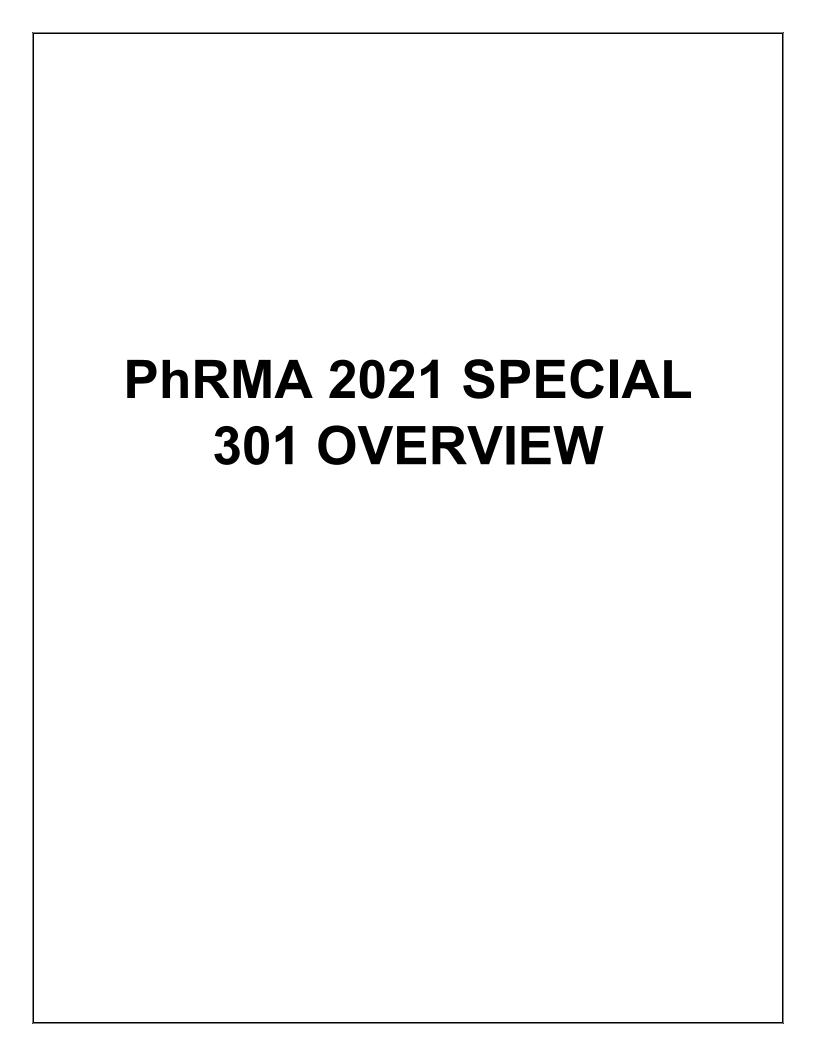


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PhRMA 2020 SPECIAL 301 OVERVIEW

The Pharmaceutical Research and Manufacturers of America (PhRMA) appreciates the opportunity to provide this submission for the *2021 Special 301 Report*. America leads the world in the research and development of valuable new medicines and vaccines. Established by the Trade Act of 1974, the Special 301 review gives the Administration a critical opportunity to confirm its strong commitment to defend these and other American inventions in overseas markets and a critical tool to address damaging market access and intellectual property barriers abroad that harm America's innovative and creative industries and the more than 45 million jobs they support across the country.¹

The COVID-19 pandemic has rattled health systems globally, but the biopharmaceutical industry is working around the clock to find ways to diagnose, treat and prevent infections from the virus and other conditions. In addition, the biopharmaceutical industry is providing financial support and in-kind donations to organizations and collaborating with U.S. and global health authorities to combat the pandemic.

Durable intellectual property and market access policies have made possible the tremendous R&D effort required to deliver COVID-19 diagnostics, treatments and vaccines to patients that need them. More than half of PhRMA members have R&D for potential treatments and vaccines under way or are providing donations of medicines and critical medical supplies as well as providing financial donations to support patients and first responders in addressing this evolving crisis. As a result of the unprecedented collaboration and partnerships between the private sector, researchers, academia, governments and other organizations, PhRMA members have and are working to deliver numerous COVID-19 treatments and vaccines in record time.

Urgent action is required to address serious market access and intellectual property barriers in the overseas markets named in this submission. As explained further below, biopharmaceutical innovators in the United States face a wide array of damaging government pricing policies abroad that undervalue American innovation, threaten billions of dollars in lost sales and put American competitiveness, jobs and exports at risk. Medicines discovered and manufactured by PhRMA member companies are the constant target of compulsory licensing and other harmful practices that deny the most basic intellectual property protections necessary to drive discovery and bring new treatments and cures to patients around the world.

The Office of the U.S. Trade Representative and other federal agencies should prioritize action to address compulsory licensing threats, including in **Indonesia**, **Malaysia** and **Russia**, and to end egregious and discriminatory pricing policies in several markets, including **Canada**, **Japan** and **Korea**. Government price controls imposed in

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¹ U.S. Department of Commerce, *Intellectual Property and the U.S. Economy: 2016 Update*, September 2016, available at https://www.uspto.gov/sites/default/files/documents/IPandtheUSEconomySept2016.pdf (last visited Jan. 27, 2021).

many markets are non-tariff barriers to trade that substantially eliminate incentives to invest in the development of new medicines for patients. They deny American inventors and workers the ability to compete on fair and equitable terms in foreign markets, undermine the expected benefit of intellectual property protections and exacerbate the U.S. trade imbalance by inappropriately raising barriers in their own markets, while their own inventors enjoy access to the U.S. market. Ending damaging pricing policies in these markets and others could add billions of dollars to research and development for new medicines and lower overall health care costs in the U.S. and around the world, while supporting U.S. competitiveness and jobs.²

I. The Innovative Biopharmaceutical Sector

The U.S. biopharmaceutical industry is the world leader in medical research – producing more than half the world's new molecules in the last decade.³ Innovators in this critical sector depend on strong intellectual property protection and enforcement, and on fair and equitable access to overseas markets. With the right policies and incentives in place at home and abroad, they can continue to bring valuable new medicines to patients, contribute powerfully to the American economy and jobs and open markets to U.S. exports.

A. Biopharmaceutical innovation delivers value for patients and economies

PhRMA member companies and the more than 800,000 women and men they employ across the United States are devoted to inventing, manufacturing and distributing valuable medicines that enable people to live longer, healthier, and more productive lives.⁴ They work in partnership with universities, clinical researchers, patient organizations, health care providers and others to bring new treatments and cures to patients who need them at home and abroad – introducing nearly 650 new therapies

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² See Council of Economic Advisers, "Reforming Biopharmaceutical Pricing at Home and Abroad," February 2018, available at https://trumpwhitehouse.archives.gov/wp-content/uploads/2017/11/CEA-Rx-White-Paper-Final2.pdf (last visited Jan. 27, 2021); and U.S. Department of Commerce, International Trade Administration, *Pharmaceutical Price Controls in OECD Countries: Implications for U.S. Consumers, Pricing, Research and Development, and Innovation*, December 2004, available at https://web.archive.org/web/20190414170009/https://2016.trade.gov/td/health/DrugPricingStudy.pdf (last visited Jan. 27, 2021).

³ Battelle Technology Partnership Practice, *The Biopharmaceutical Research and Development Enterprise: Growth Platform for Economies around the World*, Battelle Memorial Institute, May 2012, available at http://phrma-

docs.phrma.org/sites/default/files/pdf/phrma_growthplatformforeconomiesaroundtheworld_20120508.pdf (last visited Jan. 27, 2021).

⁴ TEConomy Partners, *The Economic Impact of the U.S. Biopharmaceutical Industry*, Oct. 2017, available at http://phrma-docs.phrma.org/files/dmfile/PhRMA_GoBoldly_Economic_Impact.pdf (last visited Jan. 27, 2021).

since 2000⁵ and investing in many of the over 8,000 new drugs currently in development worldwide,⁶ with about three quarters having the potential to be first-in-class treatments.⁷

Pioneering work by biopharmaceutical innovators in the United States contributes significantly to economic growth and supports good-paying jobs in all 50 states. In 2017, biopharmaceutical research and development activity added more than \$1.3 trillion to the U.S. economy and supported more than four million American jobs, including indirect and induced jobs. For all occupations involved in the biopharmaceutical industry, the average total compensation per direct employee is twice the average compensation in any other U.S. private sector industry. In 2019, U.S. biopharmaceutical goods exports totaled over \$66 billion. The biopharmaceutical sector was the largest exporter of goods among the most R&D-intensive industries in 2019 – which in addition to biopharmaceuticals included navigational/measuring/medical/control instruments, semiconductors and other electronic components, medical equipment and supplies, and communications equipment. In

Even more important than the biopharmaceutical sector's role in the U.S. economy is its contribution to global patient health. Biopharmaceutical innovation extends lives, improves worker productivity and cuts health care costs. Between 1950 and 2016, life expectancy for women and men in the United States increased by more than a decade 12 – adding trillions of dollars to the U.S. economy. 13 New medicines are responsible for much of this increase. According to a National Bureau of Economic Research working

⁵ U.S. Food and Drug Administration, "New Drugs at FDA: CDER's new molecular entities and new therapeutic biological products," available at https://www.fda.gov/drugs/development-approval-process-drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products (last visited Jan. 27, 2021); and U.S. Food and Drug Administration, "Biological approvals by year," available at https://www.fda.gov/vaccines-blood-biologics/development-approval-process-cber/biological-approvals-year (last visited Jan. 27, 2021).

⁶ Adis R&D Insight database, last accessed Jan. 4, 2019.

⁷ Long G., The Biopharmaceutical Pipeline: Innovative Therapies in Clinical Development. Analysis Group; 2017.

⁸ TEConomy Partners; for PhRMA. The Economic Impact of the US Biopharmaceutical Industry 2017: National and State Estimates.

¹⁰ TradeStats Express™: National Trade Data for NAICS Code 3254 Pharmaceuticals and Medicines, available at http://tse.export.gov/TSE/TSEHome.aspx (last accessed Jan. 27, 2021).

¹¹ U.S. Census. USA Trade: Foreign Trade Data, 2019; National Science Foundation Business Research and Development Survey (BRDIS), 2020; Siwek, Stephen E. Copyright Industries in the U.S. Economy, 2016 and 2014 reports. International Intellectual Property Alliance, available at https://iipa.org/files/uploads/2018/01/2016CpyrtRptFull-1.pdf and

https://iipa.org/files/uploads/2018/01/2014CpyrtRptFull.pdf (last visited Jan. 27, 2021); ndp | analytics.

¹² U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, *Health, United States, 2017*, Table 15, May 2018, available at
https://www.cdc.gov/nchs/data/hus/2017/015.pdf (last visited Jan. 27, 2021).

¹³ Between 1970 and 2000, increased longevity added about \$3.2 trillion per year to national wealth in the United States. *See* Murphy, K.M. and R.H. Topel, "The Value of Health and Longevity," National Bureau of Economic Research, June 2005, available at http://www.nber.org/papers/w11405 (last visited Jan. 27, 2021).

paper, new treatments accounted for three-quarters of life expectancy gains in the United States and other high-income countries between 2000 and 2009.¹⁴

For example, the AIDS death rate has dropped nearly 87 percent since the approval of antiretroviral treatments in 1995. Today, a 20-year old diagnosed with HIV can expect to live another 50 years. New medicines have cut heart disease deaths by 38 percent, according to the Centers for Disease Control and Prevention. More than 80 percent of the increase in life expectancy of cancer patients since 1980 is attributable to new treatments. New hepatitis C therapies approved since 2013 cure over 90 percent of patients – a more than two-fold increase from previously available treatment options.

PhRMA member companies are building on these achievements and pioneering new treatments and cures for some of the world's most devastating diseases. Researchers are developing more than 1,200 new medicines for infectious diseases, including viral, bacterial, fungal, and parasitic infections such as the most common and difficult-to-treat form of hepatitis C, a form of drug-resistant malaria, a form of drug-resistant MRSA, and a novel treatment for smallpox.²⁰ Advances in biotechnology and genomics are propelling the discovery of new medicines to treat a range of chronic and infectious diseases. Made using living organisms, biologic medicines are revolutionizing the treatment of cancer and autoimmune disorders. Biologics are critical to the future of the industry and promise progress in the fight against conditions like Alzheimer's, which today lack effective treatments.²¹

¹⁴ Lichtenberg, F.R., "Pharmaceutical Innovation and Longevity Growth in 30 Developing and High-income Countries, 2000-2009," *National Bureau of Economic Research*, July 2012, available at http://www.nber.org/papers/w18235 (last visited Jan. 27, 2021).

¹⁵ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, *Health, United States, 2014*, Table 29, May 2015, available at http://www.cdc.gov/nchs/data/hus/hus14.pdf (last visited Jan. 27, 2021).

¹⁷ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "New CDC Vital Signs: CDC finds 200,000 heart disease deaths could be prevented," Dec. 2013, available at https://www.cdc.gov/media/releases/2013/p0903-vs-heart-disease.html (last visited Jan. 27, 2021); and U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, "Vital Signs: Avoidable Deaths from Heart Disease, Stroke, and Hypertensive Disease—United States, 2001-2010," Sep. 2013, available at https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6235a4.htm (last visited Jan. 27, 2021).

¹⁸ Sun, E., D. Lakdawalla et al., "The determinants of recent gains in cancer survival: an analysis of the surveillance, epidemiology and end results [SEER] database," *Journal of Clinical Oncology*, 2008, available at http://ascopubs.org/doi/abs/10.1200/jco.2008.26.15_suppl.6616 (last visited Jan. 27, 2021); A more recent article by the American Cancer Society (dated Jan. 8, 2019) reported that cancer death rates have been reduced 27% since 1991. *See* https://www.cancer.org/latest-news/facts-and-figures-2019.html (last visited Jan. 27, 2021).

¹⁹ See, e.g., "FDA approves Viekira Pak to treat hepatitis C," Dec. 19, 2014, available at https://www.formularywatch.com/fda/fda-approves-viekira-pak-treat-hepatitis-c (last visited Jan. 27, 2021). ²⁰ PhRMA, 2013 Medicines in Development – Infectious Diseases Report, Pharmaceutical Research and Manufacturers of America, Dec. 2013, available at https://www.phrma.org/en/Report/Medicines-in-Development-for-Infectious-Diseases-2013-Report (last visited Jan. 27, 2021). ²¹ *Id.*

New medicines can lower the overall cost of treating these and other devastating diseases by reducing medical complications, hospitalizations and emergency room visits. For example, the use of cholesterol-lowering statin drugs has cut hospitalizations and saved the U.S. health care system at least \$5 billion.²² Every \$24 spent on new medicines for cardiovascular diseases in OECD countries saves \$89 in hospitalization costs.²³ Treating high blood pressure according to clinical guidelines would result in annual health system savings of about \$15.6 billion.²⁴ In addition to lowering overall health care costs, appropriate use of medicines can increase worker productivity by reducing rates of absenteeism and short-term disability.²⁵ A 2012 study demonstrated that appropriate use of diabetes medicines saved 15 percent and 20 percent per month in medical spending after one year of initiating treatment²⁶ and an estimated reduction of more than one million emergency department visits and hospitalizations annually, for an annual savings of up to \$8.3 billion.²⁷

PhRMA members are working to overcome significant systemic challenges that can prevent the poorest patients from accessing medicines. Together with governments, academia and others, they are leading more than 300 initiatives with more than 1,000 partners to help shape sustainable solutions that improve the health of all people.²⁸ In 2017, more than 20 biopharmaceutical companies joined the World Bank and the Union for International Cancer Control to launch Access Accelerated – a first-of-its-kind global initiative to address cancer and other non-communicable diseases that cause more than 28 million deaths per year in low and lower-middle income countries.²⁹

²² Grabowski, D., D. Lakdawalla et al., "The Large Social Value Resulting From Use Of Statins Warrants Steps To Improve Adherence And Broaden Treatment," *Health Affairs*, Oct. 2012, available at

https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2011.1120 (last visited Jan. 27, 2021). ²³ Lichtenberg, F., "Have newer cardiovascular drugs reduced hospitalization? Evidence from longitudinal country-level data on 20 OECD countries, 1995-2003," *National Bureau of Economic Research*, May 2008, available at http://www.nber.org/papers/w14008 (last visited Jan. 27, 2021).

²⁴ Cutler, D.M., G. Long et al., "The Value of Antihypertensive Drugs: A Perspective on Medical Innovation," *Health Affairs*, Jan. 2007, available at

https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.26.1.97 (last visited Jan. 27, 2021).

²⁵ Carls G.S., M.C. Roebuck et al., "Impact of medication adherence on absenteeism and short-term disability for five chronic diseases," *Journal of Occupational and Environmental Medicine*, July 2012, available at

http://journals.lww.com/joem/Abstract/2012/07000/Impact_of_Medication_Adherence_on_Absenteeism_a nd.7.aspx (last visited Jan. 27, 2021).

²⁶ Jha A.K., Aubert R.E., Yao J., Teagarden J.R., Epstein R.S., "Greater adherence to diabetes drugs is linked to less hospital use and could save nearly \$5 billion annually," *Health Affairs*, Aug. 2012, available at https://www.healthaffairs.org/doi/10.1377/hlthaff.2011.1198 (last visited Jan. 27, 2021).

²⁷ Slejko J.F., Ho M., Anderson H.D., Nair K.V., Sullivan P.W., Campbell J.D., "Adherence to statins in primary prevention: yearly adherence changes and outcomes," *J Manag. Care Pharm.*, Jan. 2014, available at https://www.jmcp.org/doi/10.18553/jmcp.2014.20.1.51 (last visited Jan. 27, 2021).

²⁸ See Global Health Progress, available at http://www.globalhealthprogress.org (last visited Jan. 27, 2021).

²⁹ Access Accelerated, "22 Biopharma Companies Partner and Launch Access Accelerated," Jan. 2017, available at https://accessaccelerated.org/news-and-events/test-post-f/ (last visited Jan. 27, 2021).

Between 2000 and 2011, biopharmaceutical innovators contributed an estimated \$98.4 billion dollars toward achieving health-related Millennium Development Goals.³⁰ Despite a three percent drop in public funding for neglected disease (excluding Ebola) research and development in 2014, biopharmaceutical industry funding increased by 28 percent during the same period.³¹

B. Policies that power prevention, treatments and cures

Fair and transparent access to overseas markets and strong protection and enforcement of patents, regulatory test data and other intellectual property provide powerful incentives that drive and sustain substantial investments in valuable treatments and cures. Where markets are open, innovation is valued, and intellectual property is protected and enforced, biopharmaceutical innovators have the predictability and certainty that they need to collaborate with partners, compete successfully and accelerate the launch of new medicines.

³⁰ Morris, Jeremiah et al., *The Pharmaceutical Industry's Contributions to the United Nations Millennium Development Goals*, Hudson Institute, May 2013, available at

http://www.hudson.org/content/researchattachments/attachment/1260/the_pharmaceutical_industry_s_contibutions_to_the_un_millennium_development_goals.pdf (last visited Jan. 27, 2021).

³¹ Global Funding of Innovation for Neglected Diseases: G-Finder, available at https://gfinder.policycuresresearch.org/ (last visited Jan. 27, 2021).

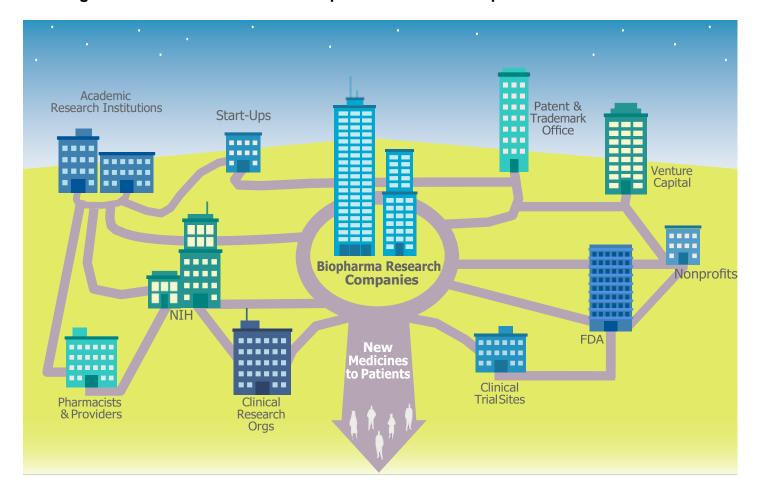


Figure 1: Collaboration and the biopharmaceutical R&D process

As highlighted in Figure 1 above, research, development and distribution of innovative medicines increasingly involves <u>collaboration</u> and the exchange of commercially sensitive information between multiple partners across borders and around the world. Strong intellectual property protection and enforcement enable innovators to license their patented inventions to others with the certainty that valuable information disclosed is secure. Thanks to the technology transfer framework established by the Bayh-Dole Act, licensing of intellectual property is also enabling collaboration among industry, university and public sector researchers in the development of new medicines and other products – adding close to \$591 billion to the U.S. economy and supporting more than four million American jobs between 1996 and 2015.³² Such collaboration is

2021).

³² See Association of University Technology Managers, Statistics Access for Technology Transfer (STATT) database, available at https://autm.net/surveys-and-tools/databases/statt (last visited Jan. 27, 2021); and Pressman, L., D. Roessner et al., "The Economic Contribution of University/Nonprofit Inventions in the United States: 1996-2013," Mar. 2015, available at https://www.bio.org/sites/default/files/files/BIO 2015 Update of I-O Eco Imp.pdf (last visited Jan. 27,

delivering similar benefits in other countries. Recent research in the United Kingdom found that public expenditure on biomedical and health research leveraged even greater private sector investment, delivering a total rate of return to public biomedical and health research of up to 28 percent.³³

Patents and market-based pricing policies promote <u>competition</u> and greater treatment options. In exchange for the limited period of protection that patents provide, innovators must fully disclose their inventions to the world. That disclosure accelerates innovation and empowers potential competitors to build on those inventions. Competition means more medicines in the same therapeutic class, more options for patients and even lower prices.³⁴ For example, less than a year after market entry of the first in a new class of hepatitis C treatments, there were multiple suppliers that competed both on price and clinical benefits. Indeed, competition was so fierce that the largest U.S. pharmacy benefit manager claimed hepatitis C treatment is less expensive in America than in other western countries.³⁵ European countries have seen similar gains from competition.³⁶

Today, biopharmaceutical innovators face competition faster – both from other innovators and from generic drug companies. In the 1970s, a new medicine might remain the only innovative treatment available in its therapeutic class for ten years or more. By the 2000s, that period had declined to about two years.³⁷ Generic competitors now challenge patents earlier and more frequently – even as early as four years after the launch of an innovative medicine.³⁸ Today, over 94 percent of innovative medicines experience at least one patent challenge prior to generic entry – compared to 25 percent

³³ Sussex, J., Y. Feng et al., "Quantifying the economic impact of government and charity funding of medical research on private research and development funding in the United Kingdom," *BMC Medicine*, Feb. 2016, available at http://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-016-0564-z (last visited Jan. 27, 2021).

³⁴ International Federation of Pharmaceutical Manufacturers and Associations, *The New Frontiers of Biopharmaceutical Innovation*, *2012*, available at http://www.ifpma.org/wp-content/uploads/2016/01/IFPMA_New_Frontiers_Biopharma_Innovation_2012_Web.pdf (last visited Jan. 27, 2021).

³⁵ LaMattina, J., "For Hepatitis C Drugs, U.S. Prices are Cheaper Than in Europe," *Forbes*, Dec. 2015, available at http://www.forbes.com/sites/johnlamattina/2015/12/04/for-hepatitis-c-drugs-u-s-prices-are-cheaper-than-in-europe/#1483772d64bb (last visited Jan. 27, 2021).

³⁶ Berdud, M. et al., "R&D, Competition and Diffusion of Innovation in the EU: The Case of Hepatitis C," Office of Health Economics, July 2018, available at https://www.ohe.org/publications/rd-competition-and-diffusion-innovation-eu-case-hepatitis-c (last visited Jan. 27, 2021).

³⁷ Tufts Center for the Study of Drug Development, "First-in-class drugs in competitive development races with later entrants," Impact Report, Dec. 2015, available at https://csdd.tufts.edu/impact-reports/ (last visited Jan. 27, 2021).

³⁸ Grabowski, H., G. Long et al., "Updated trends in US brand-name and generic drug competition," *Journal of Medical Economics*, Sep. 2016, available at https://www.ncbi.nlm.nih.gov/pubmed/27064194 (last visited Jan. 27, 2021).

in 1995.³⁹ Increasing competition from biosimilars is driving down the cost of cutting-edge treatments.40

Patents promote faster access to new medicines. A major 2014 study found firms launch innovative medicines sooner in countries where there is effective patent protection and enforcement. The study looked at data from the launch of more than 600 drugs in almost 80 countries between 1983 and 2002. It showed that strong patent protection accelerates new product launches in higher and lower income countries alike.41 Launching a medicine in a particular country also has important effects on the whole health care system. For instance, when a new medicine is introduced, biopharmaceutical companies invest in educating health care providers on the science and appropriate use of that medicine. 42 This investment later enables accelerated acceptance of generic versions once relevant patents expire.

Strong intellectual property protection and enforcement has long been a critical goal of America's trade policy agenda. Strong intellectual property protection and enforcement at home and abroad, and the efficient market conditions necessary to enjoy those rights, provide essential incentives for investment in the biopharmaceutical sector and in all of the innovative industries that today account for nearly 40 percent of U.S. gross domestic product.⁴³ For each of these industries, developing and bringing new products and processes to market is a risky endeavor; it requires time and substantial resources. In most cases, new products will fail to deliver returns that meet or exceed investment. Some three-guarters of all venture capital-backed internet startups fail.⁴⁴ And even those that succeed often fail to make a profit. Biopharmaceutical firms face similar challenges. Just two of every ten marketed medicines achieve returns that match or exceed average research and development costs.⁴⁵ Of the approximately 1,200 biopharmaceutical companies in the United States, more than 90 percent do not earn a profit.46

⁴⁰ See, e.g., Sagonowsky, E., "As competition heats up, U.S. prices for Remicade and biosims slip: analyst." FiercePharma, Dec. 2018, available at https://www.fiercepharma.com/pharma/amid-biosimcompetition-remicade-prices-gradually-slipping-analyst (last visited Jan. 27, 2021).

⁴¹ Cockburn, I.M. et al., "Patents and the Global Diffusion of New Drugs," National Bureau of Economic Research, Sep. 2014, available at http://nber.org/papers/w20492 (last visited Jan. 27, 2021).

⁴² Wilsdon, Tim and Glyn Chambers, "The wider value delivered to patients, healthcare systems and competitors when innovators launch new products," Charles River Associates, Apr. 2013.

⁴³ U.S. Department of Commerce, Intellectual Property and the U.S. Economy: 2016 Update, Sep. 2016, available at https://www.uspto.gov/sites/default/files/documents/IPandtheUSEconomySept2016.pdf (last visited Jan. 27, 2021).

⁴⁴ Gage, D., "The Venture Capital Secret: 3 Out of 4 Start-Ups Fail," *The Wall Street Journal*, Sep. 2012, available at http://www.wsj.com/articles/SB10000872396390443720204578004980476429190 (last visited Jan. 27, 2021).

⁴⁵ Vernon, J.A., J.H. Golec and J.A. DiMasi, "Drug development costs when financial risk is measured using the fama-french three-factor model," Health Economics, Aug. 2010, available at http://onlinelibrary.wiley.com/doi/10.1002/hec.1538/abstract (last visited Jan. 27, 2021).

⁴⁶ Biotechnology Industry Organization, *Unleashing the Next Generation of Biotechnology Innovation*, available at https://www.bio.org/sites/default/files/files/Whitepaper-Final_0.pdf (last visited Jan. 27, 2021).

POST APPROVAL RESEARCH & MONITORING

PHASE I PHASE II PHASE III

PHASE IV

POTENTIAL NEW MEDICINES

NUMBER OF VOLUNTEERS
HUNDREDS

TENS
HUNDREDS

THOUSANDS

POST APPROVAL RESEARCH & MONITORING

PHASE III

PHASE III

PHASE III

PHASE III

PHASE IV

POST APPROVAL RESEARCH & MONITORING

PHASE IV

PHASE IV

Figure 2: The biopharmaceutical research and development process

Key: IND: Investigational New Drug Application, NDA: New Drug Application, BLA: Biologics License Application

The lengthy approval process for new products makes the research-based biopharmaceutical sector particularly reliant on the temporary protection intellectual property rights provide. ⁴⁷ Unlike products made by other innovative industries, new medicines are not market-ready at the time they are developed. As highlighted in Figure 2 above, biopharmaceutical firms rigorously test and evaluate potential therapies through a series of clinical trials to demonstrate they are safe and effective for treatment of a particular disease or condition. ⁴⁸ In 2017, biopharmaceutical companies sponsored more than 4,500 clinical trials in the United States alone, with trials in all 50 states, the District of Columbia and Puerto Rico. These trials involved close to one million participants and

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⁴⁷ Without patent protection, an estimated 65% of pharmaceutical products would not have been brought to market, compared with an average of eight percent across all other industries. *See* Mansfield, E., "Patents and Innovation: An Empirical Study," *Management Science*, Feb. 1986, available at https://www.jstor.org/stable/2631551?seq=1#page_scan_tab_contents (last visited Jan. 27, 2021).

⁴⁸ PhRMA adaptation based on Dimasi J.A., "Cost of Developing a New Drug," Tufts Center for the Study of Drug Development, *R&D Cost Study Briefing*, available at

https://static1.squarespace.com/static/5a9eb0c8e2ccd1158288d8dc/t/5ac66afc6d2a732e83aae6bf/15229 52963800/Tufts_CSDD_briefing_on_RD_cost_study_-_Nov_18%2C_2014..pdf (last visited Jan. 27, 2021); U.S. Food and Drug Administration, *Development & Approval Process* | *Drugs*, available at https://www.fda.gov/Drugs/DevelopmentApprovalProcess/ (last visited Jan. 27, 2021).

accounted for nearly \$43 billion in economic activity.⁴⁹ Test data generated through those trials is then submitted to national regulatory agencies for marketing approval.

For these reasons and others, research and development is more capital intensive in the innovative biopharmaceutical sector than in other industries. Firms in this sector invest twelve times more in research and development per employee than the average of all other manufacturing industries.⁵⁰ In 2017 alone, American biopharmaceutical companies invested approximately \$97 billion in research and development.⁵¹ Clinical trials can account for more than 60 percent of the total cost of bringing a new medicine to market, and there is no guarantee promising molecules and proteins that enter clinical trials will result in a new treatment or cure.⁵² The process of evaluating potential new therapies is so exacting that less than 12 percent of all potential new drugs entering clinical trials result in an approved medicine.⁵³

Advances in the treatment of diseases typically are not driven by large, dramatic developments, but more commonly build on a series of continuous improvements over time. The best clinical role and full value of a particular therapy typically emerges years after initial approval as further research is conducted and physicians and other health care providers gain real-world experience. These improvements and the further development of therapeutic classes of medicines often lead researchers to explore new treatments in related areas – restarting the research and development cycle. Indeed, nearly a quarter of existing therapeutic indications are treated by medicines initially developed to address a different concern. And more than 60 percent of therapies on the World Health Organization's (WHO's) Essential Medicines List relate to improvements on older treatments. This step by step transformation in knowledge has led to increased survival, improved patient outcomes and enhanced quality of life for many patients.

⁴⁹ TEConomy Partners; for PhRMA. Biopharmaceutical Industry-Sponsored Clinical Trials. April 2019.

⁵⁰ Pham, N., *IP-Intensive Manufacturing Industries: Driving U.S. Economic Growth, NDP Analytics*, Mar. 2015, available at http://www.ndpanalytics.com/ip-intensive-manufacturing-industries-driving-us-economic-growth-2015/ (last visited Jan. 27, 2021).

⁵¹ Research!America, U.S. Investments in Medical and Health Research and Development, 2013-2016, Arlington, VA, Fall 2017, available at https://www.researchamerica.org/sites/default/files/RA-2017_InvestmentReport.pdf (last visited Jan. 27, 2021).

⁵³ PhRMA adaptation based on Dimasi JA. Cost of developing a new drug. Tufts Center for the Study of Drug Development (CSDD). R&D Cost Study Briefing (Nov. 18, 2014), available at https://static1.squarespace.com/static/5a9eb0c8e2ccd1158288d8dc/t/5ac66afc6d2a732e83aae6bf/15229 52963800/Tufts_CSDD_briefing_on_RD_cost_study_-_Nov_18%2C_2014..pdf (last visited Jan. 27, 2021).

⁵⁴ Jin, G. and S. Wong, "Toward better drug repositioning: prioritizing and integrating existing methods into efficient pipelines," *Drug Discovery Today*, Jan. 2014, available at

http://www.sciencedirect.com/science/article/pii/S1359644613003991 (last visited Jan. 27, 2021).
⁵⁵ See Cohen, J. and K. Kaitin, "Follow-On Drugs and Indications: The Importance of Incremental Innovation to Medical Practice," *American Journal of Therapeutics*, Jan.-Feb. 2008, available at
http://journals.lww.com/americantherapeutics/Citation/2008/01000/Follow_On_Drugs_and_Indications__T
he Importance of.15.aspx (last visited Jan. 27, 2021).

⁵⁶ Goss, T.F., E.H. Picard, and A. Tarab, *Recognizing the Value in Oncology Innovation*, Boston Healthcare Associates, June 2012, available at http://phrma-docs.phrma.org/sites/default/files/flash/phrma_innovation_oncology.pdf (last visited Jan. 27, 2021).

II. Practices that Undermine Innovation and Access to New Treatments

To research, develop and deliver new treatments and cures for patients who need them around the world, biopharmaceutical innovators must be able to secure and effectively enforce patents and protect regulatory test data. They must be able to obtain timely marketing approval for new medicines and make those therapies available to patients according to reimbursement rules and procedures that are fair, transparent, reasonable and non-discriminatory, and that appropriately value and reward patented pharmaceuticals. Also, these conditions are necessary to facilitate U.S. exports and ensure that the competitive biopharmaceutical industry can continue to provide jobs and advance the economic interests of the United States.

For well over a century, governments have recognized the need for global minimum standards that enable inventors to effectively and efficiently protect and share their inventions in a territorial system of intellectual property rights. Signed in 1883, the Paris Convention for the Protection of Industrial Property allowed inventors, regardless of nationality, to claim priority for their inventions and to take advantage of the intellectual property laws in each member country. To facilitate the process of filing patent applications around the world, many members of the Paris Convention established the Patent Cooperation Treaty (PCT) in 1970. Today, more than 90 percent of all countries are members of the Paris Convention and the PCT.

The World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which entered into force in 1994, was a major achievement in strengthening the worldwide protection and enforcement of intellectual property rights by creating an international minimum standard of protection for intellectual property rights. TRIPS was premised on the view that its obligations, if faithfully implemented by the diverse WTO Membership,⁵⁷ would create the policy and legal framework necessary for innovation-based economic development of WTO Members by rewarding innovation with reliable rights-based systems and permitting the flow of its attendant commercial benefits. Because it concerns both the definition and enforcement of rights, TRIPS is one of the single most important steps toward effective protection of intellectual property globally. WTO Members, including the United States, have an important role to play in fully and effectively implementing, reiterating and enforcing TRIPS minimum standards.

Critically, the United States and other countries have promoted, implemented and built on the global minimum standards of protection provided by these international rules through eligibility criteria for trade preference programs, WTO accessions and regional and bilateral trade agreements that establish strong intellectual property protections and require fair and equitable market access. However, certain U.S. trading partners maintain or are considering acts, policies or practices that are harming or would harm the ability of biopharmaceutical innovators to research, develop and deliver new treatments and cures for patients around the world. These acts, policies or practices deny or would deny

⁵⁷ 164 members as of July 29, 2016.

adequate and effective intellectual property protection and/or fair and equitable market access for innovative medicines. In many cases, they appear to be inconsistent with global, regional and bilateral rules.

Moreover, some countries are using the COVID-19 pandemic opportunistically to advance longstanding industrial policies to further erode intellectual property policies. India and South Africa are key sponsors of a proposal at the WTO TRIPS Council calling to eliminate for an indefinite term certain WTO obligations to grant IP on a wide range of technologies related to COVID-19. The proposal marks a significant escalation in anti-IP global activism and will further polarize legitimate conversations on countries' engagement to combat the pandemic. The proposal will do nothing to address the production and distribution challenges for making COVID-19 vaccines globally available. If anything the proposals threaten to undermine the ability to respond to another pandemic, and will inevitably affect IP discussions in countries around the world.

Multilateral organizations that once served as custodians of the international rules-based system increasingly are seeking to undermine and even eliminate intellectual property protections that drive and sustain biopharmaceutical innovation in the United States and around the world. By reinterpreting international agreements and through meetings, reports, guidelines and training programs, the WHO, the United Nations Development Program (UNDP), the United Nations Conference on Trade and Development (UNCTAD), Unitaid and other organizations are promoting acts, policies and practices globally and in specific countries that prevent biopharmaceutical innovators from securing and maintaining patents, protecting regulatory test data and from enjoying fair and equitable market access.⁵⁸

The following sections highlight the most serious challenges facing PhRMA members around the world. The acts, policies and practices of specific countries are described further below. PhRMA members urge USTR and other federal agencies to highlight these challenges, acts, policies and practices in the 2021 Special 301 Report and to use all available tools to address and resolve them.

A. Practices that deny fair and equitable market access

PhRMA members increasingly encounter acts, policies and practices abroad that deny fair and equitable market access. Through arbitrary and often discriminatory government price controls, unnecessary regulatory delays and high tariffs and taxes, countries across Europe, Asia and beyond are limiting market competition, increasing costs and undermining the ability of biopharmaceutical innovators in the United States to bring new medicines to patients who need them.

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⁵⁸ Hudson Institute, "The Patent Truth about Health, Innovation and Access," June 2016, available at https://s3.amazonaws.com/media.hudson.org/files/publications/20160706ThePatentTruthAboutHealthInn ovationandAccess.pdf (last visited Jan. 27, 2021).

In recent years, America's biopharmaceutical sector has witnessed a surge in the number and severity of arbitrary and discriminatory government price controls abroad that threaten U.S. exports and jobs. Such measures cause serious damage in the countries that maintain them by rationing patient access to health care. They also can have significant ripple effects across other markets. For example, government price controls implemented in one country can spill over to many other countries through international reference pricing. These policies can restrict competition and artificially depress prices below market value, ultimately delaying and denying patient access to new medicines.⁵⁹

A 2004 Commerce Department study⁶⁰ found that international reference pricing and other such measures that "rely heavily on government fiat to set prices rather than competition in the marketplace" put short-term government objectives ahead of long-term strategies that would ensure continued R&D into medicines that patients need most. The report showed that moving to market-based systems would add billions to research and development for new medicines and lower overall health care costs around the world by promoting greater efficiencies in off-patent markets. A 2020 report from the Council of Economic Advisers⁶¹ found that foreign government price controls have worsened over the past 15 years, causing innovative products to be sold "below fair market value," leading to a "slower pace of innovation" and "fewer potential new life-saving therapies for patients in all countries." Urgent action is needed to address and resolve the following government price control regulations, policies and practices that are limiting market access for medicines researched and developed in the United States:

• Government price controls. In many countries, governments are the primary payer of medicines and in effect dictate prices. This dominant position often results in U.S. trading partners failing to appropriately recognize the value of innovation in their pricing and reimbursement policies, instead engaging in actions that distort markets and artificially depress prices below what a competitive market would provide. Foreign governments are increasingly employing a range of regulatory measures, including international reference pricing, therapeutic reference pricing, mandatory price cuts, clawback taxes, and flawed health technology assessments. These measures are often layered to exert maximum pressure. Korea employs several price control measures – including health technology assessments that require unreasonable thresholds for "cost-effectiveness," international reference pricing of inappropriate off-patent and generic comparators, and ad hoc measures – to systematically cut prices. In recent years, Japan approved sweeping changes

⁵⁹ Danzon, P., Y. Wang et al., "The Impact of Price Regulation on the Launch Delay of New Drugs – Evidence from Twenty-Five Major Markets in the 1990s," Health Economics, March 2005, available at https://onlinelibrary.wiley.com/doi/abs/10.1002/hec.931 (lasted visited Jan. 27, 2021).

⁶⁰ U.S. Department of Commerce, International Trade Administration, Pharmaceutical Price Controls in OECD Countries: Implications for U.S. Consumers, Pricing, Research and Development, and Innovation (Dec. 2004) available at

https://web.archive.org/web/20190414170009/https://2016.trade.gov/td/health/DrugPricingStudy.pdf (last visited Jan. 27, 2021).

⁶¹ The Council of Economic Advisers, *Funding the Global Benefits of Biopharmaceutical Innovation*, February 2020, available at https://trumpwhitehouse.archives.gov/wp-content/uploads/2020/02/Funding-the-Global-Benefits-to-Biopharmaceutical-Innovation.pdf (last visited Jan. 27, 2021).

to pricing policies that significantly undermine efforts to carry a fair share of the costs of global research and development. In particular, the eligibility criteria for the new Price Maintenance Premium (PMP) program as well as other price-cutting measures such as annual price cuts and newly proposed health technology assessments will mean that some of America's most innovative medicines will be significantly undervalued. In **Canada**, the Patented Medicine Prices Review Board regulates the maximum allowable price that a manufacturer can charge for a patented medicine to public or private payers. Last year, the Board announced draconian changes intended to set prices at levels paid by less wealthy countries. Examples of other highly-developed markets that undervalue innovative medicines include **Australia**, **Europe Union** and New Zealand.

• Discriminatory pricing policies. In some countries, governments have policies that further benefit domestic drug companies and wholesalers at the expense of innovators in the United States. For example, in 2018, **Japan** revised its PMP program based on company criteria that appear to be inherently biased towards domestic companies (e.g., number of local clinical trials and whether the product was launched first in Japan), and in 2019 implemented new health technology assessments that will subject imported products to greater scrutiny and price cuts than domestic products. These new company and country-of-origin criteria call into question Japan's commitment to fair and non-discriminatory policies, including that of national treatment.

Other acts, policies and practices delay or limit market access for America's biopharmaceutical innovators and the benefits patients overseas could realize from faster access to medicines and greater competition between treatments in the same therapeutic class. These barriers include:

• Import barriers. High tariffs and taxes can limit U.S. biopharmaceutical exports and prevent access to new treatments in overseas markets.⁶² Under the WTO Pharmaceutical Agreement, the United States and the 33 other countries do not impose any import duties on a wide range of medicines and other health products.⁶³ However, biopharmaceutical innovators in the United States do not benefit from the same access to China, India and other emerging economies that, despite being major producers and exporters of drugs and active pharmaceutical ingredients, are not parties to the WTO Pharmaceutical Agreement. Between 2006 and 2013, the value of worldwide biopharmaceutical trade in countries that are not

⁶² Bate, R. et al., "Still Taxed to Death: An Analysis of Taxes and Tariffs on Medicines, Vaccines and Medical Devices," AEI-Brookings Joint Center for Regulatory Studies, Feb. 2006, available at https://www.researchgate.net/publication/46454258_Still_Taxed_to_Death_An_Analysis_of_Taxes_and_Tariffs_on_Medicines_Vaccines_and_Medical_Devices (last visited Jan. 27, 2021).

⁶³ General Agreement on Tariffs and Trade, "Trade in Pharmaceutical Products" (L/7430), Mar. 1994, available at

https://ustr.gov/sites/default/files/WTO%20Pharmaceutical%20Agreement%20March%201994.pdf (last visited Jan. 27, 2021).

parties to that Agreement increased at a compound annual growth rate of more than 20 percent. This means that a larger proportion of medicines distributed around the world are potentially subject to tariffs. For example, **India**'s basic import duties on biopharmaceutical products and active ingredients average about ten percent. Additional duties and assessments can raise India's effective import duty to as high as 20 percent or more. Combined federal and state taxes add about 31 percent to the cost of medicines in Brazil, one of the highest tax burdens on medicines in the world compared to the global average of 6%. Examples of other countries that maintain high tariffs and taxes on imported medicines include **Argentina**, **Russia** and **Thailand**.

- Regulatory approval delays. China is making significant strides in reforming and strengthening its regulatory framework but remains an outlier in the drug approval process compared to other regulatory authorities, with new medicines typically taking three to five years longer to reach China than other major markets. In other words, a "drug lag" remains in China. Examples of other markets with complex and lengthy regulatory approval processes include Mexico, Russia and Turkey. Accelerating regulatory approval in these countries and others will improve the efficiency of global drug development, facilitate U.S. exports and reduce the time it takes for new medicines to reach patients.
- Government pricing and reimbursement delays. Restrictive government pricing and reimbursement policies delay market access for biopharmaceutical innovators in the United States and prevent timely patient access to new treatments and cures that have received regulatory approval. These processes vary by country with the result that government reimbursement decisions can be almost immediate in some countries to several years in others. For example, prior to 2017, China had only undertaken two substantive updates (2004 and 2009) to the National Reimbursement Drug List which delayed reimbursement by up to seven years. In Mexico, delays can stretch as long as 1,500 days or more, on average, compared to 230 days in other countries.⁶⁸ PhRMA is encouraged by efforts that China has made to accelerate updates to its reimbursement list. However, patients would be

⁶⁴ Banik, N. and P. Stevens, "Pharmaceutical tariffs, trade flows and emerging economies," Geneva Network, Sep. 2015, available at http://geneva-network.com/wp-content/uploads/2015/09/GN-Tariffs-on-medicines.pdf (last visited Jan. 27, 2021).

⁶⁶ Olcay, M. and R. Laing, "Pharmaceutical Tariffs: What is their effect on prices, protection of local industry and revenue generation," World Health Organization, May 2005, available at http://www.who.int/intellectualproperty/studies/TariffsOnEssentialMedicines.pdf (last visited Jan. 27, 2021).

⁶⁷ Brazilian Institute of Tax Planning, 2018.

⁶⁸ Mexico data provided by the Asociación Mexicana de Industrias de Investigación Farmacéutica. Comparison data from the European Federation of Pharmaceutical Industries and Associations (EFPIA) *Patients' W.A.I.T. Indicator Report*, available at http://studylib.net/doc/7634123/patients--w.a.i.t.-indicator--report-201 (last visited Jan. 27, 2021). *See also* Salieri, G. and F. Fuentes, "Biopharmaceutical Innovation in Mexico: At the Crossroads," Fundacion IDEA, 2016, available at http://genevanetwork.com/article/biopharmaceutical-innovation-mexico-crossroads/ (last visited Jan. 27, 2021).

better served by a model that allows all new drugs to be reviewed for reimbursement on a more regular, or rolling, basis.

Lack of transparency and due process. Lack of transparency, due process, and delayed reimbursement decisions are widespread across the world. In Canada. Japan and Korea, the governments continue to make significant pricing policy reforms without adequate consultation with the industry. In Mexico, excessive regulatory approval delays are compounded by new procurement processes that lack transparency and are applied inconsistently. In **Turkey**, reimbursement decision criteria are not clearly defined, the process is non-transparent, and unpredictable delays in decision-making significantly postpone patient access to innovative medicines. The United States has previously recognized the serious nature of these types of concerns and attempted to redress several of them through a variety of trade policy initiatives. For example, the United States-Mexico-Canada Agreement (USMCA) requires Canada and Mexico to adhere to detailed transparency and procedural fairness obligations, and the United States-Korea Free Trade Agreement (KORUS) requires Korea to comply with similar specific commitments. PhRMA and its member companies welcome continued U.S. Government attention to these issues and encourage the Administration to strengthen its enforcement of our trading partners' commitments in these areas.

More broadly, PhRMA members recognize the efforts undertaken by the U.S. Government to address these barriers, including eliminating tariffs and promoting fair, reasonable and non-discriminatory pricing and reimbursement policies in trade agreements and addressing regulatory approval delays and other market access challenges in bilateral forums. PhRMA also welcomes the Administration's continued focus on the problem of advanced economies undervaluing U.S. innovative medicines. ⁶⁹ As more countries enact price controls, the burden for financing medical advances will be borne increasingly by U.S. patients and biopharmaceutical innovators, while patients abroad will suffer decreased access to improved therapies over the long term. It remains critical that the U.S. Government engage on these issues with its trading partners, effectively enforce U.S. trade agreements, and require immediate and meaningful steps

visited Jan. 27, 2021).

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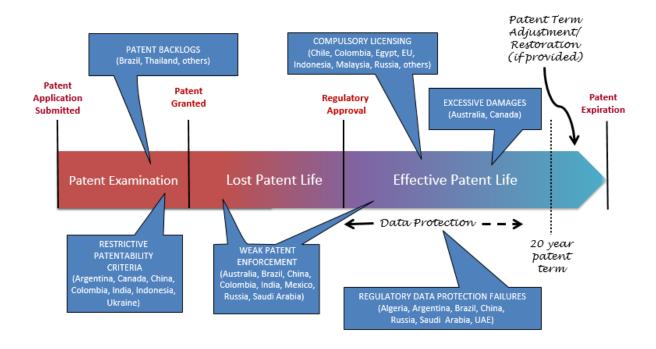
⁶⁹ See, e.g., 2020 Special 301 Report, at pp. 13-16 (April 2020), available at https://ustr.gov/sites/default/files/2020_Special_301_Report.pdf (last visited Jan.27, 2021); The Council of Economic Advisers, Funding the Global Benefits of Biopharmaceutical Innovation, February 2020, available at https://trumpwhitehouse.archives.gov/wp-content/uploads/2020/02/Funding-the-Global-Benefits-to-Biopharmaceutical-Innovation.pdf (last visited Jan. 27, 2021); U.S. Department of Health and Human Services, American Patients First: The Trump Administration Blueprint to Lower Drug Prices and Reduce Out-of-Pocket Costs, May 2018, available at https://www.hhs.gov/sites/default/files/AmericanPatientsFirst.pdf (last visited Jan. 27, 2021); Office of the U.S. Trade Representative, USTR Engagement on Pharmaceutical and Medical Device Issues, Apr. 2018, available at https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2018/april/ustr-engagement-pharmaceutical-and (last visited Jan. 27, 2021); The Council of Economic Advisers, Reforming Biopharmaceutical Pricing at Home and Abroad, Feb. 2018, available at https://trumpwhitehouse.archives.gov/wp-content/uploads/2017/11/CEA-Rx-White-Paper-Final2.pdf (last

by foreign governments to resolve existing barriers and to ensure that patients have faster access to new treatments and cures.

B. Practices that undermine biopharmaceutical innovation

The six intellectual property challenges described below and highlighted in Figure 3 have serious and immediate impacts on the ability of PhRMA members to invest in discovering and transforming promising molecules and proteins into useful new medicines for patients around the world. These challenges hinder or prevent biopharmaceutical innovators from securing patents (restrictive patentability criteria and patent backlogs), maintaining and effectively enforcing patents (market-size damages, weak patent enforcement and compulsory licensing), and protecting regulatory test data (regulatory data protection failures).

Figure 3: Biopharmaceutical intellectual property challenges



Restrictive Patentability Criteria

To bring valuable new medicines to patients, biopharmaceutical innovators must be able to secure patents on all inventions that are new, involve an inventive step and are capable of industrial application. National laws, regulations or judicial decisions that prohibit patents on certain types of biopharmaceutical inventions or impose additional or heightened patentability criteria restrict patient access to valuable new medicines and undermine investment in future treatments and cures. These restrictions prevent innovators from building on prior knowledge to develop valuable new and improved treatments that can improve health outcomes and reduce costs by making it easier for patients to take medicines and by improving patient adherence to prescribed therapies. Some of the most serious examples of restrictive patentability criteria challenges facing PhRMA members in countries around the world include:

Patentability restrictions and additional patentability criteria. A number of countries
maintain laws and regulations that, per se, prevent the patenting of a wide range
of specific improvements to existing medicines⁷³ – improvements that are valuable

⁷⁰ See generally, TRIPS Article 27.1.

⁷¹ New improvements to existing treatments, such as new dosage forms and combinations, are of tremendous value to patients. They can make it easier for patients to take medicines and increase patient adherence. Specifically, they make it more likely patients will take their medicines consistently and as prescribed. Such improvements might allow patients to take an oral medication instead of an injection or reduce the number of doses required. Adherence is inversely proportional to the number of times a patient must take their medicine each day. The average adherence rate for treatments taken once daily is nearly 80%, compared to about 50% for medicines that must be taken four times a day. Patient adherence to prescribed courses of treatment leads to better health outcomes and is particularly important for the management of chronic, non-communicable diseases like diabetes, heart disease and cancer. According to the WHO, "[a]dherence to therapies is a primary determinant of treatment success." See Shrank, William H. et al., "A Blueprint for Pharmacy Benefit Managers to Increase Value," *American Journal of Managed Care*, Feb. 2009, available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2737824/ (last visited Jan. 27, 2021).

⁷² Encouraging patients to take their medicines consistently and as prescribed can lower overall health care costs. The cost of non-adherence has been estimated at \$100 billion to \$300 billion annually, including the costs of avoidable hospitalizations, nursing home admissions and premature deaths. Making patents available for improvements and new indications can also drive price competition for medicines by encouraging the development of alternative treatments – leading to multiple drugs in a single therapeutic class and increasing the range of options for patients and health care providers. See Osterberg, Lars and Terrence Blaschke, "Adherence to Medication," New England Journal of Medicine, Aug. 2005, available at http://www.neim.org/doi/full/10.1056/NEJMra050100 (last visited Jan. 27, 2021); and DiMatteo, M. Robin, "Variations in Patients' Adherence to Medical Recommendations: A Quantitative Review of 50 Years of Research," Medical Care, Mar. 2004, available at http://journals.lww.com/lwwmedicalcare/Abstract/2004/03000/Variations in Patients Adherence to Medical.2.aspx (last visited Jan. 27, 2021); and DiMasi, Joseph A., Price Trends for Prescription Pharmaceuticals 1995-1999, background report prepared for the Department of Health and Human Services Conference on Pharmaceutical Pricing Practices, Utilization and Costs, Aug. 2000, available at https://aspe.hhs.gov/basic-report/price-trends-prescription-pharmaceuticals-1995-1999 (last visited Jan. 27, 2021).

⁷³ Examples of improvements include enantiomers and combination treatments. *See* Stevens, P. and J. Ellis, "Enantiomer Patents," Geneva Network, June 2017, available at https://geneva-network.com/wp-

to patients and payers and that require significant investment and research to develop. For example, **Argentina** issued regulations in 2012 that prevent biopharmaceutical innovators from securing patents on certain types of inventions, including new dosage forms and combinations. In the **Philippines**, national law limits patentability of new forms and new uses of existing medicines. **Indonesia** adopted a new patent law in 2016 that similarly prohibits patents for news forms and new uses of existing medicines. **India**'s Patent Law harms its own domestic drug companies⁷⁴ by prohibiting patents on new forms and new uses of known substances, unless applicants can demonstrate they meet an additional "enhanced therapeutic efficacy" test. **Ukraine** adopted recently legislation that restricts the patentability of new forms and uses.

In addition, multilateral organizations such as UNDP and Unitaid advocate actively for patentability restrictions and additional patentability requirements that are inconsistent with international practice. For example, although UNDP does not appear to have specialized expertise on intellectual property matters, it issued patent examination guidelines in 2016 that, if followed, would prevent innovators from securing patents on many kinds of biopharmaceutical inventions. ⁷⁵ Similarly, Unitaid partnered with various non-governmental organizations in 2018 to launch a campaign to erode intellectual property policies and laws globally.

• Restrictions on post-filing submissions. Unlike patent offices in the United States, Europe, Japan, Korea and other major markets, China's National Intellectual Property Administration (CNIPA) does not consistently accept data generated after a patent is filed during patent prosecution to describe inventions or satisfy inventive step requirements. Consistent with its commitments in Article 1.10 of the Economic and Trade Agreement between the United States and China (Phase One Trade Agreement), China has recently issues a judicial interpretation prescribed that the Court would review post-filing experimental data and CNIPA has amended its Patent Examination Guidelines. PhRMA and it members welcome these positive steps and will be closely monitoring implementation of the revised Guidelines to ensure that they permit pharmaceutical patent applicants to rely on supplemental data to satisfy relevant requirements for patentability.

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content/uploads/2017/07/enantiomer-patents.pdf (last visited Jan. 27, 2021); and Stevens, P. and J. Ellis, "The Power of Combination Drugs," Geneva Network, June 2017, available at https://geneva-network.com/wp-content/uploads/2017/07/Combination-drugs-patentability.pdf (last visited Jan. 27, 2021).

Geneva Network, "Copy or Compete: How India's patent law harms its own drug industry's ability to innovate," December 2018, available at https://geneva-network.com/research/copy-or-compete-how-indias-patent-law-harms-its-own-drug-industrys-ability-to-innovate/ (last visited Jan. 27, 2021).
 United Nations Development Program, "Guidelines for the Examination of Patent Applications relating to Pharmaceuticals," 2016, available at http://www.undp.org/content/undp/en/home/librarypage/hiv-aids/guidelines-for-the-examination-of-patent-applications-relating-t.html (last visited Jan. 27, 2021).

Restrictive patentability criteria in many of these countries and others appear to be contrary to WTO rules and U.S. trade agreements, which require parties to make patents available for inventions that are new, involve an inventive step and are capable of industrial application. These laws also appear to apply solely to pharmaceutical products, either expressly by law or in a *de facto* manner as applied. This is not consistent with the obligations of WTO Members and U.S. trade agreement partners to make patents available without discrimination as to the field of technology.

PhRMA members appreciate steps that USTR and other federal agencies have taken to address restrictive patentability criteria and look forward to continuing to work closely with these agencies to secure concrete progress and real results. Effective enforcement of U.S. trade agreements is needed to resolve these challenges in particular countries and to prevent others from adopting similar practices.

Patent Backlogs

Long patent examination and approval backlogs harm domestic and overseas inventors in every economic sector. Backlogs undermine incentives to innovate, prevent timely patient access to valuable new treatments and cures, and impose huge societal costs. The Because the term of a patent begins on the date an application is filed, unreasonable delays can directly reduce the value of granted patents and undermine investment in future research. For biopharmaceutical companies, patent backlogs can postpone the introduction of new medicines. They create legal uncertainty for research-based and generic companies alike, and can increase the time and cost associated with bringing a new treatment to market.

Patent backlogs are a challenge around the world, but a few countries stand out for persistently long delays. In **Brazil** and **Thailand**, for example, it can take ten years or more to secure a patent on a new medicine. Despite recent positive steps to address the patent examination backlog in Brazil, the patent backlog challenge continues to be compounded by an unnecessary dual examination process for biopharmaceutical patent applications. The Brazilian Health Surveillance Agency (ANVISA) still may review all

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⁷⁶ Hollman, C.M. et al., "Patentability Standards for Follow-On Pharmaceutical Innovation," *Biotechnology Law Report*, June 2018, available at https://www.liebertpub.com/doi/pdf/10.1089/blr.2018.29073.cmh (last visited Jan. 27, 2021).

⁷⁷ Schultz, M. and K. Madigan, "The Long Wait for Innovation: The Global Patent Pendency Problem," George Mason University, Center for the Protection of Intellectual Property, 2016, available at https://sls.gmu.edu/cpip/wp-content/uploads/sites/31/2016/10/Schultz-Madigan-The-Long-Wait-for-Innovation-The-Global-Patent-Pendency-Problem.pdf (last visited Jan. 27, 2021).

⁷⁸ Business Standard, "Delay in Patents Can Slow Down Improvements in Medicines: Experts," October 2016, available at http://www.business-standard.com/article/news-ians/delay-in-patents-can-slow-down-improvement-in-medicine-experts-116101600452_1.html (last visited Jan. 27, 2021).

⁷⁹ Schultz, M. and K. Madigan, "The Long Wait for Innovation: The Global Patent Pendency Problem," George Mason University, Center for the Protection of Intellectual Property, 2016, available at https://sls.gmu.edu/cpip/wp-content/uploads/sites/31/2016/10/Schultz-Madigan-The-Long-Wait-for-Innovation-The-Global-Patent-Pendency-Problem.pdf (last visited Jan. 27, 2021).

patent applications for new medicines, in addition to the formal patent examination process conducted by the Brazilian Patent Office.⁸⁰ Thailand approved a patent application filed by one PhRMA member six weeks before the patent expired. The situation is only somewhat better in markets like **India**, where it takes an average of six years to secure a patent,⁸¹ and yet in 2015, India granted one patent based on an application filed 19 years earlier.⁸²

Long patent examination delays cause significant damage. A London Economics study estimated the value of lost innovation due to increased patent pendency at £7.6 billion per year. Patent backlogs are a particular challenge for small start-up firms that are playing an increasingly important role in biopharmaceutical innovation. According to a U.S. Patent and Trademark Office (PTO) Economic Working Paper, for every year an ultimately-approved patent application is delayed, a start-up firm's employment growth decreases by 21 percent and its sales growth decreases by 28 percent on average over the following five years. Each year a patent application is delayed, the average number of subsequent patents granted decreases by 14 percent, and the probability that a startup will go public is cut in half.

PhRMA members support patent term adjustment provisions in trade agreements and national laws to address unreasonable patent examination delays. They support initiatives to increase the efficiency of patent prosecution and reduce patent backlogs, including the PCT and work sharing arrangements through the IP5 and Patent Prosecution Highway (PPH) programs. Through these and other initiatives, national and regional patent offices in the European Union, Japan, Korea, Mexico and elsewhere are succeeding in reducing patent examination delays. In this regard, industry was disappointed to hear the sudden announcement on January 6, 2021, that the Gulf Cooperation Council (GCC) Patent Office is no longer accepting patent applications, thereby requiring innovators to file their patent applications in each of the GCC Member States rather than through the one office. Further, damaging legislation in the **European Union** has weakened patent term restoration mechanisms in Europe by reducing the patent protections restored through Supplementary Protection Certificates. Further work

⁸⁰ Cipriano, M., "Biodiversity Law Reform Spurs Innovation, But Patent Backlog Remains," Oct. 2016, available at https://pink.pharmaintelligence.informa.com/PS119423/Biodiversity-Law-Reform-Spurs-Innovation-But-Patent-Backlog-Remains (last visited Jan. 27, 2021).
⁸¹ Id.

⁸² IndiaSpend, *Patent Delays Threaten 'Make In India'*, Jan. 2016, available at http://www.indiaspend.com/cover-story/patent-delays-threaten-make-in-india-67033 (last visited Jan. 27, 2021).

⁸³ London Economics, *Patent Backlogs and Mutual Recognition report to the UK Intellectual Property Office,* Jan. 2010, available at

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/328678/p-backlog-report.pdf (last visited Jan. 27, 2021).

⁸⁴ Farre-Mensa, J., D. Hegde, and A. Ljungqvist, "What Is a Patent Worth? Evidence from the U.S. Patent 'Lottery'," USPTO Economic Working paper No. 2015-5, Dec. 17, 2015, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2704028 (last visited Jan. 27, 2021).

is needed to consolidate gains in patent protections and to extend effective models to other countries.

Compulsory Licensing

Biopharmaceutical innovators support strong national health systems and timely access to safe, effective, and high-quality medicines for patients who need them. Patents drive and enable research and development that delivers new treatments and cures. These limited and temporary intellectual property rights are not a barrier to access to medicines⁸⁶ – particularly when governments and the private sector partner to improve health outcomes.

Compulsory licenses (CLs) have been issued in several countries, including India, Indonesia, Russia and Malaysia, that allow local companies to make, use, sell or import particular patented medicines without the consent of the patent holder. Other governments, including Argentina, Australia, Chile, Colombia, El Salvador, European Union, Peru, the Philippines, Saudi Arabia, Turkey and Vietnam, have adopted or considered resolutions, laws or regulations that promote or provide broad discretion to issue such licenses. Some countries like Hungary, Colombia and Indonesia, have adopted emergency regulations that allow the grant or blanket use of CLs for COVID-19 products without due process or basic engagement with the patent holder. PhRMA believes that governments should grant CLs in accordance with international rules and only in exceptional circumstances and as a last resort. Decisions should be made through fair and transparent processes that involve participation by all stakeholders and consider all relevant facts and options.

Experience and recent research demonstrates that compulsory licensing is not an effective way to improve access or achieve other public health objectives. It does not necessarily lower prices⁸⁷ or speed access⁸⁸ in the short-term, or provide sustainable or comprehensive solutions to longer-term challenges. It does not address systemic barriers

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⁸⁶ See, e.g., Attaran, A. and L. Gillespie-White, "Do Patents for Antiretroviral Drugs Constrain Access to AIDS Treatments in Africa?" *Journal of the American Medical Association*, Oct. 2001, available at https://jamanetwork.com/journals/jama/fullarticle/194301 (last visited Jan. 27, 2021); Attaran, A. "How Do Patents and Economic Policies Affect Access to Essential Medicines in Developing Countries," *Health Affairs*, May 2004, available at https://www.healthaffairs.org/doi/full/10.1377/hlthaff.23.3.155 (last visited Jan. 27, 2021).

⁸⁷ Beall, R.F. et al., "Compulsory Licensing Often Did Not Produce Lower Prices for Antiretrovirals Compared to International Procurement," *Health Affairs*, Mar. 2015, available at http://content.healthaffairs.org/content/34/3/493.abstract?etoc (last visited Jan. 27, 2021).
88 When Brazil issued a CL for an antiretroviral treatment in 2007, it took the local manufacturer two years to launch production of a generic version. *See* Bond, E. and K. Saggi, "Compulsory licensing, price

to launch production of a generic version. *See* Bond, E. and K. Saggi, "Compulsory licensing, price controls, and access to patented foreign products," Vanderbilt University, Apr. 2012, available at http://www.wipo.int/edocs/mdocs/mdocs/en/wipo_ip_econ_ge_4_12/wipo_ip_econ_ge_4_12_ref_saggi.p df (last visited Jan. 27, 2021).

to access⁸⁹ – from weak health care delivery systems to low national health care funding and high taxes and tariffs on medicines. Compulsory licensing is particularly ineffective relative to the many alternatives available. Biopharmaceutical innovators support different tools and programs that make medicines available to patients who could not otherwise afford them, including drug donation and differential pricing programs, voluntary licensing and non-assert declarations.90 In sub-Saharan Africa, for example, the majority of antiretrovirals are manufactured under voluntary licenses to local generic drug companies.91

Unfortunately, some countries appear to be using CLs to promote the local production of medicines at the expense of manufacturers and jobs in the United States and elsewhere. 92 For example, **Malaysia** issued a CL in 2017 in a move that appears designed to facilitate the local development and marketing of a competing combination product. Indonesia's patent law enables the government to grant CLs on the grounds that an inventor is not manufacturing a patented product in Indonesia within three years after the patent was granted. In 2013, India's Intellectual Property Appellate Board affirmed a CL for a patented oncology medicine, based in part on a finding that the patented medicine was not being manufactured in India. 93

In its 2020 Special 301 Report, USTR rightly highlighted concerning actions by "trading partners to unfairly issue, threaten to issue, or encourage others to issue compulsory licenses" and committed to "engage, as appropriate, with trading partners".94 PhRMA members welcomed these statements and urge USTR and other federal agencies to engage to address serious and growing compulsory licensing threats across Latin America, Southeast Asia and elsewhere.

⁸⁹ Vesper, I., "Cheap drugs not enough to fight hepatitis C in Asia," SciDevNet, July 2018, available at https://www.scidev.net/global/disease/news/drugs-fight-hepatitis-

asia.html?utm_source=link&utm_medium=rss&utm_campaign=/global/global_rss.xml& (last visited Jan.

⁹⁰ IFPMA Policy Position, Voluntary Licenses and Non-Assert Declarations, available at http://www.ifpma.org/wp-content/uploads/2016/03/IFPMA-Position-on-VL-and-Non-Assert-Declarations-18FEB2015.pdf (last visited Jan. 27, 2021).

⁹¹ Chien, C., "HIV/AIDS Drugs for Sub-Saharan Africa: How Do Brand and Generic Supply Compare?" PLoS One, Mar. 2007, available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1805689/ (last visited Jan. 27, 2021).

⁹² See, for example, Drugs for Neglected Diseases Initiative, "DNDi welcomes Malaysia's move to secure access to more affordable treatments for hepatitis C," Sep. 2017, available at https://www.dndi.org/2017/media-centre/press-releases/dndi-welcomes-malaysia-move-accessaffordable-treatments-hepc/ (last visited Jan. 27, 2021).

⁹³ Chatterjee, P., "India's First Compulsory License Upheld, But Legal Fights Likely to Continue," Intellectual Property Watch, Apr. 2013, available at http://www.ip-watch.org/2013/03/04/indias-firstcompulsory-licence-upheld-but-legal-fights-likely-to-continue/ (last visited Jan. 27, 2021).

^{94 2020} Special 301 Report, at p. 14 (Apr. 2020), available at

https://ustr.gov/sites/default/files/2020_Special_301_Report.pdf (last visited Jan. 27, 2021).

Weak Patent Enforcement

To continue to invest in the research and development of new medicines, biopharmaceutical innovators must be able to effectively enforce patents. Mechanisms such as patent linkage that provide for the early resolution of patent disputes before potentially infringing follow-on products enter a market are essential for effective enforcement. The premature launch of a product that is later found to infringe a patent may disrupt patient treatment and require governments to adjust and re-adjust national formularies and reimbursement policies. For biopharmaceutical innovators, it may cause commercial damage that is impossible to repair later.

At a minimum, effective early resolution mechanisms (1) require governments to notify the holder of a patent on a biopharmaceutical product if another party applies for marketing approval for a generic or biosimilar versions of that product; (2) enable the holder of a patent on a biopharmaceutical product to seek provisional enforcement measures, such as a stay, preliminary injunction or interlocutory injunction, to prevent the marketing of a potentially infringing generic or biosimilar version of that product; and (3) provide for the timely resolution of patent disputes before marketing approval is granted for a generic or biosimilar.

PhRMA members welcomed bold proposed intellectual property reforms **China** announced in 2017, including planned implementation of a patent linkage system. While those efforts had stalled, they have been reinvigorated this year by the inclusion of effective patent enforcement commitments in the Phase One Trade Agreement. As a result, China has proposed critical elements of a patent linkage system in both amendments to the Patent Law, as well as draft Measures for the Implementation of Patent Linkage. A well-functioning patent enforcement system is critical in China, particularly in light of the fact that its regulatory authority continues to approve follow-on products while the reference products in each case are still subject to patent protection. As such, PhRMA and its member companies strongly welcome the intellectual property commitments included in the Phase One Trade Agreement and look forward to securing expeditious implementation of Article 1.11 of these commitments in a manner fully consistent with international best practices.

Biopharmaceutical innovators strongly supported passage of patent linkage legislation in **Taiwan** in late 2017. We welcomed regulations issued on January 30, 2019, to implement patent linkage for both biologic and chemically synthesized medicines. In July 2019, Taiwan published the final patent linkage regulation and shortly thereafter the Executive Yuan approved implementation of the patent linkage system effective August 20, 2019. Disappointingly, however, the Taiwan Food and Drug Administration has unilaterally determined that Taiwan's patent linkage system should not include patents that protect new doses, new dosage forms or new unit strengths. If allowed to continue, this action will seriously undermine the value of Taiwan's patent linkage system. We stand ready to work with the Taiwan Government to support appropriate implementation of the regulation and to ensure that patents on all innovative medicines are effectively enforced.

U.S. trade agreements generally require parties to notify patent holders, to act expeditiously on requests for provisional enforcement measures and to prevent the marketing of generic or biosimilar products during the patent term without the consent of the patent holder. However, some U.S. trade agreement partners do not comply with these obligations. For example, biopharmaceutical innovators in the United States are unable to quickly secure effective preliminary injunctions in **Mexico**. Until recently, **Australia** did not require any notice of a third party's intention to obtain marketing approval, so as to enable final resolution of patent claims before marketing approval.

Saudi Arabia has knowingly facilitated the infringement of the patent on a medicine formulated and exported from the United States by giving a local company approval to produce a competing product during the patent term. Similarly, in 2017 the United Arab Emirates (UAE) approved the sale of patent infringing generics despite the government's pharmaceutical patent commitments in Ministerial Decree No. 404 and reciprocal patent recognition obligations under the Gulf Cooperation Council. Promisingly, recently issued Decree No. 321 suggests that the UAE may be poised to remedy this deficiency. In Bangladesh, local companies are taking advantage of the country's least developed country (LDC) status to undermine intellectual property protections in other countries. Under the terms of a waiver adopted in 2001 (and extended in 2015), LDCs are not obligated to comply with WTO intellectual property rules. 95 Local companies in Bangladesh are reverse engineering and making copies of biopharmaceutical products that are under patent in other parts of the world. These unlicensed biopharmaceutical products are entering markets abroad, e.g., India, where patent protection exists. The quality and safety of these products have not been reviewed and could pose significant risks. Furthermore, local companies are adopting product names for biopharmaceutical products that are nearly identical to well-known product names of U.S. biopharmaceutical companies creating confusion in the market as to their source and/or association. Under the terms of a waiver adopted in 2001 (and extended in 2015), LDCs are not obligated to comply with WTO intellectual property rules. 96

Effective early resolution mechanisms are also needed in **India**, **Russia** and other countries, where innovators are not notified of marketing approval applications filed for potentially infringing products and generally are unable to secure provisional enforcement measures.

PhRMA urges USTR and other federal agencies to enforce intellectual property commitments in existing U.S. trade agreements and to continue to promote effective patent enforcement abroad, including through the JCCT, the U.S.-India Trade Policy Forum and other bilateral dialogues.

⁹⁶ WTO Council decision, available at https://www.wto.org/english/news_e/news15_e/trip_06nov15_e.htm (last visited Jan. 27, 2021).

⁹⁵ WTO Council decision, available at https://www.wto.org/english/news_e/news15_e/trip_06nov15_e.htm (last visited Jan. 27, 2021).

Excessive and Punitive Damages

Biopharmaceutical innovators must be able to rely on and enforce patents issued by competent government authorities. Laws or policies that allow governments or other non-parties to a patent dispute to collect excessive and punitive damage awards after the fact from innovators that pursue unsuccessful patent claims unfairly penalize and discourage the use of provisional enforcement measures as part of well-functioning early resolution mechanisms. These policies undermine legal certainty, predictability and the incentive provided by patents to invest in new treatments and cures.

The ability to enforce patents in **Canada** continues to weaken. Canada's current policies discourage and penalize innovators from seeking patent enforcement actions by enabling generic litigants to recover excessive and punitive damage awards simply because innovators unsuccessfully sought to protect patents granted by the Canadian Government. Pending court decisions could make that situation far worse – increasing the potential that innovators forfeit patents prematurely in Canada rather than defend them. Section 8 of the Patented Medicines (Notice of Compliance) Regulations (PM (NOC) Regulations) is intended to compensate generic drug companies that bring successful patent disputes against innovators for actual losses suffered during the stay period. But Canada's courts are granting generic litigants damages in excess of 100 percent of the total generic market.

Canada's implementing regulations of the Comprehensive Economic and Trade Agreement (CETA) further expose innovators to excessive liability under Section 8. These regulations enable competitors to claim indefinite future loses and to seek compensation for production "ramp-up" costs that they may have incurred before the stay was granted and after it was lifted. In addition, Canada's courts are now contemplating even more excessive damage awards for generic litigants using obscure legal theories under the "Statute of Monopolies" to seek **treble** damages from innovators that unsuccessfully enforced their patent(s) against a generic litigant. An Ontario trial court decision awarding a generic litigant damage under this statute is currently under appeal.

Australia's Therapeutic Goods Act passed as part of legislation implementing the U.S.-Australia Free Trade Agreement, ⁹⁷ provided for "market-size damages" in certain instances. Since 2012, the Australian Government has stated its intent to seek – and has sought – market-size damages from biopharmaceutical innovators that have pursued unsuccessful patent claims. Those damages are designed to compensate Australia's pharmaceutical reimbursement scheme (PBS) for any higher price paid for a patented medicine during the period of a provisional enforcement measure. The PBS imposes automatic price cuts on medicines as soon as competing versions enter the market, but the policy entails no corresponding mechanism to compensate innovators for losses if an infringing product is launched prematurely.

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⁹⁷ See Schedule 7 of the U.S. Free Trade Agreement Implementation Act 2004, available at http://www.wipo.int/wipolex/en/text.jsp?file_id=206375 (last visited Jan. 27, 2021).

By pursuing market-size damages, Australia is unfairly tipping the scales in commercial patent disputes – encouraging competitors to launch at risk and discouraging innovators from enforcing their patents. This action creates an inappropriate conflict of interest by permitting the same government that examined and granted a patent to seek damages if that patent is later ruled invalid or not infringed. It exposes innovators to significant additional compensation claims that are difficult to quantify and were not agreed to at the time provisional enforcement measures were granted. The size of these additional claims equates legitimate patent enforcement with patent abuse. Allowing governments or other non-parties to a patent dispute to collect market-size damages undermine legal certainty, predictability and the incentives patents provide for investment in new treatments and cures. Australia's practice appears to be inconsistent with the U.S.-Australia Free Trade Agreement and with WTO intellectual property rules, including with respect to provisional measures.

In a 2004 letter⁹⁸ to Australia's trade minister, USTR raised concerns about the significant and negative impact that the Therapeutic Goods Act amendments permitting market-size damages could have on patent rights and the consistency of those amendments with Australia's international obligations. The letter stated that the "United States reserves its right to challenge the consistency of these amendments with such obligations." PhRMA members urge USTR and other federal agencies to prioritize actions to address Australia's pursuit of market-size damages.

Regulatory Data Protection Failures

Regulatory data protection (RDP) complements patents on innovative medicines. By providing temporary protection for the comprehensive package of information biopharmaceutical innovators must submit to regulatory authorities to demonstrate the safety and efficacy of a medicine for marketing approval, RDP provides critical incentives for investment in new treatments and cures.

RDP is a carefully balanced mechanism that improves access to medicines of all kinds. Prior to 1984, generic drug companies in the United States were required to generate their own test data for marketing approval. The Hatch-Waxman Act introduced abbreviated pathways that enabled generic drug companies to rely on test data developed by innovators. 99 In exchange, innovators received a period of protection for test data gained through substantial investments in clinical trials over many years. As a result of this and other provisions of Hatch-Waxman, the percentage of prescription drugs

⁹⁸ Letter from U.S. Trade Representative Robert B. Zoellick to Australian Minister of Trade Mark Vaile, Nov. 17, 2004, available at

https://ustr.gov/archive/assets/Trade_Agreements/Bilateral/Australia_FTA/Implementation/asset_upload_file393 6951.pdf (last visited Jan. 27, 2021).

⁹⁹ Pub. L. No. 98-417, 98 Stat. 1585 (1984) (codified as amended at 21 U.S.C. § 355 and 35 U.S.C. §§ 156, 271 and 282).

filled by generics soared from 19 percent in 1984 to approximately 90 percent of all prescriptions filled in the United States today. 100

RDP is particularly critical for biologic medicines, which may not be adequately protected by patents alone. Made using living organisms, biologics are so complex that it is possible for others to produce a version – or "biosimilar" – of a medicine that may not be covered within the scope of the innovator's patent. For this reason and others, U.S. law provides twelve years of RDP for biologics. This was not an arbitrary number, but rather the result of careful consideration and considerable research on the incentives necessary to ensure biopharmaceutical innovators and the associated global scientific ecosystem are able to sustainably pursue groundbreaking biomedical research. ¹⁰¹

Unfortunately, many U.S. trading partners do not provide RDP. Examples, some of which are described further in the country profiles below, include Algeria, Argentina, Brazil, China, Egypt, and India. Others, like Saudi Arabia, provide RDP but have allowed local companies to rely on data submitted by American innovators during the period of protection. This is contrary to WTO rules, which require parties to protect regulatory test data submitted as a condition of obtaining marketing approval against both disclosure and unfair commercial use. U.S. trade agreements generally require parties to provide RDP for a specified period of time, but some partner countries have not fully honored their commitments. For example, Mexico and Peru provide RDP for smallmolecule treatments, but not for biologics. Other countries have adopted mechanisms inconsistent with international rules that enable governments to circumvent RDP. Recently, the **United Arab Emirates** took the positive step of issuing an RDP Decree, but created an unprecedented exception to that protection. We urge the UAE Government to ensure that the Decree (and in particular the proposed exception in Article 5) is consistent with the UAE's international commitments and that it is implemented in a manner that provides effective and meaningful RDP for all innovative pharmaceuticals (including biologics). Israel enacted legislation affording limited RDP to small molecule drugs, but it fails to provide such protection for biologics. Israel established an intergovernmental committee in 2018 to consider providing RDP for biologics, although the process has not yet yielded a policy recommendation for providing adequate protection. We urge Israel to complete the regulatory impact assessment process and provide a period of RDP for biologic drugs that reflects the highest international standards. Meanwhile, Canada passed legislation in 2014 that gives the Health Minister broad discretion to share undisclosed test data without safeguards to protect against unfair commercial use. Other countries provide RDP in a manner that discriminates against foreign innovators.

PhRMA urges USTR and other federal agencies to enforce intellectual property commitments in existing U.S. trade agreements, to address RDP failures in bilateral

¹⁰¹ See, e.g., Grabowski, H. et al., "Data exclusivity for biologics," *Nature Reviews – Drug Discovery*, Jan. 2011, available at https://fds.duke.edu/db/attachment/1592 (last visited Jan. 27, 2021).

¹⁰⁰ PhRMA analysis based on IQVIA National Sales Perspective and Quintiles, IMS Institute MIDAS™ audited data, 2017.

forums and to seek and secure RDP commitments in trade agreement negotiations that reflect the high standards found in U.S. law.

C. Localization barriers – A cross-cutting challenge

Like businesses in many other sectors of the U.S. economy, PhRMA members are witnessing a proliferation of acts, policies and practices abroad that are designed to benefit local producers at the expense of manufacturers and their employees in the United States and elsewhere around the world. In countries like **Argentina**, **China**, **India**, **Indonesia**, **Russia**, and **Turkey**, these localization barriers have become so pervasive that they are now a routine part of many transactions between businesses and governments – from securing patents, regulatory approval and market entry to the most minor administrative formalities.

These discriminatory measures put American jobs at risk and appear to violate the most basic principles of the global trading system found in the General Agreement on Tariffs and Trade, TRIPS and the WTO Agreements on Technical Barriers to Trade and Trade-Related Investment Measures. They deny adequate and effective intellectual property protection for biopharmaceutical innovators in the United States and fair and equitable market access for new medicines, vaccines and other health technologies. Some examples of the most serious localization barriers that are undermining the ability of PhRMA members to develop and deliver new treatments and cures include:

• Market entry or other benefits conditioned on local manufacturing. While many economies provide positive incentives for businesses to conduct research and development and to manufacture in their markets, 102 an alarming number are seeking to grow their economies by discriminating against innovators in the United States and other countries. For example, **Turkey** has removed products from the reimbursement list that are not produced in Turkey. **Algeria** prohibits imports of virtually all biopharmaceutical products that compete with similar products manufactured domestically. **Russia**'s Law on the Federal Contract System allows government medicines procurement agencies to ban foreign goods in public procurement tenders. Moreover, Russia is implementing legislation that limits national medicine procurement to manufacturers in the Eurasian Economic Union (EAEU) if there are two or more manufacturers for a particular class of medicine. **Indonesia**'s new Patent Law permits the government to compulsory license patented medicines if the patent holder does not begin manufacturing that medicine in Indonesia within three years after the patent is granted. 103

¹⁰² Pugatch Consilium, "Separating Fact From Fiction – How Localization Barriers Fail Where Positive Non-Discriminatory Incentives Succeed: A Global Assessment of Localization Policies and Incentivizing Life Science Investment and Innovation," 2016, available at http://www.pugatch-consilium.com/reports/Localization%20Paper_US_FINAL.pdf (last visited Jan. 27, 2021).

¹⁰³ Cory, N., "The Worst Innovation Mercantilist Policies of 2016," Information Technology and Innovation Foundation, Jan. 2017, available at http://www2.itif.org/2017-worst-innovation-mercantilist-policies.pdf?_ga=1.176855585.581989633.1484510758 (last visited Jan. 27, 2021).

- Mandatory technology transfer. In Indonesia and other countries, local
 manufacturing requirements are coupled with other policies that directly
 expropriate sensitive intellectual property and know-how. For example, a foreign
 biopharmaceutical company may import medicines into Indonesia only if it partners
 with an Indonesian firm and transfers relevant technology so that those medicines
 can be domestically produced within five years. Requiring technology transfer to
 import medicines into Indonesia creates a windfall for domestic firms and artificially
 distorts the market.
- De facto bans on imports. Manufacturing licensing requirements generally are intended to ensure that companies meet globally recognized standards such as good manufacturing practices (GMP). Some countries exploit these licensing requirements by adopting policies that virtually prevent market entry. For example, Turkey does not recognize internationally accepted GMP certifications from other countries unless they have mutual recognition agreements (MRAs) on inspections with Turkey. Given, however, the many steps that would need to be satisfied before an MRA could be pursued between the United States and Turkey, this policy serves as a de facto ban on imports from biopharmaceutical innovators in the United States. Turkey has stated publicly that the purpose of this policy is to promote Turkish drug companies.

Recent research¹⁰⁴ demonstrates the significant and widespread damage localization barriers can inflict on the global economy and on markets that put such barriers in place. They cost businesses and their employees in the United States and other leading nations by cutting tens of billions of dollars in global trade and by reducing global income and innovation. They do not increase biopharmaceutical investment or knowledge-intensive employment in countries that adopt localization barriers. In fact, they can even reduce employment – particularly for the less skilled – by raising input costs and severing connections to global value chains.¹⁰⁵

PhRMA members appreciate the attention that USTR and other federal agencies have given to localization barriers in recent reports and publications. However, action is urgently needed to remove these barriers and to discourage other countries from adopting

http://www2.itif.org/2013-localization-barriers-to-trade.pdf?_ga=1.136058805.581989633.1484510758 (last visited Jan. 27, 2021); Hufbauer, G.C., J.J. Schott et al., *Local Content Requirements: A Global Problem*, Peterson Institute for International Economics, Sep. 2013, available at

¹⁰⁴ See, e.g., Stone, S., J. Messent and D. Flaig, "Emerging Policy Issues: Localisation Barriers to Trade," OECD Trade Policy Papers, No. 180, 2015, available at http://www.oecd-ilibrary.org/trade/emerging-policy-issues_5js1m6v5qd5j-en;jsessionid=ai5pr32hanqoq.x-oecd-live-03 (last visited Jan. 27, 2021); Ezell, S.J., R.D. Atkinson and M.A. Wein, "Localization Barriers to Trade: Threat to the Global Innovation Economy," Information Technology and Innovation Foundation, Sep. 2013, available at http://www2.itif.org/2013-localization-barriers-to-trade.pdf?_ga=1.136058805.581989633.1484510758

https://www.piie.com/bookstore/local-content-requirements-global-problem (last visited Jan. 27, 2021).

105 Pugatch Consilium, "Separating Fact From Fiction – How Localization Barriers Fail Where Positive Non-Discriminatory Incentives Succeed: A Global Assessment of Localization Policies and Incentivizing Life Science Investment and Innovation," 2016, available at http://www.pugatch-consilium.com/reports/Localization%20Paper_US_FINAL.pdf (last visited Jan. 27, 2021).

similar acts, policies and practices. Biopharmaceutical innovators in the United States look forward to concrete progress and real results in 2021.

III. Addressing Challenges and Securing the Benefits of Biopharmaceutical Innovation

To address these pressing challenges and ensure biopharmaceutical innovators in the United States can continue to research, develop and deliver new treatments and cures for patients who need them around the world, PhRMA members urge USTR and other federal agencies to take the following five actions. These actions can help ensure access to quality, safe and effective medicines at home and abroad by promoting high standards of protection for patents and regulatory test data, effective enforcement of these and other intellectual property rights and transparent and predictable legal and regulatory regimes.

A. Enforce and defend global, regional and bilateral rules

USTR and other federal agencies should use all available tools and leverage to ensure America's trading partners live up to their obligations in global, regional and bilateral trade and investment agreements. Negotiating new trade agreements, modernizing existing trade agreements and strengthening enforcement activity in the months and years ahead will be critical to end discriminatory pricing policies and to address longstanding intellectual property challenges around the world – particularly in countries that are U.S. trade and investment agreement partners, that have made important unfulfilled WTO accession commitments and that benefit from U.S. trade preference programs.

U.S. regional and bilateral trade agreements affirm globally accepted standards for the patentability of biopharmaceutical and other inventions and require countries to protect regulatory test data, provide mechanisms that enable innovators to resolve patent disputes prior to the marketing of potentially infringing products, and establish a stronger intellectual property framework. Some also include government pricing and reimbursement and transparency commitments. However, **Australia**, **Canada**, **Chile**, **Colombia**, **Korea** and other U.S. trading partners fail to adequately comply with some or all of these obligations. USTR and other federal agencies should consider a process to systematically review compliance with trade and investment agreements and to take steps necessary to ensure that countries abide by rules to which they have agreed.

On joining the WTO in 2001, **China** committed to provide six years of protection for clinical test and other data submitted for regulatory approval of biopharmaceutical products containing a new chemical ingredient. On the china has never implemented this

https://www.wto.org/english/thewto_e/acc_e/completeacc_e.htm (last visited Jan. 27, 2021).

¹⁰⁶ World Trade Organization, "Report of the Working Party on the Accession of China" (WT/ACC/CHN/49), Oct. 2001, available at

obligation, despite agreement to do so during the 2012 U.S.-China Joint Commission on Commerce and Trade meeting. ¹⁰⁷ In light of these deficiencies, we strongly welcomed the CFDA draft Circular 55 (Relevant Policies on Protecting Innovators' Rights to Encourage New Drug and Medical Device Innovation) and draft "Implementing Provisions on Protection of Drug Trial Data" (April 2018), which propose up to twelve years of RDP for therapeutic biologics, orphan and pediatric medicines and six years of RDP for new small molecule drugs. These proposals represent a strong first step toward reform in this area, but it is now imperative that these proposed policy revisions are transparently and expeditiously implemented in a manner that provides for effective protection for U.S. biopharmaceutical companies and is consistent with international best practices and China's renewed commitment to provide RDP as affirmed in the chapeau to Section C of Chapter One of the Phase One Trade Agreement.

The Generalized System of Preferences (GSP) program provides unilateral duty-free access to the U.S. market for more than 3,500 products. ¹⁰⁸ Before granting GSP benefits to an eligible country, the President must take into account a number of factors, including the extent to which the country is willing to "provide equitable and reasonable access to its markets" and is "providing adequate and effective protection of intellectual property rights." ¹⁰⁹ However, GSP beneficiaries like **Argentina**, **Brazil** and **Indonesia** do not provide adequate and effective protection of intellectual property rights or fair and equitable market access.

The Special 301 Report is an important tool. Action plans required by the Trade Facilitation and Trade Enforcement Act of 2015 should be developed for countries listed on the Priority Watch List with input from relevant stakeholders. 110 Out-of-cycle reviews announced in the Special 301 Report should be conducted and should involve the participation of relevant stakeholders.

The National Trade Estimate Report likewise is an important tool to identify and prioritize acts, policies and practices in these and other overseas markets that are harming America's creative and innovative industries by denying adequate and effective intellectual property protection and fair and equitable market access. PhRMA members urge USTR and other federal agencies to ensure that this tool is used effectively.

USTR should pursue a variety of enforcement initiatives, including – but not limited to – the filing of dispute settlement cases to secure compliance with trade and investment

¹⁰⁷ Office of the U.S. Trade Representative, "Fact Sheet: 23rd U.S.-China Joint Commission on Commerce and Trade," Dec. 2012, available at https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2012/december/23rd-JCCT (last visited Jan. 27, 2021).

¹⁰⁸ Office of the United States Trade Representative, *U.S. Generalized System of Preferences Guidebook*, Apr. 2018, available at

https://ustr.gov/sites/default/files/files/gsp/GSP%20Guidebook%20April%202018.pdf (last visited Jan. 27, 2021).

¹⁰⁹ See Title V of the Trade Act of 1974 (19 U.S.C. § 2461 et seq.), as amended.

¹¹⁰ See Section 182 of the Trade Act of 1974 (19 U.S.C. § 2242), as amended.

agreement commitments. In addition, USTR should create and fill key positions, such as the Chief Innovation and Intellectual Property Negotiator required by the Trade Facilitation and Trade Enforcement Act of 2015.¹¹¹

B. Secure strong commitments in global, regional and bilateral negotiations

Global, plurilateral, and bilateral trade and investment negotiations provide critical opportunities to build on the existing foundation of international rules and to secure commitments necessary to drive and sustain 21st Century biopharmaceutical innovation. Ending discriminatory pricing policies, eliminating restrictive patentability criteria, addressing unreasonable patent examination and approval delays, providing for the early and effective resolution of patent disputes, ensuring robust protection of regulatory test data, and reducing unnecessary regulatory barriers can promote biopharmaceutical innovation and improve market access.

PhRMA supports trade agreements that include strong protections for intellectual property, ensure fair and equitable market access and enable biopharmaceutical innovators in the United States to export lifesaving medicines to patients around the world. Free and fair trade agreements open new markets. They help grow our economy and create better, higher-paying jobs. PhRMA members look forward to continuing to work with USTR and other federal agencies to modernize existing trade agreements and to consider opportunities to further improve public health and grow American manufacturing exports and jobs through additional trade agreements, including with leading U.S. biopharmaceutical export markets.¹¹²

C. End discrimination in pricing and reimbursement

PhRMA members are, and seek to be, partners in solutions to health care challenges facing patients and their communities around the world. However, some governments have proposed or implemented pricing and reimbursement policies that discriminate against medicines made in America, do not appropriately value innovation and lack predictable, transparent, and consultative processes. As stated above, such measures can undermine the ability of biopharmaceutical innovators to bring new medicines to patients who need them and to invest in future treatments and cures.

The biopharmaceutical industry is unique in that most foreign governments, as sole or primary health care providers, impose burdensome and often discriminatory price controls and regulations on the sector. Others have resorted to improperly using national compulsory licensing provisions to threaten or coerce manufacturers to accept pricing agreements on unreasonable commercial terms and conditions. As a result, market

¹¹¹ Public Law 114–125 (Feb. 24, 2016), available at

https://www.congress.gov/114/plaws/publ125/PLAW-114publ125.pdf (last visited Jan. 27, 2021).

¹¹² U.S. Department of Commerce, International Trade Administration, "2016 Top Markets Report: Pharmaceuticals," May 2016, available at

https://legacy.trade.gov/topmarkets/pdf/Pharmaceuticals_Executive_Summary.pdf (last visited Jan. 27, 2021).

access for pharmaceuticals is dependent not only on innovators meeting strict regulatory approval standards and obtaining necessary intellectual property protections, but also on obtaining positive government pricing and reimbursement determinations. It is imperative, therefore, that regulatory procedures and decisions regarding the approval and reimbursement of medicines are governed by fair, transparent and verifiable rules guided by science-based decision making. There should be meaningful opportunities for input from manufacturers and other stakeholders to health authorities and other regulatory agencies and a right to appeal government pricing and reimbursement decisions to an independent, objective court or administrative body.

The U.S. Government can play a critical role in ensuring transparency and due process of pricing and reimbursement policies, as well as in highlighting the global benefits to patients that result from a reduction in trade barriers. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 called for the Administration to develop a strategy to address foreign price controls on pharmaceuticals and related practices through bilateral and multilateral trade negotiations. PhRMA believes that the cornerstone of any such strategy must be a proactive U.S. trade policy focused on: (i) addressing discriminatory government price controls and related practices and (ii) highlighting the global benefits for patients from the potential groundbreaking research that could result from a reduction in key trade barriers. Unfortunately, governmental policies around the globe over the last year have continued to harm patient access to innovative medicines.

PhRMA members appreciate steps USTR and other federal agencies have taken to ensure fair and equitable market access for innovative medicines in overseas markets, including seeking and securing commitments in trade agreements that ensure pricing and reimbursement policies abroad are fair, reasonable, and non-discriminatory, and appropriately value patented pharmaceuticals. PhRMA urges USTR and other federal agencies to continue to promote the full implementation of these commitments and to build on them in future trade negotiations by ensuring future trade agreements meet the Trade Promotion Authority objective to "ensure that government regulatory reimbursement regimes are transparent, provide procedural fairness, are non-discriminatory, and provide full market access for United States products." 113

In particular, proposed laws, regulations and procedures concerning how medicines are approved, priced, and reimbursed should be:

- Promptly published or otherwise made available to enable interested parties to become acquainted with them.
- Published prior to adoption in a single official journal of national circulation, with an
 explanation of the underlying purpose of the regulation. In addition, interested
 parties (including trading partners) should be provided a reasonable opportunity to
 comment on the proposed measures. Those comments and any revisions to the

¹¹³ Section 102(b)(7)(G) of the Bipartisan Congressional Trade Priorities and Accountability Act of 2016 (P.L. 114-26).

proposed regulation should be addressed in writing at the time that the agency adopts its final regulations. Finally, there should be reasonable time between publication of the final measures and their effective date so that the affected parties can adjust their systems to reflect the new regulatory environment.

In turn, specific regulatory determinations or pricing and reimbursement decisions should be:

- Based on fair, reasonable, consistent and non-discriminatory procedures, rules and criteria that are fully disclosed to applicants.
- Completed within a reasonable, specified timeframe. In some countries, there are
 no deadlines for making decisions on whether to approve new medicines. In
 others, deadlines exist, but are regularly not met. These delays impede market
 access, deplete the patent term, and are detrimental to patients waiting for lifesaving medicines.
- Conducted so that they afford applicants timely and meaningful opportunities to provide comments at relevant points in the decision-making process.
- Supported by written reports which explain the rationale for the decision and include citations to any expert opinions or academic studies relied upon in making the determination.
- Subject to an independent review process.

D. Combat the worldwide proliferation of counterfeit medicines

PhRMA members view counterfeit medicines as a critical public health and safety concern threatening patients around the world. Counterfeit medicines may deprive patients of the medicines they need and contribute to drug-resistant forms of tuberculosis and other serious diseases and contain impurities or toxins that can cause harm or even death. This challenge is exacerbated by the ease with which counterfeiters can offer

2014, available at https://www.gpo.gov/fdsys/pkg/CHRG-113hhrg88828/pdf/CHRG-113hhrg88828.pdf

(last visited Jan. 27, 2021).

¹¹⁴ Testing reported in *The Lancet* found one-third of anti-malarial medicines in sub-Saharan Africa and South East Asia lacked active ingredients. Guarvika, M.L.N. et al., "Poor-quality antimalarial drugs in southeast Asia and sub-Saharan Africa," *The Lancet*, June 2012, available at http://www.thelancet.com/journals/laninf/article/PIIS1473-3099%2812%2970064-6/fulltext (last visited Jan. 27, 2021). *See also* Testimony of Howard Sklamberg, U.S. Food and Drug Administration Deputy Commissioner for Global Regulatory Operations and Policy, before the House Energy and Commerce Subcommittee on Oversight and Investigations, "Counterfeit Drugs: Fighting Illegal Supply Chains," Feb.

fake medicines over the Internet¹¹⁵ and ship them by mail¹¹⁶ to patients and consumers worldwide.¹¹⁷

Counterfeit medicines are a potential danger to patients everywhere, including in the United States. During fiscal year 2019, U.S. Customs and Border Protection seized more than 1,700 shipments of counterfeit pharmaceuticals at America's borders. Using a broader measure that includes counterfeiting, illegal diversion and theft, the Pharmaceutical Security Institute documented more than 5,800 incidents of pharmaceutical crime in the United States in calendar year 2018 – an all-time high. Heaving Across all sectors, the Organization for Economic Cooperation and Development (OECD) found that global counterfeiting and piracy accounts for 2.5 percent of world trade and disproportionately harms innovators in the United States. PhRMA and its members welcomed the proactive launch and implementation of "Operation Stolen Promise 2.0" by the U.S. Department of Homeland Security in April 2020 to address COVID-19-related fraud and criminal activity, including the illicit sale and distribution of counterfeit or unauthorized vaccines and treatments.

China and **India** are leading sources of fake medicines seized at ports of entry in the United States¹²¹ and elsewhere,¹²² though many other jurisdictions are involved –

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¹¹⁵ Of more than 11,000 web sites selling prescription medicines to patients in the United States, the National Association of Boards of Pharmacy® has found approximately 96% of them are operating illegally. See National Association of Boards of Pharmacy, "Internet Drug Outlet Identification Program: Progress Report for State and Federal Regulators," Aug. 2017, available at https://nabp.pharmacy/wp-content/uploads/2016/08/Internet-Drug-Outlet-Report-August-2017.pdf (last visited Jan. 27, 2021).
¹¹⁶ An OECD study found that more than 60% of counterfeit goods seized around the world between 2011 and 2013 were shipped by mail or express carrier. OECD, "Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact," 2016, available at http://www.keepeek.com/Digital-Asset-Management/oecd/governance/trade-in-counterfeit-and-pirated-goods_9789264252653-en#.WHv5mpcraBc#page1 (last visited Jan. 27, 2021).

¹¹⁷ Institute of Medicine (IOM), *Countering the Problem of Falsified and Substandard Drugs*, Feb. 2013, available at https://www.ncbi.nlm.nih.gov/books/NBK202530/ (last visited Jan. 27, 2021). The IOM notes that "because the internet facilitates easy international sales, online drug stores have spread the problem of falsified and substandard drugs...." *Id.*

¹¹⁸ Homeland Security, "Intellectual Property Rights: Fiscal Year 2019 Seizure Statistics," Sep. 2020, available at https://www.cbp.gov/sites/default/files/assets/documents/2020-

Sep/FY%202019%20IPR%20Statistics%20Book%20%28Final%29.pdf (last visited Jan. 27, 2021). ¹¹⁹ Pharmaceutical Security Institute, "Incident Trends," available at https://www.psi-inc.org/incident-trends (last visited Jan. 27, 2021).

¹²⁰ OECD, "Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact," 2016, available at http://www.keepeek.com/Digital-Asset-Management/oecd/governance/trade-in-counterfeit-and-pirated-goods 9789264252653-en#.WHv5mpcraBc#page1 (last visited Jan. 27, 2021).

¹²¹ Homeland Security, "Intellectual Property Rights Seizure Statistics: Fiscal Year 2017," Apr. 2018, available at https://www.cbp.gov/document/stats/fy-2017-ipr-seizure-statistics (last visited Jan. 27, 2021). ¹²² See, e.g., "Report on EU customs enforcement of intellectual property rights: Results at the EU border," 2015, available at http://ec.europa.eu/taxation_customs/sites/taxation/files/2016_ipr_statistics.pdf (last visited Jan. 27, 2021).

particularly in online sales.¹²³ According to the WHO, regions where protection and enforcement systems are weakest also see the highest incidence of counterfeit medicines. In these jurisdictions and others, customs and other law enforcement officials often are not able to seize counterfeit medicines, particularly goods in transit, goods in free trade zones and goods offered for sale on the Internet. Violations of limited laws on the books often are not effectively enforced or do not come with sufficient penalties to deter counterfeiting.¹²⁴

PhRMA member companies work to maintain the safety of their manufacturing facilities and the security of their global supply chains. They currently employ and routinely enhance a variety of anti-counterfeiting technologies, including covert and overt features on the packaging of high-risk prescription medicines. They have adopted a range of business processes to better secure prescription drug supply chains and facilitate the early detection of criminal counterfeiting activity. They partner with law enforcement officials around the world.

To combat the global proliferation of counterfeit medicines and active pharmaceutical ingredients, PhRMA supports strengthening training and collaboration with U.S. trading partners to adopt and implement a comprehensive regulatory and enforcement framework that: (i) subjects drug counterfeiting activity to effective administrative and criminal remedies and deterrent penalties; (ii) adequately regulates and controls each link in the legitimate supply chain; (iii) trains, empowers and directs drug regulators, law enforcement authorities and customs to take effective and coordinated action, including against exports and online activity; and (iv) educates all stakeholders about the inherent dangers of counterfeit medicines.

E. Build and strengthen global cooperation

Finally, PhRMA members urge USTR and other federal agencies to further build and strengthen partnerships with countries around the world that also have a critical stake in a strong and effective intellectual property system that values and protects innovation. Federal agencies should promote full implementation and ensure effective enforcement of global, regional and bilateral commitments and support training of regulators, law enforcement officials, judges and other court personnel overseas to enforce those commitments.

PhRMA members appreciate the steps that USTR and other federal agencies already are taking to strengthen cooperation with other governments. Bilateral forums like the Transatlantic IPR Working Group have helped to build understanding and to identify

¹²³ United States Government Accountability Office, "Internet Pharmacies: Federal Agencies and States Face Challenges Combatting Rogue Sites, Particularly Those Abroad," (GAO-13-560), July 2013, available at http://www.gao.gov/assets/660/655751.pdf (last visited Jan. 27, 2021).

¹²⁴ Office of the U.S. Intellectual Property Enforcement Coordinator, "Supporting Innovation, Creativity & Enterprise: Charting a Path Ahead," U.S. Joint Strategic Plan on Intellectual Property Enforcement, FY2017-2019, available at https://obamawhitehouse.archives.gov/blog/2016/12/12/supporting-innovation-creativity-and-enterprise-charting-path-ahead (last visited Jan. 27, 2021).

and advance common priorities. They can be a model for similar engagement with other countries, particularly those which are parties to Trade and Investment Framework Agreements. The network of PTO intellectual property attachés around the world is a vital resource for American inventors and should be expanded. Cooperation between PTO and other leading patent offices through the PCT, the IP5 and PPH programs is cutting costs, improving the efficiency of patent examination in overseas markets and helping to reduce stubbornly high patent examination backlogs.

All this provides a valuable foundation on which to build in the coming year and beyond. PhRMA members believe that strengthening such coalitions will be particularly critical in multilateral organizations that advise countries and provide assistance on policies related to global trade, intellectual property, and pharmaceutical markets. Organizations such as the WHO, the World Intellectual Property Organization (WIPO), the WTO, UNDP, and UNCTAD often focus their work inappropriately on limitations and exceptions to intellectual property rights, as well as promote a range of harmful policies that would undermine vital incentives for innovation. For example, WHO's Roadmap on Access to Medicines envisions providing "technical support" to countries that intend to engage in compulsory licensing, 125 with one regional WHO office openly asserting that compulsory licensing is "important and to be encouraged." 126 The WHO Director-General even publicly supported an extreme and unnecessary proposal at the WTO TRIPS Council to waive entirely certain international obligations with respect to COVID-19 technologies, even as Member States were still debating this proposal in a separate multilateral forum. Unitaid has directed millions of dollars to programs that seek to weaken intellectual property laws and lobby governments to reject provisions in international trade agreements that would strengthen innovation incentives. 127 U.S. leadership is essential to preventing such organizations from weakening or even eliminating the intellectual property protections that drive America's innovation economy.

As the leading funder of many multilateral organizations, the United States must remain vigilant in these forums and work with other like-minded countries to advocate for robust intellectual property protection and fair and equitable market access. Federal agencies should ensure that intellectual property matters are addressed in organizations with the appropriate mandate and expertise, and with full visibility of the organization's Member States. The U.S. Government should strengthen interagency coordination and ensure that officials with intellectual property expertise are part of U.S. delegations to relevant global meetings. U.S. leadership can help to ensure that all stakeholders, including those in the private sector, are able to contribute to discussions in multilateral organizations on relevant topics.

¹²⁵ WHO, "Road Map for Access to Medicines, Vaccines, and Other Health Products, 2019–2023," p. 18, available at https://apps.who.int/gb/ebwha/pdf_files/WHA72/A72_17-en.pdf (last visited Jan. 27, 2021). ¹²⁶ WHO South-East Asia Regional Office (SEARO), "Access to medical products in the South-East Asia Region 2019," available at https://apps.who.int/iris/bitstream/handle/10665/326829/9789290227281-eng.pdf (last visited Jan. 27, 2021).

¹²⁷ Unitaid, "Unitaid expands its work on access to medicines," Sep. 8, 2018, available at: https://unitaid.org/news-blog/unitaid-expands-its-work-on-access-to-medicines/#en (last visited Jan. 27, 2021).

IV. Country Designation Index

A. Priority Foreign Country

PhRMA urges USTR to designate **Canada**, **Japan** and **Korea** as Priority Foreign Countries. Market access and/or intellectual property acts, policies and practices in these three countries are the most onerous and egregious. They are having or could have the greatest adverse impact on medicines developed and manufactured in the United States. USTR and other federal agencies should use all available tools to remedy serious concerns in these markets.

B. Priority Watch List

PhRMA recommends that **14** markets be included on the Priority Watch List. We further recommend that **China** continue under Section 306 Monitoring. The detailed information presented in the market-specific sections below demonstrates that the acts, policies and practices of these markets are denying adequate and effective intellectual property protection or fair and equitable market access. They are harming biopharmaceutical innovators and their employees in the United States and limiting their ability to bring new treatments to patients around the world. In many cases, they appear to be inconsistent with relevant global, regional and bilateral trade and investment agreement rules. To evaluate progress and secure action and real results, PhRMA recommends that USTR conduct meaningful **Out-of-Cycle Reviews** for **Chile**, **Colombia**, **Malaysia**, **Russia** and **Saudi Arabia**.

C. Watch List

PhRMA recommends that **eight** markets be included on the Watch List. We urge USTR and other federal agencies to include all these markets in the *2020 Special 301 Report* – particularly Australia and other markets that are current or potential U.S. bilateral trade agreement partners. To evaluate and secure progress, PhRMA recommends that USTR conduct an **Out-of-Cycle Review** for **Indonesia**. USTR and other federal agencies should monitor developments in these markets and address specific intellectual property and market access concerns through bilateral and multilateral engagement.

D. Out-of-Cycle Reviews

PhRMA's Out-of-Cycle Review recommendations largely reflect the deteriorating environment for IP protection and enforcement in the markets, particularly related to compulsory licensing practices which seriously endanger U.S. biopharmaceutical innovation. PhRMA believes that the Out-of-Cycle Review tool presents an opportunity to send a firm response regarding the troubling IP issues in the markets and highlights the urgent need for heightened USG engagement to reverse the negative trends in these markets.

PRIORITY FOREIGN COUNTRY

CANADA

PhRMA and its member companies operating in Canada are extremely concerned about Canada's market access environment and intellectual property (IP) protections for patented medicines. Of particular concern are Canada's new pricing policies for patented products that would significantly undermine the practical benefits to U.S. companies of Canada's trade-related intellectual property commitments, and which create uncertainty for patients. In addition, Canada's IP regime continues to lag behind that of other developed nations in several respects.

Key Issues of Concern:

- The Patented Medicine Prices Review Board (PMPRB): On August 21, 2019, Canada published amendments to the Patented Medicines Regulations ("Amended PMR") governing the PMPRB. While the PMPRB's regulatory mandate has not changed - the PMPRB remains responsible for ensuring the prices of patented medicines are "not excessive" – the changes to the PMR related to how a "not excessive" price is to be determined are profound. The amended regulations change the basket of reference countries to include those with onerous price controls, introduce flawed economic factors to determine whether a price is "excessive" and require manufacturers to report all indirect price reductions for the purpose of a national ceiling price regulation. The PMPRB subsequently issued Guidelines which implement the Amended PMR and contain concepts and price tests which are beyond the PMPRB's jurisdiction. These Guidelines further compromise the rights of patent holders and are subject to ongoing litigation. If implemented on July 1, 2021, it is expected that the Amended PMR and the PMPRB Guidelines will significantly undermine the marketplace for innovative pharmaceutical products, delay or prevent the introduction of new medicines in Canada and reduce investments in Canada's life sciences sector.
- Regulatory barriers to patient access to new medicines: Canada has many bureaucratic barriers that extend the time between submission to the federal government of newly discovered medicines and vaccines for regulatory approval, and their availability to patients through public reimbursement plans. These barriers significantly delay the benefits of new medicines and vaccines for Canadian citizens and erode the time that companies have to commercialize their innovations.
- Weak patent enforcement: The Canadian Patented Medicines (Notice of Compliance) Regulations (the "PM(NOC) Regulations")¹²⁸ include several key deficiencies that weaken Canada's enforcement of patents, including excessive and windfall damage awards to generic litigants, and limitations and inequitable eligibility requirements on the listing of patents in the Patent Register. Recent jurisprudence under the PM(NOC) Regulations has also resulted in a heightened

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¹²⁸ Patented Medicines (Notice of Compliance) Regulations, SOR/93-133.

level of liability for patent owners akin to punitive damages. PhRMA and its member companies are also troubled to see that Canada has used implementation of the Canada-EU Comprehensive Economic and Trade Agreement (CETA)¹²⁹ to implement reforms not required by that Agreement, which expose innovators to even greater potential liability under Section 8 of the PM(NOC) Regulations. PhRMA members are also concerned about potential damage awards which could stem from various common law theories within the Canadian provincial courts.

- **Inadequate patent term restoration (PTR):** Under CETA, Canada is required to provide innovators with some compensation for delays in obtaining marketing approval for pharmaceuticals. The USMCA also requires Canada to provide PTR for unreasonable delays during the prosecution and issuance of any patent. However, in its CETA implementing regulations, Canada has chosen to implement an "export" exception that is inconsistent with the fundamental purpose of restoring a portion of the patent term lost due to the marketing approval process and has only adopted the minimum term of PTR negotiated under CETA further deviating from global standards. Furthermore, Canada's adoption of restrictive time limits and eligibility criteria will unduly and unreasonably limit patent term restoration eligibility in Canada in a manner that is contrary to the intent of the negotiation and the CETA text itself. Finally, Canada is interpreting the PTR regulations required by CETA in a narrow manner that is inconsistent with the treaty text. 130 PhRMA's member companies believe Canada should support innovation by ensuring that its PTR system effectively ameliorates the effects of lengthy regulatory processes, which can significantly erode the duration of the IP rights of innovators.
- Standard for the disclosure of confidential business information (CBI): In November 2014, Canada enacted legislation to update its Food and Drugs Act (Bill C-17).¹³¹ Provisions in that law granted the Health Minister discretion to disclose a company's CBI without notice to the owner of the CBI and in accordance with a standard that is both inconsistent with other similar Canadian legislation and Canada's treaty obligations. On March 20, 2019, regulations were put in place respecting these authorities to release information about therapeutic products.¹³² Further, on July 9, 2018, the Federal Court of Canada issued a decision ordering Health Canada to release vast amounts of pharmaceutical clinical trial data on five medications to a researcher, undercutting the federal government's attempts to

¹²⁹ See CETA, Final Text, as published by the Government of Canada, available at http://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/ceta-aecg/text-texte/toc-tdm.aspx?lang=eng (last visited Jan. 27, 2021).

¹³⁰ GlaxoSmithKline Biologicals S.A. v. The Minister of Health, 2020 FC 397.

¹³¹ See https://www.parl.ca/DocumentViewer/en/41-2/bill/C-17/royal-assent (last visited Jan. 27, 2021).

¹³² Canada Gazette, Part II, Volume 153, Number 6 Regulations Amending the Food and Drug Regulations (Public Release of Clinical Information) SOR/2019-62, available at http://canadagazette.gc.ca/rp-pr/p2/2019/2019-03-20/html/sor-dors62-eng.html (last visited Jan. 27, 2021).

keep the information confidential. The decision, which was not appealed by Health Canada, has the potential to exacerbate the negative impacts of the draft regulations and guidelines on biopharmaceutical innovators. 133

For these reasons. PhRMA requests that Canada be designated a **Priority** Foreign Country in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Market Access

The Patented Medicine Prices Review Board (PMPRB)

The PMPRB is a quasi-judicial body created under the Canadian Patent Act 134 with a legislative mandate to ensure that prices of patented medicines are not "excessive." Due to its power in shaping the real-world benefits of IP property protections, the PMPRB is an important institution within Canada's broader IP regime for pharmaceuticals. The PMPRB regulates the maximum allowable price that a manufacturer can charge for all patented medicines in Canada regardless of payer. The PMPRB does not make decisions about the amount of reimbursement for a product, which is appropriately the responsibility of separate federal and provincial/territorial government agencies, or private insurers.

On August 21, 2019, Health Canada published the Amended PMR. 135 The Amended PMR was largely unchanged from the proposals previously released on December 2, 2017. The PMPRB changes were initiated as part of the PMPRB's professed role as a "counterweight to the patent rights of pharmaceutical manufacturers." 137 The Amended PMR constitutes an impermissibly broad exception to IP rights in contrast to Canada's obligation under the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), which requires that a member state not impose measures that "unreasonably conflict with a normal exploitation of the patent" and not "unreasonably prejudice the legitimate interests of the patent owner." 138 The changes could negatively impact the innovative

¹³⁴ Patent Act. R.S.C. 1985, c.P-4, ss.79-103.

¹³³ Doshi v. Canada (Attornev General), 2018 FC 710.

¹³⁵ Canada Gazette, Part II, Regulations Amending the Patented Medicines Regulations (Additional Factors and Information Reporting Requirements), Vol. 153, No. 17, Aug. 21, 2019, available at http://www.gazette.gc.ca/rp-pr/p2/2019/2019-08-21/html/sor-dors298-eng.html (last visited Jan. 27, 2021). ¹³⁶ Canada Gazette, Part I, Regulations Amending the Patented Medicines Regulations, Vol. 151, No. 48, Dec. 2, 2017, available at http://www.gazette.gc.ca/rp-pr/p1/2017/2017-12-02/html/reg2-eng.html (last visited Jan. 27, 2021).

¹³⁷ PMPRB 2015-16 Report on Plans and Priorities, available at http://www.pmprbcepmb.gc.ca/view.asp?ccid=1163 (last visited Jan. 27, 2021).

¹³⁸ TRIPS Article 28 provides that a patent "shall confer" on its owner the exclusive rights to prevent third parties without the owner's consent from "the acts of: making, using, offering for sale, selling, or importing for these purposes that product." In turn, TRIPS Article 30 permits WTO members to grant only "limited" exceptions to these exclusive rights, provided that such exceptions do not conflict with the "normal

biopharmaceutical industry, the availability of new medicines to Canadian patients, and the competitiveness of Canada for research-based pharmaceutical investment. The Amended PMR has been further delayed and is scheduled to come into force on July 1, 2021. 139

Through the Amended PMR, Canada amended the PMPRB's basket of reference countries with the goal of setting ceiling prices of patented medicines at the OECD median despite Canada being at the forefront of OECD economies in terms of wealth and other metrics. Specifically, the PMPRB changed its reference basket to remove the United States and Switzerland – two countries that take a more holistic view of the value of medicines – and to add six jurisdictions with lower drug prices and more onerous price controls: Australia, Belgium, Japan, the Netherlands, Norway and Spain. The new reference basket will now consist of Australia, Belgium, France, Germany, Italy, Japan, the Netherlands, Norway, Spain, Sweden and the United Kingdom. The United States is Canada's largest trading partner and the pharmaceutical markets in both countries share many common features. While PhRMA and its member companies believe that international reference pricing is a deeply flawed methodology that undermines continued R&D into medicines that patients need most, it is particularly egregious for Canada not to reference the United States and other countries with pro-innovation biopharmaceutical policies.

The Amended PMR also introduced new economic factors to determine whether a price is "excessive." The new economic factors to regulate prices include pharmacoeconomic evaluation based on an arbitrary monetary threshold of the value of an additional year of life; price ceilings based on projected market size; and the proportion of gross domestic product spent on patented medicines. Such thresholds will impact the future viability of many drugs for rare diseases, oncology treatments, cellular and gene therapy, precision medicine and other similar innovations in Canada. While cost-effectiveness thresholds are used downstream in other nations in making public reimbursement decisions, and to guide public reimbursement decisions in Canadian provinces, their utilization as part of a binding regulatory price ceiling would be unique to Canada and duplicate existing public reimbursement processes.

Finally, the Amended PMR requires manufacturers to report all indirect price reductions given as a promotion or in the form of rebates, discounts, refunds, free goods,

innovation." See WTO, Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS/114/R, ¶¶ 7.54-55 (Mar. 2000), available at

exploitation" of the patent and do not prejudice the legitimate interests of the patent owner. The *Canada—Pharmaceuticals* panel appropriately recognized that the "normal exploitation" of a patent includes the realization of anticipated "economic returns" during a defined period of exclusivity "as an inducement to

https://www.wto.org/english/tratop_e/dispu_e/7428d.pdf (last visited Jan. 27, 2021).

¹³⁹ Canada Gazette, Part II, Regulations amending the Regulations Amending the Patented Medicines Regulations (Additional Factors and Information Reporting Requirements), Vol. 155, No. 2, Jan. 20, 2021, available at http://www.gazette.gc.ca/rp-pr/p2/2021/2021-01-20/html/sor-dors298-eng.html (last visited Jan. 27, 2021).

free services, gifts or any other benefit in Canada – including confidential rebates agreed to with public or private insurers in Product Listing Agreements (PLAs). Given the lack of information on the purpose and use of this information, this requirement has raised a number of legal concerns.

The Canadian innovative biopharmaceutical industry, led by its industry association Innovative Medicines Canada, challenged the Amended PMR on several grounds through a judicial review proceeding. 140 The hearing took place on June 1-2, 2020, and Justice Manson of the Federal Court issued his decision on June 29, 2020, 141 The Applicants were partially successful in their arguments, as the Court held that the requirement for manufacturers to report all indirect price reductions is unlawful, void and of no force and effect because it extends beyond sales made by the patentee at the factory-gate. The existing provision of the Regulations will continue to operate as it currently reads. However, the Court upheld the other amendments relating to the new economic factors and the revised basket of reference countries. These amendments are now scheduled to come into effect on July 1, 2021, and will apply to new and existing medicines for sales that occur after July 1, 2021, with the exception of the new economic factors which will apply to medicines that received a drug identification number after August 21, 2019, the date the Amended PMR were released. Industry continues to challenge the remaining amendments and filed an appeal with the Federal Court of Appeal on September 10, 2020. It is unlikely that the appeal will be decided before the amendments come into force on July 1, 2021.

In addition, seven innovative pharmaceutical companies have challenged the constitutional jurisdiction of the PMPRB's legislative and regulatory framework in the Superior Court of Quebec on the basis that price regulation is a provincial responsibility. 142 On December 18, 2020, the Quebec Superior Court, like the Federal Court before it, held that the PMPRB does not have the authority to regulate rebates, such that the new requirement to disclose PLAs was a direct incursion into the field of provincial jurisdiction. In addition, while the Court upheld the constitutionality of the remaining aspects of the PMR Amendments, the Judge pointed out (at para. 401) that it would not be acceptable if the PMPRB's implementation of the new factors is merely an indirect way of carrying out pure price control or setting the process as low as possible, without regard to the existence of excessive prices. As in the Federal dispute, industry continues to challenge the remaining amendments and filed an appeal with the Court of Appeal of Quebec on January 25, 2021. It is unlikely that the appeal will be decided before the amendments come into force on July 1, 2021.

¹⁴⁰ *Innovative Medicines Canada et al. v. Attorney General of Canada*, T-1465-19, S.18.1 Application for Judicial Review.

¹⁴¹ Innovative Medicines Canada et al. v. Attorney General of Canada, 2020 FC 725, available at https://decisions.fct-cf.gc.ca/fc-cf/decisions/en/item/481803/index.do?q=innovative+medicines+canada (last visited Jan. 27, 2021)

¹⁴² Merck Canada Inc., et al. v. Procureur Général du Canada et Procureur Général du Québec, No. 500-17-109270-192 Avis de questions constitutionnelles.

Moreover, the process of implementing the Amended PMR through changes to the PMPRB's Guidelines raise many additional points of uncertainty and risk for U.S. biopharmaceutical innovators. The PMPRB released its draft Guidelines on November 21, 2019, and released revised draft Guidelines on June 19, 2020, and final Guidelines on October 23, 2020. The final Guidelines are extremely complex and create further uncertainty for patentees. The Guidelines exacerbate concerns arising from the Amended PMR and if implemented as proposed, will have significant negative impacts on patentees and patients. On November 23, 2020, Innovative Medicines Canada – together with 19 of its member companies – filed a judicial review application in the Federal Court of Canada. The application was filed on the basis that the final PMPRB Guidelines are outside of PMPRB's authority under the *Patent Act*. They also direct the PMPRB to consider the Maximum Rebated Price in defiance of the June 2020 decision in the abovementioned judicial review challenge brought before the Federal Court of Canada (as well as the subsequent Quebec Superior Court decision on December 18, 2020). A hearing in the judicial review of the Guidelines is not expected until mid to late 2021.

In the thirty years since the PMPRB was established, a variety of mechanisms have emerged in Canada for the government and industry to work together to ensure the affordability of medicines. These mechanisms include the Canadian Agency for Drugs and Technologies in Health (CADTH), the Institut national d'excellence en santé et services sociaux (INESSS) in Quebec, the Common Drug Review (CDR), the pan-Canadian Pharmaceutical Alliance (pCPA), and confidential PLAs, among others. Indeed, the specific change to include a cost-effectiveness factor as part of PMPRB's price evaluation overlaps with and duplicates the work of existing publicly funded agencies (e.g., pCPA), and its major beneficiary would be for-profit private insurers as opposed to patients. Any expansion of the PMPRB's mandate is therefore unnecessary and would harm U.S. innovative biopharmaceutical companies and the patients they serve.

Patented medicines accounted for only 6.6 percent of Canadian health care spending in 2018¹⁴³ and have experienced near zero real cost growth over the last decade. These data suggest that patented medicines are not the primary cost driver of health care spending, which calls into question whether the regulatory changes will generate benefits to outweigh the potential risks to access and innovation that will results. Low prices should not be the only goal of pharmaceutical policy and we urge the government to carefully consider the impact of pricing policies on access to new medicines, clinical studies, launch of new treatments, investment, jobs and the research ecosystem as a whole.

PhRMA requests that the U.S. Government urge the Canadian Government to reconsider any changes to the PMPRB's mandate that would harm U.S. innovative

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¹⁴³ Based on analysis of information from the *Canadian Institute for Health Information*, available at https://www.cihi.ca/en/national-health-expenditure-trends-1975-to-2019 (last visited Jan. 27, 2021) and the PMPRB Annual Report 2018, available at https://www.canada.ca/en/patented-medicine-prices-review/services/reports-studies/annual-report-2018.html (last visited Jan. 27, 2021).

¹⁴⁴ *Id.*

biopharmaceutical companies and undermine the competitiveness of Canada's life sciences sector. The PMPRB's role must be placed in its proper context with the many other agencies already active in the Canadian pharmaceutical marketplace and should not be a means to eviscerate Canada's international obligations on patent rights.

The PMPRB is also required to report to the Federal Minister of Health on pharmaceutical trends and on R&D spending by pharmaceutical patentees. Due to the antiquated 1987 tax law formula used to measure R&D spending, which is referenced in its governing regulations, PMPRB has consistently and systematically under-reported the R&D levels of innovative pharmaceutical companies operating in Canada for many years, underestimating the industry's contribution to private sector R&D spending and lessening the government's willingness to address the myriad issues described above. To the extent that the PMPRB should have a mandate to report on R&D spending in Canada, PhRMA members urge the U.S. Government to encourage Innovation, Science and Economic Development Canada to engage with industry as it assesses how to update the regulatory R&D definition so that the PMPRB can more accurately calculate the significant R&D contributions made by pharmaceutical patentees to the Canadian knowledge-based economy.

Regulatory Barriers to Patient Access to New Medicines

Beyond the regulatory approval for safety and efficacy, there are additional market access barriers that significantly delay Canadian patients' ability to access new medicines and vaccines. These include the PMPRB review, health technology assessments, price negotiations through the pan-Canadian Pharmaceutical Alliance (pCPA), and, finally, the execution of PLAs with individual public drug plans. Nearly 90 percent of new medicines launched globally since 2011 are available in the United States compared to just 46 percent in Canada, with Canadian patients waiting an average of 15 months from global first launch for the fewer medicines that do become available. However, even after a medicine becomes available in Canada, there are additional delays to listing on a public formulary. Time to listing data for products launched between June 1, 2018, to May 31, 2020, indicate that it took an average of 294 to 610 days across the different provinces after Health Canada approval before patients were able to access a new medicine. 146

Overall, these barriers significantly delay the benefits of new medicines and vaccines for Canadian citizens and erode the already limited time that innovative companies have to commercialize their significant investments in R&D, clinical trials and regulatory approval processes. PhRMA and its member companies urge the U.S. Government to engage with the Canadian Government on these growing delays that are hindering patient access to new medicines.

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¹⁴⁵ PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2019. June 2020.

¹⁴⁶ IQVIA Formulary Acceptance: Monitoring & Evaluation (FAME) Database. August 2020.

Intellectual Property Protection

Weak Patent Enforcement

In 1993, the PM(NOC) Regulations were promulgated for the stated purpose of preventing the infringement of patents by the premature market entry of generic drugs as a result of the "early working" exception. In 2015, the Canadian Government helped resolve significant difficulties related to inappropriate court decisions that prevented the listing of patents relevant to combination inventions, which seriously undermined patent enforcement actions relevant to those inventions. However, serious and systemic deficiencies remain with the PM(NOC) Regulations. The regulations do not reliably provide "expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements," as required under the TRIPS Agreement. For example:

1. Proceedings under the PM(NOC) Regulations and appeal rights

The negotiated CETA text stipulates that "patent linkage" systems must provide all litigants with "equivalent and effective rights of appeal." The intention behind this negotiated outcome was to address the asymmetry in legal rights that flowed from Canada's previous restrictive PM(NOC) Regulations regime under which a patent owner did not have an equal ROA as that afforded to a generic drug producer. CETA simply required Canada to correct this imbalance. The changes to the PM(NOC) Regulations, 147 however, have proven to be far more extensive than necessary to comply with Canada's CETA obligations in a manner that prejudices existing innovator rights.

For example, despite adopting significantly more procedural complexity under the new regime, including full pleadings, discovery and trials in order to make final patent determinations in a single proceeding, Canada has maintained the same 24-month statutory stay that governed the old summary system. As a result, the innovative industry is concerned that patentees will now be forced to choose between the surrender of procedural rights and obtaining any kind of meaningful injunction under the new regime, contrary to Canada's many other related international obligations to protect intellectual property rights.

2. Limitation on Listing of Valid Patents and Inequitable Listing Requirements

Patent owners continue to be prevented from listing their patents on the Patent Register established under the PM(NOC) Regulations if the patents do not meet certain arbitrary timing requirements that are not present in the United States under the Hatch-Waxman Act. The effect of these rules is to deny innovative pharmaceutical companies access to enforcement procedures in the context of early working for any patent not meeting these arbitrary listing requirements.

¹⁴⁷ Regulations Amending the Patented Medicines (Notice of Compliance) Regulations, 2017, available at http://www.gazette.gc.ca/rp-pr/p2/2017/2017-09-07-x1/html/sor-dors166-eng.php (last visited Jan. 27, 2021).

3. Excessive Level of Liability for Lost Generic Profits

The PM(NOC) Regulations allow an innovator to seek an order preventing a generic manufacturer from obtaining Notice of Compliance, on the basis that the innovator's patent covers the product and is valid. When the innovator seeks such an order, but is ultimately unsuccessful, Section 8 provides the generic manufacturer the right to claim damages in the form of lost profits for the period of time they could have been selling the product, but for the innovator's action. As such, Section 8 unreasonably prejudices the legitimate interests of the patent owner. One legitimate right of a patent owner is to petition the government to enforce a patent which that government granted in the first place. Unless the patent owner has obtained its patent by fraud or otherwise knows that the patent is invalid or uninfringed, any grievance or damages claim by a generic manufacturer in connection with a patent that is later found invalid or uninfringed should not result in punishment of a patent owner for relying in good faith on a patent duly issued by the Canadian Intellectual Property Office (CIPO).

PhRMA members are also concerned that Canadian courts have taken an approach to Section 8 damages that allows for excessive damages. Subsection 8(1) compensates for all losses actually suffered in the period during which the second person/company was held off the market – a provision that, as currently interpreted by the courts, has led to instances of overcompensation. The Courts have granted damages in excess of 100 percent of the total generic market, despite holdings that the provision is meant to be compensatory and not punitive in nature. Such overcompensation is contrary to the law of damages and reflects a punitive as opposed to a compensatory theory of damages. 148, 149

Recent CETA implementing regulations established new rules that further expose innovators to excessive liability under Section 8. The amended PM(NOC) regulations eliminate previous language specifying that the period during which the innovator is liable to the competitor for any losses suffered ends on the date the stay is withdrawn or discontinued by the innovator or is dismissed or reversed by the court. This unwarranted change is likely to result in excessive damages awards by enabling competitors to claim

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¹⁴⁸ The Supreme Court of Canada granted leave with respect to a Section 8 damages case, but in April 2015 dismissed this case from the bench, stating that it did so substantially for the reasons of the majority in the Federal Court of Appeal. Sanofi-Aventis, et al. v. Apotex Inc., et al., SCC. 35886, available at http://www.scc-csc.gc.ca/case-dossier/info/dock-regi-eng.aspx?cas=35886 (last visited Jan. 27, 2021). The dismissal of the appeal provided parties to Section 8 damages litigation with no meaningful higher court guidance with respect to how these damages are to be calculated in future lower court decisions, which means any clarity must come from regulatory amendments by the Government of Canada.

149 On April 23, 2018, Eli Lilly Canada (Lilly) applied to the Supreme Court of Canada for leave to appeal in respect of a March 2018 decision of the Federal Court of Appeal. The Federal Court of Appeal had dismissed Lilly's appeal of a trial decision awarding more than \$70 million to Teva Canada (Teva) under Section 8. The Federal Court of Appeal granted Teva's cross-appeal seeking to add to its recovery lost sales and an adjustment to account for an under-reporting of sales in the data relied on by both parties' experts. Eli Lilly Canada Inc v Teva Canada Limited, 2018 FCA 53, available at https://decisions.fct-cf.gc.ca/fca-caf/decisions/en/307557/1/document.do (last visited Jan. 27, 2021). Lilly was denied leave by the Supreme Court of Canada on November 8, 2018.

indefinite future losses and to seek compensation for production "ramp-up" costs they may have incurred before the stay was granted and after it was lifted. In addition, innovators are now "jointly and severally" liable for any damages. Expanding the scope of liability in this manner will enable competitors to claim damages from local subsidiaries or licensees, as well as their licensors or corporate partners in the United States.

Also in the area of excessive damage liability, PhRMA members are concerned about ongoing litigation under various common law theories within the provincial courts. In spite of Canadian PM(NOC) Regulations governing compensatory damages for generic companies held off the market due to patent litigation, other proceedings have been allowed to proceed under various common law theories (Statute of Monopolies, Trademarks Act, unjust enrichment and others). These cases could result in damages or liability for PhRMA members which exceed the compensatory threshold.

Therefore, PhRMA members request that the U.S. Government urge Canada to implement amendments to the PM(NOC) Regulations to address this issue.

Inadequate Patent Term Restoration

PTR seeks to compensate for a portion of the crucial effective patent life lost due to clinical trials and the regulatory approval process. Most of Canada's major trading partners, including the United States, the European Union and Japan, offer forms of PTR which generally allow patent holders to recoup a valuable portion of a patent term where time spent in clinical development and the regulatory approval process has kept the patentee off the market. In these countries, up to five years of lost time can be recouped.

By way of implementing CETA, Canada has made a potentially significant step to provide innovators with some compensation for delays in obtaining marketing approval for pharmaceuticals. Under CETA, Canada agreed to implement a "sui generis protection" period of between 2 to 5 years for pharmaceuticals to compensate for delays in drug marketing approval, subject to certain specified conditions.

However, PhRMA has concerns with Canada's implementation of this commitment under the new Certificate of Supplemental Protection (CSP) Regulations. 150 At a fundamental level, the sui generis protection provided by the CSP does not appear to grant the full patent protections that PTR is intended to provide, and instead appears to be implemented subject to an exception for "manufacture for export." While this is permitted by the CETA text, this is not consistent with Article 20.46 of the U.S.-Mexico-Canada Agreement (USMCA) or PTR in other jurisdictions. 151 Implementing PTR so that it does not confer full patent rights, e.g., providing an exception for "manufacturing for

¹⁵⁰ Available at http://www.gazette.gc.ca/rp-pr/p2/2017/2017-09-07-x1/html/sor-dors165-eng.php (last visited Jan. 27, 2021).

¹⁵¹ See Solovy, E., "A Manufacturing-for-Export Exception to Patent Protection: A Proposal for Exporting Violations of the TRIPS Agreement and Beyond," Journal of IP Law and Practice (Sep. 2017).

export" or other infringing activities, is not consistent with the fundamental purpose of restoring patent term lost due to the lengthy marketing approval process.

Moreover, having only adopted the minimum term of PTR negotiated under CETA (*i.e.*, Canada's term is capped at two years of a possible five), Canada's further adoption of restrictive time limits and eligibility criteria will unduly and unreasonably limit CSP eligibility in Canada in a manner that is contrary to the intent of the negotiation and the CETA text itself.

In particular, the CSP Regulations introduce a new and complex CSP application requirement whereby only those Canadian new drug submissions (NDSs) filed within 1 year of any first international drug submission filed for the same drug (in any of EU, US, Australia, Switzerland or Japan) will be CSP eligible (the "Timely Submission Requirement"). The Timely Submission Requirement is a novel requirement in Canada that is unprecedented amongst the PTR regimes of Canada's major trading partners, including the United States. PhRMA is concerned that the 1-year time limit being enforced under the Timely Submission Requirement will inappropriately bar otherwise deserving and eligible innovative medicines from benefiting from the period of *sui generis* protection.

Moreover, Canada's new PTR regime requires that CSP-eligible medicinal ingredients be "first" approvals. Unlike other jurisdictions, Canada has further implemented a list of "variations" of medicinal ingredients and other prior drug approvals that will automatically exclude new drug submissions from possible CSP eligibility. Neither the U.S. nor EU patent term extension regimes provide enumerated lists of excluded variations ineligible for CSP.

Finally, Canada is interpreting the CSP Regulations in a manner that is inconsistent with CETA and in a way that disregards clear clinical evidence. The Federal Court recently reinforced Canada's requirement to comply with the rationale, purview and specific constraints of the statutory scheme and any relevant international law, including CETA. However, this decision is presently under appeal. 152

We urge the U.S. Government to engage with the Canadian Government on this issue in all available fora, and encourage Canada to join the ranks of other industrialized countries who are champions of IP protection internationally and to provide for effective

¹⁵² On April 7, 2020, the Federal Court issued its first judicial review decision under the CSP Regulations.

GlaxoSmithKline Biologicals S.A. v. The Minister of Health, 2020 FC 397, available at https://decisions.fct-cf.gc.ca/fc-cf/decisions/en/item/468729/index.do?q=shingrix (last visited Jan. 27, 2021).

The Court held that the Minister's decision to deny a CSP for the drug Shingrix® was unreasonable. While the Minister was ordered to redetermine the matter on the merits, the Minister is appealing the court's decision. The parties disagree on whether a particular vaccine adjuvant is a medicinal ingredient for the purpose of applying the CSP Regulations. Protecting vaccine adjuvants as "medicinal ingredients" promotes innovation and is consistent with the object of CETA. In determining that the Minister's decision was unreasonable, the Federal Court held that Minister's rationale demonstrated "administrative tunnel vision" and failed to address "highly relevant considerations." The appeal will be heard in Q1 2021.

and competitive PTR measures in Canada. CSP eligibility should not be circumscribed by overly restrictive enumerated exclusions on medicinal ingredients and patents.

Standard for the Disclosure of Confidential Business Information

PhRMA members are concerned with amendments to the Food and Drugs Act, ¹⁵³ which could allow for an unprecedented disclosure of CBI contained in clinical trial and other data submitted by pharmaceutical companies in the course of seeking regulatory approval for medicines. The amendments could significantly impact incentives for drug innovation and are inconsistent with Canada's international treaty obligations.

There is particular concern surrounding issues of confidentiality, the broad definition of CBI (broad enough to also cover trade secrets), and the threshold for the disclosure of CBI by Health Canada to governments and officials, as well as to the public. These amendments are inconsistent with the standards set out in other Canadian federal health and safety legislation, including similar provisions in more recent federal legislation, ¹⁵⁴ are inconsistent with Canada's treaty obligations under USMCA and TRIPS, and are also inconsistent with the standards and practices of other national health regulators, including the U.S. Food and Drug Administration.

Both USMCA and the TRIPS Agreement require that CBI be protected against disclosure except where necessary to protect the public. For disclosure to the public, the amendments require a "serious risk," but it does not reach the standard set out in the treaty language since subjective and discretionary language has been included: the Minister may disclose CBI "if the Minister believes that the product may present a serious risk of injury to human health." (Emphasis added.) In other words, it is not necessary that there be a serious risk of injury to justify the disclosure; rather the amendments merely require that the Minister believes the disclosure to be necessary.

The amendments also state that the Minister may disclose CBI to a person who "carries out functions relating to the protection or promotion of human health or safety of the public" and this can be done "if the purpose of the disclosure is related to the protection or promotion of health or safety of the public." There is no necessity requirement for the disclosure to occur, only that it be related to protecting or promoting health. USMCA and TRIPS do not refer to disclosure for the promotion of health, but rather to disclosure needed to protect the health of the public.

Finally, the amendments provide inadequate protections to ensure that there is no unfair commercial use of the disclosed CBI as required by TRIPS Article 39.3. The

¹⁵³ See

http://www.parl.gc.ca/HousePublications/Publication.aspx?Language=E&Mode=1&DocId=6676418&File=4 (last visited Jan. 27, 2021).

¹⁵⁴ Hazardous Materials Information Review Act, Amendments to the Act, 2019, Subdivision H, Disclosure of Confidential Business Information, available at https://www.parl.ca/DocumentViewer/en/42-1/bill/C-97/royal-assent (last visited Jan. 27, 2021).

potential recipients of the disclosed CBI are very broad and there is no mechanism, such as a confidentiality agreement, to ensure that those recipients (or anyone else to whom they disclose that data) are not able to use the divulged CBI to secure an unfair commercial advantage.

In July 2015, a final guidance document was issued by Health Canada with respect to the administration of its powers to require and disclose CBI. 155 PhRMA and its member companies are pleased that the document provides some reassurances with respect to the administration of Health Canada's new powers under the amended Food and Drugs Act. However, the document is a non-binding guidance as opposed to binding law or regulations.

In September 2015, a pharmaceutical company was subjected to a disclosure by Health Canada of CBI related to its pharmaceutical product, representing the first known usage of the new legislative disclosure powers. Following a request made under the new mechanisms in the Food and Drugs Act, approximately 35,000 pages of raw trial data were released, demonstrating the potential prejudice to U.S. innovative biopharmaceutical companies that could result from future CBI disclosures. ¹⁵⁶

More recently, in December 2017, Health Canada released a draft regulatory package that would amend the Food and Drug Regulations (Regulations) and facilitate automatic public access to manufacturer submitted clinical information following the issuance of a final Health Canada regulatory decision. ¹⁵⁷ As previously noted, those Regulations were published March 20, 2019.

The Regulations specify the scope of clinical information in drug submissions that cease to be CBI following the issuance of a final regulatory decision (Notice of Compliance, Notices of Non-Compliance – Withdrawal, or Notice of Deficiency – Withdrawal). The amendments authorize the Minister to release information that has ceased to be CBI to the public without notifying or receiving consent from the originator. Clinical information provided in drug submissions would continue to be treated as confidential during the regulatory review process. In addition, the Regulations apply to drugs for human use and medical devices, and apply to clinical information in drug

¹⁵⁵ See Amendments to the Food and Drugs Act: Guide to New Authorities (power to require and disclose information, power to order a label change and power to order a recall), available at http://www.hc-sc.gc.ca/dhp-mps/legislation/unsafedrugs-droguesdangereuses-amendments-modifications-eng.php (last visited Jan. 27, 2021).

¹⁵⁶ See selected media reports on the CBI disclosure: David Bruser and Jesse McLean, "Health Canada Hands Over Documents But Muzzles Doctor," *Toronto Star* (Oct. 14, 2016), available at https://www.thestar.com/news/canada/2015/10/14/health-canada-hands-over-documents-but-muzzles-doctor.html (last visited Jan. 27, 2021); Anne Kingston, "Health Canada OKs research into popular morning-sickness drug," *Macleans* (Nov. 23, 2015), available at

http://www.macleans.ca/society/health/health-canada-oks-research-into-popular-morning-sickness-drug/ (last visited Jan. 27, 2021).

¹⁵⁷ Canada Gazette, Part I, Regulations Amending the Food and Drug Regulations (Public Release of Clinical Information), Vol. 151, No. 49, December 9, 2017, available at http://gazette.gc.ca/rp-pr/p1/2017-12-09/html/reg3-eng.html (last visited Jan. 27, 2021).

submissions filed with Health Canada both before and after the coming into force of the Regulations. The Regulations establish a mechanism to release previously submitted information, even from years or decades prior, within the scope of public disclosure.

Further complicating matters, on July 9, 2018, the Federal Court of Canada issued a decision ordering Health Canada to release vast amounts of pharmaceutical clinical trial data on five medications, undercutting the federal government's attempts to keep the information confidential. The effect of this decision, which Health Canada chose not to appeal, on the Regulations and/or the guidelines document is unknown at present, but it presents the risk that the scope of clinical information susceptible to public release will be made even broader than under the current regulatory and guidance document proposals.

PhRMA members therefore urge the U.S. Government to press the Canadian Government to ensure that regulations to implement these amendments to the Food and Drugs Act are consistent with Canada's international treaty obligations.

JAPAN

A decade ago, Japan made important reforms in the areas of drug pricing, evaluation and approval, and vaccine policy that made its system more transparent, more supportive of innovation and more conducive to biopharmaceutical research and development. These changes reduced regulatory delays in the introduction of new medicines and reduced Japan's well-known drug lag. However, the environment has significantly deteriorated since 2016. The Japanese Government has pursued, and the Central Social Insurance Medical Council (Chuikyo) has approved, a series of draconian price cutting mechanisms and other actions related to intellectual property that significantly undermine Japan's pro-innovation environment and its efforts to carry its fair share of the costs of global R&D efforts. Moreover, these decisions are made with limited meaningful opportunities for stakeholders to provide timely input and increasingly in ways that are contrary to their stated intent.

Key Issues of Concern:

- Non-scientific and discriminatory revisions to the Price Maintenance Premium (PMP) system: Japan announced several new drug pricing policies in December 2017 that ran counter to the government's pledge to appropriately value innovation and foster innovation in Japan. Among these, PhRMA member companies are particularly concerned by the dramatic reduction in the number of patented medicines that are recognized as "innovative" for the purpose of qualifying for the PMP. In addition, fewer PhRMA member companies qualify for the full benefit of the PMP under the new company requirements. More specifically, Japan's new product criteria are non-science based and unique in the world, and the new company criteria contain elements that discriminate against foreign companies and smaller companies. Unfortunately, despite industry proposals to improve the criteria, the Japanese Government made only minor changes when it undertook a review of the outcome of the new rules in 2019. The PMP system continues to severely undervalue U.S. intellectual property, and the eligibility criteria that are biased in favor of domestic companies were not adequately revised, seriously calling into question Japan's commitment to fair and nondiscriminatory policies.
- Annual price cuts to patented medicines: Another issue of serious concern is the announced move from the current system of biennial price cuts to an annual system. In December 2020, the government announced a new rule that will apply annual price cuts effective April 1, 2021, to all medicines with more than a 5 percent difference (yakkasa) between the government reimbursement price and the surveyed wholesaler price to purchasers (e.g., hospitals, clinics and retail pharmacies). In 2020, this included 69 percent of all medicines (more than 90 percent on a monetary basis) and 59 percent of patented medicines. The scope of the annual price cut policy goes far beyond any options put forward by Ministry of Health, Labour and Welfare (MHLW) for discussion at the Chuikyo and was never

shared with the industry prior to its formal announcement. In 2021, the average price cut to these products will be 5.2 percent (before application of the PMP) and is expected to be similar in future years. The combined impact of the recent PMP revisions and annual price cuts on patented medicines severely undervalues U.S. intellectual property and makes Japan an outlier among leading economies.

- Use of health technology assessment (HTA) to devalue innovation: In 2018, the Japanese Government cut the prices of several leading innovative medicines that were subject to an ongoing cost-effectiveness assessment pilot program. For these products, the price premium granted at launch for innovativeness and clinical benefit was later reduced based on a poorly justified cost-effectiveness threshold of JPY 5 million yen per quality-adjusted life year. Given the challenges experienced during the pilot program, the Japanese Government decided to review the outcomes. However, in April 2019, without sufficiently addressing prior concerns and without resources and processes to ensure scientifically valid assessments, the new HTA system was formally implemented. The new HTA system is severely inconsistent with international norms, solely focusing on costeffectiveness thresholds and ignoring many aspects of a product's value. Further, the system has been developed with limited, meaningful opportunities for the innovative biopharmaceutical industry and other stakeholders to provide input. PhRMA continues to remain concerned about the current direction of the new HTA system - including proposals to expand its use to reimbursement listing contrary to U.S.-Japan trade understandings – and its potential to significantly undervalue U.S. innovation.
- Lack of transparency and predictability in government decision-making: As the Japanese Government developed detailed plans to carry out the drug pricing reform initiative over the last four years, there were few formal attempts by the decision-making bodies to seek input from stakeholders, including the innovative pharmaceutical industry. For example, despite the key policy issues being debated by the government from 2017 to 2020, the Japanese Government has not once released the proposed new rules for public comment. In addition, the industry has only been invited to testify before the Chuikyo on very limited occasions (e.g., only three times in 2020 including virtual meetings), and the time allotted for testimony has typically been rigidly limited. Frequently, no government proposal is put forward in advance of the Chuikyo meeting on which the industry could comment. Except for the formal hearings at which industry is invited to testify, industry representatives are only able to attend Chuikyo meetings as observers. Even after rules are announced, PhRMA member companies are often uncertain about how they will be applied or experience their capricious application. Moving forward, PhRMA and its member companies request more regular and meaningful opportunities to provide input regarding the development of further reforms to Japan's pricing and reimbursement rules.
- Regulatory policies: The Japanese Government continues to seek to accelerate and expand drug development in Japan, ensure that patients have prompt access

to the newest drugs and support the pharmaceutical industry as a key driver of economic growth in Japan. To achieve these goals, more flexible approaches are needed in the approval and regulatory process to promote simultaneous global development. This includes acceptance of a pooled strategy for the ICH E17 guideline, Japanese sample size for multi-regional clinical trials and long-term clinical studies, and to increase the number of drugs designated and approved early under the *Sakigake* designation and conditional early approval systems so they are equivalent to similar systems in the U.S. and EU.

- Vaccines: In order to ensure that Japanese citizens have access to the world's newest and most innovative vaccines, Japan needs to execute the National Vaccine Plan and to develop a system that provides for permanent and full funding of all recommended vaccines, transparency in the evaluation and adoption of new vaccines into the recommended (i.e., funded) vaccination schedule, and a science-based process to determine the benefits of vaccines and to manage adverse events.
- Patent term restoration (PTR): PhRMA members appreciate Japan's PTR laws, as they provide term extensions for subsequent marketing approvals for additional indications or medical uses, or modifications of previously approved products. The Japanese law acknowledges the value that additional approvals can provide to patients. However, the laws as currently interpreted by the Japanese Patent Office (JPO) often result in extensions for subsequent marketing approvals which are shorter in term than the extensions for the original approval and can thus act as a disincentive to conduct research on additional medical uses and indications, including new formulations for an approved product.
- Effective patent enforcement: Recent actions by MHLW to approve generic versions of an innovative product even though JPO had upheld two of the four claims on the patent identified by the innovator as relevant to its product, raise concerns for industry as to Japan's commitment to effectively enforce patents. Further, while injunctive relief is typically available in Japan, such relief can take months to secure, thereby frustrating the ability of the innovator to seek an injunction before potentially infringing products are allowed to enter the market.

For these reasons, PhRMA requests that Japan be designated a **Priority Foreign Country** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Market Access

Non-scientific and Discriminatory Revisions to the Price Maintenance Premium System

The introduction of the PMP in 2010 as a two-year pilot project (followed by its renewal in 2012, 2014 and 2016), has been a critical factor in promoting innovation in Japan, eliminating the drug lag, ensuring that Japanese patients have timely access to

innovative medicines, and ensuring that U.S. and other innovative products were appropriately valued. This system has demonstrably led to increased R&D and applications and approvals for new drugs and indications, even though the net benefit of the price maintenance premium has been somewhat reduced by the 80 percent ceiling on the premium under certain circumstances and the continued use of the market expansion and other re-pricing rules. Investment in biopharmaceutical innovation is a long-term endeavor, such that any unpredictability in the PMP could lead to slower development or launch of new medicines.

However, under the government pricing reforms implemented in April 2018, products eligible to receive the PMP were restricted to those that either: (1) received a price premium at launch or post-launch; (2) meet certain criteria for new mechanisms of action; (3) are second- or third-in-class and launched within three years of a comparator product in the above groups; (4) received an orphan designation or; (5) were developed in response to an open request from MHLW. Particularly for the third set of products, the new PMP system equates innovativeness with the speed and the order in which products launch. PhRMA is opposed to such a non-science-based evaluation of innovation, and notes that several globally-leading U.S. products have been deemed non-innovative under the new criteria and stripped of their PMP eligibility. This clearly demonstrates that the new system fails to appropriately value U.S. innovation. According to the MHLW, approximately 30 percent of patented medicines no longer qualify for the PMP.

In addition to the product eligibility changes, companies with eligible products were ranked and sorted into three tiers based on: (1) the number of phase 2+ clinical trials conducted in Japan; (2) the number of new products launched in Japan within the past five years; (3) the number of new products developed in response to open requests from MHLW; and (4) the number of products with a *Sakigake* designation. The number of companies eligible for Tier 1 status was limited to 25 percent but not exceeding 30 percent, even if companies have the same rank. All eligible products marketed by Tier 1 companies were awarded the full amount of the PMP. Eligible products marketed by Tier 2 or Tier 3 companies were awarded 90 percent or 80 percent of the PMP, respectively.

While the Japanese Government undertook a review of the new PMP rules and outcomes in 2019, only minor changes were made despite industry proposals to address concerns. PhRMA believes that the product criteria remain non-science-based and that limiting the number of companies eligible for the full PMP cannot be a true test of innovativeness. Further, the company criteria continue to inappropriately favor larger companies, and specific elements are inherently biased towards domestic companies, seriously calling into question Japan's commitment to fair and non-discriminatory policies pursuant to its WTO obligations. Further revisions to the PMP system are urgently needed to ensure that it is science-based, fairly evaluates innovation and promotes biopharmaceutical R&D.

Annual Price Cuts to Patented Medicines

In December 2020, the Japanese Government announced a new rule that will move from the current system of biennial price cuts to an annual system, applying annual price cuts effective April 1, 2021, to all medicines with more than a 5 percent difference (yakkasa) between the government reimbursement price and the surveyed wholesaler price to purchasers (e.g., hospitals, clinics and retail pharmacies). In 2020, this included 69 percent of all medicines (more than 90 percent on a monetary basis) and 59 percent of patented medicines. In 2021, the average price cut to these products will be 5.2 percent (before application of the PMP) and is expected to be similar in future years. The combined impact of the recent PMP revisions and annual price cuts on patented medicines severely undervalues U.S. intellectual property and makes Japan an outlier among leading economies.

The scope of products that will be subject to annual price cuts also goes far beyond any policy options put forward by MHLW for discussion at the Chuikyo and was never shared with the industry or other stakeholders prior to its formal announcement. Further, the scope of the revision marked a major departure from previous Japanese Government policy decisions that have been publicly announced and codified in various documents, including the 2016 four-ministers agreement which stated that only products with a large yakkasa would be subject to the off-year price revision. Finally, the decision seemed to ignore the results of the 2020 market price survey and prior discussions at the Chuikyo, during which several health care stakeholder groups (e.g., physicians and pharmacists) opposed implementing the changes.

Use of Health Technology Assessment to Devalue Innovation

PhRMA agrees that appropriate HTA systems have the potential to assist governments in making informed decisions about allocating health care resources. However, deficient HTA processes can run counter to their key objectives and risk denying or delaying patients' appropriate access to medical technologies, inefficiently allocating resources, constraining clinical freedom and harming innovation through pure cost-containment methods.

In 2018, the Japanese Government cut the prices of several leading innovative products that were subject to an ongoing cost-effectiveness assessment pilot program. For these products, the price premium granted at launch for innovativeness and clinical benefit was reduced based on a poorly justified cost-effectiveness threshold of JPY 5 million per quality-adjusted life year, ignoring many other elements of a product's value including broader clinical, societal and economic benefits not captured by an incremental cost-effectiveness ratio (e.g., disease severity, caregiver burden and absenteeism). Given the challenges experienced during the pilot program, the Japanese Government decided to review the outcome of the pilot program for several products.

In April 2019, without sufficiently addressing prior concerns and without resources and processes to ensure scientifically valid assessments, the Japanese Government

implemented the new HTA system. The new HTA system is severely inconsistent with international norms in both process and methods, and remains solely focused on cutting prices based on an incremental cost-effectiveness thresholds. By primarily serving to reduce the price premiums granted at launch for innovativeness and clinical benefit, the adopted approach perversely acts to remove the incentives for medicines that deliver better patient outcomes. Further, the system has been developed without meaningful opportunities for interested stakeholders, including the innovative industry, to provide input. Unfortunately, the MHLW presentations to the Chuikyo did not fully include proposals put forward by the industry and other materials on our learnings from other markets. Furthermore, PhRMA remains concerned about the Japanese Government's plan to potentially expand the scope of the HTA system to reimbursement listing. Such a new policy would not only be contrary to previous U.S.-Japan trade understandings but would create further market access barriers to U.S. pharmaceutical products and almost certainly delay patient access to innovative medicines.

Lack of Transparency and Predictability in Government Decision-Making

As the Japanese Government developed detailed plans to carry out the drug pricing reform initiative over the last four years, there were few formal attempts by the decision-making bodies to seek input from stakeholders, including the innovative pharmaceutical industry. For example, despite the key policy issues being debated by the government from 2017 to 2020, the Japanese Government has not once released the proposed new rules for public comment. In addition, the industry has only been invited to testify before the Chuikyo on very limited occasions (e.g., only three times in 2020 including virtual meetings), and the time allotted for testimony has typically been rigidly limited and there has frequently been no government proposal put forward in advance on which the industry could comment. Except for the formal hearings at which industry is invited to testify, industry representatives are only able to attend Chuikyo meetings as observers.

In addition to the failure to provide adequate meaningful opportunities for interested stakeholders, including PhRMA member companies, to provide input into the development of these policies, the Japanese Government has also failed to publish clear guidelines on how some of the new policies will being interpreted and implemented. Even after rules are announced, PhRMA member companies experience sudden and non-transparent application of rules to their products, and increasingly in a way that is contrary to their stated intent. This lack of transparency and frequent changes to the rules for setting prices at reimbursement listing, re-pricing of existing products and other key policies have made the Japanese market highly unpredictable and lacking in procedural fairness.

Moving forward, PhRMA and its member companies request that Japan implement more transparent decision-making processes that include regular and meaningful opportunities to provide input regarding the development of further reforms to Japan's pricing and reimbursement rules. We urge the U.S. Government to engage with their counterparts in the Japanese Government in an early timeframe to ensure that Japan

provides the appropriate transparency and due process – including the opportunity for meaningful consultations with industry and other interested stakeholders – before Japan finalizes proposed laws, regulations and procedures concerning how medicines are priced and reimbursed.

Other Government Policies of Concern

The introduction of optimal use guidelines and repeated changes to various repricing rules have been imposed suddenly and without meaningful stakeholder involvement. These actions by the Japanese Government reduce the predictability and transparency of the drug pricing system in Japan and threaten to undervalue innovative U.S. products. Reform of the pricing system should be done via a fully fair and transparent system and should avoid reactive short-term, *ad hoc* re-pricing mechanisms that fail to appropriately value innovation. The re-pricing rules should be revisited in their entirety and the effect of optimal use guidelines on the health insurance system should be strictly limited so that patients' early access to innovative medicines is ensured.

The industry also recommends that other unfair or unreasonable rules in Japan's drug pricing and reimbursement system be corrected as follows:

- 1. Revisit Re-pricing Rules: Over the past few years, new or strengthened re-pricing rules have been applied in Japan. For example, in 2016 the huge seller re-pricing rule was introduced, starting in 2018 some of the re-pricing rules have been applied on a quarterly basis instead of a biennial basis and in 2020 a special rule for indication change re-pricing was introduced. Such frequent changes and tightening of the re-pricing rules significantly impair the predictability of drug prices and reduce the incentive to invest in R&D for additional indications. PhRMA believes that the complex re-pricing rules need to be revisited and restructured by reexamining the requirements of each rule, the necessity for huge seller re-pricing, the application of re-pricing to similar drugs, and the mechanism to evaluate the usefulness of an additional indication.
- 2. Reward for Innovative Additional Indications: The MHLW should consider not only the strengthening of the re-pricing rules, but also the mechanism by which the reward for innovative additional indications can be reflected in the drug price. According to the current rules, when pediatric or orphan indications are added, a corrective premium can be granted at the time of re-pricing. In the same manner, when adding highly innovative indications, corrective premiums should be added at the time of re-pricing.
- 3. Apply Innovation and Usefulness Premiums: Under the existing pricing method for new drugs, certain premiums may be granted where the drug shows greater innovation or usefulness than its comparator or existing treatments. However, most new drugs eligible for the price premium still receive no, or relatively low, premiums. One reason for this is that even if evidence of usefulness is available, a premium is often not applied when the supporting evidence is not evaluated in

the PMDA review report. PhRMA believes that even if such evidence is not included in the PMDA review report, it should be accepted for determining whether a premium is applied as long as the evidence can withstand scientific and objective evaluation.

4. Relax the 14-day Limit Rule for New Drug Prescriptions: Prescriptions for newly approved drugs can only be written for a 14-day supply during the first year after reimbursement price listing. This restriction imposes a physical and financial burden on patients who are forced to visit their doctors twice a month for the first year simply to receive a prescription. It also imposes a burden on overworked doctors who must see a patient as many as 26 times during this first year simply to renew a prescription.

Pharmaceutical Regulatory Reform and Related Issues

1. Simultaneous Global Development of Drugs

PhRMA welcomes the government's continued support of simultaneous global development and efforts to promote multiregional clinical trials (MRCT) in order to eliminate the drug lag and expedite the availability of life-saving and life-enhancing drugs to patients. Therefore:

- PhRMA encourages the government to increase its global and regional regulatory harmonization efforts, especially to include the reduction of market-specific requirements that can delay simultaneous global development. In particular, PhRMA hopes the MHLW and Pharmaceuticals and Medical Devices Agency (PMDA) will be increasingly flexible in the approval and regulatory process for promoting simultaneous global development, including the acceptance of a pooled strategy for the ICH E17 (MRCT) guideline, Japanese sample size for MRCT and long-term clinical studies.
- PhRMA encourages harmonization of the following CMC data points: (1) globally aligned science- and risk-based specification setting for commercial products; (2) flexibility of requirements for CMC data for expedited approval pathways; (3) harmonization of pharmacopoeias; (4) bio-equivalency (BE) data requirements for drug products under development, including adherence to ICH M9 guidelines; and (5)CMC data requirements for biological products.
- PhRMA encourages PMDA to continue to ensure consistency across its review offices as they consider drug development strategies based upon the scientific aspects of each drug.
- The threat of drug-resistant pathogens to antibacterial drugs is a worldwide issue. PhRMA encourages the Japanese Government to consider measures to promote

drug development for Antimicrobial Resistance (AMR), such as the creation of internationally harmonized clinical development guidelines for AMR.

2. Improved Efficiencies at PMDA

PhRMA appreciates and applauds the significant efforts made by PMDA to meet its review performance goals for standard and priority files, as well as its efforts to meet the demands for consultations in an expeditious manner. PhRMA values its participation in PMDA's Working Groups on consultations and review practices. PhRMA looks forward to continuing its active participation in these groups and hopes that its participation will lead to the development and implementation of concrete process improvements that will aid PMDA in continuing to meet its performance goals.

3. Revision of Post-Approval Change Process and Reduction in Review Times

PhRMA appreciates the opportunity to discuss Japan's post-approval changes to manufacturing and control processes and will continue to provide constructive recommendations based on global best practices for revising the system so that it is more aligned with those systems used by other major regulatory agencies. PhRMA further appreciates the efforts to reduce the review times of partial change applications and encourages PMDA to include biologic products, especially those arising from recombinant technology, in those review targets.

4. Risk Management System

Reform of the safety system and risk management is an important undertaking by the government and PhRMA has supported the government's preparation and implementation of its Risk Management System (*i.e.*, Risk Management Plan (RMP)). The RMP went into effect on April 1, 2013 in Japan. While global standardization of a risk management system is challenging, risk minimization in an effective and efficient manner is critical. PhRMA looks forward to continuing to engage collaboratively with academia and regulatory authorities on the implementation of this concept and process.

5. AMED – the Japan Agency for Medical Research and Development

PhRMA welcomes the creation of AMED in April 2015 as a new agency designed to enhance translational research, to support drug development from the laboratory through the clinical development process and into the marketplace, and to coordinate the national government's health care research and development budgets now assigned to different ministries without strategic coordination. PhRMA emphasizes the need to ensure that AMED's programs will be open to all pharmaceutical companies, whether Japanese or foreign based.

6. Sakigake Program and Conditional Early Approval System

PhRMA welcomes the enforcement of the Sakigake program and the conditional

early approval system under the revised Pharmaceuticals and Medical Devices Law, which will encourage the early evaluation and approval of important new drugs. To avoid a drug lag for innovative products in Japan, PhRMA encourages the government to adopt a flexible approach to the acceptance requirements for applications in order to increase the number of drugs designated and approved early under the *Sakigake* designation and conditional early approval systems. This will ensure Japan's expedited approval pathways are equivalent to similar systems in the United States and the European Union.

Preventive Health Care and Vaccines

Prevention plays a critical role in protecting a population's health and well-being. However, more effective and efficient awareness initiatives aimed at the public should be undertaken. Vaccines are particularly important in reducing disease burden and medical expenses, as well as improving the quality of life. The past several years have seen some important changes, including a revision in 2013 of the Preventive Vaccination Law, implementation of a National Vaccine Plan and adoption of six vaccines into the national immunization program (NIP). The next revision to the Law is expected to be finalized in 2021, although the timeline remains unclear due to the COVID-19 pandemic. In preparation for the next revision, responsible committees within MHLW, such as the Basic Policy Committee, have begun discussions on the direction of policy reforms.

The following outstanding issues continue to require attention:

1. Lack of transparency and timeliness in the NIP decision-making process at MHLW

The current recommendation process is not transparent as it relates to the evaluation and adoption of new vaccines. As a result, vaccine manufacturers lack crucial information as to what data are necessary to receive a national recommendation and when the data should be presented. Furthermore, the vaccination decision-making process is unclear. While a Vaccination Policy Committee under MHLW exists, the timeline of a new vaccine's evaluation, the criteria by which it is evaluated, and the committee's ability to change vaccination policy, are not transparent. For example, in October 2019, MHLW's Vaccination Policy Committee made the decision to include rotavirus vaccines into the NIP from October 2020. This decision came eight years after the vaccine's regulatory approval in Japan. It is essential that decisions related to vaccines be based on science. This is especially important in any evaluation of adverse events and attendant actions.

2. Lack of international regulatory harmonization

Quality standards for vaccines and pre- and post-approval vaccine supply processes, including the current national testing requirement, should be streamlined and harmonized with global standards in order to supply innovative vaccines in a timely manner. Japan faces sporadic outbreaks due in part to shortage of available vaccines. The most recent example is measles that started in the spring of 2018 and continued into 2019. In addition, a rubella outbreak in the summer of 2018 prompted the issuing of a

warning for pregnant women traveling to Japan by foreign governments, including the U.S. Centers for Disease Control and Prevention. Introduction of vaccines from outside Japan is one effective option in such circumstances, and in order to facilitate and accelerate this, there should be a more harmonized regulatory system, including modernization of various requirements such as Minimum Requirements for Biological Products.

3. Lack of broad recognition from Japanese citizens of the value of vaccines

Although the revision of the Preventive Vaccination Law provided for full national funding for most recommended vaccines, including several foreign-origin vaccines, the changes did not apply to several other vaccines that are already approved. The value of vaccines should be recognized by a funding system and NIP process that incentivize manufacturers to develop and bring new vaccines to Japan as quickly as possible, together with a nationwide program to educate citizens, and especially parents, about the importance of vaccinations.

4. Countermeasures against vaccine shortage risks

To mitigate supply shortage risks, MHLW has proposed manufacturers and distributors increase their inventory of vaccines. Details on implementation should be further discussed by taking into consideration the different circumstances of each vaccine. Given that an increase in inventory alone will not completely address the root causes of supply instability, PhRMA believes further discussions are needed. In particular, the international harmonization of regulatory standards and required testing should be further promoted to lower the entry barrier to the Japanese market.

With these issues in mind, PhRMA recognizes the importance of the beginning of a National Vaccine Plan in Japan and the creation of a Japan version of the U.S. Advisory Committee on Immunization Practices (ACIP). PhRMA supports their fair operation and urges that the Committee on Immunizations be given the maximum possible responsibility and autonomy to make recommendations based on scientific evidence and fair assessment of innovation. A priority should be full execution of the National Vaccine Plan.

Intellectual Property

Patent Term Restoration

Japan's PTR system permits term extensions for subsequent approvals for a product, such as for a new use of a previously approved product. PhRMA members appreciate Japan's PTR laws, as they acknowledge the value that additional approvals can provide to patients. However, PhRMA urges the JPO to review its practices in granting PTR for subsequent approvals, to take into account the full regulatory review period in determining the length of any extensions. In particular, the current JPO practice, which provides an extension period based only on what is considered "necessary testing" for the subsequent approval, often results in extension periods for subsequent approvals

that are shorter than the extension period of the first approval. As a result, the current practice can act as a disincentive to conduct research on additional medical uses and indications, including new formulations for an approved product.

Effective Patent Enforcement

PhRMA's members value the highly predictable and reliable intellectual property protections provided in Japan. Predictable and reliable IP protections are particularly important to our sector given the significant resources required to develop innovative medicines, as well as the inherently risky nature of developing new medicines which must not only be developed but also must be shown to be safe and effective for treatment of a particular disease or condition. Less than 12 percent of all potential new drugs entering clinical trials result in an approved medicine, and in most cases, new products in our sector fail to deliver returns that meet or exceed investment.¹⁵⁸

However, recent actions by the MHLW throw the predictability of Japanese IP protections into question. Specifically, while MHLW appropriately takes the position that it should not arbitrate patent disputes, it essentially did so this past summer when it unilaterally determined that it was appropriate to approve multiple generic versions of an innovative product even though the JPO had upheld two of the four claims on the underlying method of use patent. In other words, MHLW took it upon itself to interpret whether the upheld patent claims covered the innovative product.

The innovative manufacturer in this instance has initiated patent infringement suits against each of the approved generics. That, however, has served to highlight another deficiency in Japan's patent enforcement system. Specifically, now that the MHLW has approved these generics versions, those products were added to the National Health Insurance price list in December 2020, thereby enabling potentially infringing products to enter the market. While injunctive relief is typically available in Japan, such relief can take months to secure, thereby frustrating the ability of the innovator to seek an injunction before potentially infringing products were allowed to enter the market in December 2020. As a result, the manufacturers of each of the approved generics have been put in the position of having to decide whether to launch at risk despite the ongoing litigation. In short, this situation creates significant uncertainty for innovators and generic manufacturers alike, and could ultimately result in products being prescribed to Japanese patients that ultimately have to be withdrawn from the market based on the outcome of the pending litigation. It is exactly this uncertainty that well-functioning and effective patent enforcement systems are designed to avoid.

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¹⁵⁸ Research!America, U.S. Investments in Medical and Health Research and Development, 2013-2016, Arlington, VA, Fall 2017, available at https://www.researchamerica.org/sites/default/files/RA-2017_InvestmentReport.pdf (last visited Jan. 27, 2021).

KOREA

PhRMA and its member companies remain highly concerned with several market access and intellectual property (IP) issues in Korea. Korea's drug pricing policies severely devalue U.S. IP and favor Korea's own pharmaceutical industry at the expense of U.S. companies. As a result, America's cutting-edge R&D and manufacturing sectors are losing out. The upshot is fewer U.S. jobs, fewer U.S. exports, and fewer new medicines for patients worldwide. Korea's pricing practices are inconsistent with its commitments under the U.S.-Korea Free Trade Agreement (KORUS).

Recognizing these deficiencies, PhRMA and its member companies commended the U.S. Government for securing a commitment from Korea to amend its premium pricing policy for global innovative drugs to ensure non-discriminatory and fair treatment for U.S. pharmaceutical exports. While it was hoped that Korea would use this opportunity to demonstrate its broader pledge to appropriately value innovative medicines, Korea has implemented this commitment in a manner that eviscerates the ability of any company to qualify for premium pricing and is in contradiction with the spirit of their 2018 commitment. PhRMA stands ready to work with the U.S. and Korean Governments to secure amendments to Korea's pricing and reimbursement policies consistent with Korea's broader KORUS obligations.

Key Issues of Concern:

- Impermissible government pricing and reimbursement policies: On multiple levels, Korea's pricing policies contravene its KORUS commitments and negatively impact the rights of U.S. innovators. Korea's Health Insurance Review and Assessment Service (HIRA) often disregards evidence of clinical benefit, and even then values innovative medicines using a cost-effectiveness threshold established when Korean GDP per capita was significantly lower. Moreover, the prices of most new innovative medicines are based on the weighted average price (WAP) of off-patent and generic comparators. The government can also require additional concessions as a condition of reimbursement and can impose excessive and repeated price cuts. Combined, these price controls constitute a failure to "appropriately recognize the value of the patented pharmaceutical product," in violation of KORUS Article 5.2(b).
- Lack of transparency, predictability and due process: Compounding these
 challenges, Korea also does not provide meaningful transparency and due process
 for companies that apply for reimbursement, contrary to Korea's commitments
 under KORUS Article 5.3. Applicants are often not provided with a satisfactorily
 informative written basis for evaluations and decisions, and Korea has never
 honored its commitment in KORUS Article 5.3(5)(e) and the side letter thereto, to
 make available an effective independent review mechanism relating to medicine
 reimbursement.

- Issues with patent term restoration (PTR): While Korea has implemented PTR, there are two significant issues. First, the PTR calculation should include all relevant essential clinical trials used for the approval of the Korean product, including international clinical trials that are submitted as a part of the Korean dossier for approval of the product. Failure to do so has a discriminatory effect on companies outside Korea that conduct necessary trials, on which the Korean Ministry of Health relies in approving the drug, outside of Korea. Second, there is a lack of due process in the PTR procedures. If the Patent Office determines a certain duration of PTR that is less than the full amount originally requested by the patentee, and the patentee challenges that determination and subsequently loses the challenge, no PTR is granted; even the duration previously determined by the Patent Office is lost. This all-or-nothing approach significantly undermines a patentee's right to appeal, effectively deterring appeals of erroneous calculations, and undermines the patentee's rights.
- Unduly strict patentability criteria for selection inventions: The patentability requirements for a selection invention in Korea are overly strict, and fall short of substantially protecting useful chemical, biological, and pharmaceutical inventions. Many valuable inventions in the chemical, biological, and pharmaceutical fields that are filed worldwide have difficulties meeting these strict requirements in Korea. The current practice in Korea does not reflect the nature of these types of inventions and should be harmonized with the standards in other countries, so that these valuable inventions are protected.
- Patent enforcement concerns: While Korea has implemented a patent linkage mechanism pursuant to its KORUS commitment, certain key issues of concern remain. These issues include the discretion afforded to the Ministry of Food and Drug Safety (MFDS) as to whether to list a patent in the Green List or to permit a change to the patent listing and the limited period of only nine months for a sales stay. In addition, if an innovator elects not to seek a stay of a second (or subsequent) generic/biosimilar, any stay granted against the first generic/biosimilar application is cancelled.

For these reasons, PhRMA requests that Korea be designated a **Priority Foreign Country** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Market Access

Impermissible Government Pricing and Reimbursement Policies

Since the implementation of a positive reimbursement list system in 2007, new prices of innovative medicines are determined based primarily on cost reduction rather than a holistic assessment of value. Multiple pricing regulations are layered to set artificially low prices for innovative medicines and volume caps, which violates Korea's international obligations and results in reduced access to innovative medicines for Korean

patients and doctors. Nearly 90 percent of new medicines launched globally since 2011 are available in the United States compared to just 35 percent in Korea, with Korean patients waiting an average of 28 months from global first launch for the fewer medicines that do become available.¹⁵⁹

Korea's Drug Reimbursement Evaluation Committee (DREC) operating under HIRA assesses the cost-effectiveness of innovative medicines using a low threshold on how much can be paid for health gains, with few products exempted. This incremental cost-effectiveness threshold was set based on Korean GDP per capita in 2007 and has not been increased for most innovative medicines even though Korean GDP per capita is now 50 percent higher.

Manufacturers are often required to make repeated price concessions as they move through the many DREC subcommittees before the final reimbursement recommendation, despite the ostensibly different roles and responsibilities of each subcommittee. For example, the oncology subcommittee tends to review materials that should be reviewed instead by the pharmacoeconomic subcommittee or the budget assessment subcommittee and rejects reimbursement despite proven clinical benefit. Even when a price is recommended following the cost-effectiveness evaluation, the Korean Government tends to impose additional risk sharing agreements in the form of expenditure caps or excessive rebates as a condition of reimbursement.

Following DREC review and recommendation of a maximum reimbursement price, the National Health Insurance Service (NHIS) conducts a price negotiation with the manufacturer. During negotiations, the price for a new innovative medicine recommended by the cost-effectiveness evaluation tends to be lowered based on the prices of off-patent and generic comparators, as well as the prices in other countries. However, since 2015, new medicines that HIRA evaluates based on WAP do not undergo NHIS price negotiations and instead are generally listed at 90 percent of WAP regardless of budget impact. Given the prevalence of off-patent and generic medicines in the WAP calculation, the prices of innovative medicines in Korea continue to be significantly depressed. The Ministry of Health and Welfare (MoHW) has the ultimate authority for approving all pricing and reimbursement decisions.

Over the last decade, the Korean Government has used excessive and repetitive measures to further reduce prices of innovative medicines, such as Actual Transaction Pricing (ATP) investigations and price cuts associated with volume and new indication expansions. For example, if the reimbursement scope is expanded or claim amounts increased, then prices can be significantly reduced through various mechanisms during the period of patent protection. Moreover, decreases in prices through ATP investigations have created incentives for larger hospitals to force biopharmaceutical companies to supply drugs at lower prices. The result is that innovative medicines are subject to repeated and excessive price cutting mechanisms.

¹⁵⁹ PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2019. June 2020.

Combined, Korea's pricing policies contravene negatively impact the rights of U.S. innovators and constitute a failure to "appropriately recognize the value of the patented pharmaceutical product," in violation of KORUS Article 5.2(b).

Moreover, Korea's pricing and reimbursement regime goes far beyond a "limited exception" to the patentee's exclusive rights, and thus is inconsistent with KORUS Article 18.8(3) and Korea's broader TRIPS obligations. TRIPS Article 28 provides that a patent "shall confer" on its owner the exclusive rights to prevent third parties without the owner's consent from "the acts of: making, using, offering for sale, selling, or importing for these purposes that product." In turn, TRIPS Article 30 permits WTO members to grant only "limited" exceptions to these exclusive rights, provided that such exceptions do not conflict with the "normal exploitation" of the patent and do not prejudice the legitimate interests of the patent owner. The *Canada – Pharmaceutical Patents* panel appropriately recognized that the "normal exploitation" of a patent includes the realization of anticipated "economic returns" during a defined period of exclusivity "as an inducement to innovation." This TRIPS jurisprudence supports a parallel reading of KORUS Article 18.8(3).

Under terms of a premium pricing policy for global innovative drugs approved in June 2017, Korea impermissibly provided reimbursement price preferences and other advantages to products developed by local companies. These policies discriminated against U.S. and other foreign-based innovative biopharmaceutical companies and were the subject of renegotiated KORUS commitments agreed to in 2018. Following this agreement, HIRA revised the premium pricing policy for global innovative drugs effective from January 2019. However, the new criteria are so strict and unworkable that it is highly unlikely that any innovative medicine would be eligible for premium prices. While it was

¹⁶⁰ TRIPS Article 28.

¹⁶¹ *Id.* Article 30.

¹⁶² WTO, Panel Report, Canada – Patent Protection of Pharmaceutical Products, WT/DS/114/R, ¶¶ 7.54-55 (adopted Mar. 17, 2000), available at https://www.wto.org/english/tratop_e/dispu_e/7428d.pdf (last visited Jan. 27, 2021). Similarly, the TRIPS Agreement negotiating history indicates that the "rights conferred" by a patent within the meaning of TRIPS Article 28 include the right to sell pharmaceutical products at prices that would permit recoupment of investments and provide an incentive to develop innovative products. In a 1987 statement, the United States set forth this view, stating that "price control" was not a legitimate reason to deny intellectual property protection or to "impose conditions that preclude reasonable compensation for use of an invention or creation." Statement by the United States at Meeting of 25 March 1987, MTN.GNG/NG11/W/2 (Apr. 3, 1987), at 3. As the United States expressed at that time, "[s]uch policies interfere with obtaining and maintaining intellectual property rights and thus reinforce the direct distortion of trade that results from such policies." Id. Others involved in the TRIPS negotiations made similar statements. At a September 1989 meeting, a participant discussed providing patentees "the right to exclude others from making, using or selling the patent or invention for a specified time" and asserted that "Itlhese rights were necessary to provide patentees with the necessary economic incentive to justify investment in innovation." Negotiating Group on Trade-Related Aspects of Intellectual Property Rights, Meeting of the Negotiating Group of 12-14 July 1989: Note by the Secretariat, MTN.GNG/NG11/14 (Sept. 12, 1989), ¶ 75. In a previous meeting, another TRIPS negotiator noted that "the recovery of an investment [of a patented product] depended not only on the duration of patent[] rights[s] but also on a number of other factors, for example whether there was price control." Negotiating Group on Trade-Related Aspects of Intellectual Property Rights, Meeting of Negotiating Group of 16-19 May 1988: Note by the Secretariat, MTN/GNG/NG11/7 (June 21, 1988), ¶ 11.

hoped that Korea would use this opportunity to demonstrate its broader pledge to appropriately value innovative medicines, Korea has implemented this commitment in a manner that eviscerates the ability of companies to qualify for premium pricing and is contrary to the spirit of the commitment it made to the U.S. Government.

Lack of Transparency, Predictability and Due Process

Since 2010, MoHW has repeatedly changed its pharmaceutical pricing and reimbursement policies without considering the long-term implications for innovation and market predictability, resulting in an uncertain business environment for innovative pharmaceutical companies in a manner that is inconsistent with Korea's transparency and due process obligations under KORUS Article 5.3.

Korea also does not provide meaningful transparency and due process for companies that apply for reimbursement. The various subcommittees involved in the reimbursement process do not share the outputs of their deliberations, and applicants are often not provided with a satisfactorily informative written basis for evaluations and decisions, as well as reasonable opportunities for appeal. Moreover, the data used for NHIS budget impact analysis and other government evaluations are not shared with applicants prior to reimbursement negotiations.

Finally, under Article 5.3(5)(e) of KORUS and the side letter thereto, Korea agreed to "make available an independent review process that may be invoked at the request of an applicant directly affected by a [pricing/reimbursement] recommendation or determination." Korea has taken the position, however, that reimbursed prices negotiated with pharmaceutical companies should not be subject to the independent review mechanism because the NHIS does not make "determinations" and merely negotiates the final price at which a company will be reimbursed. Moreover, for many innovative medicines, prices are decided by HIRA based on WAP without subsequent price negotiations with NHIS. However, this interpretation negates the original purpose of the independent review mechanism, which should apply to the process for setting prices of all reimbursed medicines, particularly patented medicines. While an independent review process is actively used for medical devices, there is not an effective independent review mechanism relating to medicine reimbursement, in part because regulations permit HIRA to conduct re-evaluations even after an independent review has taken place.

Intellectual Property Protection

Patent Term Restoration

While Korea has implemented PTR, there are two significant issues. First, the PTR calculation should include all relevant essential clinical trials used for the approval of the Korean product, including essential clinical international trial that are submitted as a part of the Korean dossier for approval of the product. Failure to do so has a discriminatory effect on companies outside Korea that conduct necessary trials, on which the Korean Ministry of Health relies in approving the drug, outside of Korea. The Korean Patent Court

has recently held that there was no legal basis to exclude foreign clinical trials from the calculation of the extended term. The Patent Office should reflect this holding and immediately change its current unfair practice.

Second, there is a lack of due process in the PTR procedures. If the Patent Office determines a certain duration of PTR that is less than the full amount originally requested by the patentee, and the patentee challenges that determination and subsequently loses the challenge, no PTR is granted; even the duration previously determined by the Patent Office is lost. This all-or-nothing approach significantly undermines a patentee's right to appeal, effectively deterring appeals of erroneous calculations, and undermines the patentee's rights.

<u>Unduly Strict Patentability Criteria for Selection Inventions</u>

The patentability requirements for a selection invention in Korea are overly strict as compared to the standards in other countries, and fall short of substantially protecting useful chemical, biological, and pharmaceutical inventions. Specifically, if an invention is in a genus-species relationship with a prior art reference, the invention is classified as a selection invention, and, in order to be patentable, is required by Korea to have a qualitatively different or qualitatively the same but quantitatively remarkable effect which is clearly described in the specification. Many valuable inventions in the chemical, biological, and pharmaceutical fields that are filed worldwide have difficulties meeting these strict requirements in Korea. The current practice in Korea does not reflect the nature of these types of inventions and should be harmonized with the standards in other countries. The existing selection invention standards are currently being reviewed *en banc* by the Korean Supreme Court. These overly strict standards should be overturned or relaxed so that these valuable inventions are fairly protected in Korea.

Patent Enforcement

Consistent with its IP obligations under KORUS, 163 effective March 15, 2015, Korea implemented the framework of an effective patent enforcement system. PhRMA continues to monitor a number of key issues concerning this system. First, the system provides overly broad discretion to MFDS to determine whether to list a patent in the Green List or to permit a change to the patent listing. Second, the system only provides for a nine-month sales stay. In the ordinary course, this is not an adequate period of time to resolve a patent dispute (consistent with Article 18.9(5)(b) of KORUS) before an infringing product is allowed to enter a market. Third, the sales stay system mechanism is problematic in that it requires the patentee to seek a sales stay against all generic/biosimilar applications, regardless of whether those products may infringe the innovator's patent(s), as long as they are the same in terms of (i) active ingredient and amount thereof, (ii) formulation, (iii) dosage and administration, and (iv) efficacy and effectiveness. If the patentee fails to do so, the sales stay against the first generic/biosimilar is cancelled.

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¹⁶³ See U.S.-Korea Free Trade Agreement, Art. 18.9, para. 5.

SECTION 306 MONITORING

THE PEOPLE'S REPUBLIC OF CHINA

PhRMA and its member companies operating in the People's Republic of China are committed to supporting the government's efforts to build a patient-centered and proinnovation health care system. China is taking positive steps to strengthen biopharmaceutical intellectual property (IP) protection and enforcement, align its drug regulatory review and approval process with international standards, and improve government reimbursement for innovative medicines. However, PhRMA and its member companies are concerned about lax IP protections, including ineffective regulatory data protection (RDP) and patent enforcement and inconsistent patent examination guidelines. In addition, we remain concerned about non-transparent and unpredictable government pricing and reimbursement policies, downstream regulatory approval barriers, burdensome biological sample exportation policies, areas of divergence from international registration standards, rampant counterfeiting of medicines, and underregulated active pharmaceutical ingredients (APIs).

We commend the governments of China and the United States for securing Phase One of the Economic and Trade Agreement (Phase One Trade Agreement) between the two countries in January 2020. We look forward to the implementation of the Phase One provisions on supplemental data, early resolution of patent disputes, and patent term extension in a manner that results in meaningful improvement in IP protection for innovative medicines in China. We also welcome the countries' affirmation of their commitment to provide "effective protection and enforcement of pharmaceutical-related intellectual property rights, including patents and undisclosed test or other data submitted as a condition of marketing approval", and stand ready to work with both governments to ensure provision of these critical IP protections in China. Finally, industry commends the countries for their strong commitments to "ensure fair and equitable market access" (Article 1.2), "take effective and expeditious enforcement actions against counterfeit pharmaceutical and related products" (Article 1.18) and ensure "that the transfer of technology occurs on voluntary, market-based terms" (Chapter 2).

PhRMA is encouraged by China's ongoing work to strengthen its drug regulatory framework, including through the Drug Administration Law (DAL) (August 2019), which includes provisions on nationwide-adoption of the marketing authorization holder (MAH) system and facilitates drug review and approval; New Vaccine Administration Law (VAL) (June 2019); new revisions to the Drug Registration Regulation (DRR) (July 2020); the Central Committee of the Communist Party / State Council Opinions (CCP/State Council Opinions) on Strengthening Intellectual Property Rights Protection (IPR) (November 2019) and on Deepening the Reform of the Review and Approval System and Encouraging the Innovation of Drugs and Medical Devices (October 2017); and the draft NMPA Circulars (Nos. 52-55) issued in May 2017. NMPA's May 2017 accession to the International Council on Harmonization (ICH), June 2018 elevation to the ICH Management Committee and its subsequent efforts to implement ICH guidance documents further exemplifies China's regulatory reform efforts.

Many of the above-mentioned Opinions and draft proposals include provisions to bolster IP protection, and PhRMA is eager to continue supporting China in its reform effort to strengthen RDP, patent enforcement and patent examination guidelines. Although we are disappointed that reforms to advance RDP have not progressed, we were encouraged to see that the revised Patent Law (issued in October 2020 and to go into effect on June 1, 2021) includes language to provide both patent term adjustment (PTA) (for patent office delays) and patent term restoration (PTR) (to compensate for a portion of the lengthy development and regulatory approval process), as well as a form of early patent dispute resolution (specifically elements of a "patent linkage" system). However, several important provisions related to these proposed mechanisms are ambiguous, leading to uncertainty about their scope, implementation and value for biopharmaceutical innovators in China and abroad. The NMPA-China National Intellectual Property Administration (CNIPA) draft Measures for the Implementation of the Early Drug Patent Dispute Resolution System (September 2020) and the Supreme People's Court (SPC) draft Judicial Interpretation (JI) on Several Issues Concerning Application of Law in the Trial of Patent Civil Cases Involving Examination and Approval of Drug Marketing (October 2020) provide the contours of a patent linkage mechanism, but several provisions in the draft measures and JI are confusing and potentially problematic. Furthermore, we are very concerned that NMPA since January 2019 has granted more than 50 marketing approvals to local drug companies to make infringing copies of innovative medicines while the reference products in each case are still subject to patent protection. These actions have continued since the Phase One Trade Agreement was concluded and appear designed to benefit Chinese companies at the expense of innovators in the United States and elsewhere. This problem is exacerbated by the difficulties of obtaining preliminary injunctions in patent infringement cases in China. We are further concerned that at least a few of these infringing products were included on lists that passed preliminary review for inclusion on the 2020 National Reimbursement Drug List (NRDL) and the fourth national volume-based procurement (VBP) program. PhRMA strongly encourages China to move swiftly to implement the proposed reforms in a manner that enables biopharmaceutical innovators both in China and abroad to meet the growing needs of China's patient population and in a manner consistent with its commitments in the Phase One Trade Agreement.

Further, in order to meet the needs of China's patient population, particularly those with rare diseases and for whom there is unmet need, PhRMA recommends that China consider further strengthening of the regulatory framework to incentivize the development of treatments for people with rare diseases in China. PhRMA notes the documented success of regulatory incentives, namely orphan drug designation and companion regulatory exclusivity, in achieving significant increases in drug development and marketing authorization of these important treatment options in other regions.

On the regulatory side, PhRMA continues to have concern with China's interpretation of the term "new drug" and its broader policy implications. The recently revised DAL and DRR continue to not define the term "new drug." However, China has maintained the definition of a new drug as one that has not yet been marketed anywhere in the world, (*i.e.*, not simply new to China), in lower level application guidelines for drugs

and biologics. ¹⁶⁴ These guidelines also maintain the position that an innovative drug is one category of new drug and include separate categories for drugs/biologics already approved overseas. This position is inconsistent with international standards, under which new drugs are those that are new to a specific country, and potentially paves the way for China to treat drugs manufactured and approved abroad differently (*e.g.*, the expedited program for breakthrough drugs is only available for new drugs). ¹⁶⁵ These developments undercut the laudable goals of the CCP/State Council Opinion, DAL, DRR and China's long-term innovation plans. This globally unique approach is very likely to be counterproductive for China, making it more difficult for both foreign and domestic innovative manufacturers to benefit from the proposed policy reforms and engage in the type of meaningful drug research and development and collaboration with partners in China and around the world that promotes innovation. Given the problems that this definition creates, we urge China to amend the application guidelines and define "new" to mean newly approved for marketing in China, as opposed to new to the world.

Moreover, there are some regulatory requirements that create barriers to development in China. China generally requires substantial testing for the Clinical Trial Applications (CTA) and, in connection with this testing, the production of detailed manufacturing information. China have very specific requirements, many of which exceed those required by other global regulatory authorities. The newly revised DRR that became effective on July 1, 2020 has removed the specific provision on testing product at the CTA stage and replaced it with a section on testing for registration applications more generally, leaving the requirement for biologic CTA-related testing vague. In practice, however, we understand that CTA applicants must routinely submit to this testing and are required to submit substantial related manufacturing information, such as biologics upstream manufacturing information; standard operating procedures, batch records, and validation reports. This information can include sensitive trade secret and confidential information that is not normally required at this stage of development by international regulators.

In addition, Human Genetic Resource (HGR) regulations require an additional approval on top of that of the Regulatory Authority and Ethics Committee for clinical research projects involving a foreign sponsor or other foreign party prior to the commencement of the clinical trial or research. The HGR regulations prohibit human sample collection by foreign parties and restrict the use, analysis, and transfer of such samples and related data except in the context of an approved collaboration with Chinese parties, such as medical institutions or enterprises with no foreign investment. ¹⁶⁶ This process has added approximately three to five months to the timeline for trials with heavy penalties for non-compliance. By definition, the HGR regulations disproportionately

¹⁶⁴ Chemical Drug Registration Categorization and Application Requirements (NMPA No. 44 2020), available at https://www.nmpa.gov.cn/xxgk/ggtg/qtggtg/20200630180301525.html (last visited Jan. 27, 2021); Biological Product Registration Categorization and Application Requirements (NMPA No. 43 2020), available at https://www.nmpa.gov.cn/xxgk/ggtg/qtggtg/20200630175301552.html (last visited Jan. 27, 2021).

¹⁶⁵ Drug Registration Regulation, Article 59 (NMPA 2020).

¹⁶⁶ Human Genetic Resource Regulations, Articles 21-22 (State Council No. 717, 2019) ("HGR Regulations").

burden U.S. and other foreign companies who may need to export samples and data to complete their clinical trials. This is a significant barrier to timely access to innovation in China.

On the government pricing front, PhRMA is encouraged by China's efforts to develop a regular mechanism for government reimbursement and a value assessment system. We were pleased to see that the recently revised Interim Administrative Measures for the NRDL (July 2020) stipulated that beginning in 2020 the National Healthcare Security Administration (NHSA) will annually adjust the NRDL. PhRMA urges China to establish a comprehensive and sustainable policy framework for government pricing and reimbursement that would include predictable and timely reimbursement decisions for new drugs, systematic and transparent mechanisms for price negotiation linked to reimbursement, adoption of evidence-based methodologies for drug value assessment and an enhanced role for commercial health insurance.

A fair and transparent regulatory and legal process is another priority element for a sound and sustainable policy environment for innovative medicines drug regulatory regime in China. PhRMA is concerned about China's inconsistency in meeting its domestic legal requirements and bilateral U.S.-China commitments in this regard. In particular, China frequently does not provide reasonable periods for public comment on draft laws, rules, regulations and other binding measures, despite these obligations. PhRMA thus welcomes the recent provision of 45-day comment periods related to proposals to implement the Phase One Trade Agreement, consistent with the commitment in Article 8.5 of this Agreement.

Key Issues of Concern:

• Weak patent enforcement: Transparent mechanisms and legal standing to bring suit are needed in China to ensure parties are afforded a meaningful opportunity to resolve patent disputes before potentially infringing pharmaceutical products are launched in the market. We are very concerned that since January 2019, NMPA has granted more than 50 marketing approvals to local drug companies to make infringing copies of innovative medicines while the reference products in each case are still subject to patent protection. While we were encouraged by the issuance of a revised Patent Law, the NMPA-CNIPA draft Measures and the SPC draft JI in order to establish a robust early patent dispute resolution framework, the resulting system, if implemented, would not be fit for purpose. Moreover, requests for preliminary injunctions for patent infringement lawsuits are rarely, if ever, granted. PhRMA and its member companies stand ready to work with the U.S. and Chinese governments on the implementation of an effective patent enforcement system in China, consistent with its commitments in Article 1.11 of the Phase One Trade

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¹⁶⁷ See, e.g., Fact Sheet: 25th U.S.-China Joint Commission on Commerce and Trade (Dec. 2014), available at https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2014/december/us-fact-sheet-25th-us-china-joint (last visited Jan. 27, 2021) (stating that "China and the United States agree that for all draft pharmaceutical and medical device rules and regulations where notifications are required under the relevant WTO rules, a comment period will be provided that will be no less than 60 days.").

Agreement and with a view to establishing an effective and commercially meaningful enforcement system for medicines patents in China.

- Loss of patent term due to regulatory processes: Patent Office delays, and lengthy regulatory approval processes for pharmaceutical products result in a significant loss of effective patent term for such products. Given these current challenges, we are encouraged that the revised Patent Law and the CNIPA draft Patent Law Implementing Rules (PLIR) (November 2020) include language to provide both PTA and PTR. We recommend the CNIPA revise the Draft PLIR to clarify significant ambiguities and to provide further guidance about how the PTA and PTR periods will be calculated. These revisions are essential for effectuating the patent term compensation provisions in Article 42 of the revised Patent Law and satisfying China's commitments under the Phase One Trade Agreement.
- Lack of regulatory data protection: China committed as part of its accession to the World Trade Organization (WTO) to provide a six-year period of RDP against unfair commercial use for clinical test and other data submitted to secure approval of products containing a new chemical ingredient. In practice, however, China does not have a mechanism to grant RDP and the criteria are inconsistent with China's commitments. We thus strongly welcomed the draft NMPA measures on the Implementation of Drug Clinical Trial Data Protection (April 2018), which proposed up to six and 12 years of RDP for chemically synthesized drugs and therapeutic biologics, respectively. This draft measure represented a strong first step toward reform in this area, but then failed to progress. We urge implementation of final measures that are consistent with international best practices and China's renewed commitment to provide RDP as affirmed in the chapeau to Section C of Chapter One of the Phase One Trade Agreement.
- Restrictive patentability criteria: In April 2017, the CNIPA 168 amended its Patent Examination Guidelines that would require examiners to consider post-filing experimental data submitted by an applicant. Consistent with its commitments in Article of the Phase One Agreement, in September 2020, the SPC issued the JI of Some Issues in Hearing Administrative Cases of Granting and Determination of Patent Rights, in which Article 10 prescribed that the Court would review post-filing experimental data. 169 On December 11, 2020, CNIPA approved further amendments to the chemical, pharmaceutical and biotech sections of the Patent Examination Guidelines that went into effect on January 15. PhRMA and it members welcome these positive steps and will be closely monitoring implementation of the revised Guidelines to ensure that they permit

¹⁶⁸ In August 2018, the State Intellectual Property Office (SIPO) changed its name to the China National Intellectual Property Administration (CNIPA). Although many of the policies and draft proposals referenced in this submission were issued under the name of SIPO, we have used CNIPA consistently throughout this document.

¹⁶⁹ Provisions of Some Issues in Hearing Administrative Cases of Granting and Determination of Patent Rights (I) (Supreme People's Ct. September 11, 2020), available at http://www.court.gov.cn/zixun-xiangqing-254761.html (last visited Jan. 27, 2021).

pharmaceutical patent applicants to rely on supplemental data to satisfy relevant requirements for patentability.

- Government pricing and reimbursement: PhRMA welcomes the 2017, 2019 and 2020 updates to the NRDL as well as the addition of 17 oncology medicines to the NRDL in 2018. We encourage the Chinese Government to shift towards a more timely, transparent, predictable and evidence-based reimbursement system, in which manufacturers may apply for reimbursement at any time, evidence-based methodologies are adopted for product value assessment and completed within a pre-defined period following the application (e.g., within 90 days), and negotiations between manufacturers and the responsible government agency take into account the product's value and the need to promote future innovation versus focusing solely on price and occur periodically (e.g., semi-annually). PhRMA commends the NHSA for establishing an annual reimbursement mechanism and negotiation process, and we urge China to continue taking steps to better align its pricing and reimbursement system with international best practices.
- Regulatory approval process: NMPA has undertaken significant reform efforts to accelerate the drug review and approval process and align its regulatory framework with international standards. PhRMA is encouraged with the development of expedited review pathways (breakthrough, conditional approval, priority review and special review) that will facilitate accelerated development and approval of new drugs. It is important that the qualifying criteria, process and timelines for these pathways are clearly defined. The revised DAL codifies existing expedited programs for conditional approval for urgently needed drugs used to treat life-threatening illnesses and other priority categories described above. The recently revised DRR establishes separate programs for breakthrough therapies, conditional approval, priority review, and special review to house these and other various categories. PhRMA recommends that NMPA develop regulatory guidance regarding the conversion of conditionally-approved medicines to regular approval. It is also important for NMPA to implement policies that leverage the best science and innovation to improve the efficiency and predictability of this conversion process.

At the same time, there remain significant impediments to development that delay the clinical trial timeline in China. One worrying impediment is the additional approval or notification now applicable to all trials conducted in China by foreign companies or their affiliates that collect *any* samples that contain Chinese human genetic resources, regardless of whether those samples are for genetic testing. Pursuant to HGR Regulations that have been in effect since 1998, but were largely unenforced until 2015, foreign applicants must apply to the Human Genetic Resources Administration Office of China (HGRAC), under the Ministry of Science and Technology (MOST) before they can collect and transfer these samples and associated data. The trial may not commence until this process is complete. An additional, increasingly concerning impediment is NMPA's unusually detailed review of the manufacturing process at the CTA stage, which includes asking

questions that would require revealing proprietary information about manufacturing steps and requesting additional data beyond what is required on the face of the application materials. This detailed analysis is not in line with international practice and is particularly concerning for innovative products such as complex biologics. The detailed analysis delays the clinical trials and raises concerns about potential disclosure of manufacturing CCI to third parties.

Counterfeit medicines: We commend the two governments on the commitments in Section G of Chapter One of the Phase One Trade Agreement to combat counterfeiting. Over the last several years, China has implemented national plans to improve drug safety and crack down on the production and sale of counterfeit medicines, resulting in several positive and tangible actions on the enforcement front. However, the production, distribution and sale of counterfeit medicines and unregulated APIs continue to pose a problem in China and continue to pose a threat to China and its trading partners. The revised DAL expressly subjects APIs to applicable good manufacturing practice regulations, but also removes APIs from the scope of the definition of drug, which leaves the application of other drug regulations to APIs unclear. Also, the DAL removes the prohibited act of manufacturing or importing unapproved drugs from the definition of counterfeit drug. The DAL now further states that individuals who import small quantities of unapproved drugs that are approved abroad may receive lesser or no penalties. That provision is not limited to drugs that are not for resale. It is not yet clear how these provisions will affect enforcement against counterfeit drugs.

For these reasons, PhRMA requests that China remain on the **Priority Watch List** and be subject to **Section 306 Monitoring** for the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

In 2017 and 2018, China released a series of proposed policies that had the potential to strengthen its intellectual property protection and enforcement system for innovative medicines. Specifically, these proposals could address long-standing industry concerns about the lack of RDP, loss of patent term due to lengthy regulatory approval processes, ineffective patent enforcement, and inconsistent patent examination guidelines. For example, the April 2018 draft NMPA measures on the Implementation of Drug Clinical Trial Data Protection, propose up to six and 12 years of RDP for chemically synthesized drugs and therapeutic biologics, respectively. The CCP/State Council Innovation Opinion, which was issued in October 2017, was the first time that this level of the Chinese Government has openly endorsed RDP and patent linkage in a meaningful way. In addition, the NMPA draft Circulars, which were issued in May 2017, proposed the establishment of a patent linkage system and specific RDP terms. Until the signing of the Phase One Trade Agreement in January 2020, little action had been taken to implement these proposals. On the contrary, the new DAL (August 2019) as well as the new DRR (July 2020) did not include any provisions to advance these critical IP protections. Even

worse, since January 2019, NMPA has repeatedly approved follow-on products while the reference products in each case are still subject to patent protection in China.

In light of this standstill and ongoing patent infringement, PhRMA and its member companies strongly welcome the IP commitments in the Phase One Trade Agreement and look forward to securing expeditious implementation of these commitments in a manner fully grounded in international best practices. We acknowledge China's progress in 2020 to implement the IP commitments and advance important IP reforms. However, further work is required to ensure that the final mechanisms are implemented in a manner that advances innovation and patient access, is consistent with China's international commitments, provides meaningful market access and ensures that U.S. biopharmaceutical companies can compete on a level playing field with China's domestic industry.

Weak Patent Enforcement

Consistent with Article 1.11 of the Phase One Trade Agreement, transparent mechanisms and a legal standing to sue are needed in China to ensure parties are afforded the opportunity to resolve patent disputes before potentially infringing pharmaceutical products are launched on the market. If a follow-on company actually begins to market a drug that infringes the innovator's patents, the damage to the innovator may be irreparable even if the innovator later wins its patent litigation. This could undermine the goal of encouraging innovation in China. In fact, NMPA has repeatedly approved infringing copies of patented medicines since 2019, and research-based pharmaceutical companies currently have no effective legal means to resolve patent disputes prior to the marketing of those infringing drugs. Further, although China's laws and regulations provide for injunctive relief, in practice injunctions are rarely, if ever, granted in the context of preventing premature follow-on product market entry, due to high procedural barriers as well as instructions from the Supreme People's Court to be "cautious" in granting preliminary injunctions in technically complicated cases, and to be "substantially convinced" of infringement before granting preliminary injunctions.

Since January 2019 there has been a significant uptick in NMPA granting market approvals to local drug makers for a variety of medicines used to treat common conditions – even though these drugs are all still under patent (including their basic compound patent). To date, we are aware of more than 50 such generic approvals. In taking these actions, NMPA has knowingly facilitated the infringement of patents owned by inventors based in the United States and elsewhere outside China. In addition, these actions continued after the signing of the Phase One Agreement.

Objections by innovative drug makers have not changed any outcome. In some cases, the Chinese companies have challenged the patents while applying for marketing approval, but no patent has been invalidated. The slowness of the Chinese patent court system and the near impossibility of securing preliminary injunctions to keep infringing products off the market already make it very difficult for innovative drug makers to stop patent violations. These NMPA actions seriously exacerbate the problem in China.

In addition, parallel patent dispute resolution proceedings through China's judiciary and CNIPA's Patent Reexamination and Invalidation Department (PRID) further frustrate biopharmaceutical innovator's ability to effectively and efficiently resolve patent disputes. Patent owners are often faced with unnecessary and burdensome procedural hurdles to seek the timely resolution of patent disputes because invalidity decisions issued by CNIPA's PRID during an ongoing infringement proceeding are grounds for automatic dismissal of such an infringement proceeding. In that situation, patent owners are required to appeal the PRID decision through the judiciary, and if successful, seek a court to compel PRID to confirm the judgment. Due to PRID's extremely strict inventive step and supplemental data requirements, and fast docket times, patent infringement defendants can use the PRID proceedings as a tactic to circumvent the judicial process.

These shortcomings underscore the need for an effective mechanism for early resolution of patent disputes in China. Core elements of an effective early patent dispute resolution system include: (i) early notice to innovators of potentially infringing follow-on applications referencing the original application prior to approval of such follow-on applications; (ii) the ability to initiate patent suits (e.g., cause of action) prior to the approval and marketing of the follow-on product; and (iii) a mechanism to stay marketing approval pending the resolution of any patent disputes. Over the course of 2020, the several responsible agencies released a patchwork of proposed measures to implement such a system including amendments to the Patent Law, the NMPA-CNIPA draft Measures and the SPC draft JI, and while aspects of the core elements were reflected in those proposed measures the resulting system, if implemented, would not be fit for purpose. Key deficiencies include (i) inadequate notice to innovators (no direct notice); (ii) the scope of patents for which notice would be provided is not clearly defined and is severely limited for biologics; (iii) a woefully inadequate stay period of nine months (with no stay provided for biologics); and (iv) unclear guidance on the availability of injunctive relief to allow for the resolution of patent disputes outside of or beyond the proposed patent linkage mechanism. Further, while the revised Patent Law appears to create a cause of action to allow for the resolution of the patent dispute during the stay of marketing approval, the draft JI creates uncertainty as to the scope of the cause of action and type of action established under Article 76 of the revised Patent Law. Clarity about the cause of action and how it relates to traditional infringement and invalidity proceedings is needed to bring predictability to innovators and follow-on drug product manufacturers. We also are concerned that it may be difficult for a patent holder or interested party to meet the procedural and evidentiary requirements under the draft JI for filing an Article 76 lawsuit given the notice procedures anticipated by the NMPA-CNIPA draft Measures.

We look forward to continuing to work with the Chinese and U.S. Governments to ensure that China implements an effective patent enforcement system consistent with its commitments in Article 1.11 of the Phase One Trade Agreement.

Lack of Regulatory Data Protection

As part of its accession to the WTO in 2001, China committed to provide a six-year period of RDP for undisclosed test or other data submitted to obtain marketing approval

for pharmaceuticals in accordance with Article 39.3 of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).¹⁷⁰ While China's DAL Implementing Regulations (DALIR) anticipate a six-year period of protection for test data of products containing a new chemical ingredient,¹⁷¹ in practice there is no mechanism in China to prevent the unfair commercial use of safety and efficacy data generated by innovative pharmaceutical companies.

Moreover, even if there were a mechanism for granting RDP in China, key aspects of the RDP provisions are inconsistent with TRIPS Article 39.3. First, certain key concepts such as "new chemical ingredient" (sometimes referred to as "new chemical entity") and "unfair commercial use" are undefined or are not in line with international standards. The term "new chemical ingredient" should be clearly defined in the DAL, DRR, and other relevant laws and regulations in line with international standards and include biologic and chemically synthesized drugs, recognizing the considerable investment by innovative pharmaceutical companies in developing and proving safety and efficacy of all new pharmaceutical products.

Second, RDP should be granted to any product that is "new" to China, *i.e.*, has not been approved by NMPA. Proposals to date, however, suggest that China would only grant RDP to pharmaceutical products that are "new" to the world – in other words, products that make their international debut in China. That is at odds with the approach of other regulatory systems and even at odds with the approach taken in China for RDP for agricultural chemicals. PhRMA is concerned that this definition of "new drug" or similar concepts may continue to create risk that a drug approved or marketed first outside of China may receive weaker or no priority or protection in China. This approach would also

⁷⁰ Report of the Working

¹⁷⁰ Report of the Working Party on the Accession of China to the World Trade Organization, WT/MIN(01)/3 (Nov. 10, 2001), at para. 284. Article 39.3 provides that a country must protect data submitted in the context of a drug registration application from unfair commercial use.

¹⁷¹ See Regulations for Implementation of the Drug Administration Law of the People's Republic of China, Art. 34.

¹⁷² During the December 2012 JCCT, China "agreed to define new chemical entity in a manner consistent with international research and development practices in order to ensure regulatory data of pharmaceutical products are protected against unfair commercial use and unauthorized disclosure." See Fact Sheet: 23rd U.S.-China Joint Commission on Commerce and Trade (Dec. 19, 2012), available at https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2012/december/23rd-JCCT (last visited Jan. 27, 2021). Following many years of discussion in the JCCT and other venues, this commitment was a positive development. Unfortunately, this commitment remains unfulfilled.

¹⁷³ NMPA continues to draw distinctions between drug applications in China relative to approvals in other countries. The February 2016 NMPA "Chemical Drug Registration Category Work Plan," defined a "new drug" as a chemical entity that is "new to the world." Although this definition is contrary to international practice and the definition in the earlier DAL Implementing Regulation itself, NMPA continues to utilize this concept to grant priority to certain applications. NMPA and CNIPA are also proposing that only products "new to the world" would qualify for patent term restoration (in the January 2019 Patent Law draft) and the full regulatory data protection terms (in an April 2018 draft of NMPA measures on the Implementation of Drug Clinical Trial Data Protection). Applicants that submit marketing applications in China before or at the same time as other countries receive benefits; those who submit later in China receive less. The draft 2019 DRR contains a separate application category for drugs approved abroad but not in China, which could be used to perpetuate this disparate treatment of drugs approved abroad.

be discriminatory in that it would favor domestic industry and innovation, contrary to China's international obligations.

As it stands, China provides no period of protection during which a non-originator (or follow-on) applicant is prevented from relying on the data submitted to NMPA or a foreign regulatory agency to secure approval of the originator product. This practice gives an unfair commercial advantage to the follow-on manufacturer by permitting it to rely on the full clinical data submitted by an innovator – which the follow-on manufacturer did not incur the costs to produce – while having to submit only a small amount of China-specific supplemental data to NMPA.

In light of these deficiencies, we welcomed the draft NMPA measures on the Implementation of Drug Clinical Trial Data Protection in April 2018, which proposed up to six and 12 years of RDP for chemically synthesized drugs and therapeutic biologics, respectively. However, the proposed location- and time-based conditions and limitations placed on the terms for innovative drugs are not consistent with China's international commitments, are not practical, and could well undermine the very goals that are driving these proposed reforms. In this respect, the Draft Measures would make it difficult – if not impossible - to obtain the benefits of RDP by forcing innovators into arbitrary choices concerning the location of development and timing of submissions. In some cases, the costs of these choices for the overall development program could exceed the benefits of RDP. Moreover, there remains significant uncertainty regarding the scope of the data protected and the criteria for protected categories, and we are very troubled by the broad post-approval data disclosure requirements. Consistent with its commitment in the chapeau to Section C of Chapter One of the Phase One Trade Agreement, now is the time for China to advance reforms to provide "effective protection and enforcement of pharmaceutical-related intellectual property rights, including ... undisclosed test or other data submitted as a condition of marketing approval."

Lack of Patent Term Extension Mechanisms

PhRMA and its member companies applaud the U.S. and Chinese Governments for their commitment in Article 1.12 to provide effective patent term extension mechanisms to compensate for unreasonable delays that occur in granting patents (PTA) and unreasonable curtailment of the effective patent term as a result of the lengthy marketing approval process (PTR) for innovative medicines. Pharmaceutical companies must adhere to a drug registration process before marketing drugs in China, as they must in other countries, which causes delays in marketing that reduce the effective term of patent protection for products once they reach the market. PhRMA members are encouraged that the revised Patent Law and the CNIPA draft PLIR include language to provide both PTA and PTR. We recommend the CNIPA to revise the draft PLIR to clarify significant ambiguities related to the definition of "new drug", the scope of patents eligible for adjustment and restoration, as well as the scope of protection provided. In addition, the PLIR should provide clear direction as to how the PTA and PTR periods will be calculated. These revisions are essential for effectuating the patent term compensation

provisions in Article 42 of the revised Patent Law and satisfying China's commitments under the Phase One Trade Agreement.

Restrictive Patentability Criteria

Reforms need to continue in China to provide clear and coherent standards, consistent with other major drug markets, for obtaining biopharmaceutical patents. It is critical that such standards reflect the realities of the drug development lifecycle. For example, unlike patent offices in the United States, Europe, Japan, Korea and other major markets, CNIPA does not consistently accept data submitted after a patent is filed to satisfy sufficiency and inventive step requirements, pursuant to Articles 26.3 and 22.3 of China's Patent Law, respectively. This practice has caused uncertainty about the ability to obtain and maintain biopharmaceutical patents in China, and has caused denials of patents on new medicines in China that received patents in other jurisdictions.

In late 2016, CNIPA issued an amendment to its Patent Examination Guidelines that requires examiners to consider post-filing experimental data submitted by the applicant. This amendment sought to implement China's commitment, made during the 2013 JCCT, to permit patent applicants to file additional data after the application filing date. Consistent with its commitments in Article of the Phase One Agreement, in September 2020, the SPC issued the JI of Some Issues in Hearing Administrative Cases of Granting and Determination of Patent Rights, in which Article 10 prescribed that the Court would review post-filing experimental data. ¹⁷⁴ On December 11, 2020, CNIPA approved further amendments to the chemical, pharmaceutical and biotech sections of the Patent Examination Guidelines that went into effect on January 15. PhRMA and it members welcome these positive steps and will be closely monitoring implementation of the revised Guidelines to ensure that they permit pharmaceutical patent applicants to rely on supplemental data to satisfy relevant requirements for patentability.

In addition, specific therapeutic methods essentially cannot be protected by patents in China. New "specific therapeutic methods" are new methods of treatment of a known indication with a known product (such as new dosage regimens, treatment of new subgroups of patients or new routes of administration). They are distinguished from new product forms (such as dosage forms and formulations), manufacturing processes and treatment of new indications, which can be protected by patents in China either directly or through use of the Swiss-type claim format. Most countries with strong IP laws provide patent protection for specific therapeutic methods either directly (by permitting methods of treatment to be patented) or indirectly (by permitting alternative claim formats that, in effect, can provide patent protection for such inventions). Incentives to develop such new specific therapeutic methods should be provided by the patent system because such new uses of existing medicines can bring important patient benefits, including methods of treatment specific to the Chinese population that may not be developed in the absence

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¹⁷⁴ Provisions of Some Issues in Hearing Administrative Cases of Granting and Determination of Patent Rights (I) (Supreme People's Ct. September 11, 2020), available at http://www.court.gov.cn/zixun-xiangqing-254761.html (last visited Jan. 27, 2021).

of a local incentive to do so. However, Article 25(3) of China's Patent Law does not allow for direct patenting of methods of treatment. The courts, including the Supreme Court (see, e.g., in the decision on *Genentech v. PRB* against the validity of patent No. ZL 00814590.3) and CNIPA (as stipulated in the Guidelines for Patent Examination), do not permit alternative claim formats that could protect specific therapeutic methods, including either Swiss-type claims where the point of novelty is a specific therapeutic method or other alternative formats that are accepted by patent offices in other countries, including the European Patent Office. We urge CNIPA to revisit this gap in China's patent system and conform China's practice to that of many other countries.

Lack of Transparency in Patent Prosecution

According to Rule 48 of the Implementing Regulations of the Patent Law, any person may, from the date of publication of a patent application till the date of allowance, submit his observations why the application does not satisfy the patentability criteria. In turn, section 4.9 of Part II Chapter 8 of the Patent Examination Guidelines provides:

The observations submitted by anyone to the Patent Office on an invention application not in conformity with the provisions of the Patent Law shall be included in the application file. The examiner shall take them into consideration during substantive examination.... The handling of the observation submitted by the public does not need to be notified to the public concerned. (Emphasis added.)

The Examination Guidance does not indicate whether the observations/opinions submitted by "anyone" must be shared with the applicant.

Contrary to international best practice, patent applicants in China are not typically notified of the submission of third-party observations nor offered the opportunity to rebut any allegations that they contain even though these observations may influence the substantive examination of their patent applications. We strongly encourage China to amend the Examination Guidelines and/or Implementing Regulations of the Patent Law to provide this basic transparency and due process as part of its patent prosecution process.

Mandatory intellectual property sharing related to certain biological material

As discussed above, any research conducted by foreign companies using Chinese human biological samples must be undertaken in collaboration with Chinese partners (*i.e.*, Chinese state hospitals) under the HGR regime. In both the original HGR Regulation and the 2019 amended version, there are provisions that require (1) that the foreign and Chinese party jointly submit any patent applications arising from the results of the collaboration (*e.g.*, results of exploratory research and post-marketing studies) and (2) that the two parties agree on an arrangement for sharing or, in the event that there is no arrangement, jointly share the rights and benefits to other intellectual property, including obtaining the consent of the other party to transfer those rights. While not necessarily

impacting rights over the investigational product, applicants are required to submit their clinical trial agreements (including the IP-related provisions) and make declarations on forms¹⁷⁵ as to how they will share these IP rights with Chinese parties, sometimes requiring a negotiation with the HGRAO that creates uncertainty as to the rights over exploratory research and post-marketing studies.

In 2017, MOST released the Guidelines on Optimizing the Approval Process of Human Genetic Resources to streamline the approval process and allow for parallel reviews of CTAs and genetic testing (HGRAC). However, under the new process, foreign sponsors and vendors are required to sign an "undertaking letter," which certifies that that they will comply with Chinese regulations that govern clinical studies and the Chinese Administrative Permit Law. They are also accountable for the validity and accuracy of the application in its entirety, based on the official instructions on the application form. The intellectual property sharing requirement and the undertaking letter together form a significant hurdle and create uncertainty for foreign companies conducting clinical research in China.

Sample collection during a clinical trial should be left out of the approval process. The mandatory intellectual property sharing requirement should be eliminated to ensure, consistent with Chapter 2 of the Phase One Trade Agreement, that any transfer of technology as part of securing marketing approval for innovative medicines occurs on voluntary, market-based terms.

Market Access

Government Pricing and Reimbursement

To appropriately address patient access and affordability challenges, PhRMA urges China to establish a more timely, transparent, predictable and evidence-based reimbursement system, in which manufacturers may apply for reimbursement at any time, evidence-based methodologies are adopted for product value assessment and completed within a pre-defined period following the application (e.g., within 90 days), negotiations between manufacturers and the responsible government agency occur more periodically (e.g., semi-annually) and consider the product's value and need to promote future innovation versus focusing solely on price. Such a comprehensive and sustainable policy framework should also include an enhanced role for commercial health insurance. PhRMA and its members are committed to working with the appropriate government authorities in China to assist in the timely and transparent development of this policy framework.

¹⁷⁵ The forms that are part of the notification process introduced by the 2019 amendment to the HGR Regulations do not require IP-related declarations, although applicants must still submit the clinical trial agreements.

National Reimbursement Drug List

PhRMA welcomed the 2017, 2019 and 2020 updates to the NRDL as well as the addition of 17 oncology medicines to the NRDL in 2018. These important steps and the government's stated transition in 2020 to conduct annual negotiations will significantly improve the access and affordability of innovative medicines for patients in China. While any additions to the NRDL are a positive development, it appears that the negotiation process for these new medicines has lacked transparency and has diverged from global best practices that support sound government pricing and reimbursement systems. There remain major implementation challenges, such as low reimbursement percentages, hospital listing restrictions and cost control regulations, which will continue to restrict patient access to innovative and life-saving medicines. Only 20 percent of new medicines launched globally in the past decade are available in China, and among these fewer than 40 percent are included in the NRDL.¹⁷⁶

We appreciated the opportunity to comment on the NHSA draft Interim Administrative Measures for the National Reimbursement Drug List (July 2020) and welcomed the deletion of language that would have (1) prioritized products with "independent intellectual property" (i.e., developed and owned by a Chinese legal entity) for inclusion in the NRDL, and (2) allowed local medical institutions to conduct secondary negotiations to achieve prices below the nationally negotiated reimbursement payment standard during the two-year NRDL contract renewal period. In addition, NHSA extended the marketing authorization cutoff date from December 31, 2019 to August 17, 2020, which made eligible for the NRDL at least an additional 22 innovative medicines and 15 indications for existing medicines from PhRMA members. At the same time, we were concerned that NHSA included at least two patent-infringing generic products on a list of products that passed preliminary review for inclusion in the 2020 NRDL.

PhRMA recommends that the Chinese Government continue to take steps to improve the clinical assessment and negotiation process for innovative medicines. The drug clinical assessment should be a transparent, evidence-based and comprehensive analysis of scientifically proven clinical benefits that is independent of economic considerations. Following the clinical assessment, a transparent and evidence-based framework that holistically reflects benefits and costs should be established before conducting individual product negotiations. Greater clarity and engagement with industry and other stakeholders on comparator selection and budget impact methodology is needed. Negotiations between the national reimbursement authority and the manufacturer should be based on these clear conditions with open communication channels during and after negotiations to resolve any issues. We also recommend increasing the amount of time provided for companies to prepare for negotiations and making documentation requirements available much earlier. These reimbursement system reforms would increase the transparency and predictability of the Chinese market, more appropriately recognize the value of innovative medicines and provide U.S. companies increased market access that leads to improved patient access

¹⁷⁶ PhRMA analysis of IQVIA Analytics Link and FDA, EMA NHSA, NMPA and PMDA data. May 2020.

Government Procurement Policies

In late 2018, NHSA initiated the "4 + 7" VBP pilot program to centrally procure off-patent and generic products that passed a generic quality consistency evaluation (GQCE) for all public hospitals in 11 cities (*i.e.*, the four directly managed municipalities of Beijing, Shanghai, Chongqing and Tianjin, and seven key cities in other provinces), which collectively represent around a third of the pharmaceutical market. Twenty-five of the 31 molecules proposed for procurement were selected based on the lowest bidders, with an average price cut of 52 percent. The pilot program substantially lowered procured prices for off-patent and generic products, reducing the economic burden on Chinese patients.

In September 2019, the Chinese Government expanded the program to most of China but modified the procurement methodology to allow three suppliers with the lowest bids. Subsequent procurements have increased the number of allowed suppliers. For example, in December 2019, the National Drug Joint Procurement Office (the procurement agency authorized by the NHSA) organized the second national VBP for 33 products and allowed six suppliers with the lowest bids. In August 2020, the National Drug Joint Procurement Office organized the third national VBP for 55 products and allowed eight suppliers with the lowest bids. In December 2020, China initiated steps toward the fourth national VBP, which is expected to be finalized in early 2021. PhRMA is concerned that the preliminary list of VBP candidate products includes a compound for which the compound patent is still valid and an administrative lawsuit is in progress.

While allowing multiple winning bidders is a positive development, PhRMA urges the Chinese Government to ensure that by awarding all supply to those with the lowest bids the national VBP program does not reduce the number of quality suppliers in the market, increase the risk of drug shortages and hinder patient and physician choice in selecting the clinically most appropriate medicines. PhRMA encourages the Chinese Government to implement the national VBP program in a more transparent and consistent manner and to provide additional sales channels to ensure that patients have the full range of treatment options available.

In 2020, NHSA officially clarified that biologic medicines would not be excluded from national VBP program. To ensure patient safety, we recommend that biosimilars demonstrate strong and specific scientific, clinical and quality standards. Accordingly, before biologics are included in the national VBP program, the Chinese Government should supplement the existing biologic management policy framework with policies on naming, pharmacovigilance and interchangeability.

PhRMA is committed to working collaboratively and expeditiously with the appropriate government authorities to implement a transparent and appropriate government pricing policy that recognizes quality-systems, innovation, and the value that our member companies' products bring to patients and China.

Regulatory Approval Process

China is making significant strides in reforming and strengthening its regulatory framework, including shorter review times for CTAs (notwithstanding the unique manufacturing requirements for biologics) and the expedited programs described above. Although there were a number of examples where NMPA granted expedited regulatory approval consistent with timelines in the U.S. and EU or even faster, China remains an outlier in the biologic and vaccine drug development and approval process compared to other regulatory authorities. We encourage China to address these issues rapidly, given the promise that a significant number of therapies currently in development have shown and the importance of predictable and timely review processes to encourage innovators to bring these new therapies to China for regulatory approval.

Chinese patients remain at a disadvantage compared to other countries with respect to the number of innovative medicines available, though moderate improvements continue to reduce the gap. Still, just eight percent of the new medicines launched between 2011 and 2017 are available in China (*i.e.*, listed on the NRDL). ¹⁷⁷ Because of China's unique and overly strict regulatory requirements and lengthy review and testing procedures, a "drug lag" remains in China.

PhRMA is encouraged by China's recent legislative and regulatory developments including the recently revised DAL and certain aspects of the new DRR which implement reforms that will speed up the approval process for some drugs. This new legislation continues to support greater flexibility in the drug development process, including a shortened timeline for the approval of clinical trials, streamlined amendment and reporting processes for clinical trial applications, and strengthened channels for stakeholder-NMPA communications. Furthermore, we support NMPA's implementation of various conditional approval programs, including for three lists of drugs approved in the U.S., Europe, and Japan that China considers to be urgently needed for clinical use. We also support the issuance of guidance in July 2018 on the acceptance of overseas clinical trial data followed by the new clinical technical requirements for drugs approved overseas but not yet in China in October 2020.

Additionally, NMPA's May 2017 accession to the ICH and successful election to the ICH Management Committee further exemplifies China's reform efforts. Being an ICH member will further encourage NMPA's harmonization with international regulatory standards, including but not limited to the China Pharmacopeia 2020, enforcement of harmonized global regulatory practices (including good manufacturing and clinical practices), and further implementation of standardized electronic submission for new drug applications (eCTD) and safety reporting, which will enable companies to pursue global simultaneous drug development and accelerate Chinese patient access to innovative medicines. Industry and other ICH stakeholders have high expectations for NMPA to implement fully ICH's technical guidelines in the coming years. CDE is working on

¹⁷⁷ PhRMA analysis of IQVIA Analytics Link.

implementing various ICH guidance documents and established related training programs.

Clinical Trial Applications

To help China further integrate into the global innovation network and reduce the time it takes for innovative medicines to reach patients, it is critical for China to shorten the CTA review and approval time. As discussed above, China now permits a new drug clinical trial to move forward if NMPA has not raised objections within 60 business days. Under the newly revised DAL and DRR, this 60-day implicit approval should apply to all trials. Also, the newly revised DAL now permits filing administration of clinical trial sites to proceed via a faster notification process to increase the availability of resources. Therefore, PhRMA recognizes and applauds the important steps NMPA is taking to make the development process more efficient.

But there is still more that could be done. Based on PhRMA member company experience in other major markets, NMPA should maintain consistent and specific timelines for reviewing and approving applications. In addition, applications should be evaluated based on a clear set of standardized criteria coupled with science-based and risk-based decision making (principles embedded in ICH guidelines) that applies equally to both local and foreign manufacturers and matches the stage of development.

Specifically, we are encouraged that the recently revised DAL and DRR create a more uniform system that does not draw distinctions between local trials and international multicenter trials, building on prior reports in this area. For example, in 2017 NMPA began to permit International Multi-Center Trials (IMCTs) to commence in China in parallel with the rest of the world, with the exception of vaccine trials. IMCTs may now also support registration in China without going through a lengthy waiver process that NMPA imposed between 2013 and late 2017. These reforms coupled with the increasing acceptance of foreign data have the potential to further facilitate the drug development process. With respect to foreign data acceptance, further clarity on whether ethnic differences require additional clinical studies in China and whether this data can be accepted without filing a time-consuming clinical trial waiver application, will help to avoid any uncertainty in China's drug registration process.

One of the more significant recent impediments to development has been an additional approval or notification now applicable to all trials conducted in China by foreign companies or their affiliates that collect *any* samples that contain Chinese human genetic resources, regardless of whether those samples are for genetic testing. Pursuant to HGR Regulations that have been in effect since 1998, but were largely unenforced until 2015, foreign applicants must apply to the HGRAC, under MOST, before they can collect and transfer these samples and associated data. The trial may not commence until this process is complete. While an amendment to the HGR Regulations in 2019 now permits manufacturers to submit a notification (rather than an approval application) for trials that are intended to support a marketing application in China, provided that no samples from

the trial will be exported from China, the filing criteria is very stringent and the vast majority of cases do not qualify. In addition, other trials still require approval.

The HGR application process potentially adds months to the development timeline. Under the 2019 amendment, applicants must file any data that they intend to transfer outside of China with the HGRAO. This situation presents a hurdle for China to participate in global development and contradicts various reform policies to encourage innovation. The additional conditions for HGR research by foreign companies, limitations on data transfer and storage, and intellectual property sharing requirements described below raise serious questions about China's compliance with its international commitments undertaken pursuant to WTO agreements and Article 2 of the Phase One Trade Agreement. These requirements – which are unique to China – disproportionately burden foreign companies. If not eliminated entirely, they should be reduced to a simple notification procedure without restrictions on export of samples and data.

PhRMA's view on intellectual property sharing related to certain biological material in connection with the HGRAO process is noted below.

An additional, increasingly concerning impediment to development is NMPA's unusually detailed information requirement for the manufacturing process at the CTA stage, which includes asking questions that would require revealing proprietary information about manufacturing steps and requesting additional data beyond what is required on the face of the application materials. This is not in line with international best practice. The detailed information required not only delays the clinical trials but also raises concerns about potential disclosure of manufacturing CCI to third parties. In these instances, NMPA has been hesitant to permit redactions of these records or accept less sensitive substitutes.

Drug Approvals Process

PhRMA welcomes a number of other key regulatory reforms described above because they represent positive movement in China's progress toward supporting a simultaneous global development/ registration framework in China. These reforms are consistent with industry's primary recommendations, including streamlined processes for IMCT registrations, strengthened expedited programs, acceptance of foreign clinical data to satisfy registration in China, structured agency consultation, and the establishment of an orphan disease list. Although the establishment of an orphan disease list is an encouraging step to better serve patients with rare diseases, it only contains 121 rare diseases of the about 8,000 rare diseases in total known today. As it is impossible to create a complete list, PhRMA suggests replacing this list with a definition of prevalence, which is the approach taken in the United States and other ICH regulatory agencies. In addition, PhRMA encourages China to pair the establishment of an orphan disease definition with an orphan drug regulatory framework that provides for the expedited development and review of orphan drugs, as well as regulatory incentives.

The newly revised DAL adopts a MAH system nationwide and applies it to ex-China applicants. This system unifies the previously separate imported and domestically made drug pathways in certain ways. Applicants can now receive a marketing authorization tied to a product and have the freedom to contract out manufacturing, whether in China or abroad, and distribution to multiple partners. Also, the newly adopted DAL unifies what were previously separate applications for the drug product, the active ingredient, excipients and primary packaging materials. Materials related to the latter three will be registered to certain applicants as part of a mandatory drug master file (DMF) system that began in 2017. Although the bundled system streamlines the review process, some of the required administrative and technical information for a DMF is burdensome for the companies as well as their suppliers and it is unnecessary to ensure product quality and safety. PhRMA recommends that the DMF system should be voluntary as is the case in the United States and the European Union.

To ensure Chinese patients receive timely access to new therapies, PhRMA recommends that NMPA continue to bring its regulatory framework into compliance with accepted international standards and adopt science-based, transparent, consistent and predictable policies for evaluating and approving drugs and biologics. PhRMA commends NMPA on its emerging leadership at ICH and reminds NMPA of the importance of timely and robust implementation of all ICH guidelines. PhRMA recommends continued reforms to accelerate and simplify the drug regulatory approval process, unify requirements and practices for locally manufactured and imported products and clearly outline and streamline the criteria and timeline for reviewing and approving clinical trial and marketing application processes. PhRMA and its members stand ready and look forward to working closely with the U.S. and Chinese Governments to support China's regulatory reform efforts.

Counterfeit Medicines

Pharmaceutical counterfeiting poses global public health risks, exacerbated by rapid growth of online sales of counterfeit medicines and the production and sale of unregulated APIs used to manufacture counterfeit products. China has increased enforcement efforts against counterfeited drugs in recent years, both through legislative reforms and increased police activity, and we commend the two governments on the commitments in Section G of Chapter One of the Phase One Trade Agreement to combat counterfeiting. In implementing these commitments it will be particularly important to address online distribution of counterfeit medicines and unregulated API. A number of stories involving counterfeit medicines continue to make national headlines, including a

scandal in 2016 which uncovered nearly \$88 million USD in substandard vaccines being circulated throughout 20 provinces. 178

Under current pharmaceutical regulations, there is no effective regulatory control over the manufacture and distribution of API, which creates a major regulatory loophole that exerts a negative impact on the security of China's upstream drug supply chain. The new DAL states that APIs used in drug production must comply with good manufacturing practice regulations and that drug producers must verify the compliance of APIs they purchase. But the DAL is not clear on the applicability of other regulations to APIs as it has removed API from the definition of "drug."

The new DAL also introduces provisions on a system for drug traceability. This includes building upon existing efforts to establish an online platform for collecting and publishing traceability records and a requirement for a unique identifier according to uniform coding rules on each drug package. In addition, the DAL also contains increased fines and longer debarment penalties for counterfeiting.¹⁷⁹

The amended DAL is a start, but further measures are still required, including:

- amending the Criminal Code to ease the burden of proof to prosecute brokers or API suppliers who knowingly deal with illegal APIs;
- empowering NMPA or another authority to regulate any party that manufactures API even if that party has not declared an intent to do so;
- empowering NMPA (through implementation of the revised DAL) to penalize API manufacturers based on *prima facie* evidence of a product having medicinal use or being an "API" or a "chemical drug substance" without cGMP certification; and
- deepening cooperation with major Internet Service Providers, portal sites, and search engines for earlier identification and tracking of illegitimate API suppliers through B2B websites.

While the State Administration for Market Regulation plays a critical role in developing future solutions, any significant reform plan will require coordination and consultation among all relevant ministries within the central government. These efforts to crack down on unregulated API must go hand-in-hand with China's current campaign against counterfeit drugs in order to enhance the effectiveness of China's national drug safety plan objectives.

¹⁷⁹ See DAL Chapter 11. The potential fines for manufacturing or distributing counterfeit drugs increased from 2 to 5 times the value of the goods to 15 to 30 times the value of the goods with a minimum fine of RMB 1,500,000 (about USD 208,000). These entities can be debarred for 10 years. The maximum penalty for a responsible person increased from ten years' debarment to lifetime debarment from the pharmaceutical industry. For severe violations, the police department may detain the responsible person for five to 15 days.

¹⁷⁸ Fake and Shoddy Drugs A Threat to the People a Challenge to Administrators, China Daily, Dec. 8, 2017, available at http://www.chinadaily.com.cn/opinion/2017-12/08/content_35258859.htm (last visited Jan. 27, 2021).

China has continued to coordinate joint special enforcement campaigns targeting counterfeit drug crimes, including in 2018. It also appears that China is beginning to spend more efforts tackling the sale of counterfeits on the Internet. In 2016, NMPA pursued 14 cases of online drug counterfeiting in collaboration with the Guangdong and Shenzhen MPAs. In 2013, NMPA and the State Information Office jointly led a five-month crackdown campaign with collaboration of several ministries and offices against illegal online sales of drugs.

Reportedly, the government also demands major search engines to filter out fake drug posts, which is a significant partnership with the private sector aimed at protecting Chinese patients. Under the new E-Commerce Law and the new DAL, platforms that sell drugs must be registered with the government, verify the credentials of those who sell via their sites, and cease content and submit a report to the government related to any illegal activities it discovers.

PhRMA hopes that the U.S. Government will work with China to increase transparency of such campaigns, including enhancing information sharing with drug manufacturers to help evaluate the effectiveness of online actions, and supporting enforcement efforts, given the importance of protecting patients. China's actions in this area could serve as a model for other countries facing similar challenges online.

PhRMA encourages the Chinese and U.S. Governments to continue and increase further their cooperation related to counterfeit medicines sold on the Internet, given the role of the Internet in the global counterfeit drug trade. This notably requires a holistic approach since not only finished counterfeit medicines are sold on the major online platforms in China but also separate materials (*i.e.*, API, secondary packaging, primary packaging, labels) especially on business to business platforms for these to be assembled in and outside China.

Finally, while we commend China for improvements in customs regulations, which include monitoring and seizure of imports and exports, Chinese Customs authorities

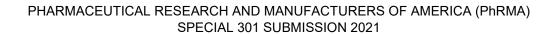
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¹⁸⁰ See, e.g., China Launches Crackdown on Fake Food and Drugs, China Daily, Oct. 14, 2018, http://www.chinadaily.com.cn/a/201810/14/WS5bc2cf18a310eff303282339.html (last visited Jan. 27, 2021); N.Y. Times, "2,000 Arrested in China in Counterfeit Drug Crackdown," Aug. 5, 2012, available at http://www.nytimes.com/2012/08/06/world/asia/2000-arrested-in-china-in-crackdown-on-counterfeit-drugs.html?_r=0 (last visited Jan. 27, 2021); Huffington Post, "China Detains 1,300 People Suspected of Making and Selling Counterfeit Drugs," Dec. 15, 2013, available at http://www.huffingtonpost.com/2013/12/16/ counterfeit-drugs-china-medicine_n_4447483.html (last visited Jan. 27, 2021).

¹⁸¹ NMPA Notice on Crackdown of 14 Online Distribution of Counterfeit Drugs, Feb. 5, 2016, available at https://www.nmpa.gov.cn/xxgk/ggtg/qtggtg/20160205144801638.html (last visited Jan. 27, 2021) ¹⁸² Reportedly, search engines have been required to ensure that qualified websites are listed earlier in the search results, to conduct active searches for illegal online drug sales, to delete false and illegal medical advertising, and to report unqualified websites to the National Internet Information Office and NMPA. In response, several Internet companies have stepped in to support the fight against counterfeit drugs. One of the most prominent companies, 360, introduced several products to provide users with accurate information on medicines and block false medical information websites, claiming that such sites accounted for 7.9% of all blocked websites or approximately 40,606 websites.

rarely exercise their authority to monitor pharmaceutical exports. PhRMA believes that more and better trained resources and support should be targeted to monitoring pharmaceutical and chemical exports to ramp up efforts against counterfeiting and unregulated API producers. This could include, for example, encouraging greater cooperation between Chinese Customs and the Public Security Bureau to ensure the identification and prosecution of those manufacturing and exporting counterfeit medicines. In addition, Chinese Customs could consider working with the World Customs Organization to exchange information and potentially align activities. Close cooperation and intense risk analysis with key intermediaries such as online e-commerce platforms and postal courier companies is critical to effectively monitor and detect small parcels with counterfeit medicines.

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ASIA - PACIFIC

INDIA

PhRMA and its member companies support India's efforts to create a stronger business, innovation, and healthcare environment through the Make in India initiative, the National Intellectual Property Rights (IPR) Policy 2016, the National Health Policy 2017, and the National Health Protection Scheme (NHPS) announced in February 2018 to provide health insurance coverage up to INR 500,000 (approximately USD 7,000) to 500 million Indians and the opening of health and wellness centers under the Ayushman Bharat Mission. These efforts can advance improved access to health care for Indian patients, while driving economic growth by enhancing India's global competitiveness and improving ease of doing business. However, despite some positive signs, PhRMA and its member companies remain concerned about the challenging regulatory and policy environment in India.

Market access challenges persist and, despite important announcements to expand health care programs, the Indian Government has not increased investment in this critical area, leaving public health care spending at only 1.6 percent of GDP during 2019-2020, and with only 37.2 percent of the population covered under any health insurance in 2019. Moreover, there are cumbersome procedures related to compensation which prevent India from becoming a part of global clinical trial programs and thereby limit patient access to innovative medicines.

Pharmaceutical innovators saw positive signs from the Indian Government in 2019, including the release of the Manual of Patents Practice and Procedure (MPPP) that was notified by the Office of the Controller General of Patents Designs & Trademarks (CGPDTM) on November 26, 2019. However, no real policy or practical changes have since been realized. To research, develop, and deliver new treatments and cures to patients, biopharmaceutical innovators must be able to secure and effectively enforce intellectual property (IP) rights. With the right policies put in place, India could become a globally-competitive leader in life sciences and biomedical development. The National IPR Policy, 2016, puts forward an important framework for strengthening India's innovation ecosystem; still, greater predictability and reliability is needed and implementation of the policy offers an opportunity to advance concrete policy improvements.

The innovative biopharmaceutical industry greatly appreciates the efforts to address these concerns at the highest levels of the U.S. and Indian Governments. We welcome the opportunity to continue working with both Governments to improve access

¹⁸³ Economic Survey 2019-2020, Ministry of Finance, Chapter 10, available at https://www.indiabudget.gov.in/economicsurvey/doc/vol2chapter/echap10_vol2.pdf (last visited Jan. 27, 2021).

¹⁸⁴ See National Health Profile 2019, available at http://www.cbhidghs.nic.in/showfile.php?lid=1147 (last visited Jan. 27, 2021).

to medicines for patients and advancing a "Healthy India" by removing market access barriers and fostering legal and regulatory certainty for the protection of IP in India.

Key Issues of Concern:

- Unpredictable patent environment: India's legal and regulatory systems pose procedural and substantive barriers at every step of the patent process, including: impermissible hurdles to patentability posed by Section 3(d) of India's Patents Act, 1970, patent grant delays due to cyclic filings of pre-grant oppositions followed by rampant post-grant opposition proceedings, onerous patent application disclosure requirements and conditioning patent grant on unclear and subjective access and benefit sharing requirements that disproportionately affect foreign patent applicants. These shortcomings, coupled with the ongoing threat of compulsory licenses (CLs), demonstrate that much work needs to be done to improve the patent environment in India.
- Lack of patent enforcement: One of the most significant challenges facing biopharmaceutical innovators seeking marketing approval in India is that marketing and manufacturing approvals are not transparent or coordinated between federal and state agencies. Indian law allows the Central Drugs Standard Control Organization (CDSCO) to approve third-party manufacturers to commercialize copies of innovator products, regardless of whether those products infringe on an innovator's patent(s). After four years of the medicine's first approval in India, a license from any of the state drug regulators to manufacture and market the product in India suffices resulting in irreparable harm to patients, innovators, and other follow-on producers. Coincident with changes to Indian customs procedures that eliminated patent enforcement at the border, biopharmaceutical innovators are seeing an increased incidence of infringing products manufactured outside India in neighboring territories being illegally imported into India. Not only do such products violate patents granted in India, they may also potentially threaten patient safety.
- Regulatory data protection failures: Contrary to India's obligations under Article 39.3 of the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), regulatory authorities in India rely on test data submitted by originators to seek approval in India and/or another country when granting marketing approval to follow-on pharmaceutical products to third parties. This reliance results in unfair commercial use prohibited by the TRIPS Agreement and discourages the development and introduction into India of new medicines for unmet medical needs.
- Discriminatory and non-transparent government pricing policies: PhRMA and its member companies commend the Department of Pharmaceuticals (DoP) for amending Paragraph 32 of the Drug Price Control Order 2013 (DPCO) to provide exemptions from price controls for five years from the commencement of

marketing in India for patented products and for life for orphan drugs. However, the potential benefit of the provision is yet to be seen as there is significant delay in implementation, and applications made by industry remain pending. Moreover, there remain significant concerns of an evolving pricing regime that is discriminatory, unpredictable and opaque, including the threat of further amendments to the DPCO or dilution of Paragraph 32. Also, while the innovative biopharmaceutical industry supports the introduction of the Trade Margin Rationalization (TMR) approach for price monitoring of the non-scheduled market, the application and implementation of the TMR formula needs to be transparent and predictable. Further, the possible inclusion of patented medicines in the National List of Essential Medicines (NLEM) and thereby the threat of direct price setting under the DPCO would significantly reduce the benefits of patent protection and create an unviable business environment. The broad authority granted to the National Pharmaceutical Pricing Authority (NPPA) and continued lack of transparency and predictability in the decision-making process inhibit further investment in India.

- Discriminatory government procurement policies: In 2020, the Indian government began prohibiting procurement of products not fulfilling minimum local content requirement, where the value of the goods to be procured is less than INR 200 crores (approximately USD 27 million). The Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry has twice amended the 2017 Public Procurement Order (PPO) to disqualify non-local bidders (i.e., products with less than 20 percent local content) in all government tenders (except in permitted international tenders). The December 30, 2020 procurement guidelines issued by the DoP specified a minimum of 80 percent local component requirement for a Class 1 local supplier and 50 percent to qualify as a Class 2 local supplier.
- High tariffs and taxes on medicines: Medicines in India face high effective import duties for active ingredients and finished products with the basic import duties averaging around 10 percent. When combined with the Integrated Goods and Service Tax, the effective tax can exceed 20 percent. The Goods and Service Tax (Central GST & State GST) on medicines ranges from 5-12 percent. 185
- Unpredictable environment for clinical research: While the government is keen
 to reinvigorate clinical research in India, ambiguities and discriminatory practices
 in the Indian regulatory space continue to hinder that effort. In particular, the
 granting of waivers of India's local clinical trials requirements is highly subjective
 and unpredictable. While revisions to the Clinical Trials Rules, 2019, promisingly
 proposed that local clinical trials could be waived if the clinical trials were
 conducted in certain countries, the list of relevant countries has yet to be published.

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¹⁸⁵ See Central Board of Indirect Taxes and Customs, Tariffs on Chapter 30 (Pharmaceuticals), available at http://www.cbic.gov.in/resources//htdocs-cbec/customs/cst1718-020218/Chap-30-01052018.pdf;jsessionid=B8490083D262DD476149822F19D8A442 (last visited Jan. 27, 2021).

Further, the provision allowing for deemed approval of clinical trials applications is discriminatory in nature, as it does not apply to drugs whose research and development was conducted outside of India. These issues perpetuate a burdensome environment for clinical research that undermines the availability of new treatments and vaccines for Indian patients.

For these reasons, PhRMA requests that India remain on the **Priority Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

India announced the new National IPR Policy in May 2016.¹⁸⁶ The Policy recognizes the tremendous economic and socio-cultural benefits that a strong IP regime could bring to India through economic growth, employment, and a vibrant R&D environment. While the government has established the Cell for IPR Promotion and Management under the National IPR Policy to conduct an IPR awareness campaign across the country in educational institutions, no concrete measures have been taken to improve the IP regime, *i.e.*, to promote innovation.

The Policy also puts forward important administrative and procedural improvements. However, it should be strengthened to accelerate the reforms needed to foster medical innovation and enhance India's global competitiveness. For example, while the policy focuses on government, open-source R&D, Corporate Social Responsibility credits, tax breaks, loan guarantees for start-ups, support systems for Micro-, Small- and Medium-sized Enterprises and other mechanisms to encourage innovation in India, it is also important to incentivize the private sector and scientific institutions by providing effective and meaningful IP protection and enforcement mechanisms. Effective implementation of the National IPR Policy, 2016 should include a consultative process with relevant stakeholders and meaningful reforms to India's IP policies that lead to improvements in IP protection and enforcement for medicines.

Restrictive Patentability Criteria

PhRMA members continue to face considerable barriers at every step of the patent application process, including restrictive patentability criteria posed by Section 3(d) of India's Patents Act, 1970, narrow patentability standards applied during pre- and post-grant opposition proceedings, conditioning patent grant on unclear and subjective access and benefit sharing requirements, and outdated patent application disclosure requirements.

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¹⁸⁶ Department of Industrial Policy and Promotion, "National Intellectual Property Rights Policy," May 12, 2016, available at http://dipp.nic.in/sites/default/files/National_IPR_Policy_English.pdf (last visited Jan. 27, 2021).

TRIPS Article 27 requires that patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that an invention is new, involves an inventive step, and is capable of industrial application. Section 3(d) of the Indian Patents Act, 1970, as amended by the Patents (Amendment) Act 2005, adds an impermissible hurdle to patentability by adding a fourth substantive criterion of "enhanced efficacy" to the TRIPS requirements. Moreover, this additional hurdle appears to be applied only to pharmaceuticals. Under this provision, salts, esters, ethers, polymorphs, metabolites, pure form, particle size, isomers, mixtures of isomers, complexes, combinations and other derivatives of known substances are presumed to be the same substance as the original chemical entity and thus not patentable, unless it can be shown that they differ significantly in properties with regard to therapeutic efficacy. Further, indiscriminate and routine use of Section 3(d) by the Indian Patent Office during prosecution of patent applications even for a novel compound or a derivative, with the onus of proof on the applicant to prove otherwise, poses an unreasonable and unnecessary burden on innovators.

Additional substantive requirements for patentability beyond those enumerated in the TRIPS Agreement are inconsistent with India's international obligations. For example, Article 27 of the TRIPS Agreement provides an exclusive list of the types of subject matter that can be precluded from patent coverage, and this list does not include "new forms of known substances lacking enhanced therapeutic efficacy," as excluded by Section 3(d) of the Indian law. Therefore, Section 3(d) is inconsistent with the framework provided by the TRIPS Agreement. Moreover, Section 3(d) represents an additional hurdle for patents on inventions specifically relating to chemical compounds and, therefore, the Indian law is in conflict with the non-discrimination principles provided by TRIPS Article 27 and WTO rules. 187

From a policy perspective, Section 3(d) undermines incentives for biopharmaceutical innovation by preventing patentability for improvements that do not relate to efficacy, for example an invention relating to the improved safety or toxicity of a product. Further, Section 3(i) of the Indian Patents Act, 1970, excludes method of treatment claims, effectively preventing U.S. biotechnology companies with needed treatment methods from entering the Indian market and providing life-saving products.

India's pre- and post-grant patent opposition system is another source of unreasonable restrictive standards for patentability. Patent revocations using "hindsight" analyses made during pre- and post-grant oppositions have cited a lack of inventiveness concluding that inventions were based on "old science" or failed to demonstrate an inventive step. In addition, the lack of clear rules guiding pleading and evidentiary standards during pre-grant opposition proceedings create further uncertainty relating to the patentability of inventions. Further, pre-grant opposition procedures under Section 25 of India's Patents Act, 1970, have created significant uncertainty and delayed the introduction of new inventions by undermining patent office efficiency and delaying patent

¹⁸⁷ The additional patentability hurdle imposed by section 3(d) was recently reinforced by the Pharmaceutical Patent Examination Guidelines issued in October 2014.

prosecution. Frivolous pre-grant oppositions (by multiple independent individuals) and existing patent backlog and the absence of mechanisms such as patent term adjustment further complicate this process and contribute to the loss of patent life.

Weak Patent Enforcement

Indian law permits CDSCO to approve third-party manufacturers to commercialize copies of innovator chemically-synthesized products, regardless of whether those products infringe on an innovator's patent(s). After four years of the medicine's first approval in India, a medicine is deemed to no longer be a new drug. 188 As such, approval from CDSCO is not required and a mere license from any of the state drug regulators to manufacture and market the product in India suffices. State regulatory authorities are not required to verify or consider the remaining term of the patent protection on the original product. Therefore, an infringer can obtain marketing/ manufacturing authorization from the state government for a generic version of an on-patent drug, forcing the patent holder to seek redress in India's court system, which often results in irreparable harm to the patent holder. India's National IPR Policy, 2016 calls for identification of important areas of potential policy development related to ambiguities between IP laws and other laws or authorities whose jurisdictions impact administration or enforcement of patents. 189 At a minimum, India should amend its rules for "new drugs" in the New Drugs and Clinical Trials Rules, 2019, by increasing the period a drug is considered "new" from four years to ten years (thereby extending the period before which a manufacturer can seek approval for a follow-on product).

India also does not provide mechanisms for notification or resolution of patent disputes prior to marketing approval of generic products. Such mechanisms are needed to prevent the marketing of patent infringing products and resolve disputes in a timely manner. The SUGAM initiative launched in November 2015 to implement e-Governance with respect to the licensing system within India's CDSCO lacks transparency and does not facilitate timely notification to a patentee of a possible infringement. In April 2017, India amended Form 44 of the Drugs and Cosmetics Rules¹⁹⁰ to omit Item 8 which previously required new drug applicants to disclose the "patent status of the drug." This action further eroded the ability of patent owners to effectively and timely notify generic manufacturers and state drug regulatory authorities of existing patents related to medicines approved by CDSCO or get timely and adequately notified of filing of applications for marketing or manufacturing approval by any subsequent applicant. CDSCO's Notification GSR 19(E) dated January 10, 2019, falls short in providing an opportunity to facilitate notification of manufacturing applications between government

¹⁸⁸ As per Rule 2(1)(w) of the New Drugs Clinical Trials Rules, 2019 a drug (apart from a modified or sustained release form of a drug or novel drug delivery system of any drug or a vaccine, r-DNA derived product, living modified organism, monoclonal anti-body, stem cell derived product, gene therapeutic product or xenografts, intended to be used as drug) "shall continue to be new drugs for a period of four years from the date of their permission granted by the Central Licensing Authority"

¹⁸⁹ See Secs. 3.8 and 3.8.3 of the National IPR Policy.

¹⁹⁰ Form 44, Schedule A, Drugs and Cosmetics Rules, 1945.191 Id.

agencies and patent holders under the SUGAM initiative. The industry has submitted many formal representations urging the Ministry of Health and Family Welfare (MoHFW) to take immediate steps to increase transparency and cooperation between central and state medicines regulatory authorities. At a minimum, MoHFW should ensure all biopharmaceutical manufacturers, the relevant Indian authorities and the broader public have timely notice of marketing and manufacturing applications filed with central and state regulators.

With regard to patent enforcement, in at least one specific case, the patent holder was forced to wait seven years before receiving a court decision upholding its patent. In that case, the court ultimately did not grant an injunction because by the time the decision was issued the patent was close to expiration. ¹⁹² In another case, a company waited two years for a Court to grant an injunction. During that time the infringing product was marketed and sold. ¹⁹³ Recent cases ¹⁹⁴ also reveal that defendants have started to obtain market authorizations and manufacturing licenses without the knowledge to the innovator and pre-emptively filing declaratory suits as to the non-infringement of the patents in a civil court so as to delay grant of any injunction orders. Moreover, while some innovators have been recently successful in obtaining interim injunctions, that relief is often very limited because infringers are only enjoined from future infringing acts, *i.e.*, it does not prohibit the marketing of products already manufactured and/or launched.

The Commercial Courts, Commercial Division and Commercial Appellate Division of High Courts Act, 2015 (as amended in 2018) provides for the creation of commercial and commercial appellate divisions in high courts, and commercial courts at the district level to assist in addressing disputes in a timely manner. While this is a promising provision, these courts are overburdened with cases and will require a significant amount of technical expertise and commitment of resources to be properly implemented. Patents involve technical issues and therefore, designation of a specialized patent bench with the appropriate knowledge is critical for accurately examining and interpreting the issues involving complex technologies.

While the draft National IPR Policy proposed to establish specialized patent benches at the High Court level and designate an IP court at the district level, the final National IPR Policy did not include this provision. 195

¹⁹² F. Hoffman-La Roche Ltd v. Cipla, RFA(OS) 92/2012, Delhi High Ct., (Nov. 27, 2015), available at http://delhihighcourt.nic.in/dhcqrydisp_o.asp?pn=258821&yr=2015 (last visited Jan. 27, 2021).

¹⁹³ Merck Sharp & Dohme Corp. v. Glenmark Pharms, Delhi High Ct., 2015 (64) PTC417(Del).

¹⁹⁴ FAO(OS) 158/2019 – Natco Pharma Ltd. vs. Bayer Healthcare LLC, order dated July 11, 2019.

¹⁹⁵ Department of Industrial Policy and Promotion, Press Release, Oct. 22, 2014, available at http://dipp.nic.in/sites/default/files/ipr_PressRelease_24October2014_0.pdf (last visited Jan. 27, 2021); "National Intellectual Property Rights Policy," May 12, 2016, available at

http://dipp.nic.in/sites/default/files/National_IPR_Policy_English.pdf (last visited Jan. 27, 2021).

Compulsory Licensing

The grounds for issuing a CL in India under the Patents Act, 1970 are broad, vague and appear to include criteria that are not clearly related to legitimate health emergencies. While the Indian Government continues to take a more measured and cautious approach in responding to recent CL cases, the MoHFW continues to entertain potential recommendations to impose CLs on certain anti-cancer and rare disease medicines under the special provisions of Section 92 of India's Patents Act, 1970, which would cause further difficulty for patent owners to defend their patents. Moreover, some Indian pharmaceutical companies routinely initiate requests for voluntary licenses under Section 84(6)(iv) of the Patents Act as a precursor to seeking a CL, reducing CLs to a commercial tool rather than a measure of last resort. Internationally, in various multilateral forums, India has advocated for the broad adoption and implementation of legislation that facilitates the use of CLs, contrary to the spirit of the TRIPS Agreement. A market with ongoing threats of CLs perpetuates an unreliable environment for patent protection and investment.

In addition, Section 146 of the India Patents Act, 1970, further exacerbates the uncertainty and scope of India's CL provisions. Rules promulgated under that section require all patent holders to file an annual statement summarizing "the extent to which the patented invention has been worked on a commercial scale in India." Notwithstanding the commercially sensitive nature of information required to satisfy Section 146, it also provides an impermissible basis for local companies to seek CLs, as occurred in 2012. Moreover, the rationale for requesting this information is unclear, and appears merely to be a disguise for facilitating questionable administrative challenges to existing patents. While PhRMA members are appreciative of the amendments brought about in Form 27 vide GSR 652(E) dated October 19, 2020, the ambiguity around the definition of 'working of patents' remain.

We believe that resort to CLs is not a sustainable or effective way to address health care needs. Voluntary arrangements independently undertaken by our member companies can better ensure that current and future patients have access to innovative medicines. Statements from the government incorrectly imply that CLs are widely used by other governments, both developed and developing. These are misunderstandings and do not justify widespread use of compulsory licensing.

At a minimum, India should ensure that CLs are exercised with extreme caution and as a measure of last resort and specified as such in the India Patents Act, 1970. India should also clarify that importation satisfies the "working" requirement, pursuant to TRIPS Article 27.1. Further, India must maintain the confidentiality of the working statement disclosures made under Form 27.

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¹⁹⁶ India Patents Act, Section 146(2).

¹⁹⁷ See, e.g., Nirupama Rao, The Hill (op-ed), "India honors – not dishonors – patent laws," available at http://thehill.com/blogs/congress-blog/campaign/316883-india-honors--not-dishonors--patent-laws (last visited Jan. 27, 2021). These misstatements of wide-spread use of CLs in the U.S. and the premise that CLs can resolve access problems in India have been refuted by OPPI and PhRMA.

Administrative Burdens

PhRMA welcomes the Indian Government's ongoing work to address India's patent examination backlog including the commitment to reduce examination periods from up to seven years to 18 months from initial submission. Backlogs undermine incentives to innovate and hinder timely patient access to valuable new treatments and cures. Because the term of a patent begins on the date an application is filed, unreasonable delays can directly reduce the value of granted patents and undermine investment in future research activity. For biopharmaceutical companies, patent examination backlogs can postpone clinical trial activity and ultimately the introduction of new medicines in India. Generic manufacturers are also affected by patent examination backlogs. So long as a patent application is unreasonably delayed, generic manufacturers cannot assess whether they will have freedom to operate. That lack of certainty could discourage the launch of generic medicines or expose generic companies to damages once the patent is granted. In addition to increasing the number of patent examiners, it is equally important to assess administrative procedures that unduly extend patent examination timelines.

Section 8 of the Patents Act sets forth requirements that have been interpreted in a manner that creates heightened and unduly burdensome procedures that mainly impact foreign patent applicants – those most likely to have patent applications pending in other jurisdictions. Section 8(1) requires patent applicants to notify the Controller and "keep the Controller informed in writing" of the "detailed particulars" of patent applications for the "same or substantially the same invention" filed outside of India. Section 8(2) requires a patent applicant in India to furnish details to the Indian Controller about the processing of those corresponding foreign patent applications if that information is requested. These additional patent application processing requirements have been interpreted in a manner that creates heightened and unduly burdensome patent application procedures that mainly impact foreign patent applicants – those most likely to have patent applications pending in other jurisdictions.

Section 8 was enacted in 1970 when the information was only available from the applicant; much of the information sought is now publicly available on patent office websites in most major jurisdictions. For example, through the Global Dossier Initiative of five major patent offices (the U.S. Patent and Trademark Office, the European Patent Office, the State Intellectual Property Office of China, the Japanese Patent Office, and the Korean Intellectual Property Office), the current file histories from each of these offices are accessible at one website. Thus, accurate information about counterpart foreign applications is readily available to the India Patent Office examiners. Recent court decisions provide greater clarity on the applicability and scope of Section 8. In particular, current jurisprudence limits Section 8 to information that is material to patentability and to deliberate failures to disclose this information.¹⁹⁸

¹⁹⁸ See Telefonaktiebolaget Lm Ericsson v. Intex Technologies (India) Ltd., Delhi High Court Judgment dated Mar. 13, 2015 in CS (OS) No. 1045 of 2014, available at

Additionally, requests pursuant to Section 8(2) for the translation of foreign search and/or examination reports are not only unduly burdensome but costly as well. In practice, attorneys routinely receive informal translations of foreign search and/or examination reports intermingled with local attorney advice and counsel (information subject to attorney-client privilege). Moreover, translations of the search and/or examination reports may not yet be available at the time of the Section 8(2) request.

Further, the remedy for failure to comply with Sections 8(1) and 8(2) is extreme compared to other countries with similar (but less onerous) administrative requirements. In India, the failure to disclose under Section 8 can be treated as a strict liability offense that by itself can invalidate a patent (although a recent court decision indicates some flexibility for mere clerical errors). This is in contrast to a requirement that the failure to disclose be material and/or intentional as in the U.S. or Israel. Thus, India's disclosure requirement and remedy are each more burdensome as compared to other jurisdictions, thereby creating a barrier to patentability that has an unfairly greater effect on foreign patent applicants, and, in some instances resulted in India revoking patents on the grounds of non-compliance with this particular provision. ¹⁹⁹

We welcome the Guidelines provided for the examiners in the Manual of Patent Office Practice and Procedure (MPOPP) that was notified by CGPDTM on November 26, 2019. Of particular promise, Section 8 directs patent examiners to utilize resources available at WIPO DAS (Digital Access Service) and WIPO CASE (Centralised Access to Search and Examination) and to recognize the evolved jurisprudence by the Indian Courts. In particular, industry was glad to see that the initial proposal in the MPOPP to expand the definition of "person interested" beyond the definition provided under the Patents Act, 1970, was dropped in the final MPOPP. However, implementation of the Guidelines remains inconsistent such that examiners continue to seek information from applicants that is available in the WIPO DAS and CASE databases.

We also welcome the adoption of a Patent Prosecution Highway (PPH) programme between the Indian Patent Office (IPO) and the Japan Patent Office (JPO) and the release of the Procedure Guidelines for the PPH. However, the guidelines lay down procedures to file a PPH request in certain specified technical fields only, namely, Electrical, Electronics, Computer Science, Information Technology, Physics, Civil, Mechanical, Textiles, Automobiles and Metallurgy while JPO may receive applications in all fields of technology. We believe that PPH requests in India should be extended to all fields of technology, including biopharmaceuticals.

http://164.100.69.66/jupload/dhc/MAN/judgement/16-03-2015/MAN13032015S10452014.pdf (last visited Jan. 27, 2021); Sukesh Behl & Anr. v. Koninklijke Phillips Electronics, Delhi High Court, 2015(61) PTC183(Del); Merck Sharp & Dohme Corp. v. Glenmark Pharms, Delhi High Court, 2015 (64) PTC417(Del).

¹⁹⁹ See, e.g., Ajantha Pharma Ltd. v. Allergan, Intellectual Property Appellate Board (2013).

Regulatory Data Protection Failures

Contrary to its TRIPS Article 39.3 obligation, India fails to prevent unfair commercial use of the regulatory data submitted by an innovator in securing marketing approval in India or in a third country. Rather, when a pharmaceutical product has been previously approved by a Regulatory Authority in India or in another country, India requires only limited clinical data (in some cases involving as few as 16 Indian patients). This is *in lieu* of requiring submission of the entire dossier by the applicant for review by India's regulatory authority. Moreover, in some instances when an applicant seeks approval for a generic or biosimilar product that has already been approved in other countries, Indian authorities waive the requirement to submit even this data.²⁰⁰ In those circumstances, any subsequent approval of the drug granted to an entity who is not an innovator in India is based entirely on the prior approval granted to the innovator in a third country.

By linking approval in other countries that require the submission of confidential test and other data to its own drug approval process, India, in effect, uses those countries as its agents. Approval by the Indian regulatory authorities to third parties based on other-country approvals amounts to indirect and unfair reliance on the clinical trial and other test data generated and submitted by the innovators for such other-country approvals. This indirect reliance results in unfair commercial use, which is prohibited by TRIPS Article 39.3.

Market Access Barriers

Discriminatory and Non-Transparent Government Pricing Policies

Despite decades of government price controls in India, ostensibly seeking to improve patient access to medicines, essential medicines are still not easily accessible. Still, India has thousands of manufacturers of pharmaceuticals who operate in a very competitive environment, and as a result, India has some of the lowest prices of medicines in the world.²⁰¹ Instead of resorting to unsustainable price controls, India should focus on removing key barriers to access in India, including insufficient financing, infrastructure, and quality.

In 2014, an Inter-Ministerial Committee was constituted to suggest a methodology to be applied to pricing of patented medicines in India.²⁰² Earlier, a DoP Committee Report on Price Negotiation for Patented Drugs (February 2013) recommended an international

²⁰⁰ See Rules 75 and 80 of the MoHFW, "The New Drugs and Clinical Trials Rules, 2019," available at http://www.egazette.nic.in/WriteReadData/2019/200759.pdf (last visited Jan. 27, 2021). ²⁰¹ Analysis based on IMS MIDAS Data.

²⁰² Government of India Speed Post No. 31011/5/2009/PI-II(pt), Ministry of Chemicals & Fertilizers, Department of Pharmaceuticals, Subject: Inter-Ministerial Committee on Prices of Patented Drugs, New Delhi, Feb. 17, 2014, available at https://pharmaceuticals.gov.in/sites/default/files/Inter-Ministerial%20Committee%20on%20Prices%20of%20Pateneted%20Drugs.pdf (last visited Jan. 27, 2021).

reference pricing scheme with a purchasing power parity adjustment for government procured patented medicines, with those patented medicines to be provided through health insurance. A final decision on the 2014 Inter-Ministerial Committee recommendations has yet to be made. However, PhRMA members are highly concerned that the 2013 proposals could be adopted, which would significantly reduce the benefits of patent protection, *de facto* discriminate against importers in order to pacify the domestic industry and create an unviable and unbalanced government pricing framework and business environment for innovative pharmaceutical companies.

PhRMA and its member companies supported the DoP decision to amend Paragraph 32 of the Drug Price Control Order 2013 (DPCO) to provide exemptions from price controls for five years from the commencement of marketing in India for patented products and for life for orphan drugs. However, the potential benefit of the provision has not been realized due to a significant delay in implementation, and applications made by industry remain pending. Moreover, there remain significant concerns of an evolving pricing regime that is discriminatory, unpredictable and opaque, including the threat of further amendments or dilution of Paragraph 32. For example, the DoP is considering amending the DPCO 2013 to include several provisions which would enlarge the scope of price controls in India to all strengths and doses of a scheduled medicine, establish annual price revisions based on a Wholesale Price Index (WPI) for all medicines including in the non-scheduled market and impose ceiling prices on new medicines.

Also, while PhRMA and its member companies support the introduction of the Trade Margin Rationalization (TMR) approach for price monitoring of the non-scheduled market, concerns and uncertainties remain regarding the implementation of the TMR system. In particular, the method for calculating the Price-to-Stockist would result in unviable price controls being extended to the non-scheduled market. Further, the possible inclusion of patented medicines in the NLEM and thereby the threat of direct price setting under the DPCO would significantly reduce the benefits of patent protection and create an unviable business environment. The broad authority granted to the NPPA and continued lack of transparency and predictability in the decision-making process inhibit further investment in India.

The expansion of price controls to a larger range of medicines will not substantially improve access to medicines in India; the real access barriers are insufficient health care financing, poor access to physicians, and inadequate health care facilities.²⁰³ For example, even medicines and vaccines that are offered free of charge often do not reach the patients who need these medicines.²⁰⁴ A 2015 study by IMS titled "Analyzing the

²⁰³ "A Study of Healthcare Accessibility," Dr. DY Patil Medical College, Pune, India, prepared for India Health Progress, Mar. 2011; Wagstaff, Adam, "Health System Innovation in India Part I: India's health system challenges," available at http://blogs.worldbank.org/developmenttalk/health-system-innovation-in-india-part-i-india-s-health-system-challenges (last visited Jan. 27, 2021).

²⁰⁴ See, e.g., Patra, Nilanjan, "When Will They Ever Learn?': The Great Indian Experience of Universal Immunisation Programme," Dec. 2009, available at

http://www.isid.ac.in/~pu/conference/dec_09_conf/Papers/NilanjanPatra.pdf (last visited Jan. 27, 2021).

Impact of Price Controls on Access to Medicines" found that price controls are neither an effective nor a sustainable strategy for improving patient access. The study found that the primary beneficiaries of price controls have been high-income patients, rather than the intended low-income population. ²⁰⁵ A considerable body of evidence demonstrates that price controls contribute to lower investment in pharmaceutical research and development, ultimately harming patients who are in need of improved therapies. ²⁰⁶ The Annual Economic Survey last year also clearly highlighted that price control of medicines has not improved access.

PhRMA members believe that competitive market conditions are the most efficient way of allocating resources and rewarding innovation; however, the research-based biopharmaceutical industry recognizes the unique circumstances in India and is committed to engaging with the government to discuss pragmatic public policy approaches through industry and public consultations that will enable the development of simple and transparent government pricing and reimbursement mechanisms that provide access to medicines, reward R&D and innovation, encourage clinical trials, include the patient perspective, and encourage continued investment into unmet medical needs.

<u>Discriminatory Government Procurement Policies</u>

On May 15, 2020, the General Financial Rules 161(iv)(b) were amended to prohibit international tenders where the value of the goods to be procured is less than INR 200 crores (approximately USD 27 million). In addition, on September 16, 2020, the Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce and Industry issued a Public Procurement Order that discriminates against non-local bidders (*i.e.*, products with less than 20 percent local content) in all government tenders (except in permitted international tenders), although there are some exemptions to ensure operational continuity. The revised PPO further provides for exclusion of bidders from countries that do not allow Indian bidders in their government procurements.

Further, on December 30, 2020, the DoP issued yet another restrictive order specifying a minimum of 80 percent local component requirement for a Class 1 local supplier and 50 percent to qualify as a Class 2 local supplier.²⁰⁷

 ²⁰⁵ IMS, "Assessing the Impact of Price Control Measures on Access to Medicines in India," June 2015.
 206 U.S. Department of Commerce, International Trade Administration, Pharmaceutical Price Controls in OECD Countries: Implications for U.S. Consumers, Pricing, Research and Development, and Innovation, December 2004, available at

https://web.archive.org/web/20190414170009/https://2016.trade.gov/td/health/DrugPricingStudy.pdf (last visited Jan. 27, 2021; Vernon, John, "Drug Research and Price Controls," *Regulation*, Winter 2002-2003, available at https://www.cato.org/sites/cato.org/files/serials/files/regulation/2002/12/v25n4-7.pdf (last visited Jan. 27, 2021).

²⁰⁷ Guidelines for implementing the provisions of Public Procurement (Preference to Make in India) Order (PPO), 2017 - revision, related to procurement of Goods & Services in Pharmaceutical Formulations December 30, 2020, available at

https://pharmaceuticals.gov.in/sites/default/files/PPO%20SIGNED%20DRUGS.pdf (last visited Jan. 27, 2021).

High Tariffs and Taxes on Medicines

PhRMA member companies operating in India face high import duties for active ingredients and finished products. Though the basic import duties for pharmaceutical products average about 10 percent, due to the integrated GST imposed on imports, the effective taxes on imported medicines can exceed 20 percent. Moreover, excessive duties on the reagents and equipment imported for use in research and development and manufacture of biotech products make biotech and pharmaceutical operations difficult to sustain. Compared to other Asian countries in similar stages of development, import duties in India are very high. And while certain essential and life-saving medicines may be granted exemptions from some of the taxes, the eligibility criteria are vague and subject to constant revision and debate.

GST was implemented in July 2017 and, while it is expected to significantly reduce layers and complexity in the indirect tax system, it levies a 5-12 percent tax on medicines. Measures to exempt life-saving drugs from GST and customs duties should be expanded to all medicines.²⁰⁸

Insufficient Financing and Low Access to Care

PhRMA's members are concerned about the general lack of access to health care in India. The Indian Government released the National Health Policy in March 2017, 209 which calls for greater access to health care for low-income patients, and the NHPS in February 2018. 210 The National Health Policy denotes expanding comprehensive primary health care through "Health and Wellness Centres," including care for major non-communicable diseases (NCDs), mental health, geriatric health care, palliative care and rehabilitative care services. The policy also calls for increasing public health expenditure to 2.5 percent of GDP by 2025.

While the aforementioned calls to action are laudable, India nevertheless has insufficient numbers of qualified health care personnel, inadequate and poorly equipped health care facilities, and most importantly lacks a comprehensive system of health care financing that would pool financial risk through insurance and help to share the cost burdens. While Prime Minister Modi has launched Ayushman Bharat, India has a shortage of doctors. This is further fueled by limited government investment and low allocation for health care in the national budget.²¹¹ Despite the encouraging and ambitious

²⁰⁸ Hindu Business Line, "GST: The right prescription," Aug. 5, 2016 (updated Jan. 17, 2018), available at http://www.thehindubusinessline.com/specials/pulse/gst-the-right-prescription/article8949378.ece (last visited Jan. 27, 2021).

²⁰⁹ See National Health Policy, available at

https://main.mohfw.gov.in/sites/default/files/9147562941489753121.pdf (last visited Jan. 27, 2021).

²¹⁰ National Health Protection Scheme, available at

https://www.indiabudget.gov.in/doc/bspeech/bs201819.pdf (last visited Jan. 27, 2021).

²¹¹ Center for Disease Dynamics, Economics & Policy (CDDEP), "Access Barriers to Antibiotics," available at https://cddep.org/publications/access-barriers-to-antibiotics/ (last visited Jan. 27, 2021).

goals in the new National Health Policy and the MoHFW's goal of increasing health spending as a percentage of GDP to 2.5 percent by 2025, government spending on health care is currently 1.6 percent which is one of the lowest levels in the world.²¹² Without increased resources (both in terms of government spending and through reducing barriers for commercial health insurance), and a full implementation of the reform, high out-of-pocket spending on health care and pressure on the cost of medicines will persist.

<u>Unpredictable Environment for Clinical Research & Drug Approval</u>

India has many of the components of an effective regulatory system, such as institutional capacity across central and state regulators and a robust technical framework. India also has several components to support a broader ecosystem for clinical research and drug development, such as the presence of a highly skilled workforce of qualified scientists, hundreds of medical colleges, and a large and diverse patient pool.

We welcome the fact that the MoHFW and CDSCO have undertaken regulatory reforms, including adoption of New Drugs and Clinical Trials Rules, 2019, with the goal of strengthening the regulatory regime and reinvigorating clinical research. Strong, transparent and predictable regulatory frameworks are essential to protecting patients as well as to promoting globally-competitive innovative and generic pharmaceutical industries. However, as noted above, the New Drugs and Clinical Trials Rules, 2019 include significant ambiguities and several discriminatory provisions, which create uncertainties in the regulatory process for clinical trials and threaten the overall clinical research environment in India. These issues must be addressed in order to increase the availability of new treatments and vaccines for Indian patients.

Further, certain challenges that existed in the Drugs and Cosmetics Rules, 1945 continue to exist in the New Drugs and Clinical Trials Rules, 2019. Rule 41 of the New Rules, which describes attributable causes of injury for clinical trials participants, is overly broad and lacks a legally or scientifically sound process for determining causality of injury. Definitions for "trial related injury" and "standard of care," remain uncertain. Furthermore, many provisions in the New Rules are ambiguous and highly subjective. For example, the provisions on local clinical trial waiver lack clarity; the list of countries to be notified by the regulator under the New Drugs and Clinical Trials Rules, 2019 for seeking waiver of local clinical trial is yet to be notified; the provision on deemed approval is discriminatory in nature as it is limited to drugs whose research and development was conducted in India; and the New Rules do not designate an appellate authority. Further, with no guidelines for the Subject Expert Committee (SEC) reviewing the applications for clinical trials heightens the existing subjectivity. Furthermore, requests for review of SEC decisions tend to be reviewed by the same SEC panel.

As a result, adoption of the New Rules leaves great uncertainty relating to future costs and liabilities associated with conducting clinical trials in India, resulting in many

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²¹² See National Health Profile 2019, available at http://www.cbhidghs.nic.in/showfile.php?lid=1147 (last visited Jan. 27, 2021).

sponsors not launching clinical trials in India until these uncertainties have been resolved. Research shows that if India were to address outstanding concerns, India could see an increase in the number of new clinical trials per year to above 800, adding over \$600 million in economic gains.²¹³ Greater clarity and predictability are needed for administrative procedures and regulations *qua* drug registration applications, drug labelling standards and drug review standards and procedures in order to make the latest research products available in India.

Further, the MoHFW has notified draft amendments to the New CT Rules vide GSR 354(E) dated June 5, 2020 proposing to permit import & manufacture of unapproved new drug but under Phase-III clinical trial in the country or in any other country for compassionate use for diagnosis, treatment, mitigation or prevention any life threatening disease or disease causing serious permanent disability or disease requiring therapy for unmet medical need under a treatment protocol by not only the innovators but also by third parties. PhRMA members believe that such a proposal will not only discourage research and development that is critical for addressing unmet medical needs but would also put patient safety at risk.

²¹³ Pugatch Consilium, "Quantifying the Economic Gains of Strengthening India's Clinical Research Policy Environment," Sep. 2015, available at http://www.pugatch-

consilium.com/reports/Quantifying%20the%20Economic%20Gains%20from%20Strengthening%20the%20Clinical%20Research%20Policy%20Environment%20in%20India.pdf (last visited Jan. 27, 2021).

MALAYSIA

PhRMA and its member companies operating in Malaysia remain concerned by recent Government of Malaysia actions which undermine intellectual property (IP) protection and, if unaddressed, could mislead other countries to take similarly damaging actions.

Key Issues of Concern:

- Compulsory licensing: Through a flawed and non-transparent process, the Malaysian Government issued an unjustified compulsory license (CL) for a breakthrough innovative medicine developed in America that provides a cure for patients suffering from hepatitis C. This action was taken despite the fact that the U.S. manufacturer had agreed to include Malaysia in its voluntary license program. Although the CL term has expired, the Malaysian Government is considering legislative amendments that could further promote vague and ambiguous grounds for compulsory licensing and introduce unnecessary procedures that would undermine granted patents. These actions undermine innovator confidence in Malaysia and set a negative precedent for other markets, adoption of which would significantly undermine the R&D model for innovative medicines on which the U.S. pharmaceutical industry and patients around the world rely.
- Medicines Price Control proposal: The industry shares a common goal with the Malaysian Government to improve patient access to medicines. However, the planned introduction of the Medicines Price Control to set wholesale and retail ceiling prices for medicines will not address long-term health care cost challenges and could delay patient access to new medicines. Further, the proposed phased implementation of the Medicines Price Control to first target single-source products which are generally patent protected appears to discriminate against foreign companies.
- Listing medicines on the national formulary: As of 2016, Malaysia adopted a new process for listing medicines on the Ministry of Health (MoH) Medicines Formulary. While this was a welcome development, PhRMA and its members are concerned that the final guidelines require six or 12 months of post-marketing surveillance data prior to listing and that there is no mechanism to ensure that patients who benefited from the medicines during local clinical trials can maintain access during this period. In addition, if a product is not approved for listing on the Formulary, the applicant should be provided a detailed explanation for that decision so that it can better understand the criteria for listing and to determine if it may negotiate an alternative access scheme with the government. MoH listing decisions, both by the body responsible for conducting health technology assessment (HTA) and making listing recommendations, and by the panel responsible for the ultimate listing decision, currently lack transparency and are based on ambiguous criteria.

- Preferential treatment of local manufacturers: The Government of Malaysia indirectly discourages a fair, open and competitive marketplace for international pharmaceutical compounds through procurement preferences for locally manufactured products. For example, the Government of Malaysia has announced that it will grant three-year procurement contracts to companies that move production of imported products to Malaysia, with the potential for a two-year extension if those locally produced products are exported.
- Halal pharmaceuticals: In December 2017, the MoH published a guideline on prescribing and administration of non-halal pharmaceuticals. PhRMA's member companies, whilst strongly supportive of religious and cultural sensitivities, do not believe that the government should provide preferential treatment to such products in government procurement, but adhere firmly to the tenets of safety, quality and efficacy of medicines. Furthermore, it is important to ensure that patients, in partnership with their health care providers, are prescribed the appropriate medicine for their conditions.
- Inadequate IP protection and enforcement: Malaysia does not have an effective patent enforcement system that provides for the early resolution of patent disputes before marketing approval is granted to infringing follow-on products during the patent term. In addition, its regulatory data protection (RDP) system fails to provide (1) any protection for biologics; and (2) effective protection for a sufficient period of time for chemically-synthesized drugs from the date of marketing approval in Malaysia.
- Patent and trademark laws: Proposed amendments to Malaysia's IP laws that
 include provisions for disclosure of traditional knowledge and genetic resources,
 as well as compulsory licensing, raise concerns for the research-based
 pharmaceutical industry. PhRMA urges the government to continue consultative
 processes with stakeholders before such amendments are implemented in order
 to avoid policies that deter or discourage innovation across fields of technology.

For these reasons, PhRMA requests that Malaysia be placed on the **Priority Watch List** in the 2021 Special 301 Report. Further, we encourage the U.S. Government to continue the **Out-of-Cycle Review** that it initiated in 2020 so it may continue to evaluate the progress on these important issues and dedicate the required bilateral attention necessary to make progress on the barriers confronted by U.S. businesses in Malaysia.

Intellectual Property Protection

Compulsory Licensing

In September 2017, the Malaysian Government utilized a non-transparent process to issue a CL on a patent-protected innovative U.S. medicine to treat hepatitis C. This

unnecessary and unjustified measure was taken in a unilateral and non-transparent fashion, despite the fact that the U.S. manufacturer had decided to include Malaysia in its voluntary licensing program. The CL has sent a devastating signal to America's biopharmaceutical innovators that their patents are not safe in Malaysia.

While imposing a license is rarely, if ever, an appropriate mechanism to improve patient access, that is particularly true in this instance. Industry experience clearly demonstrates that collaborative access policies enable significantly better treatment access outcomes. Malaysia's compulsory license reportedly only treated 1,501 patients with hepatitis C over a 12-month period in 2018.²¹⁴ However, cooperative discussions and collaborative access policies like voluntary licensing treated over 15,000 patients over the same period in neighboring Vietnam.²¹⁵

While this CL has significantly undermined investor confidence in Malaysia, industry is glad to see that the Malaysian Government elected not to renew the CL when it expired in October 2020. This promising action is undermined, however, by reports that Malaysia is considering compulsory licenses for other products, as well as the government's broad support for unsubstantiated calls by certain countries at the World Trade Organization to suspend certain IP rights during the global pandemic.

Further, in August 2019, Malaysia's intellectual property office (the Intellectual Property Corporation of Malaysia or MyIPO), released for public comment a "consultation paper" on proposed amendments to the Patents Act 1983. The consultation paper and commenting period were not widely publicized. While the consultation paper lacked specific textual proposals, PhRMA members are very concerned that the proposed amendments could promote vague and ambiguous grounds for compulsory licensing, restrictions on what can be patented, and unnecessary procedures that would undermine granted patents. Considering the preliminary nature of that consultation paper and limited information, PhRMA provided MyIPO an initial response calling for the Malaysian Government to engage in a meaningful and transparent consultation process.

Recognizing that Malaysia has not renewed the remdesivir CL, but that the specter of further CLs remains, we strongly encourage the U.S. Government to maintain the out-of-cycle review that it initiated in 2020 to seek stronger enforcement of IP rights in Malaysia.

²¹⁴ "Malaysia to make drug to treat Hepatitis C," *The Star* (Mar. 8, 2019), available at https://www.thestar.com.my/news/nation/2019/03/08/malaysia-to-make-drug-to-treat-hepatitis-c (last visited Jan. 27, 2021).

²¹⁵ "Five Takeaways: Bridging access and innovation in healthcare policy," Observer Research Foundation (Oct. 31, 2019), available at https://www.orfonline.org/research/five-takeaways-bridging-access-and-innovation-in-healthcare-policy-57163/ (last visited Jan. 27, 2021).

²¹⁶ Consultation Paper on Proposed Amendments to the Patents Act 1983 [Act 291] published on Aug. 30, 2019.

Regulatory Data Protection (RDP)

Biopharmaceutical innovators work with hospitals, universities and other partners to rigorously test potential new medicines and demonstrate they are safe and effective for patients who need them. Less than 12 percent of medicines that enter clinical trials ever result in approved treatments.²¹⁷

To support the significant investment of time and resources needed to develop test data showing a potential new medicine is safe and effective, governments around the world protect that data submitted for regulatory approval from unfair commercial use for a period of time. TRIPS Article 39.3 requires WTO members, including Malaysia, to protect proprietary test data submitted to market authorizing bodies, including the MoH, "against unfair commercial use" and against "disclosure."

The stated objective of Malaysia's Directive (11) dlm. BPFK/PPP/01/03 Jilid 1 is "to protect the undisclosed, unpublished and non-public domain pharmaceutical test data ... for the purpose of scientific assessment in consideration of the quality, safety, and efficacy of any new drug product...."²¹⁸

Further, paragraph 4.2 of that Directive provides:

An application for Data Exclusivity shall only be considered if the application in Malaysia for:

(i) New drug product containing a New Chemical Entity is made within eighteen (18) months from the date the product is first registered or granted marketing authorization; AND granted Data Exclusivity / Test Data Protection in the country of origin or in any country, recognized and deemed appropriate by the Director of Pharmaceutical Services....²¹⁹

As such, Malaysia requires the marketing authorization application of the new medicine to be filed within 18 months from the first worldwide regulatory approval in order to be considered as a "new chemical entity" and, thus, eligible for RDP in Malaysia. If the 18-month deadline is not met, the product loses data protection, allowing a follow-on molecule to be approved based on the originator's regulatory data during what should have been the RDP period. It is challenging – if not impossible – to meet the 18-month

²¹⁷ DiMasi JA, Grabowski HG, Hansen RW; Tufts Center for the Study of Drug Development. Innovation in the pharmaceutical industry: new estimates of R&D costs. In: Briefing: Cost of Developing a New Drug, available at

https://static1.squarespace.com/static/5a9eb0c8e2ccd1158288d8dc/t/5ac66afc6d2a732e83aae6bf/15229 52963800/Tufts_CSDD_briefing_on_RD_cost_study_-_Nov_18%2C_2014..pdf (last visited Jan. 27, 2021).

²¹⁸ See paragraph 1.2 of Directive BPFK/PPP/01/037.

application requirement if the first worldwide registration was not in the EU or the United States (both are relied upon for the Certificate of Pharmaceutical Product application).

In addition to this inappropriate restriction on products eligible for RDP in Malaysia, the actual term of the protection in Malaysia is measured from the date of first approval in the world. Thus, if a new chemical entity is registered in Malaysia one year after first approval in the world, Malaysia only provides four years of RDP. Indeed, the only instance in which an innovator can receive the full five years of RDP in Malaysia is if they seek marketing approval in Malaysia first.

Malaysia's flawed Directive improperly penalizes innovators for first seeking marketing approval in other countries. As in other markets that seek to promote research and development into innovative medicines, Malaysia should measure the term of the RDP protection from the time that the new molecule is approved in Malaysia.

Finally, Malaysia fails to provide any RDP for biologics. Made from living organisms, biologics are complex and challenging to manufacture and may not be protected adequately by patents alone. Without the certainty of a substantial period of exclusivity, innovators may not have the incentives needed to conduct the expensive, risky and time-consuming work to discover and bring new biologics to market.

Effective Patent Enforcement

PhRMA members encourage Malaysia to efficiently and effectively enforce its Patent Act. A competent and practical enforcement mechanism provides redress and solutions to infringements of IP rights and deters future infringement. Timely and efficient patent enforcement gives owners an appropriate period over which to recoup the value of their significant efforts and investment. For example, patent protection and enforcement would be enhanced by structured enforcement guidelines and a mechanism to curb unfair promotion and sale of generic drugs either prior to patent expiry of innovator drugs, or, in the event of a patent dispute, prior to a court decision on patent disputes.

PhRMA's member companies strongly encourage the improvement and adoption of mechanisms that strengthen patent enforcement and the ability to resolve outstanding patent concerns prior to marketing approval and launch of follow-on products, such as generics. These mechanisms could greatly enhance Malaysia's business environment by: (1) providing transparency and predictability to the process for both innovative and the generic pharmaceutical companies; (2) creating a more predictable environment for investment decisions; and (3) ensuring timely redress of genuine disputes.

Patent and Trademark Laws

Proposed amendments to Malaysia's patent and trademark laws that include provisions for disclosure of traditional knowledge and genetic resources, as well as compulsory licensing, raise concerns for the research-based pharmaceutical industry, and PhRMA encourages a continued consultative process with stakeholders before such

amendments are implemented in order to avoid policies that deter or discourage innovation across fields of technology. These proposed amendments also include provisions for effective patent enforcement and patent term restoration. PhRMA member companies are eager to engage in meaningful dialogue with Malaysian Regulatory Authorities to build a system that reflects international best practices.

Market Access

Medicines Price Control Proposal

The industry shares a common goal with the Malaysian Government to improve patient access to medicines. However, the Medicines Price Control proposal to set wholesale and retail ceiling prices for medicines will not address long-term health care cost challenges and could delay patient access to new medicines. Further, the proposed phased implementation of the Medicines Price Control to first target single-source products which are generally patent protected appears to discriminate against foreign companies. Although the Malaysian Government recently conducted a cost-benefit analysis of the proposal as requested by industry, unfortunately the analysis was conducted without considering prior industry input. A comprehensive analysis that reflects meaningful engagement with industry and other stakeholders is still needed.

<u>Listing Pharmaceuticals on the National Formulary</u>

The industry welcomed Malaysian Government guidelines introduced in January 2016 which allowed companies to request inclusion on the national formulary. However, the listing process lacks transparency and appears to be based on ambiguous criteria. In addition, the guidelines require six or 12 months of post-marketing surveillance data prior to listing. This means that following local clinical trials, patients in those trials cannot automatically continue receiving the product. A policy is needed to bridge the gap for patients from the end of a clinical trial to listing on the national formulary. In addition, if a product is not approved for listing on the Formulary, the applicant should be provided a detailed explanation for that decision so that it can better understand the criteria for listing and to determine if it may negotiate an alternative access scheme with the government. MoH listing decisions, both by the body responsible for conducting HTA and making listing recommendations, and by the panel responsible for the ultimate listing decision, currently lack transparency and are based on ambiguous criteria.

Further, as the Malaysian Government pursues reforms aimed at improving patient access to medicines, PhRMA member companies hope that sufficient financing is provided to ensure that more patients can receive innovative medicines in a timely manner. Short-term measures, such as cost-containment policies, should not become a barrier to patient access, and the government should consider fair mechanisms to value innovations that are proven to raise health care standards in Malaysia.

Preferential Treatment of Local Manufacturers

Malaysia's National Medicines Policy, which prioritizes the medium- and long-term goals set by the government for the pharmaceutical sector, endorses price controls, automatic generic drug substitution, and preferences for generics and local manufacturers for medicines on the National Essential Medicines List. These discriminatory preferences for locally manufactured products discourage an open and competitive marketplace.

Halal Pharmaceuticals

In December 2017, the MoH published guidelines on prescribing and administration of non-halal medicines.²²⁰ PhRMA member companies support religious and cultural sensitivities, but believe that it is important to ensure that patients, in partnership with their health care providers, are prescribed the appropriate medicine for their conditions.

²²⁰ Guideline on the Use of Medicines with Non-halal Ingredients, available at https://www.pharmacy.gov.my/v2/ms/dokumen/panduan-penggunaan-ubat-ubatan-mengandungi-unsurtidak-halal.html (last visited Jan. 27, 2021).

THAILAND

PhRMA's member companies face significant market access and intellectual property (IP) challenges in Thailand. Thailand does not provide equitable and reasonable market access to new medicines developed and manufactured in the United States. In addition, many of the reforms proposed by the Thai Government are contrary to international or regional best practices.

Key Issues of Concern:

- **Uncertain IP protections and enforcement**: Uncertain IP protections and lack of enforcement hinder the ability of U.S. innovators – in particular, biopharmaceutical innovators – to fairly access the Thai market. Key IP concerns in Thailand include patent backlogs and failure to provide meaningful regulatory data protection (RDP). PhRMA welcomes improvements Thailand has made to its patent system in recent years, including increasing the number of patent examiners to improve processing time for patent applications. We also welcome the proposed amendments to the Patent Act that seek to build upon this progress, such as provisions that seek to speed up the patent registration process by decreasing the period of time of requesting substantive examination from five years from the application date to three. In light of Thailand's significant patent delays, these improvements will be key to reducing the patent backlogs and improving efficiencies in Thailand's patent system. While these developments make progress towards improving the registration and availability of patents in Thailand, barriers to patent ownership in the country remain an obstacle to innovation, and certain provisions in the amended Patent Act threaten to undermine effective patent protection and enforcement.
- Maximum price setting for government procurement: The Thai Ministry of Public Health (MoPH) and the National Drug System Development Committee are authorized to establish a "median procurement price" for pharmaceuticals. In practice, this price is not calculated as a median, but rather used as a "maximum procurement price" (MPP) for medicines. The MPP process, combined with Thailand's recent preference for domestic companies, harms U.S. innovators and could delay or prevent the introduction of new medicines. Industry stands ready to work with the Thai Government to standardize the MPP process and to ensure increased transparency and predictability.
- Discrimination and unpredictability in government procurement policies:
 The Thai Government continues to implement procurement policies that facilitate procurement privileges for the domestic Thai industry. These policies have created a discriminatory and unpredictable investment climate that create challenges for U.S. companies seeking to compete on a level playing field in Thailand.

For these reasons, PhRMA requests that Thailand be placed on the **Priority Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Patent Backlogs

Although the Department of Intellectual Property (DIP) has taken some important initial steps to help clear the patent backlog – including hiring more patent examiners – the waiting-period for a patent review and grant in Thailand remains unpredictable and averages ten years after application submission. As such, we welcome the proposed amendments to the Patent Act that seek to build upon this progress, such as provisions that seek to speed up the patent registration process by decreasing the period of time of requesting substantive examination from five years from the application date to three years.

Long patent grant delays create uncertainty regarding investment protection and increase the risk that a third party will use a patentable invention that is the subject of a pending patent application during the pending/review periods. Indeed, at least one PhRMA member has experienced a third-party launch of a product that was the subject of a pending patent application. In that instance it took over 18 years for the patent to be granted, and even then the member was unable to obtain meaningful enforcement of the patent. Patent term adjustments are not available in Thailand to compensate for unreasonable patent office delays, thereby reducing the effective patent term and further exacerbating the uncertainty caused by its patent grant delays.

Additionally, though some of the recent draft amendments to the Patent Act seek to streamline some procedures during the patent application process, other draft provisions could undermine efforts to support innovation and further exacerbate Thailand's backlog. For example, one of the proposed amendments seeks to introduce a third party observation mechanism that would allow third-parties to file challenges against a patent application up to the date of patent grant as well as to modify the opposition period to be both pre-grant opposition after substantive examination. The opposition should be established according to international practice of post grant opposition to sustainably solve the patent backlog and enhance investment climate towards innovation development. Other provisions, such as Section 17/1 of the Act, could impose procedural barriers by requiring applicants to disclose information regarding the use of genetic resources as part of their patent application. In some cases, compliance with such requirements is impossible, particularly where the existence or origin of any genetic resources incorporated into a product may be unknown or untraceable. As a result, such disclosure requirements can present significant barriers to patentability and should be removed from the draft amendments.

Patent Protection and Enforcement

Barriers to patent ownership in Thailand remain an obstacle to innovation, and certain provisions in the amended Patent Act threaten to undermine effective patent protection and enforcement. For example, as currently drafted, the amended Patent Act will impose upon patent applicants new, burdensome disclosure requirements relating to genetic resources. The proposed amendments also raise concerns that patent owners will be deprived of their patents for late payment of patent maintenance fees, without sufficient notice or opportunity to make payment prior to revocation. In addition, Thailand's restrictive application of patent eligibility criteria denies adequate protections to valuable new uses of existing pharmaceuticals.

Compulsory Licensing

Despite assurances that Thailand would be judicious in its use of CLs and consult with affected parties as required by the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Thailand continues to threaten the use of CLs. Further, royalty payments have not been made on products for which CLs have been issued. Thailand's compulsory licensing regime lacks sufficient due process and dialogue with affected companies and suffers from a lack of transparency in the reasoning behind CL decisions. DIP's proposed amendments to the Patent Act to add provisions on compulsory licensing raise concerns that Thailand may be seeking to increase its use of compulsory licensing in the future. Even the mere potential that Thailand may use compulsory licensing in the future brings into question the predictability and enforceability of patents in Thailand. Such doubts undermine incentives for development of new medicines and innovative treatments, thereby threatening to slow the introduction of new medicines in Thailand and decrease access to medicine for Thai patients. If DIP moves forward with amendments to its compulsory licensing regime, it should do so in a manner that adopts international best practice and adheres to Thailand's international treaty obligations under Article 31 and Article 31bis of the TRIPS Agreement.

PhRMA believes governments should grant CLs in accordance with international rules and only in exceptional circumstances and as a last resort. Decisions should be made through fair and transparent processes that involve participation by all stakeholders and consider all relevant facts and options.

Regulatory Data Protection Failures

Ministerial regulations issued by the TFDA regarding the Trade Secrets Act of 2002 do not provide RDP that would prevent generic or biosimilar drug applicants, for a fixed period of time, from relying on the innovator's regulatory data to gain approval for their versions of the innovator's product. The Act aims only to protect against the "physical disclosure" of confidential information.

PhRMA's member companies strongly encourage the Royal Thai Government to institute meaningful RDP. Specifically, Thailand should: (1) implement new regulations

that do not permit generic or biosimilars producers to rely directly or indirectly on the originators' data, unless consent has been provided by the originator, for the approval of generic or biosimilar pharmaceutical products during the designated period of protection; (2) bring the country's regulations in line with international standards by making clear that data protection is provided to test or other data submitted by an innovator to obtain marketing approval; (3) provide protection to new indications; and (4) require TFDA officials to protect information provided by the originator by ensuring it is not improperly made public or relied upon by a subsequent producer of a generic or biosimilar pharmaceutical product.

Market Access

Maximum Price Setting for Government Procurement

The MoPH and the National Drug System Development Committee are authorized to establish a "median procurement price" for pharmaceuticals. In practice, this price is not calculated as a median, but rather used as a "maximum procurement price" (MPP) for medicines.

The MPP process, combined with Thailand's recent preference for domestic companies, harms U.S. innovators and could delay or prevent the introduction of new medicines. Fortunately, the Public Procurement Act introduced in August 2017, mandates the creation of a Reference Price Subcommittee for Pharmaceutical and Medical Supplies, which would be responsible for handling reference price issues and standardizing the procedure. The innovative biopharmaceutical industry seeks the expedited formation of this subcommittee as well as the inclusion of members from the private sector so that all stakeholders may collaborate on appropriate policies that address the fiscal concerns of the Thai Government in the procurement of pharmaceuticals, as well as the concerns of innovators and the needs of Thai patients. Further, while industry welcomed the Thai Government's issuance of an annual plan related to the MPP process, additional relevant details are needed to increase transparency and predictability.

Preferential Procurement of Thai "Innovation" List

In 2016, the Thai Government established the Thai Innovation List, an initiative to develop domestic industrial capacity in several innovation sectors, including pharmaceuticals. Only Thai majority-owned companies qualify to be listed. Once listed, Thai companies receive special government procurement privileges including an earmark for at least 30 percent of orders by Thai Government agencies. Paradoxically, it appears that to qualify as a pharmaceutical innovator and be eligible for inclusion on the list, the Thai company needs only to demonstrate that their generic copy is bioequivalent to the originator product. As such, the so-called Thai Innovation List exists solely to favor local generic companies to the exclusion of U.S. and other foreign research-based biopharmaceutical companies.

The Innovation List was created under the Thailand 4.0 policy to incentivize innovation development. However, by excluding international companies, it deters international collaborative investment to promote innovation in Thailand. A more inclusive criteria that values research investment and embraces the creation of innovation without a nationality focus would foster a more investment-friendly environment.

Inconsistent and Non-Transparent Oncology Preauthorization System (OCPA)

The OCPA was established in 2006 as a direct reimbursement system to hospitals for "high-cost cancer drugs" administered to patients under the Civil Servants Medical Benefit Scheme (CSMBS). The system was intended to reduce out-of-pocket disbursements for its beneficiaries and to ensure rational use of certain innovative cancer medicines by identifying those products for which government hospitals would be directly reimbursed through prior authorization and approval based upon a pre-defined protocol of individual cancer medicines. Unfortunately, the process and criteria involved in the OCPA lack predictability and are applied inconsistently between different companies and different products. Further, recent revisions to the OCPA will result in certain innovator products being deemed not eligible for "direct reimbursement" based on unclear selection criteria or "non-reimbursable" if newly approved.

Specifically, while many innovative medicines, including cancer medicines, had been directly reimbursable by the CSMBS immediately upon being granted marketing authorization, revisions to OCPA procedures in February 2018 structured reimbursements on a tiering system: Group 1 (OCPA) or Group 2 (certain innovative and non-OCPA) products continue to be directly reimbursable, Group 3 (other innovative and non-OCPA) products require patients to provide advance payment for their medicines with no guarantee of reimbursement and then apply for government reimbursement, and Group 4 (newly-approved) products are non-reimbursable and fully paid by the patient unless those products could be additional listed in the OCPA. These revisions, which were due to government budget constraints, will create affordability challenges and access barriers to patients who cannot pay out-of-pocket for medicines and will limit provider and patient choice. For example, only one medicine per indication will be allowed in Group 1, meaning that patients treated by other medicines will be forced to pay out-ofpocket or switch treatments. Moreover, the criteria for how products are placed into each group are unclear, and potentially are based on which products have the lowest procurement price.

To ensure patient access to innovative medicines and to respect physician determinations regarding the most appropriate treatment for a given patient, the government should establish transparent procedures and criteria for OCPA reimbursement evaluation, with consideration to clinical outcomes and needs rather than pure cost-containment. In addition, Thailand should provide greater flexibility to allow for negotiation of alternative financial models with manufacturers so that patients have better access to new medicines and the government is afforded greater certainty over health care spending.

<u>Preferential Procurement Privileges for the Government Pharmaceutical Organization</u> (GPO)

The GPO, a Thai State-owned enterprise that manufactures pharmaceutical products in Thailand, benefits from preferential procurement privileges. Per Ministerial Regulation B.E.2560 (2017), the MoPH must procure at least 80 percent of medicines on the National List of Essential Medicines from the GPO or the Thai Red Cross and other central government and regional government offices must procure no less than 60 percent from these entities. In addition to these procurement preferences, under the Drug Act B.E. 2510 (1967), the GPO is not required to obtain FDA approval prior to launching medicines on the Thai market. There is no such exemption for private sector manufacturers or sellers, all of whom must obtain market authorization from the Thai FDA prior to selling their products in the Thai market. Further procurement privileges are also being extended to local vaccine producers under National Vaccine Committee Regulations on "Vaccine Procurement in Government Sector" that went into effect on August 14, 2020.

RUSSIA

PhRMA and its member companies operating in Russia are dismayed by recent steps taken by the Russian Government to issue a compulsory license for remdesivir, a COVID-19 medicine, and legislative amendments that would enable the government to issue compulsory licenses on vague and ambiguous grounds. These actions follow years of legislative and judicial efforts to expand inappropriately compulsory licensing mechanisms in Russia. In addition, we are concerned with a number of market access barriers, especially those linked to intellectual property protection and import substitution efforts, all of which undervalue innovation in Russia and the benefits it brings to Russian patients.

Key Issues of Concern:

- Compulsory licensing: The Russian Government is pursuing draft legislation that create vague and arbitrary criteria enabling Russia to issue compulsory licenses of patented medicines. On December 31, 2020, the Russian Government issued a compulsory license via Decree No. 3718-r for remdesivir, a COVID-19 therapeutic. That Decree was issued pursuant to Article 1360 of the Russian Civil Code which enables the government to issue compulsory licenses in the interest of "national security." This action follows years of unprecedented legislative and judicial expansion of compulsory licencing mechanisms in Russia. The State Duma continues to consider the government-endorsed proposed legislation to drastically expand compulsory licensing provisions. Similarly, PhRMA members are witnessing a rising trend in court cases seeking compulsory licenses for dependent patents. Russian courts, in at least two cases, have granted compulsory licenses to generic companies for innovative foreign medicines based on an extremely low evidence test and standard of proof.
- Weak patent enforcement: There is no effective mechanism in place in Russia to provide patent holders with an opportunity to resolve patent disputes prior to the launch of a follow-on product. This has led to the approval and marketing of follow-on products during the period of patent protection. Because Russian courts rarely grant preliminary injunctions in patent infringement cases related to pharmaceuticals, pharmaceutical innovators face significant legal challenges in seeking to effectively protect their innovative products against infringement, resulting in significant damages that are rarely compensable. In light of these problems, PhRMA and its member companies are encouraged by recent legislative proposals to implement a Unified Register of Pharmacologically Active Substances Protected by Patent at the level of the Russian Federation and EAEU (which may serve as a basis for patent status check during the registration of generic medicines).
- Localization barriers and government procurement restrictions: Despite being in the process of acceding to the World Trade Organization (WTO)

Agreement on Government Procurement (GPA), Russia continues to pressure local production of medicines through its government procurement system (e.g., restrictions on public procurement of imported medicines where there are at least two pharmaceuticals with locally produced finished dosage forms, so-called "three's a crowd"), and as of 2019, 25 percent price preference for products for which all stages of production are carried out locally. If "three's a crowd" is not applicable, a 15 percent price preference is applied. Moreover, in August 2020, Russia released a list of more than 200 "strategically important medicines" that must be produced in Russia.

Deteriorating government pricing environment: On October 18, 2018, a new pricing methodology for products included on the Essential Drug List (EDL) came into force that impacts ceiling price calculation and the international reference pricing methodology. In addition, in December 2019, the Russian Government approved Resolution No. 1683 that requires the re-registration of all maximum selling prices for EDL medicines in 2019-2020. Motivated by significant disruptions to state tenders and medicine shortages, in 2020, the Russian Government adopted measures permitting increases in the registered prices for EDL medicines.

For these reasons, PhRMA requests that Russia remain on the **Priority Watch List** in the 2021 Special 301 Report. Further, we encourage USTR to conduct an **Out-of-Cycle Review** of Russia's IP regime, so that the U.S. Government can evaluate progress on these important issues and dedicate the required bilateral attention necessary to make progress on the barriers confronted by U.S. businesses in Russia.

Intellectual Property Protection

Compulsory Licensing

PhRMA and its member companies are deeply concerned by compulsory licensing actions in Russia and by continued plans to expand legislatively the use of this drastic measure.

On December 31, 2020, the Russian Government issued a compulsory license via Decree No. 3718-r for remdesivir, a COVID-19 medicine. That Decree was issued pursuant Article 1360 of the Russian Civil Code – which enables the government to issue compulsory licenses in the interest of "national security." This action follows years of unprecedented legislative and judicial expansion of compulsory licencing mechanisms in Russia. PhRMA and its members are concerned that the latest government action, and ongoing legislative and judicial agendas, will set a damaging precedent in Russia and invite other economies to consider similar actions.

Over the last several years, Russia has had a legislative agenda to expand the government's ability to impose compulsory licenses. Starting in 2017, the Russian President signed Order No. 618 "On Key Areas for the Development of Competition Policy", which approved the National Plan for the Development of Competition in the

Russian Federation in 2018-2020. The Competition Development Plan called for the Russian Government to submit a draft law to the State Duma that would allow compulsory licensing on the vague and unduly broad grounds of whenever it is determined to be in the interests of national security and health protection, under article 1360 of the Russian Civil Code (*i.e.*, government use of an invention).²²¹ Building on the Competition Development Plan, on January 12, 2018, the Russian Government issued Decree No. 9-r, which approved the Roadmap for Development of Competition in Healthcare (the Roadmap). As one of its priorities, the Roadmap called for amendments to Article 1360 of the Russian Civil Code by the end of 2018 that would enable the Russian Government to authorize compulsory licensing. That law was finally submitted to the State Duma on November 22, 2019 (draft Federal Law "On Amendments to Article 1360 of the Civil Code of the RF" (the Draft Law No. 842633-7) considering the use of an invention, utility model, or industrial design "in the interests of national security.")²²²

Consistent with the 2017 Order that initiated this process, the Draft Law empowers the government to issue a compulsory license in instances of extreme urgency related to ensuring the defense and security of the state or protecting the life and health of citizens. (It also includes provisions related to participation of compulsory licensed products in tenders and the determination of the appropriate royalties.) The Draft Law was adopted in the first reading on December 15, 2020 and will be further discussed in a second and third reading. Despite industry raising ongoing concerns regarding the vagueness of these proposals, critical terms remain undefined including what situations will be considered "in the interests of national security" and rise to the level of "extreme urgency" and what is meant by for the "purpose of protecting the life and health of citizens." As such, the draft law appears to be inconsistent with Russia's commitments under the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

The Russian Government also appears to be using the pretext of implementing a limited amendment to the WTO TRIPS Agreement to pass legislation that could dramatically expand the use of compulsory licensing that do not appear to be consistent with TRIPS rules. On March 3, 2020, the Government submitted to the State Duma the Draft Federal Law "On Amendments to the chapter 72 of the Civil Code" considering provisions in the new article 1360¹ on using of an invention for manufacture of medicinal product for export without the consent of the patent holder in accordance with international treaty. 223 This Draft Law was proposed following the adoption of the Federal Law No. 184-FZ "On Approval of the Protocol Amending the TRIPS Agreement," which ratified the TRIPS Protocol governing the use of compulsory licensing for export purposes to provide medical aid at the request of less developed countries. The lack of clarity in the text could result in arbitrary implementation. The Draft Law is yet another attempt to allow

²²¹ See http://fas.gov.ru/news/27693 (last visited Jan. 27, 2021).

²²² See the information on the Draft Law No. 842633-7, available at https://sozd.duma.gov.ru/bill/842633-7 (last visited Jan. 27, 2021).

²²³ Available at https://sozd.duma.gov.ru/bill/912458-7 (last visited Jan. 27, 2021).

for the use of compulsory licensing for export purposes. The Draft Law is currently under consideration by the parliament.

There has also been an overall rising trend in court cases seeking compulsory licenses (CLs) for dependent patents. In its decision dated June 8, 2018, the Moscow Arbitration Court (1st Instance) granted a CL for an innovative cancer medicine developed in the United States to a local generic drug company. This decision was based on an extremely low evidence test and standard of proof. The dependent patent was later annulled by Rospatent on November 26, 2018, and the court case was dismissed. In early 2019, the Moscow Arbitration Court (1st Instance) issued a CL against another innovative manufacturer based on a counterclaim by the same local generic drug company; the decision was upheld by the appellate court, the IP Court (Oct. 2019) and by the Russian Supreme Court (Feb. 2020). These decisions establish dangerous precedents based on low or incorrect standards of proof and misinterpretations of cases where compulsory licenses have been granted internationally.

Restriction of Antimonopoly Immunities in Antitrust Regulations

In 2020, the Federal Antimonopoly Service (FAS) made available for public discussions several versions of the Draft Law "On Amendments to the Federal Law 'On Protection of Competition' in Terms of Establishing Antitrust Requirements for Agreements and Actions for Granting or Disposing of Exclusive Rights to the Results of Intellectual Activity or Means of Individualization of a Legal Entity, Goods, Works or Services" speaking to the application of antitrust regulations vis-à-vis intellectual property. PhRMA and its member companies are concerned that the FAS is seeking to abolish so called "antimonopoly immunities" that provide appropriate exemptions from the antitrust regulations for holders of intellectual property. Other issues that industry is monitoring closely are the extent to which the Law would allow FAS to authorize parallel imports and compulsory licensing, which may create a pathway for various abuses and disrupt stability in the market. Notably, in July 2020, the Ministry of Economic Development issued a negative opinion on the proposed draft law as part of its required regulatory assessment.

Restrictive Patentability Criteria

On May 27, 2016, FAS published on its official website, the draft *Roadmap for Development of Competition in the Healthcare Sector*. As noted above, the Roadmap

²²⁴ Available at http://kad.arbitr.ru/Card/322413fa-38a7-4085-9cc7-3c8ff9fd7d92 (last visited Jan. 27, 2021Feb. 6, 2020).

²²⁵ Available at http://kad.arbitr.ru/Card/3a0440d1-5ba5-4049-ac4c-7be5b9edc09c (last visited Jan. 27, 2021).

²²⁶ Available at https://kad.arbitr.ru/Document/Pdf/3a0440d1-5ba5-4049-ac4c-7be5b9edc09c/71db5389-d61e-4190-a963-a1ccf50d0184/A40-166505-2017_20200220_Opredelenie.pdf?isAddStamp=True (last visited Jan. 27, 2021).

²²⁷ Project ID 02/04/02-20/00099621, available at https://regulation.gov.ru/projects#npa=99621 (last visited Jan. 27, 2021).

was approved by the Russian Government on January 12, 2018, via Decree No. 9-r. The Roadmap, *inter alia*, proposes amendments to patentability criteria, for any new property or new application of a known active ingredient of a medicinal product (including new indications, new treatment methods, new combinations, and new pharmaceutical forms and manufacturing methods). In December 2018, the Ministry of Economic Development issued Order No. 527 on "double patenting" of pharmaceutical compositions and their uses. PhRMA and its members are monitoring the implementation of the relevant amendments.

Weak Patent Enforcement

Russia does not maintain an effective mechanism for early resolution of patent disputes before potentially infringing products enter the market. Follow-on drug manufacturers can apply for and receive marketing approval for a generic product — and in turn participate in state tenders — even though a patent for the original drug is still in force. The Law on the Circulation of Medicines does not include provisions for patent status review when a company applies for marketing authorization or for price registration on the EDL.

Further, while there have been some positive court decisions (including by the Russian Supreme Court²²⁸), there are still very few mechanisms available to enforce the relevant court decision. Furthermore, Russian courts rarely grant injunctive relief and some lower courts do not appear to follow the Supreme Court's decision. For example, on November 12, 2019, the Arbitration court of Moscow (on remand) yet again rejected a patent violation claim filed by an innovative manufacturer against a local manufacturer of a generic product.²²⁹ On appeal, the Tenth Arbitration Court of Appeal dismissed the claim.²³⁰ However, on further appeal to the Intellectual Property Rights Court, the Court (in an August 11, 2020 decision²³¹) remanded the case for a second time to the Arbitration Court of Moscow to a different judicial panel to be considered *ab initio*. In short, pharmaceutical innovators face significant legal challenges effectively protecting their innovative products against infringement, resulting in significant damages that are rarely compensable.

Available at http://kad.arbitr.ru/Card/414811f6-22f6-4719-a406-23e3c00a82eb (last visited Jan. 27, 2021) (upholding the findings of the lower courts that registration of a generic, as well as registration of its price, may be a threat to the original patent protecting the active ingredient. As a result of this case, a

generic manufacturer was ordered by the court to apply to the MoH to annul its registration certificate.). ²²⁹ Available at http://kad.arbitr.ru/Document/Pdf/53f07f2a-fe8f-4674-aef4-d6d19f474c42/33ba38a0-eaf7-4517-a879-37c96d4080b4/A41-3828-

²⁰¹⁸_20191112_Reshenija_i_postanovlenija.pdf?isAddStamp=True (last visited Jan. 27, 2021). ²³⁰ Available at https://kad.arbitr.ru/Document/Pdf/53f07f2a-fe8f-4674-aef4-d6d19f474c42/eb9d1d4e-c497-480a-a307-78d0213b38b7/A41-3828-

²⁰¹⁸_20200203_Postanovlenie_apelljacionnoj_instancii.pdf?isAddStamp=True (last visited Jan. 27, 2021).

²³¹ Available at https://pharmvestnik.ru/content/news/Arbitrajnyi-sud-v-treti-raz-rassmotrit-delo-mejdu-Bayer-i-Nativa-po-sorafenibu.html (last visited Jan. 27, 2021).

Such practices are contrary to Russia's obligations under TRIPS and the assurances Russia made to the WTO Working Party on the Accession of the Russian Federation to the WTO. In particular, they appear to violate TRIPS Article 41, which requires Members to provide "expeditious remedies to *prevent* infringements" (emphasis added) and provisions of Article 50 with respect to provisional measures. Russia assured the WTO Working Party that it would "counteract ... infringements of intellectual property through improvements in enforcement." However, considering the current efforts by the government to improve the situation, the industry stands ready to contribute to the formation of an effective IP protection environment.

Encouragingly, in 2019 the Russian Government assigned Rospatent and the MoH to review amendments to the Law on the Circulation of Medicines in order to provide effective patent enforcement (e.g., mechanisms to allow for early resolution of patent disputes before potentially infringing products enter the market). Predictable and effective patent enforcement procedures are especially important as it relates to the establishment of the common Eurasian Economic Union (EAEU) market for medicines. In June 2020, the Eurasian Economic Commission discussed the creation of a Unified Register of Pharmacologically Active Substances Protected by a Patent for an Invention in EAEU Member States, which the Russian Government approved in August. Industry stands ready to work with MoED, Rospatent and MoH to ensure that the proposed amendments are drafted and implemented in a manner that ensures robust patent protection for innovative medicines and provides business certainty for innovators and follow-on manufacturers alike.

Regulatory Data Protection Failures

As part of its accession to the WTO, Russia agreed to provide six years of regulatory data protection (RDP).²³² While the Law on Circulation of Medicines²³³ provides for this protection, Russia's weak judicial system creates concerns for PhRMA members in light of amendments to Russia's Law on the Circulation of Medicines passed in 2014. Specifically, beginning in 2016, the amendments allowed competitors to apply for marketing approval of follow-on medicines as early as four years after marketing authorization for a reference small molecule drug and three years after marketing authorization of a reference biologic medicine. The absence of a clear definition of the circumstances that constitute "use for commercial purposes" and the lack of injunctive relief in Russia (as noted above), has led to at least one instance of a follow-on product being approved to launching on the market before the expiry of the full 6-year RDP term.

This issue becomes especially important in light of the common EAEU medicines market, which is due to go into effect on January 1, 2021. With this milestone in mind, in April 2020, MoH released draft amendments to the Law of Circulation of Medicines to

²³² Report of the Working Party on the Accession of the Russian Federation to the World Trade Organization, WT/ACC/RUS/70, WT/MIN(11)/2 (Nov. 17, 2011), at para. 1295, incorporated in Protocol on the Accession of the Russian Federation, WT/MIN(11)/24, WT/L/839 (Dec. 17, 2011), at para. 2. ²³³ Federal Law No. 61-FZ, dated Apr. 12, 2010, "On the Circulation of Medicines".

implement the new system. Troublingly, the proposed amendments excluded Article 18 ("Submission and Analysis of an Application for State Registration of a Medicine for Human Use") from the Law on Circulation of Medicines, which, *inter alia*, contains the RDP provisions. Following a public consultation and industry advocacy, the relevant RDP provisions (parts 18, 20 and 21 of Article 18) were restored and the Draft was supported by MoED. However, the draft remains at the regulatory assessment stage and has not yet been submitted to the Russian Government or the Russian State Duma. Beyond the RDP provisions in Russian law, in light of the EAEU common pharmaceutical market, it will be essential to have a robust and well-functioning RDP system established at the level of the EAEU. Industry is working with the Eurasian Economic Commission to share best international practices on RDP regulations.

Parallel Imports

Currently, parallel imports are prohibited from countries outside the EAEU, based on the regional principle of exhaustion of trademark rights. However, the EAEU has discretion to allow parallel imports and recent Russian court decisions are already eroding trademark rights. In April 2017, the Board of the EEC approved the draft Protocol on Amendments to the Treaty on the Eurasian Economic Union of May 29, 2014. If approved by all EAEU Member States, the Protocol would grant the Eurasian Intergovernmental Council the authority to use the international principle of exhaustion of trademark rights in respect to certain products (pharmaceuticals are one of the product groups under discussion). PhRMA and its member companies remain concerned that such exemptions may at some point be renewed and cause medicine shortages in exporting countries and compromise the security of medicine supply chains.

Moreover, during the meeting between the EEC Minister of Competition and heads of the antimonopoly bodies of the EAEU Member States in September 2019, the FAS stated that it is necessary to finish the EAEU discussions on parallel imports and at the initial stage enable the Eurasian Intergovernmental Council to authorise the usage of the international principle of exhaustion of trademark rights in respect to certain product groups.²³⁴ Based on interagency consultations initiated at the end of 2020, PhRMA and its member companies are concerned that proposals to implement parallel imports in the pharmaceutical sector could be renewed in the next few months.

In the meantime, the ability of trademark owners to protect their rights against parallel imports is already being limited by the courts. On February 13, 2018, the Russian Constitutional Court published its position on parallel imports. The Court ruled that it is not allowed to apply similar sanctions against the parallel importer of an original product and the parallel importer of a counterfeit product, except in cases when the original product may cause harm similar to a counterfeit product. This Constitutional Court interpretation may affect existing court practice on parallel imports and increase the

²³⁴ Available at https://gmpnews.ru/2019/10/fas-predlagaet-konsolidirovat-usiliya-stran-eaes-v-oblasti-prinuditelnogo-licenzirovaniya/ (last visited Jan. 27, 2021).

number of cases when the trademark owner is not able to prevent parallel imports or obtain compensation from parallel importer.

Market Access

Localization Barriers and Government Procurement Restrictions

Russia is in the process of acceding to the GPA and currently participates in the Committee as an observer.²³⁵ Notwithstanding the GPA accession process, Russia continues discriminatory practices in its government procurement practices.

In November 2015, the Russian Government adopted Resolution No. 1289 "On Restrictions and Conditions of Access of Foreign Essential Medicines to State and Municipal Tenders", which codifies the so-called "three's a crowd" approach in relation to medicines included on the EDL. According to Resolution No. 1289, if two or more EAEU pharmaceutical manufacturers bid on a tender for an EDL product, then any foreign bid for that same tender must be rejected. Medicines not covered by Resolution No. 1289 remain subject to the tender preferences established by the Ministry of Economic Development (MoED), where local companies receive a 15 percent price preference.

In May 2018, the Russian Government adopted Resolution No. 572 "On Amendments to the Resolution of the Russian Government No. 1289", amending the "three's a crowd" regulation and introducing the regulatory framework for additional preferences in state procurement of essential medicines for products made using locally manufactured active pharmaceutical substances. In November 2018, the Order of the Ministry of Finance dated June 4, 2018, No. 126n entered into force and introduced additional preferences for local (EAEU) full-cycle medicines, applied from January 1, 2019. The order states that if EAEU finished dosage forms and EAEU full-cycle products participate in a tender, an EAEU full-cycle product is expected to win, if its price does not exceed the lowest price suggested for EAEU finished dosage form by more than 25 percent.

In August 2020, the Russian Prime Minister signed Resolution No. 1164, which excluded application of the "three's a crowd" rule during state procurement of 10 medicines for the treatment of leukemia and lymphoma in children until December 31, 2021. In September 2020, the Russian Government adopted Resolution № 1550, which added one new INN on this list, thus making exceptions for 10 INNs. Although the industry welcomes this decision, PhRMA and its member companies believe that the "three's a crowd" rule must be excluded for all medicines.

However, the Russian Government has also taken several steps to isolate certain segments of the pharmaceutical market for sole-supply contracts given to Russian companies. For example, on May 12, 2020, the Russian Government issued Decree No.

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²³⁵ See https://www.wto.org/english/news_e/news16_e/gpro_22jun16_e.htm (last visited Jan. 27, 2021) and https://www.wto.org/english/tratop_e/gproc_e/memobs_e.htm (last visited Jan. 27, 2021).

1257-r appointing National Immunobiological Company (NIB) in 2020-2021 as the sole supplier of certain immunobiological products produced at all stages of the technological process in Russia under the National Immunization Schedule. Many other measures aimed at supporting local manufacturers are under development and implementation in Russia. For instance, in November 2019, the Russian Government signed Resolution No. 1464 and approved the Rules for granting subsidies from the federal budget to Russian organizations for the partial reimbursement of expenses to implement industrial projects related to "modern technologies", including the launch and sale of medicines. And in December 2019, the Russian Government signed Resolution No. 1908, which approved rules for the provision of federal subsidies to stimulate demand and increase the competitiveness of Russian industrial products.

In July 2020, Law No. 44-FZ on public procurement was amended to allow the government to set quotas for locally-manufactured products to be purchased through public tenders. Subsequently, a draft government Resolution was discussed in September 2020, to introduce a 40 percent quota for local products in state procurement for medicines on the EDL medicines, as a means to further boost import substitution. Ultimately, medicines were not included within the list of goods covered by the final resolution passed on December 3, 2020 (Resolution No. 1214 "On the Minimum Mandatory Share of Local Goods and its Achievement by the Customer").

Finally, since 2018, the Russian Government has been developing a "Pharma 2030" strategy, which is expected to ensure complete local production of EDL medicines, increase regulatory efficiency and increase the responsibility of manufacturers. According to recent media reports, President Vladimir Putin supports adoption of the Pharma 2030 strategy. Although PhRMA member companies welcome the adoption of a long-term strategy, several aspects of the strategy raise significant concerns.

Deteriorating Government Pricing Environment

On October 18, 2018, new pricing registration rules and a new pricing methodology came into force. These measures change the methodology for calculating maximum ceiling prices for EDL medicines and skew the international reference pricing basket used to set prices towards the lowest price in the following countries: Belgium, the Czech Republic, France, Greece, Hungary, The Netherlands, Poland, Romania, Slovakia, Spain, Turkey and the country of origin. In addition, Federal Law 134-FL "On Amending the Law on the Circulation of Medicines in Terms of Regulation of Prices for the Medicines Included in the List of Vital and Essential Drugs" came into force on June 7, 2019. These policies could result in a downward price spiral that threatens biopharmaceutical innovation.

²³⁶ See https://pharmvestnik.ru/content/news/Kluchevye-eksperty-farmotrasli-podveli-itogi-gosprogrammy-Farma-2020.html (last visited Jan. 27, 2021).
²³⁷ *Id*.

In accordance with Federal Law No. 134-FZ, all prices for EDL medicines are subject to obligatory re-registration in 2019-2020. On December 16, 2019, the Russian Government approved Resolution No. 1683 "On Amendments to Certain Acts of the Russian Government in Relation to Registration and Re-registration of Maximum Selling Prices for Essential Medicines" (Resolution No. 1683). Products with prices that are not re-registered by January 1, 2021 can no longer be sold.

On December 19, 2019, MoH annulled its Order No. 871n from Octobe 2017 and adopted new Order No. 1064n, which sets forth the procedure for determining the initial auction prices for medicines. Motivated by significant disruptions to state tenders and drug shortage caused by Order No. 871n, MoH Order No. 1064n aimed at improvement of the regulatory framework for calculating a medicine's initial auction price. However, implementation of Order No. 1064n differs by Russian region and the MoH is monitoring the actual practice of its implementation.

Due to the COVID-19 pandemic, the Russian Government introduced the right to exercise specific price control measures on medicines not included in the EDL. From July 27, 2020 to August 21, 2020, public discussions were held regarding the draft Resolution of the Russian Government "On Approval of the Rules for Formation of the List of Medicines not included on the List of Vital and Essential Medicines in Respect of Which it is Possible to set the Maximum Selling Prices of the Manufacturers, Maximum Wholesale and Retail Markups." Subsequently, Government Resolution No. 1310 was adopted on August 29, 2020.

To mitigate the risks of medicine shortages due to their low prices, Government Resolution No. 1771 "On the Specifics of State Regulation of the Maximum Selling Prices of Manufacturers for Medicines Included in the List of Vital and Essential Medicines" was adopted on October 31, 2020. The prices for certain essential medicines were already increased based on Resolution No. 1771.²³⁸

Interchangeability of Medicines

Federal Law No. 475-FZ, amending the Law on the Circulation of Medicines, reduced the list of non-interchangeable medicines and set out a number of options for considering the interchangeability of medicines under one international non-proprietary name (INN). Several subsequent regulations and decrees have been issued pursuant to this law, which is expected to go into full effect on January 1, 2021. Law No. 475-FZ contains several provisions that may adversely affect patients, including establishing a pathway for "non-medical switches." As such, PhRMA members are closely monitoring these developments, regulatory practice and the decisions of the medical experts responsible for the interchangeability determinations. Resolution No. 1360 dated September 5, 2020, approved the procedure for determining the interchangeability of medicines for human use, and Resolution No. 1357 dated September 4, 2020 approved

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²³⁸ See https://rg.ru/2020/11/27/fas-rossii-soglasovala-proizvoditeliam-ceny-na-dva-deficitnyhonkopreparata.html (last visited Jan. 27, 2021).

rules for the use of information on the interchangeable medicines for human use and provided further clarifications. In addition, on October 1, 2020, the Russian Government issued Resolution No. 1583 "On Approval of the Rules for the Circulation of Generics (Biosimilars) Before the Expiry of the Period to Study their Bioequivalence or Therapeutic Equivalence, or Introduce Changes to the Instruction for Medical Use While Defining Interchangeability."

PhRMA and its member companies are concerned that the interchangeability determination process is based on registration dossier documents without conducting respective clinical trials to prove that switching patients from one product to another is safe. In addition, mandatory use of information on interchangeability in public procurement may lead to numerous non-medical switches which is not in the best interests of patients and which may increase health care costs due complications.

Eurasian Economic Union

The EAEU, comprised of Russia, Belarus, Kazakhstan, Armenia, and Kyrgyzstan, entered into force in January 2015. The treaties establishing the Eurasian Customs Union and the Single Economic Space were terminated by the agreement establishing the EAEU, which incorporated both into its legal framework. The EAEU envisages the gradual integration of the economies of its Member States, establishing a free trade area, unbarred financial interaction and unhindered labor migration. One of the first sectors to be integrated is the pharmaceutical sector through the creation of a single pharmaceutical market. To this end, the EAEU Agreement on Common Principles and Rules of Drug Circulation in the EAEU was executed in December 2014, and the EAEU Intergovernmental Council approved the necessary regulations to establish a common pharmaceutical market in the EAEU entered into force in May 2017.

As of January 1, 2021, all new pharmaceutical registrations in Russia must meet the EAEU regulations. However, on December 23, 2020, the Council of the Eurasian Economic Commission (EEC) adopted Decision No. 128 "On amendments to the Resolution of the Council of the Eurasian Economic Commission dated November 3, 2016 No. 78," which extended until July 1, 2021, the opportunity for pharmaceutical manufacturers to choose a national registration procedure in the four EAEU Member States other than Russia. Moreover, all medicines on the market must meet the EAEU registration requirements by January 1, 2026 (or they will be withdrawn from the market).

Although the first market authorization under the EAEU rules in Kazakhstan was approved in 2018²³⁹ and the first market authorization under EAEU rules in Russia was issued by the MoH in November 2019,240 a number of technical issues with electronic

²³⁹ Available at https://gmpnews.ru/2019/02/fakticheskoj-datoj-zapuska-edinogo-rynka-lekarstv-eaes-mozhet-stat-konec-marta-nachalo-aprelya/ (last visited Jan. 27, 2021).

²⁴⁰ Available at https://pharmvestnik.ru/content/news/Minzdrav-Rossii-vydal-pervoe-registracionnoe-udostoverenie-po-pravilam-

EAES.html?utm_source=Fbpost&utm_medium=Group&utm_campaign=Minzdrav_Rossii&fbclid=IwAR2m oYAg2p6ByiW12Xcs_BX1HuksJ69Fk-5uSUfEurqbB7XvW_xhZBJBUuY (last visited Jan. 27, 2021).

dossier format remain unresolved, which creates additional barriers for the formation of the common EAEU market.

The EAEU unified system should ensure integrity and continuous communication with national information systems so that applicants in all territories of the EAEU can follow the mutually recognized procedures. The innovative pharmaceutical industry stands ready to work with the government and EEC to ensure that there is a robust regulatory review system and continued patient access throughout the EAEU.

Track and Trace System

At the end of 2018, the Russian Government adopted Resolution No. 1556, which introduced a new, compulsory system for tracking pharmaceuticals from manufacturer to end user. Members expressed serious concerns to the Russian Government on the technical requirements of the proposal as well as the aggressive implementation timeline.

Mandatory labeling for all medicines was to commence on January 1, 2020, but due to non-readiness by various stakeholders, the deadline was postponed to July 1, 2020. Recognizing that there continued to be difficulties in implementing the track and trace system, Federal Law No. 206 was signed on July 13, 2020, to exempt products manufactured before October 1, 2020. This built on Government Resolution (No. 955) dated June 30, 2020, which allowed for import of medicines manufactured before October 1, 2020, to be imported without applying identification codes in order to avoid potential drug shortages, as per a decision of the specially established committee reviewing each individual request.

In October 2020, participants faced the rapidly growing inoperability of the track and trace system, which required immediate management decisions to prevent the collapse of the pharmaceutical supply system. As a result, Government Decree No. 1779 "On amendments to Government Decree No. 1556" was published on November 2, 2020, which temporarily simplified the monitoring system procedures to facilitate the movement of goods.

The industry stands ready to work with the Russian Government and EAEU Commission to ensure that the new track and trace requirements are not implemented in a manner that imposes unnecessary obstacles to trade and medicine shortages for Russian patients.

Good Manufacturing Practice

Since January 2016, Russia has required local Good Manufacturing Practice (GMP) certificates for foreign producers as part of the drug registration application. Industry has reported increased denials of GMP certificates, highlighting the lack of process for paper review of corrective actions submitted by inspected sites. As a result, most sites that received a negative decision had to be re-inspected.

In May 2020, Government Decree No. 1314 automatically extended for 12 months the validity of GMP certificates which were expiring in a period from March 2020 to December 2020 – in light of the restrictions on the ability to conduct GMP inspections due to the COVID-19 pandemic. Industry greatly appreciates its constructive dialogue with the GMP inspectorate and the MoIT to identify alternative means for conducting GMP inspections. Moreover, the MoIT Order No. 2945 dated September 4, 2020, approved the MoIT Administrative Regulation for the Provision of State Services for the Issuance of EAEU GMP Certificates, which created a pathway for implementation of EAEU procedures.

Orphan Drugs Legislation

The Law on the Circulation of Medicines includes a definition and an accelerated registration procedure for orphan drugs that eliminates the need for otherwise obligatory local trials. To date, however, MoH lacks a long-term strategy for orphan diseases having listed only around 250 orphan diseases,241 while the European Organization of Rare Diseases list identifies more than 5,000 orphan diseases. Promisingly, the Russian Government recently created a dedicated fund to support children with disabling or lifethreatening conditions, including orphan diseases, but much still needs to be done to improve awareness and to build an ecosystem that promotes the development and launch of medicines in Russia to treat orphan diseases.

Although the industry, as a general matter, supports accelerated pathways for orphan drugs, the procedure lacks sufficient detail to fully evaluate its effectiveness. PhRMA's members are hopeful that these issues may be resolved under the EAEU regulatory framework.

Biologic and Biosimilar Products

The Law on the Circulation of Medicines sets forth the basic regulations for biologics and biosimilars. Although PhRMA's members welcome Russia's actions to better regulate biologics and biosimilars, there remain some concerns regarding implementation of the relevant regulations (including assessment guidelines for biosimilar drugs, determining the interchangeability of biologic drugs, mutual recognition of inspections and import testing, etc.). PhRMA's members are hopeful that these issues may be resolved under the EAEU regulatory framework.

²⁴¹ Available at https://www.rosminzdrav.ru/documents/8048 (last visited Jan. 27, 2021).

TURKEY

PhRMA and its member companies face several market access and intellectual property (IP) challenges in Turkey due to forced localization measures, discriminatory pricing and reimbursement policies, unpredictable registration timelines and weak patent enforcement and regulatory data protection failures. The use of an artificially low Euro/Turkish Lira exchange rate for the purpose of regulating prices is causing severe pressure on prices of pharmaceuticals and threatening patient access to new medicines and the sustainability of the industry.

Over the past decade, Turkey has undertaken reforms to modernize its economy and expand health care for Turkish patients. However, a general lack of transparency and predictability in government decision-making has contributed to policies that undermine Turkey's investment climate and damage market access for PhRMA member companies.

While PhRMA and its member companies appreciate the increased dialogue between the Turkish Government and the innovative biopharmaceutical industry, more attention should be paid to the negative impact of these policies on incentives for innovation and the operating environment in Turkey.

Key Issues of Concern:

- Forced localization measures: Following implementation of the 10th Development Program and provisions in Article 46 of the 64th Government Action Plan released in December 2015, the Turkish Government initiated a localization program which calls for delisting imported products from the Social Security Institution (SSI) reimbursement list if they are not produced locally, and provides preferential reimbursement for domestic products. PhRMA member companies began receiving notices in February 2017 that their products would be delisted within 12 months unless localization plans were in place. Subsequently, new waves of product delisting were announced in May and November 2018. In April 2019, the European Union (EU) launched a case at the World Trade Organization (WTO) against these forced localization measures. Because parties to the dispute have failed to reach a settlement during the consultation process, the WTO Dispute Settlement Body agreed in September 2019 to establish a panel. Turkey's forced localization measures could have significant long-term consequences for the industry's operating environment and for patient access to medicines.
- Arbitrary and discriminatory pricing and reimbursement policies: The Turkish Government continues to set an insufficient pharmaceutical budget that disregards exchange rate fluctuations. Turkey regulates pharmaceutical prices using international reference pricing and an artificial fixed exchange rate instead of a market-based exchange rate to convert the value of the Euro into local currency. Although Turkish regulations specified that the exchange rate would be updated at the beginning of the year to reflect 70 percent of the average exchange rate the

preceding year, the Turkish Government changed the regulation a day before the execution to 60 percent of the average exchange rate from 2019. Such actions create uncertainty in the Turkish marketplace. The practice of using an artificially low exchange rate, which is applied only to the pharmaceutical sector, coupled with Turkey's currency fluctuations and inflation (14.6 percent in 2020), threaten both supply continuity and the sustainability of the industry. Industry requests the immediate resolution of this issue through a progressive move toward use of a market-based exchange rate.

- Local inspection requirements and delays: PhRMA and its member companies welcome efforts by the Turkish Drug and Medical Device Agency (TITCK) to improve the regulatory approval procedures of highly innovative and/or life-saving products with limited therapeutic alternatives in Turkey. Specifically, prioritizing Good Manufacturing Practices (GMP) audit procedures and allowing a parallel marketing application process have decreased delays in approving these products. However, while products deemed highly innovative are receiving preferential reviews, products without this designation face increased delays due to the lack of resources and efficient procedures for GMP inspections. PhRMA and its member companies commend Turkey for becoming a PIC/S (Pharmaceutical Inspection Convention and Co-operation Scheme) member to better align its GMP inspections with other members of the scheme. However, GMP inspection delays continue to add to registration delays, hindering patient access to innovative medicines and negating the benefits of the patent and data protection periods for many products. In addition, the Ministry of Health (MoH) recently began requiring companies to submit a two-year budget analysis as part of the GMP and registration prioritization submission, inappropriately linking pricing reimbursement to the separate science-based determination of whether a new medicine (and the manufacturing facility) is safe and effective.
- Weak patent enforcement and regulatory data protection failures: While patents and regulatory test data have received IP protection in Turkey since 1995 and 2005, respectively, significant improvements are still needed. For instance, while Turkey's new Industrial Property Law, which was passed by the Turkish Parliament in 2016, better aligns Turkey with the European Patent Convention, certain provisions in the new law inappropriately expand the possibility of granting compulsory licenses (CLs) in Turkey. In addition, Turkey does not provide an effective mechanism for resolving patent disputes before the marketing of followon products. Further, Turkey inappropriately ties the regulatory data protection period (RDP) to the patent term and the lack of RDP for combination products is still an unresolved issue. Critically, the RDP term begins with first marketing authorization of the original product in any of the EU-Turkey Customs Union Area Member States and thus, as a result of significant regulatory approval delays in Turkey, the effective RDP term is reduced significantly. Consistent with Turkey's international obligations, the RDP term should begin when a product receives marketing authorization in Turkey.

For these reasons, PhRMA requests that Turkey be placed on the **Priority Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Weak Patent Enforcement

In January 2017, Turkey enacted a new Industrial Property Law (No. 6769) that addresses IP, including patents. While the specialized IP courts have improved IP enforcement options in Turkey, IP Court judges lack relevant, and notably technical, training and capacity to effectively resolve patent disputes. Consequently, the quality of IP trials remains insufficient, all the more as the Court of Appeals case law requires that all patent validity cases are referred to court-appointed expert panels, which often consist of a single patent attorney and lecturers from universities. Despite the new law on court appointed experts, the expert examination system also lacks appropriate procedural safeguards. While relevant case law provides that the IP Court judge can deviate from the expert panel's opinion where he or she provides a reasoned opinion to the contrary, in practice, decisions in the majority of cases mirror the opinions of the panel.

Compulsory Licensing

In addition, PhRMA and our member companies are concerned about the compulsory license (CL) provisions of Industrial Property Law No. 6769. That law inappropriately expands the discretion to consider CLs in cases of non-use of the patent and in cases where a third party claims that domestic demands are not being met. The vagueness of that provision creates tremendous uncertainty for patent holders and may be abused by competitor third parties. PhRMA believes governments should grant CLs in accordance with international rules and only in exceptional circumstances and as a last resort. Decisions should be made on public health grounds through fair and transparent processes that involve participation by all stakeholders and consider all relevant facts and options.

Furthermore, compulsory licensing is included as a provision in the draft registration regulation. According to the draft regulation, a guideline will be published for execution. The scope and content of this guideline is not yet known.

Regulatory Data Protection Failures

In 2005, the Turkish Government took positive steps toward establishing protection for the commercially valuable regulatory data generated by innovative pharmaceutical companies, and now provides RDP for a period of six years for products starting from the first MA registration in any of the EU-Turkey Customs Union Member States. Several aspects of this regime are however of significant concern for the innovative pharmaceutical industry.

The period of RDP currently begins on the earliest marketing authorization in any country of the EU-Turkey Customs Union. Considering the extended regulatory approval times and delays stemming from the GMP certification approval period and prioritization process, including the requirement for budget impact projections, current estimates are that it could take one to three years, and longer in some cases, to register a new medicine in Turkey, *i.e.*, long after approval in the EU. Under these adverse circumstances, new products receive, in practice, no more than one to two years of RDP in Turkey, undermining incentives needed for innovators to undertake risky and expensive research and testing.

In addition, if a product is patented in Turkey, RDP ends when that patent expires, even if this is prior to the end of the six-year RDP term. RDP is a form of protection that serves a different purpose than patent protection and is independent and separate from patent protection. Therefore, it should not be limited to the period of patent protection.

RDP in Turkey is further undermined by the Regulation to Amend the Registration Regulation of Medicinal Products for Human Use.²⁴² This Regulation, contrary to EU standards, does not provide RDP for combination products, unless the combination product introduces a new indication. Innovative companies invest considerable amounts of time and effort to develop products that provide increased efficacy and safety for the benefit of patients, as well as new indications, from new combinations of separate molecules.

Market Access

Forced Localization Measures

PhRMA and its member companies have serious concerns about the Turkish Government's forced localization measures for medicines. In 2018, the Turkish Government began implementing policies announced in December 2015, that call for delisting imported products from the reimbursement list.²⁴³ As part of the first wave of delisting notices, which impacted 71 products with additional products in 2018, PhRMA member companies began receiving notices in February 2017 that their products would be delisted within 12 months unless they submitted plans to "localize" these products in Turkey. The second wave of delisting notifications was announced in May 2017 and impacted 176 products, of which 119 products were delisted as of July 2018 with additional delisting carried out in November 2018. The third and subsequent waves have been halted, and no formal announcements have been made regarding future waves.

PhRMA and its member companies believe these measures are inconsistent with Turkey's national treatment obligations under several WTO agreements and constitute a

²⁴² Official Gazette No. 27208 (Apr. 22, 2009).

²⁴³ See, e.g., Article 46 of the 64th Government Immediate Action Plan.

significant restriction on trade.²⁴⁴ An administrative lawsuit challenging the validity of these measures has been filed by the Association of Research-Based Pharmaceutical Companies (AIFD) in Turkey. The hearing was held in October 2019 and followed by a verdict in favor of SSI. AIFD has appealed the verdict, which is currently pending. In April 2019, the EU initiated a WTO dispute raising the inconsistency of this measure with Turkey's national treatment obligations, among other commitments. Following the end of the consultation period, the WTO Dispute Settlement Body agreed to establish a panel in September 2019. Briefings were completed by the end of June 2020 and a decision is expected in the second half of 2021.

The vast majority of medicines sold in Turkey are distributed through the SSI reimbursement list, and exclusion from this list effectively bars market access for these products. Turkey's forced localization measures could have significant long-term consequences for the ability of U.S. biopharmaceutical companies to operate in Turkey and for patient access to medicines.

<u>Arbitrary and Discriminatory Pricing and Reimbursement Policies</u>

In Turkey, pharmaceutical pricing is regulated by TITCK under the Decree for Pricing of Medicinal Products For Human Use, which sets prices at a discount below the lowest price in a basket of five European countries (France, Portugal, Spain, Italy and Greece) and the country of origin. In addition, TITCK uses an artificial fixed exchange rate instead of a market-based exchange rate to convert the value of the Euro into local currency. Over the last couple of years, TITCK has begun to annually adjust the fixed Euro/Turkish Lira exchange rate used to set prices under the Decree. However, per this Decree, the fixed exchange rate is currently set at 60 percent of the preceding year's actual exchange rate, automatically building in further discounts for the Turkish Government. To exacerbate the problem, Turkey has moved the goal posts over the past two years, with the percentage coefficient not being met in 2018 and being changed from 70 percent to 60 percent in 2019. While the exchange rate was updated in February 2020 based on the new 60 percent coefficient, biopharmaceutical companies are confronted with uncertainty of the likelihood and parameters of the update every year.

By definition, Turkey's artificial fixed exchange rate discriminates not only against pharmaceuticals – the only sector subject to this fixed exchange rate – but also against imported pharmaceuticals contrary to Turkey's national treatment obligations. Whereas prices for imported products are determined based on the fixed exchange rate, domestic

²⁴⁴ See, e.g., the General Agreement on Tariffs and Trade (GATT), Art. III:4 (requiring that imported

Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) (requiring that "patents shall be available and *patent rights enjoyable without discrimination as to* the place of invention, the field of technology and *whether products are imported or locally produced*" (emphasis added)).

products "shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements"), as incorporated into Article 2.1 of the WTO Agreement on Trade-Related Investment Measures. Compelling manufacturers of patented pharmaceuticals to produce locally in order to remain or be added to the reimbursement list as part of the fifth phase of implementation of this policy would also be inconsistent with Article 27.1 of the WTO

manufacturers of innovative products that are only available in Turkey and for which there is no international reference product available would be permitted to negotiate prices directly with the MoH based on clinical and economic evidence. The practice also appears inconsistent with Article II:3 of the Bilateral Investment Treaty (BIT) between U.S. and Turkey, which requires that investments "shall at all times be accorded fair and equitable treatment and shall enjoy full protection and security in a manner consistent with international law." Failure to update the exchange rate to reflect the actual exchange rate at the time of calculation has undermined the U.S. biopharmaceutical industry's "legitimate expectations" as to the how prices would be calculated. It is also "tantamount to expropriation," in that it substantially deprives the U.S. pharmaceutical industry of the reasonably-to-be-expected economic benefits of its investments in Turkey to the obvious benefit of the Turkish Government, contrary to Article III:1 of the U.S.-Turkey BIT.

The public reimbursement system is based on a positive list and reimbursement decisions are made by the inter-ministerial Reimbursement Commissions, led by the SSI under the Ministry of Family, Labor and Social Services (MoFLSS). The reimbursement decision process lacks transparency and is not subject to clearly defined decision criteria. Further, contrary to best practices in health technology assessment, the process is not based on pre-defined evaluation criteria, does not require the publication of an official medical evaluation report to support the assessment and does not consider the perspectives of patients, physicians and other relevant stakeholders. Companies requesting reimbursement are required to submit a cost-effectiveness analysis, but the assessment of these submissions is opaque. Further, on the rare occasion that a company receives a formal written decision, it is a simple one-page document stating acceptance or rejection, without any explanation of the grounds upon which the decision was made.

The government's insufficient budget allocated to the health care system, especially for medicines, fuels the problems describe above and remains a major concern for PhRMA member companies. Compared to other OECD countries, of which Turkey is a member, the government's budget does not support an innovative health care ecosystem and patient needs. In 2019, Turkey's health care spending as a percentage of GDP was the lowest among OECD countries at just 4.4 percent.

Pharmaceutical Product Registration

Marketing of new medicines in Turkey is governed by the regulatory procedures prescribed by the TITCK affiliate of the MoH. The data and documents required to register products are listed in the MoH's Registration Regulation of Medicinal Products for Human Use (Registration Regulation).²⁴⁵ Although this regulation requires TITCK to assess and authorize the registration of medicinal products within 210 days of the product's dossier being submitted, and efforts have been taken to improve the regulatory process, a 2020 survey by AIFD indicates that the median regulatory approval period is 377 days for high

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²⁴⁵ Official Gazette No. 25705 (Jan. 19, 2005) (Registration Regulation).

priority products, 435 days for prioritized products and 938 days for products in the normal prioritization category. Furthermore, without additional resources to complete product registrations, expediting certain applications over others only further delays the review time for those applications not receiving prioritized attention. To partially mitigate these delays, industry is requesting that prioritized products are also included in the scope of the parallel GMP and registration application, similar to highly prioritized products.

The delays at TITCK have been compounded by the fact that between November 2019 through to August 2020 the Scientific Advisory Commissions did not operate. While new Commission members were recently appointed and the Commissions resumed meeting in August 2020, the frequency of their meetings is very limited due to COVID-19. TITCK estimates that there are approximately 2,000 registration dossiers pending, approximately 1,000 of which are for priority designated products. Considering the significant backlog, TITCK has become reluctant to issue further prioritization decisions as the agency fears it will not have the necessary resources to assess the applications. Recognizing that even prior to COVID-19 TITCK was reviewing approximately 700-750 marketing authorization processes per year, it is clear that it will take many years to reduce this backlog unless TITCK recruits more members to the Commissions and allows for reviews through electronic means, which requires effective and secure infrastructure to safeguard confidentiality. While TITCK has committed to work on such solutions, progress has been limited to date. The biopharmaceutical industry representatives have repeatedly showcased examples of solutions implemented in other countries to ensure continuity of registration operations during the COVID-19 pandemic, but TITCK has so far insisted on implementing their own solution. Accelerated and flexible regulatory pathways (reliance, verification, mutual recognition etc.) are needed to reduce the backlog. In addition, due to the pandemic, TITCK announced Emergency use Approval requirements in December 2020 for COVID-19 vaccines; a similar approach should be taken for COVID-19 therapies as well.

In May 2016, TITCK published a "Guideline for the Operating Procedures and Principles of the Priority Evaluation Committee of Medicinal Products for Human Use" and PhRMA's member companies appreciate TITCK's efforts to create an expedited pathway for product registration. While not included in the May 2016 TITCK document, the agency is inappropriately requiring companies to commit to a specific retail and public sale price and to estimate the number of SKUs that will be sold at the time the company submits its prioritization application.

TITCK is also in the process of updating the Registration Regulation to achieve harmonization with the relevant legislation of the EU. While the initial draft was promising, subsequent amendments raise a number of concerns, including (1) no provisions to bring Turkey's RDP mechanism into line with EU practices; (2) vague definition of manufacturing sites; (3) inadequate clinical trial data requirements for combination products; (4) redefinition of "generics" as "equivalent," blurring the lines between these

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²⁴⁶ Based on AIFD Survey 2020.

distinct terms; and (5) deviation from global best practices to reduce the standards for biosimilars.

Promisingly, on May 27, 2020, TITCK was accepted as a full member of the International Council for Harmonisation (ICH). The ICH provides valuable work toward harmonizing international drug development and regulatory standards. In light of TITCK's commitment to act as a full ICH member, it is important that this Regulation meets international standards.

Local Inspection Requirements and Delays

The MoH's revisions to the Registration Regulation have compounded the country's registration delays. ²⁴⁷ Effective March 1, 2010, a GMP certificate that is issued by the Turkish MoH must be submitted with each application to register a medicinal product for each of the facilities at which the product is manufactured. The GMP certificate can only be issued by the MoH following an on-site inspection by Ministry staff, or by the competent authority of a country that recognizes the GMP certificates issued by the Turkish MoH. However, for the reasons explained further below, neither option can be completed in a timely manner.

Despite increasing the number of inspectors at the end of 2013, the MoH still does not have adequate resources to complete these GMP inspections in a timely manner, with a median inspection period of 309 days for highly prioritized products (GMP 1).²⁴⁸

On a positive note, the TITCK's 2018-2022 Strategic Plan stipulates that the Agency is responsible for accelerating the GMP inspection and certification processes of priority medicines which are needed on the market within 1 year. However, the absence of strategic performance indicators for products prioritized by TITCK may give rise to uncertainty in the GMP inspection processes of these products.

Furthermore, although the Amended Registration Regulation permits applicants to submit GMP certificates issued by competent authorities in other countries, it does so only to the extent that the pertinent country recognizes the GMP certificates issued by Turkey. While PhRMA commends Turkey for joining PIC/S in January 2018, this is but the first of many steps that will be required before Turkey could enter into mutual recognition agreements with the United States and other trading partners. Until mutual recognition agreements are in place, Turkey, at a minimum, should allow for parallel processing of the GMP review and the review of the registration submission.

On June 2020, TITCK announced Supplementary Measures to be Applied During the Pandemic regarding GMP Inspections and Certifications. According to the

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²⁴⁷ Regulation to Amend the Registration Regulation of Medicinal Products for Human Use, Official Gazette No. 27208 (Apr. 22, 2009) (Amended Registration Regulation); MoH, *Important Announcement Regarding GMP Certificates*, (Dec. 31, 2009) (establishing an implementation date for the GMP certification requirement).

²⁴⁸ Based on AIFD Survey 2020.

announcement, highly prioritized products will be subject to file-based inspections instead of physical inspections. This approach should be extended to all submissions regardless of classification.

Financial Impact Projection Request in GMP and Registration Prioritization Applications

TITCK recently began to request a "two-year financial impact projection" in their assessment process for "prioritization of good manufacturing practices (GMP)" and "prioritization of registration" applications for innovative products. Prioritization of GMP and registration inspections should be based on a clinical and technical evaluation based on scientific data, not the proposed price of the drug or its price in other markets (particularly when prices in other countries may not yet be available or indicative of the actual price/appropriate price in Turkey). Industry is concerned that, given the difficulties in obtaining the information needed for the budget impact projection, this requirement also results in further delays in prioritization and overall registration decisions. Such projections may also be inadequately used as a cost-containment tool, thus delaying the launch of innovative medicines developed by U.S. biopharmaceutical companies in Turkey.

Orphan Drug Guidelines

Since 2009, the MoH has been developing a pathway for orphan medicines in Turkey. Although there have been some successful workshops to progress the issue, there remains no published pathway. In August 2015, the Ministry of Science, Industry and Technology (MoSIT) published an in-depth analysis of the impact of rare diseases on Turkey's population in its "Pharmaceutical Sector Strategy and Action Plan of 2015." This study called for the creation of a national orphan drug policy. The innovative pharmaceutical industry looks forward to working with key stakeholders, including the MoH, SSI, MoSIT, Ministry of Trade, Ministry of Industry & Technology, Ministry of Treasury and Finance and civil society organizations, to establish a market access pathway and appropriate incentives to facilitate the development and commercialization of medicines to treat rare diseases and thereby better ensure that Turkish citizens have access to the medicines they need. As part of this process, it will be critical for Turkey to define rare diseases and orphan drugs based on international best practices, including current EU prevalence standards.

UKRAINE

PhRMA and its members are highly troubled by the reintroduction of proposed intellectual property legislation that would impose impermissible exclusions on patent-eligible subject matter as well as restrictive patentability criteria. As the Government of Ukraine begins to roll-out national health care insurance and drug reimbursement to its population, PhRMA member companies believe that expanding limited reimbursement lists, bolstering the inadequate medicines budget (which is below the level requested by the Ministry of Health (MoH) and required by law), and reforming its discriminatory and non-transparent procurement practices are essential.

Key Issues of Concern:

- Adoption of new intellectual property law: Intellectual property policies and laws
 in Ukraine are not certain or predictable. Following years of considering various
 bills seeking to overhaul Ukraine's intellectual property law, the Verkhovna Rada
 recently approved Law 816 "on Amending Certain Legislative Acts of Ukraine on
 Patent Law Reform". That Law appears to introduce impermissible patentable
 subject matter exclusions, restrictive patentability criteria and inappropriately
 allows for export and stockpiling during the supplementary protection certificate
 (SPC) term.
- Limited reimbursement list and inadequately funded medicines budget: Patients in Ukraine largely pay out-of-pocket for most medicines due to inadequate hospital funding and an extremely limited out-patient reimbursement list that is not set to expand nor clearly consider new products. A new system of health technology assessment to guide reimbursement list decisions is in an early stage of development and is expected to be launched in 2021.
- Public procurement system challenges and reform: Public procurement of
 medicines has long been a major challenge in Ukraine as procurements are riddled
 with duplication, corruption, inefficiency and conflict of interests due to multiple,
 non-harmonized lists that lack transparency and favor local producers. Recent
 reform efforts promise to restructure and modernize the system, although
 considerable work is needed.

For these reasons, PhRMA requests that Ukraine remain on the **Priority Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Proposed Intellectual Property Law

PhRMA members are concerned with the unpredictability and uncertainty created by August 16, 2020 amendments to Ukraine's Patent Law. The Law appears to introduce impermissible patentable subject matter exclusions, restrictive patentability criteria, and vague patent term restoration procedures.

TRIPS Article 27 requires that patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that an invention is new, involves an inventive step, and is capable of industrial application. Article 7 of Ukraine's Patent Law, however, provides that "new forms of a medicinal product known from the state of the art, including salts, compound esters, simple ethers, compositions, combinations and other derivatives, polymorphs, metabolites, pure forms, particle sizes and isomers are not patentable unless they differ significantly in efficacy. This article appears to impermissibly introduce restrictive patentability criteria for biopharmaceutical inventions, contrary to the commitments made in TRIPS Article 27.

Furthermore, while PhRMA and its member company commend Ukraine for establishing an SPC system to compensate for a portion of the lengthy development and marketing approval process (akin to patent term restoration (PTR) in the United States), it is disappointing that the Law does not grant the full patent protections that PTR is intended to provide. Specifically, the Law appears to grant exceptions to the patent rights during the SPC term to allow for "manufacture for export" throughout the SPC term and stockpiling during the last 6 months of the SPC term. This is not consistent with the fundamental purpose of PTR, which is to restore a portion of the patent term – and <u>all</u> of the rights that patents provide – that was lost due to the lengthy development and marketing approval process. In addition, Art. 271, it. 1, para 4 of the new Ukrainian Patent Law stipulates that an SPC may only be granted if the request for a marketing authorization in Ukraine is filed within one year of first global approval. This condition unduly restricts the scope of products that will be eligible for SPCs in Ukraine.

Market Access

Limited Reimbursement List and Inadequately Funded Medicines Budget

PhRMA members companies welcome Ukraine's pivotal new national health care reform law signed in January 2018, 2018-VIII, "On state financial guarantees of medical care of the population," which established the National Health Service of Ukraine (NSZU) to provide mandatory national health care insurance and reimbursable medicines for its population. In April 2020, the second stage of the national health care reform took effect, which focused on the public hospital funding mechanism.

Although the law requires the government to pay for medicines used during inpatient care, due to the government's failure to provide appropriate funding for public-

sector hospitals, many patients are nevertheless forced to pay for these treatments out-of-pocket. Moreover, the vast majority of citizens with national health care currently pay out-of-pocket for outpatient medicines, although a pilot reimbursement scheme was launched in April 2017 for essential medicines for cardiovascular conditions, type 2 diabetes, and asthma (a total of 23 products in 2020). While the pilot was expected to expand to other therapeutic areas based on a transparent evaluation of products relevant to include in the list, this has not occurred yet. Moreover, the pilot has been focused on domestic manufacturers. Due to the COVID-19 pandemic, changes are expected no earlier than 2021.

Ukraine is the only European country in which patients pay out-of-pocket for most medicines. While PhRMA members understand the budgetary pressures that Ukraine faces as it rolls out national health care insurance, we urge the government to expand its reimbursement list in a transparent and predictable manner, reduce the complexity and time required for listing decisions, and make appropriate budgetary allocations to support the modernized health system it seeks to create.

Public Procurement System Challenges and Reform

Public procurement of medicines has long been a major challenge in Ukraine as procurements are riddled with duplication, corruption, inefficiency and conflict of interests due to multiple, non-harmonized lists that favor local producers and lack transparency. Moreover, the bidding process is often delayed and lengthy, which can subsequently create challenges for the timely manufacturing and supply of medicines.

The Ministry of Health (MoH) began work to reform the procurement system in 2015 by shifting larger centralized procurements to relevant international organizations (e.g., UNICEF, Crown Agents and UNDP). MoH established a working group on reforming the system of procurement of medicines and medical products, and in August 2018, the Cabinet of Ministers established the Central Procurement Organization (CPO) to procure medicines and medical products at local, national and international levels using longer-term framework agreements and e-procurement tools.

MoH also announced the introduction of managed entry agreements for innovative medicines. However, the new system involving the CPO, as well as the older model with international organizations, covers only a very limited portion of purchases. This reflects an inconsistent approach to the management of public health needs and generates opportunity for duplication, corruption and inconsistent standards.

Nonetheless, PhRMA is encouraged by this work and recent draft legislation to reform public procurement. We urge the MoH to monitor performance to ensure that the country's renewed approach to procurement eliminates corruption, minimizes inefficiency, facilitates transparent criteria and decision-making, reflects patient needs, and encourages a level playing field for local and foreign producers.

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ARGENTINA

PhRMA and its member companies operating in Argentina continue to face longstanding market access barriers and serious intellectual property (IP) issues. While the previous administration had signaled willingness to address significant IP concerns related to patentability and regulatory data protection (RDP), this willingness did not result in the initiation of reforms and IP issues remain a matter of concern. Regulatory reforms by the sanitary authority that brought Argentina closer to international standards and reduced clinical trials approval times are already attracting investment in early phase trials. Although general registration and evaluation regulations for biopharmaceutical products exist, some complementary regulations are missing and the established evaluation deadlines are not being met, thus generating legal and business uncertainty for companies.

Key Issues of Concern:

- Restrictive patentability criteria: The Argentine Government amended its criteria for granting pharmaceutical patents in 2012. A joint regulation issued by the Ministries of Health and Industry and the Argentina Patent Office (Instituto Nacional de la Propiedad Industrial or INPI) established guidelines that significantly limit the type of pharmaceutical inventions that can be patented. These guidelines are contrary to Argentina's obligations under the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and have led to the rejection of many pharmaceutical patent applications.
- Regulatory data protection failures: Argentina does not provide protection for regulatory test data, as required under TRIPS. Specifically, Law 24,766 and Decree 150/92 permit Argentine officials to rely on data submitted by originators to approve requests by competitors to market similar products.
- Compulsory licensing: On December 21, 2019, the Argentine Congress passed economic emergency legislation that, among other things, raises the risk of compulsory licenses of patents in Argentina. Article 70 of the new law empowers the Ministry of Health to establish a mechanism to monitor the prices of medicines and to utilize measures such as compulsory licensing against "problems of availability or unjustified or irrational price increases."
- Flawed cost containment measures: In recent months the Argentine Government has made several statements regarding their plans to establish price controls for "high-cost" medicines through an international reference pricing (IRP) methodology. Because this methodology limits the flexibility and adaptation of prices to local market conditions, among other reasons, the biopharmaceutical industry does not consider this tool appropriate for achieving competitive prices and improving patient access to innovative medicines.

For these reasons, PhRMA requests that Argentina remain on the **Priority Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Restrictive Patentability Criteria

In 2012, the Argentine Government published a regulation that significantly narrowed the scope of chemical compounds and compositions that can be patented, leading to the rejection of many pharmaceutical patent applications. The regulation contemplates that similar limitations could be added in the future for "pharmaceutical biological inventions."

The regulation (Nos 118/2012, 546/2012 and 107/2012), issued jointly by the Ministries of Health, Industry and INPI sets out Guidelines for Patentability Examination of Patent Applications on Chemical and Pharmaceutical Inventions. It expressly states that pharmaceutical patents are not available for compositions, dosages, salts, esters and ethers, polymorphs, analogous processes, active metabolites and pro-drugs, enantiomers, and selection patents. Also, the ability to describe and claim an invention using Markush-type claims is severely limited.

The imposition of additional patentability criteria for pharmaceutical patents beyond those of demonstrating novelty, inventive step and industrial application is arbitrary and inconsistent with Articles 1 and 27.1 of TRIPS, as well as Argentina's obligations under its bilateral investment treaty with the United States. While the prior Argentine administration recognized that the guidelines and resolution are problematic, it did not take action to reform them, and the current administration has not indicated that reform is part of its political agenda.²⁴⁹

In 2015, the INPI passed Resolution 283/2015 which narrows the patentability of certain biotechnological inventions, including inventions based on nucleotide or amino acid sequences. The resolution also expands the scope of subject matter that is not patentable to include genetically modified organelles. These and other restrictions in Resolution 283/2015 potentially create an unprecedented class of inventions that are excluded from patentability.

pharmaceutical patent applications. That complaint is still pending.

²⁴⁹ On June 6, 2012, CAEMe, joined by over 40 innovative biopharmaceutical companies, filed an administrative petition seeking to invalidate the Joint Resolution. That administrative review petition was dismissed on April 5, 2013. On August 30, 2013, CAEMe filed a civil complaint in federal court challenging the Joint Resolution, the administrative review dismissal, and application of the Guidelines to

Regulatory Data Protection Failures

Biopharmaceutical innovators work with hospitals, universities and other partners to rigorously test potential new medicines and demonstrate they are safe and effective for patients who need them. Less than 12 percent of medicines that enter clinical trials ever result in approved treatments.²⁵⁰

To support the significant investment of time and resources needed to develop test data showing a potential new medicine is safe and effective, governments around the world protect that data submitted for regulatory approval from unfair commercial use for a period of time. WTO members considered such protection so important to incentivize biopharmaceutical innovation that they established a TRIPS provision (Article 39.3) requiring each country to safeguard regulatory test data for a period of time after the approval of a new medicine in that country.

Argentina was among the countries that crafted that provision, but has so far failed to provide protection of test and other data in a manner consistent with its international obligations. Indeed, Law No. 24,766 and Decree 150/92 allow Argentine officials to rely on data submitted by innovators in other markets to approve requests by competitors to market similar products in Argentina. The Law provides no period of protection against reliance and does not define key terms including "dishonest" use.

Weak Patent Enforcement

A critical tool to protect against irreparable harm from the loss of IP is the ability to seek a preliminary injunction to prevent the sale of an infringing product during litigation. Preliminary injunctions become all the more important when there are no other effective mechanisms to facilitate early resolution of patent disputes.

Articles 83 and 87 of Law No. 24,481 on Patents and Utility Models provide for the grant of preliminary injunctions. These Articles were amended in 2003 by Law 25,859 to fulfill the terms in the agreement to settle a dispute between the United States and Argentina (WT/DS171/13). The agreed-upon terms were intended to provide, under certain conditions, effective and expeditious means for patent owners in Argentina to obtain relief from infringement before the conclusion of an infringement trial. Unfortunately, these terms, as implemented in the Argentine legal system, have not had the intended effect. Member companies have reported that the process of obtaining injunctive relief has become very lengthy and burdensome, thereby denying the relief that they were intended to provide.

²⁵⁰ DiMasi JA, Grabowski HG, Hansen RW; Tufts Center for the Study of Drug Development. Innovation in the pharmaceutical industry: new estimates of R&D costs. In: Briefing: Cost of Developing a New Drug, available at

https://static1.squarespace.com/static/5a9eb0c8e2ccd1158288d8dc/t/5ac66afc6d2a732e83aae6bf/1522952963800/Tufts_CSDD_briefing_on_RD_cost_study_-_Nov_18%2C_2014..pdf (last visited Jan. 27, 2021).

A visible regulatory process on the status of regulatory submissions could help anticipate and mitigate potential patent infringements. Regulatory approvals are only made public at the end of the process, but they are mostly notified with delays and sometimes even after the marketing authorization is granted.

Further, the procedures for enforcing patents and seeking damages are ineffective due to the lengthy judicial process and inadequate damages awards that do not make the patent holder whole. These impediments eviscerate the value of patents in Argentina.

Patent Backlogs

The ability to secure a patent in a reasonable period of time is critical to attracting investment in the research and development needed to create new medicines and bring them to patients who need them. Patent backlogs hinder innovation by creating uncertainty and significantly raising investment risk.

Patent application delays can be lengthy in Argentina, where life science innovators wait an average of 6.6 years for patents to be granted. ²⁵¹ According to some estimates, the overall patent backlog is approximately 21,000 applications. Argentina's patent law does not provide for patent term adjustments to compensate for unwarranted delays in the examination of patent applications. Although the Argentine Patent Office implemented a Patent Prosecution Highway (PPH) mechanism under Regulation P-56/2016 in order to accelerate the examination process, restrictions on the application of this mechanism make it inapplicable to patent applications for pharmaceutical products.

To address this challenge, Argentina should open the PPH mechanism to all inventions, including innovative pharmaceutical products. In addition, Argentina should accede to the Patent Cooperation Treaty (PCT), a step that would facilitate the filing and examination of patent applications in Argentina as it does now in more than 152 Contracting Parties. While the Argentinian Congress has long-considered accession to the PCT, no final action has yet been taken. Accession to the PCT could allow Argentina to reduce its current patent application backlog and use the PCT system to lower filing costs and reduce the review period for future patent applications. Indeed, it is noteworthy that there are concrete examples where Argentine national institutions, such as the National Scientific and Research Council (Consejo Nacional de Investigaciones Científicas y Técnicas, or CONICET), have established a mechanism to access PCT in order to pursue the recognition of the Argentine inventions in other countries. It is time, therefore, that Argentina extends the benefit of acceding to the PCT to innovators in other countries.

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²⁵¹ Schultz M. and Madigan K, The Long Wait for Innovation: The Global Patent Pendency Problem, CPIP (2016), available at https://sls.gmu.edu/cpip/wp-content/uploads/sites/31/2016/10/Schultz-Madigan-The-Long-Wait-for-Innovation-The-Global-Patent-Pendency-Problem.pdf (last visited Jan. 27, 2021).

Compulsory Licensing

Among other things, the economic emergency law passed by the Argentine Congress in December 2019 (Law 27541, "Social Solidarity and Productive Reactivation") empowers the Ministry of Health to establish a compulsory or mandatory licensing mechanism, or to directly import certain medicines, to address potential problems caused by unjustified or unreasonable price increases that affect the population's access to medicines in a way that could put their health at risk.

Empowering the Ministry of Health to establish new mechanisms of compulsory licensing will undermine the incentives for innovators to develop and bring new therapies to Argentine patients, and will lead to greater uncertainty and potential legal challenges. Moreover, such a mechanism appears to encourage additional use of compulsory licensing in a manner that will not only undermine patient access to new medicines but also appears inconsistent with Argentina's international obligations.

Market Access Barriers

Flawed Cost Containment Measures

In recent months the Argentine Government has made several statements regarding their plans to establish price controls for "high-cost" medicines through an international reference pricing (IRP) methodology. As a general matter, IRP suffers from serious flaws as a mechanism for biopharmaceutical pricing. It assumes similarity across all countries in the reference basket and implicitly imports the pricing policies of those countries without accounting for circumstances that justify price differentiation. Importantly, IRP ignores the local value of the product, patient benefits and physician requirements, existing standards of care, placement within the health care system, patterns of disease burden, socioeconomic factors, stage in the pharmaceutical life cycle, etc. IRP also ignores circumstances unrelated to a product's value such as budget overruns in reference countries that lead to mandatory price cuts. For these reasons, the biopharmaceutical industry does not consider IRP appropriate for achieving competitive prices and improving patient access to innovative medicines in Argentina.

Discriminatory Reimbursement Policies

On October 1, 2015, the Ministry of Health and the Secretary of Commerce issued Joint Resolutions 1710 and 406, which establish a preferential reimbursement system for national generics and biosimilar products. These resolutions provide that Health Insurance Agents must give preference to Argentine products available in the market that have the same active ingredient or that are biosimilar to those originating abroad. This resolution is subject to the condition that the final selling price of the Argentine products must be significantly lower than the average price of similar products of foreign origin.

Key terms remain undefined, and while these policies have yet to be applied the reimbursement system appears to be inconsistent on its face with international biosimilar

guidelines (providing that biosimilars cannot be automatically substituted for the original biologic) and Argentina's national treatment obligations under the WTO General Agreement on Tariffs and Trade.

In addition, provisions of the "Buy Argentine and Development of Suppliers (27.437)" policy further restrict market participation in Argentina for foreign innovators. Foreign companies are required to submit "Productive Cooperation Agreement Proposals" (ACPs) in order to participate in public tenders – including details on their relationships with subcontracting companies, direct investment, technology transfer or other capacity building programs. Argentina's Instituto Nacional de Servicios Sociales para Jubilados y Pensionados (INSSJP), the agency that oversees health insurance for retirees, has recently granted preferential commercial conditions in its pharmaceutical purchasing agreements to local products on the grounds introduced by Law No. 27,437.

BRAZIL

PhRMA and its member companies operating in Brazil recognize the efforts of the Brazilian Government to liberalize economic opportunities by attracting foreign trade and investment. The current government has a tremendous opportunity to address long standing issues facing the industry in Brazil, including, restrictive patentability criteria and procedures, the lack of regulatory data protection (RDP) and government pricing policies. PhRMA and its member companies strongly support further strengthening of trade ties to resolve these issues. Absent comprehensive negotiations, however, ongoing trade and investment discussions between the United States and Brazil, and Brazil's ambition to join the OECD present important near-term opportunities to resolve these concerns.

Key Issues of Concern:

- Patent backlogs: With around 100,000 patent applications pending at INPI, Brazil's patent backlog still exceeds 10 years (and is even longer for pharmaceuticals), hindering innovation and significantly raising investment risk. We welcome INPI's recent efforts to tackle this examination backlog and look forward to its successful implementation. In 2019, Brazil announced a series of resolutions and plans to increase the efficiency of patent prosecution in Brazil. These include INPI's "Plan to Tackle Patent Backlog," which aims to reduce the current backlog by 80 percent and to examine new patent applications within two years from the applicant's examination request. PhRMA supports mechanisms to compensate for unreasonable patent examination delays. Article 40 of Brazil's IP Law is one example of the types of safeguards against undue patent office delays. Finally, we commend INPI's recently announced technology-neutral Patent Prosecution Highway (PPH) pilot program and hope to see that work expanded in the future.
- Restrictive patentability criteria and procedures: Since 1999, Article 229-C of Brazil's Patent Law has been interpreted to permit the health regulatory agency, the Brazilian National Health Surveillance Agency (ANVISA), to review all patent applications for pharmaceutical compound and/or process inventions. That article created a dual patent examination process for pharmaceutical inventions, resulting in both: contradictory and/or additive patentability requirements to those established by Brazilian Patent Law and adopted by the Brazilian Patent Authority (INPI); and duplicative, prolonged patent reviews that contribute to the existing patent backlog. Under the terms of regulatory changes adopted in 2017, ANVISA's opinion on the patentability of new biopharmaceutical inventions are no longer binding on INPI. This is a welcome step, but does not end Brazil's "dual examination" system. In addition, the Federal Prosecutor's Office has challenged the 2017 ANVISA regulatory changes and that challenge is pending review.

- Lack of regulatory data protection: Although Brazil applies RDP for veterinary, fertilizer, and agrochemical products, the same protection is not provided to biopharmaceutical products.
- **Regressive taxes on medicines**: Combined federal and state taxes add up to 31 percent to the cost of medicines in Brazil, one of the highest tax burdens on medicines in the world compared to the global average of 6 percent. ²⁵² Proposals to eliminate taxes on certain products including medicines have previously lapsed. Fortunately, much-needed tax reforms which would lower costs to patients, boost productivity and encourage investment are being considered by the government and present an opportunity to address these concerns.
- Restrictive government pricing, access and reimbursement policies: Brazil's policies create market access barriers for PhRMA member companies and prevent timely patient access to new treatments and cures. Key challenges include delayed pricing decisions, government price ceilings on medicines sold to private and public purchasers as a condition of market entry, price increases capped below inflation despite rising production costs, and rigid requirements by the National Committee for Technology Incorporation (CONITEC) that prevent more flexible and value-based approaches to evaluating and paying for health care. While CONITEC has recently begun to adopt certain transparency measures, without further reforms access and reimbursement policies in Brazil will continue to be a concern.
- Product Development Partnerships (PDPs) and government purchasing: Brazil has developed a regulatory framework for the establishment of PDPs. While this framework provides improved transparency, Brazil still lacks clear rules regarding the purchasing preferences offered to PDPs. In addition, while the Ministry of Health (MoH) is tasked with reviewing and approving PDPs, it can nevertheless approve a PDP submitted by a third party for products with a valid patent in Brazil although it is restricted from purchasing that product through the third party.

For these reasons, PhRMA requests that Brazil be placed on the **Priority Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

²⁵² Brazilian Institute of Tax Planning, 2018.

Intellectual Property Protection

Patent Backlogs

While PhRMA recognizes efforts underway at INPI to reduce the patent backlog, delays in patent grants (compounded by the dual examination process noted above) reduce the incentive for companies to bring innovative products to Brazil.

With around 100,000 patent applications pending at INPI, Brazil's patent backlog still exceeds 10 years (potentially longer for pharmaceuticals), hindering innovation and significantly raising investment risk. In June 2019, INPI published a new "fast track" resolution to standardize and increase efficiency within patent processing. In July 2019 INPI announced a new "Plan to Tackle Patent Backlog," aiming to reduce the current patent backlog by 80 percent within the next two years, and to complete the examination process for new patent applications within two years from the applicant's examination request.

PhRMA fully supports INPI's plan to tackle its patent backlog and suggests that the U.S. Government should support the Brazilian Government in fully implementing this plan. Brazil's recently announced technology-neutral PPH pilot program between INPI and major IP offices, including the United States, is highly encouraging. We look forward to working together with the Government of Brazil to expand fully that pilot program.

Regardless, however, of these efforts, the existing patent backlogs and the potential for future patent office delays underscore the need for mechanisms to ensure the preservation of a portion of the patent term. Article 40 of the Brazil's Patent Law provides such a mechanism, and serves as an important backstop against other weaknesses in Brazil's IP regime. Specifically, Brazilian Patent Law 9,279/96 Article 40 provides that "Patents will be given a 20-year protection from the date of filing" (caput) and "A minimum of ten-year protection will be given from the date of grant". This protection, however, is the subject of a constitutional challenge pending before the Brazilian Supreme Court, the hearing in which has been scheduled for May 26, 2021. Troublingly, reports suggest that the Brazilian Congress may seek to eliminate the minimum 10-year patent protection afforded by Article 40 before the Supreme Court rules on the constitutionality of that provision. PhRMA and its members strongly support retaining Article 40 of Brazil's Patent Law, which critically helps to offset some of the patent examination delays in Brazil.

Restrictive Patentability Criteria and Procedures

A significant problem facing the pharmaceutical industry in Brazil was created by Article 229-C, the 1999 amendment to the Brazilian Patent Law that authorizes ANVISA to conduct reviews of patent applications claiming pharmaceutical products and/or processes that may present a "health risk." This review has been an additional procedure to, and been given equal weight as, the patent examination conducted by INPI.

This "dual examination" is incompatible with Brazil's obligations under the "anti-discrimination" provisions of Article 27.1 of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Until recently, ANVISA did not limit its role to the review of the potential sanitary risk aspects of the subject matter of the patent application but also reviewed the patentability requirements. ANVISA lacks sufficient technical expertise on patentability and its role in reviewing patentability has generated uncertainty for patent applicants and undermined incentives for innovation.

Under the terms of a Joint Ordinance signed in April 2017, and new rules published by INPI in May 2017 and by ANVISA in August 2017, ANVISA may issue opinions on the patentability criteria of new biopharmaceutical inventions, although those opinions are no longer binding on INPI. However, ANVISA opinions are binding for patent applications for biopharmaceutical products and processes which are deemed as presenting a "health risk" (*i.e.*, substances whose use has been prohibited in Brazil). While communications between INPI and ANVISA have improved and biopharmaceutical patent applications are being granted, PhRMA continues to believe that Brazil must end its "dual examination" system and bring its patent system in line with global rules and norms.

In addition, the Brazilian Federal Prosecutor's Office has challenged the 2017 ANVISA amendments and that challenge is pending review.

Lack of Regulatory Data Protection

Brazilian law (Law 10.603/02) provides data protection for veterinary, fertilizer, and agrochemical products, but still does not provide similar protection for pharmaceutical products for human use, resulting in discriminatory treatment. Contrary to TRIPS Article 39, Brazil continues to allow government officials to grant marketing approval for pharmaceuticals to competitors relying on test and other data submitted by innovators to prove the safety and efficacy of their products. Additional efforts are needed to provide certainty that test and other data will be fully protected against unauthorized use to secure marketing approval for a fixed period of time.

PhRMA members continue to seek protection for their data through the judicial system. Although there have been lawsuits seeking to secure a period of data protection for specific products, so far the cases are still pending in the Brazilian courts, leaving innovators without reliable RDP.

National Intellectual Property Strategy

On December 11, Brazil published its National Intellectual Property Strategy. The National Intellectual Property Strategy could be a powerful framework to address longstanding intellectual property concerns and to proactively drive an intellectual property policy agenda that provides innovators the necessary certainty they need to collaborate with partners, support necessary research and development investments, and accelerate the launch of new medicines.

The strategy identifies essential policies related to the life science innovation, including: patent examination and backlog procedures, regulatory data protection, and others. Further initiatives such as the strengthening of the Brazilian PTO and enforcement actors are also provided for in the strategy. We urge Brazil to coordinate with all interested stakeholders including the innovative biopharmaceutical industry as it works to implement its national IP strategy and to clearly define a strategy and map out actions to eliminate the patent examination backlog. A successfully implemented IP strategy should align biopharmaceutical patentability and intellectual property enforcement criteria and procedures with international rules and best practices, including centralizing all patent examination processes within a single competent authority and provide regulatory data protection for biopharmaceutical products.

Market Access Barriers

Regressive Taxes on Medicines

Combined federal and state taxes add up to 31 percent to the cost of medicines in Brazil, one of the highest tax burdens on medicines in the world compared to the global average of 6 percent.²⁵³ Recognizing the significant burden that these high taxes impose on Brazilian patients, the innovative pharmaceutical industry supports the reform proposals under consideration by Brazil's Congress to streamline and even eliminate taxes on medicines.

High tariffs and taxes can prevent access to new treatments for patients that need them. Under the WTO Pharmaceutical Agreement, 34 countries agreed to eliminate import duties on a wide range of medicines and other health products. However, the majority of Latin American economies, including Brazil, are not parties to the WTO Pharmaceutical Agreement. Between 2006 and 2013, the value of worldwide biopharmaceutical trade in countries that are not parties to that Agreement increased at a compound annual growth rate of more than 20 percent. This means that a larger proportion of medicines distributed around the world are potentially subject to tariffs. To help remedy this trend, Brazil should accede to the WTO Pharmaceutical Agreement.

Restrictive Government Pricing, Access and Reimbursement Policies

Brazil's policies create market access barriers for PhRMA member companies and prevent timely patient access to new treatments and cures. Key challenges include government price ceilings on medicines sold to private and public purchasers as a condition of market entry, price increases capped below inflation despite rising production costs, and rigid requirements by CONITEC that prevent more flexible and value-based approaches to evaluating and paying for health care. Time for first access is also a

²⁵⁴ IQVIA (2020). Market Prognosis Country Report: Brazil.

²⁵³ *Id*

²⁵⁵ Banik, N. and P. Stevens, "Pharmaceutical tariffs, trade flows and emerging economies," Geneva Network, Sep. 2015, available at http://geneva-network.com/wp-content/uploads/2015/09/GN-Tariffs-on-medicines.pdf (last visited Jan. 27, 2021).

challenge; although products are supposed to be priced within 180 days, the process typically takes significantly longer, thereby delaying patient access to innovative medicines.

Government Purchasing and PDPs

The Brazilian Government issued Federal Law 12.349/10 in 2010, granting preferences for locally manufactured products and services in public tenders. A price preference of up to 25 percent is automatically applied to locally produced medicines in government tenders. More recently, an amendment to Portaria MDIC 279/11 provided a list of pharmaceutical products eligible for preference margins and defined the parameters for its application in public purchases. While the issuance of Portaria MDIC 279/11 brought more transparency to the purchase process, it still does not adequately define the compensation to be offered by those companies that benefit from this mechanism.

Meanwhile, a new PDP regulation (Portaria 2531/14, subsequently referenced in Consolidation Ordinance no. 5 in 2017) was issued in 2014 with participation of the private sector, which was intended to provide greater transparency and predictability. Since then, the Brazilian Government has announced several PDPs under the new regulation. It remains unclear what criteria were evaluated in assessing and approving these PDPs and the purchasing preferences that will be extended to an approved PDP. In addition, the MoH does not consider or assess relevant intellectual property rights of products that are the object of a PDP application. As a result, the MoH has approved several third-party PDP applications for innovative and patent protected products. Recognizing these shortcomings, Brazil conducted a public consultation in 2018 toward revising PDP requirements, although the resulting updates to the Brazil's PDP ordinance did not progress.

As part of these efforts, in 2019, the MOH held a public consultation with industry to discuss updates to the PDP framework that seek to redefine eligibility criteria and update submission procedures and protocols for governance and monitoring. Nevertheless, the system continues to lack transparency and predictability. More recently, in July 2019, 19 PDP agreements were unexpectedly put into various phases of suspension for a wide range of reasons. Products included medicines to treat hepatitis C, autoimmune conditions and vaccines.

CHILE

PhRMA members are very concerned about recent actions by the National Congress that are pressuring Chile's Government to issue compulsory licenses (CLs) for certain innovative medicines. These developments add to longstanding intellectual property (IP) problems, including Chile's failure to fully implement its patent enforcement and regulatory data protection (RDP) obligations under the U.S.-Chile Free Trade Agreement.

Since October 2019, Chile has faced significant social unrest, which has forced the government to radically review its policy and legislative agenda.

Key Issues of Concern:

- Compulsory licensing: Action is needed to protect American innovation in Chile. Key provisions of the "Medicines II" bill have already been negotiated by legislators and approved by the conference committee, including articles on compulsory licensing. These Articles establish extremely vague and ambiguous grounds for the government and third parties to seek compulsory licenses in Chile. Once the Medicines II bill is finalized, relevant agencies will need to adopt corresponding implementing regulations reflecting the provisions of the new law. Additionally, the Chilean Chamber of Deputies continues to call for compulsory licensing mechanisms relating to COVID-19 technologies, including the passage of a non-binding resolution earlier this year.
- Weak patent enforcement: PhRMA member companies believe that the Chilean Government's draft legislative and regulatory proposals would, if approved by the Chilean National Congress and implemented, represent a step toward compliance with Chile's treaty obligations. Unfortunately, this legislation, introduced in 2012, continues to be unlikely to move forward in the near term.
- Unjustified delays during patent prosecution: Patent applicants are not being adequately compensated for INAPI delays, due to arbitrary interpretations by the TDPI (Industrial Property Court) of what constitutes an unjustified delay during the patent prosecution process.
- Proposed trademark limitations: Chile's Congress is currently considering a bill
 to significantly limit the use of trademarks in all pharmaceutical products packaging
 through proposed amendments to the Medicines II Law. That bill also makes the
 use of the International Non-Proprietary Name (INN) mandatory in drug
 prescriptions and restricts the ability of doctors to prescribe a medicine using its
 corresponding trademark.
- Regulatory data protection: The Chilean Government's enactment in December 2010 of Supreme Decree 107 corrected several deficiencies in Chile's existing

system for protecting proprietary pharmaceutical test data against unfair commercial use and disclosure. The correction of remaining weaknesses, however, will depend upon whether the government makes certain necessary changes to Chile's Industrial Property Law.

For these reasons, PhRMA requests that Chile remain on the **Priority Watch List** in the 2021 Special 301 Report. Further, we urge USTR to provide an opportunity for an assessment of Chile's IP regime through an **Out-of-Cycle Review**, so that the U.S. Government can evaluate progress on these important issues and dedicate the required bilateral attention necessary to make progress on the barriers confronted by U.S. businesses in Chile.

Intellectual Property Protection

Compulsory Licensing

The "Medicines II" bill is pending in a conference committee of the Chilean Congress. However, the conference committee has approved an article which enables the government to issue a compulsory license on vague and ambiguous grounds, such as "inaccessibility." PhRMA and its member companies are concerned about possible adoption of that article, which would be inconsistent with international best practices, and appears to contravene key provisions of the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Once the Medicines II bill is finalized, relevant agencies will need to adopt corresponding implementing regulations reflecting the new law. We urge Chile to implement provisions of the finalized Medicines II bill in a manner consistent with its international obligations.

Moreover, a Congressional resolution was passed by the Chamber of Deputies in early 2020 calling for compulsory licensing of different products related to COVID-19. This is the latest of several politically-driven Congressional resolutions have passed in the last few years through the Chilean Congress calling for the compulsory licensing of innovative medicines that provide a cure for many patients suffering from hepatitis C, among other therapeutic areas:

On January 11, 2017, the Chilean Chamber of Deputies of the National Congress passed Resolution No. 798.²⁵⁶ That resolution calls on the Minister of Health "to incorporate and use the compulsory licensing mechanism provided for in Article 51(2) of the Industrial Property Law N° 19.039 to facilitate [medicines] acquisition at competitive prices."²⁵⁷ It also calls for the prioritization of certain classes of medicines to be considered for compulsory licensing and highlights the alleged price reductions realized by certain countries after issuing CLs on biopharmaceutical products.

Resolution No. 798, Chamber of Deputies, available in Spanish at
 https://www.camara.cl/verDoc.aspx?prmId=4692&prmTipo=RESOLUCION (last visited Jan. 27, 2021).
 Id. (emphasis added) (unofficial translation).

- In addition, the Chamber of Deputies approved Resolution No. 1014 in January 2018, seeking to establish that access to certain hepatitis C medicines is not consistent with the constitutional right to health, thus warranting, they assert, a CL.
- Further, on March 9, 2018, the former Minister of Health issued Resolution 399 declaring that the compulsory licensing of hepatitis C treatments would be justified on public health grounds. In June 2018, the Chamber of Deputies approved Resolution No. 68 requesting the Minister of Health to request directly a CL for hepatitis C medicines. On August 28, 2018, the new Minister of Health issued Resolution 1165 rejecting the patentee's challenge to Resolution 399/2018. As a result of this latest resolution, there remains a heightened risk of a CL being issued in Chile.

The research-based pharmaceutical industry is very concerned that these actions inappropriately expand the scope of the government's compulsory licensing authority to pursue objectives that are not clearly related to legitimate health emergencies.

Weak Patent Enforcement

Notwithstanding the requirement contained in Article 17.10.2 of the U.S.-Chile FTA, Chile has thus far failed to establish a satisfactory mechanism to enable effective patent enforcement before marketing approval decisions are made and implemented. Article 17.10.2 requires Chile to "make available to the patent owner the identity of any third party requesting marketing approval effective during the term of the patent" and "not grant marketing approval to any third party prior to the expiration of the patent term, unless by consent or acquiescence of the patent owner."

During 2011, the Chilean Government indicated to USTR and the innovative pharmaceutical industry its recognition of the need to enact new legislation aimed at establishing an effective patent enforcement mechanism that would bring Chile closer to compliance with its FTA obligations. PhRMA would support a final proposal that:

- Provides sufficient time prior to the grant of sanitary registration of a follow-on product to obtain a final decision regarding the validity or non-infringement of the relevant patents;
- Ensures that the patent holder will have access to the courts to assert its patent rights prior to the grant of sanitary registration for a potentially patent-infringing medicine; and
- Excludes the imposition of additional requirements or conditions that might prove unreasonable or unduly burdensome, and that might discourage reasonable patent enforcement efforts (e.g., excessive bond requirements and disproportionately high fines for declarations subsequently judged to be inaccurate).

PhRMA welcomed the government's work to introduce relevant draft legislation in January 2012. Unfortunately, that legislation has not received any attention since its introduction, and the impact of a lack of effective patent enforcement continues to worsen.

Delays in Granting Pharmaceutical Patents

For many years, applicants for pharmaceutical patents in Chile have had to wait a significant amount of time to obtain final action on their applications by the Chilean patent office. In 2008, the Chilean Government, through the Under Secretariat of Economy and specifically the DPI, issued a special resolution "Circular N° 9," in part to remedy these unacceptably long delays. One of the Circular's stated objectives is to streamline the patent application review process by limiting the number of substantive office actions and facilitating rapid communication between applicants and examiners, thereby enabling it to rule more expeditiously on patent applications.

The administrative and procedural reforms implemented by INAPI to date have decreased waiting times, with most patent applications filed after 2007 receiving a definitive decision within four to five years. Therefore, while PhRMA supports the Chilean Government's work to improve patent application processing times, it believes that some further work must be done to expedite a bit more patent application reviews in Chile. PhRMA commends Chile's recent implementation of a Patent Prosecution Highway (PPH) partnership with USPTO to further improve prosecution time of patent applications.

Furthermore, despite a right granted to applicants in the Chilean Patent Law to request an adjustment to the patent term to offset unjustified delays during the patent prosecution process, applicants are being denied adequate patent term compensation due to arbitrary interpretations by the TDPI of what constitutes "unjustified delay" and narrowly interpreting patent term restoration requests. Without any legal basis for doing so, the TDPI has determined that many types of delays that are outside of the applicants' control are in fact justified, resulting in inadequate patent term restoration in Chile.

PhRMA is hopeful that certain issues regarding patent prosecution, including the application of the three-year prosecution rule, will be addressed by the new Industrial Property Law which is currently pending in the Chilean Congress.

Trademarks

During 2020, a conference committee reconciling the Medicines II bill approved articles that significantly limit the use of trademarks or other "fanciful" designations for any prescribed medicine. A trademark for a medicine designates its source and helps doctors and patients identify the quality, safety, and intrinsic effectiveness of a given product – reputational capital and goodwill that manufacturers strive to build over time. Restricting the use of trademarks for medicines would significantly deviate from the current trademark protection guaranteed in Article 19 of Chile's Constitution and from Chile's multilateral (e.g., WTO TRIPS) and bilateral (e.g., U.S.-Chile FTA) obligations.

In addition, the conference committee approved measures that would severely limit the prescription of medicines based on their trademarked names, by requiring that prescribers use the International Non-Proprietary Names (INNs) instead.

Regulatory Data Protection

Final enactment in December 2010 of Supreme Decree 107 resolved several longstanding concerns of the U.S. Government and PhRMA regarding deficiencies in Chile's RDP system. Nevertheless, Chile's RDP system still contains the following weaknesses, correction of which will likely require amendment of the Industrial Property Law. Specifically:

- RDP is unavailable for certain pharmaceutical innovations (e.g., new uses, formulations, compositions, dosage forms, etc.) that require the presentation of additional clinical test data as a condition of sanitary registration, but that do not involve a new chemical entity not previously registered in Chile;
- Prior voluntary disclosures by the data owner made in the interest of transparency can still justify incomplete recognition or denial of RDP;
- An applicant for sanitary registration must explicitly request RDP and provide a copy of the data for which protection is sought (Art. 4);
- RDP applicants are required to submit sworn statements and other formalities that could conceivably justify denial of RDP if judged to contain technical or procedural errors (Art. 4);
- RDP is only provided to data specifically identified (by title or name) in the sanitary registration application (Art. 6);
- It is not clearly stated that Instituto de Salud Pública de Chile's obligation to not disclose protected data does not expire after 5 years; and
- S.D. 107 (Art. 10) repeats the IP Law's enumeration of various grounds for revocation or denial of the right to exclusive use that are not stated in TRIPS or Chile's bilateral trade agreements with the United States and the EU; these conditions significantly weaken the applicability and usefulness of the available data protection.

Although PhRMA recognizes that enactment of Supreme Decree 107 constituted an advance toward implementation of Chile's obligations regarding data protection under the U.S.-Chile FTA, TRIPS, and other multilateral agreements, it believes that full compliance with these obligations will require additional action by Chile to correct the aforementioned deficiencies.

COLOMBIA

PhRMA member companies face urgent market access challenges and intellectual property (IP) issues in Colombia. Significant market access barriers have arisen from the Colombian Government's adoption of cost containment measures, which aim to address overall health care spending by disproportionately imposing price reductions and budget caps on prescription medicines. Other barriers include Decree 1782 of 2014, which establishes an unprecedented "third pathway" for approval of non-comparable biologics contrary to World Health Organization (WHO) guidelines and accepted standards of the United States and other countries. These standards are essential for ensuring the safety and efficacy of biosimilar products. Moreover, the Ministry of Health and Social Protection (MoH) has begun implementing Article 72 of Law 1753 of 2015, which, as part of Colombia's National Development Plan, would apply price and health technology assessment (HTA) measures for all new medicines before they could be granted marketing approval.

Regarding intellectual property, Colombia's food and drug regulatory authority (INVIMA) recently adopted a new interpretation of the regulatory data protection (RDP) Decree 2085 of 2002. According to that interpretation, INVIMA denies RDP upon approval of some new chemical entities, simply because they share a minor portion of their chemical structure with previously approved products. Additionally, Colombia's Congress is considering draft bills that would expand considerably compulsory licensing mechanisms and require mandatory disclosure of international non-proprietary names of drug molecules in patent applications.

Key Issues of Concern:

- Substandard biologics regulation: On September 18, 2014, Colombia issued Decree 1782, which establishes marketing approval evaluation requirements for all biologic medicines. As part of the Decree, Colombia created an unprecedented "abbreviated" pathway for the registration of non-comparable products, which is inconsistent with WHO guidelines and accepted standards in the United States and other countries and which could result in the approval of medicines that are not safe and/or effective. Industry urged the Colombian Government to remove this third pathway from the Decree but was unsuccessful.
- Cost containment measures focused solely on the biopharmaceutical industry: Government measures to improve the sustainability of the Colombian health system have focused solely on the biopharmaceutical industry and have not addressed broader issues within the pharmaceutical supply chain or other health care sectors. These measures have been developed in an arbitrary, hasty and non-transparent manner that leaves industry unable to plan for transitions. For example, in 2020, the Colombian Government issued regulations to cap the expenditure of innovative medicines not included in the publicly funded Health Benefit Plan (HBP) based on historical levels that would in effect block new

innovative medicines from entering the country. These measures have been criticized for their technical shortcomings by virtually all sectors of the health system and academia.

- Maximum reimbursement values: In 2019, the MoH established reimbursement caps ("Valores Máximos de Recobro" or VMR) for more than one thousand products reimbursed by the government. The maximum reimbursement values correspond to the maximum cost that can be reclaimed from the Administrator of the Resources of the General System of Social Security in Health (ADRES) by the government-sponsored HMO system (EPS). Maximum values per unit for each active ingredient are calculated based on past reimbursement values during the reference period (2015-2018), adjusted for inflation. This formula skews toward lower prices by taking the 25th percentile of these values for multi-sourced products and the 10th percentile for single-sourced products. This reimbursement caps came into effect in May 2019 for 50 medicines and on January 1, 2020, for the remaining group of medicines.
- New drug price regulation methodology: During 2019, the National Drug Pricing Commission began reviewing its regulation methodology in place since 2013. The MoH is expected to make its system of international reference pricing more restrictive by expanding the number of reference countries from 17 to 19, changing the mix of countries to include those that are less supportive of innovation and taking the lowest unit price among groups of products that have important differences in strength, formulation, delivery system and quality. The final methodology was expected to be issued by the end of 2020 for implementation by March 2021. To date, the review process lacks transparency and the MoH has not disclosed next steps or anticipated timelines.
- Increased regulatory barriers under the National Development Plan:
 Colombia's NDP, which was enacted as part of Law 1753 on May 7, 2015,
 undermines recent gains Colombia has made to encourage innovation, delays
 access for Colombians to cutting edge technologies, and is inconsistent with
 Colombia's international commitments. Particular concerns include Article 72,
 which inserts price and health technology assessment (HTA) criteria into the
 regulatory approval process that should be guided by safety, efficacy and quality.
- Compulsory licensing: PhRMA and its members are concerned by ongoing compulsory licensing risks in Colombia. In December 2017, the MoH accepted a Declaration of Public Interest (DPI) petition for review that could lead to the compulsory licensing of the entire class of innovative treatments for hepatitis C. The petition was accepted for review contrary to Colombia's own procedures and appears to provide no justification for such an extreme and drastic action. Recently, a DPI request was made relating to a medication for acute myeloid leukemia. However, that DPI request was abandoned once a price reduction was reached between the Colombian Government and the drug's manufacturer. Most

recently, a bill was introduced in the Colombian Congress calling for automatic compulsory licensing. Although no compulsory licenses have been granted at this time, it remains an issue of deep concern for the industry.

- Regulatory data protection failures: Colombia fails to respect existing legislation that would otherwise provide RDP upon approval of novel pharmaceutical products.
- Restrictive patentability criteria: Contrary to its obligations under the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Colombia does not grant patents for second uses.
- Weak patent enforcement: There is no mechanism in place to provide patent holders with the opportunity to resolve patent disputes prior to the launch of a follow-on product. This has led to the approval and marketing of follow-on products, despite the fact that a patent for the original drug is still in force.

For these reasons, PhRMA requests that Colombia be placed on the **Priority Watch List** in the 2021 Special 301 Report. Further, we encourage the U.S. Government to conduct an **Out-of-Cycle Review** for Colombia in 2021 so it may evaluate the progress on these important issues and dedicate the required bilateral attention necessary to make progress on the barriers confronted by U.S. businesses in Colombia.

Intellectual Property Protection

Compulsory Licensing

On December 20, 2017, the MoH issued Resolution 5246 accepting for review a DPI petition filed by Fundación IFARMA. The petition calls for the compulsory licensing of the entire class of innovative medicines for the treatment of hepatitis C, following a similar petition granted against an innovative cancer medicine in 2016. That earlier petition did not result in the awarding of any compulsory licenses but was resolved through a price reduction for the medicine in question.

Resolution 5246 is both legally and procedurally deficient. It appears to be inconsistent with Colombia's international obligations and aspirations. First, Resolution 5246 is based on a petition that failed to identify the patents for which the DPI is being requested, clearly falling short of the standard set forth in Decree 1074 of 2015 ("Decree"). There is no provision in the Decree that allows for the MoH to unilaterally correct omissions in the petition. On the contrary, Article 2.2.2.24.4 of the Decree expressly places the burden of proof on the petitioner to identify the patented technologies that are supposedly affecting the public interest.

Second, a DPI on a broad category of medicines, namely "antivirals for treatment of hepatitis C" would be baseless for a number of reasons, including that: a) the petition itself identifies an entire class of medicines, a class within which significant competition

already exists; b) hepatitis C drugs were recently the subject of significant price reductions in Colombia, which the Ministry itself has publicly asserted were between 80 and 90 percent; and c) there is no indication that a health-related emergency regarding hepatitis C exists in Colombia. To the contrary, the incidence of hepatitis C is quite low in Colombia.

The MoH could act on this deeply flawed petition at any time, potentially destroying an entire market for a class of innovative medicines developed in the United States. PhRMA urges USTR and other federal agencies to address this serious threat to American innovation through ongoing discussions under the U.S.-Colombia Trade Promotion Agreement.

Regulatory Data Protection Failures

Existing Colombian legislation, Decree 2085 of 2002 (and its subsequent interpretation through a March 2003 joint act signed by the Ministers of Trade and Health), requires that new chemical entities receive a five-year period of regulatory data protection upon approval. Nevertheless, the Colombian regulatory authority INVIMA recently has begun denying regulatory data protection upon approval of some new chemical entities, simply because they share a minor portion of their chemical structure with previously approved products.

This sudden and drastic change in procedure is inconsistent with the requirements of Decree 2085 of 2002 and contrary to the practice in other countries that provide regulatory data protection for such products. Such disregard of existing legislation undermines incentives to conduct clinical trials and develop new biopharmaceutical products in Colombia.

Restrictive Patentability Criteria

The Andean Court of Justice (ACJ) has issued several legal opinions (89-Al-2000, 01-Al-2001 and 34-Al-2001) holding that Andean Community members should not recognize patents for second uses. These decisions are contrary to long-standing precedents and inconsistent with TRIPS Article 27.1. Andean member countries, including Colombia, have chosen to honor their Andean Community obligations, while ignoring their TRIPS obligations.

The failure to provide patents for second uses harms patients by undermining incentives for biopharmaceutical innovators to invest in evaluating additional therapeutic benefits of known molecules (second uses) and provide more effective solutions for unsatisfied medical needs. The ACJ position is dispositive on the issue and no further domestic appeals or remedies are possible.

In addition, Colombia's Congress is currently considering a bill that would force biopharmaceutical innovators to disclose International Non-proprietary Names (INN) in all patent applications and to report INNs for previously granted patents. If it becomes law, this requirement would be inconsistent with Andean Community law.

Weak Patent Enforcement

There is no mechanism in place to provide patent holders with the opportunity to resolve patent disputes prior to the launch of a follow-on product. This has led to the approval and marketing of follow-on products, despite the fact that a patent for the original drug is still in force.

Market Access

Substandard Biologics Regulation

On September 18, 2014, Colombia issued Decree 1782, which establishes marketing approval evaluation requirements for all biologic medicines. As part of the Decree, Colombia has established an unprecedented "abbreviated" pathway for the registration of non-comparable products, which is inconsistent with sanitary and WHO standards and practices in the United States and other countries, and which could result in the approval of medicines that are not safe and/or not effective. Since issuing the Decree, the MoH has issued implementing guidelines, but these guidelines have not served to resolve the fundamental deficiencies of the abbreviated pathway.

PhRMA members participated actively in the public consultations and engaged extensively with MoH and their technical experts, specifically highlighting that the abbreviated "third pathway" created by the Decree is not in line with the WHO guidelines for approval of biologics. In contrast to the Full Dossier Route (for originators) and the Comparability pathway (pathway for Biosimilars) found in WHO guidelines, the "Abbreviated Comparability Pathway" as described in the Decree allows for summary approval of non-comparable products and does not provide adequate controls or any clarity regarding how the safety or efficacy of a product approved via this pathway will be evaluated and assured.

Furthermore, per the Decree, a product approved via the "Abbreviated Comparability Pathway" will use the same non-proprietary name as the innovator, even though any similar biologic product would be a distinct biologic product from that of the originator or other biosimilar products. Assigning identical non-proprietary names to products that are not the same could result in inadvertent substitution of the products, generate a false sense of equivalence or substitutability and would make it difficult to quickly trace and attribute adverse events to the correct product.

The local innovative biopharmaceutical industry association AFIDRO has filed a legal challenge against the Decree, but as yet no decision has been issued. In the interim, industry will continue to work closely with all stakeholders to ensure that the quality of the information submitted for the approval of biosimilars meets international standards for demonstrating the similarity between the biosimilar and originator product.

Regulatory Decisions Inconsistent with Global Best Practices

Products approved by reference authorities such as the U.S. Food and Drug Administration, the European Medicines Agency and Brazil's National Health Surveillance Agency (ANVISA) are frequently either denied approval in Colombia or approved with deviations from their approvals in reference countries. The data provided for these drugs is pharmacologically the same as provided to reference country authorities, and no explanation is provided for why the outcome of their evaluation in Colombia would be different. These inconsistent outcomes underscore the need for ongoing collaboration between the MoH and INVIMA to ensure that the MoH adopts and applies regulatory assessment procedures that are consistent with international best practices.

Moreover, Decree 677 of 1995 establishes that, when a product has been approved in at least two reference countries and has not been rejected in any other reference country, the pharmacological evaluation will only take into account a summary of the product's clinical information. Despite this regulation, INVIMA in practice denies without justification the approval of innovative medicines that comply with these requirements, which blocks the entry of innovative medicines and ultimately increases trade barriers.

Cost-containment Measures Focused Exclusively on the Biopharmaceutical Industry

Government measures to improve the sustainability of the Colombian health system have focused solely on the biopharmaceutical industry and have not addressed broader issues within the pharmaceutical supply chain or other health care sectors. These measures have been developed in an arbitrary, hasty and non-transparent manner that leaves industry unable to plan for transitions. For example, in 2020, the Colombian Government issued Resolutions 205 and 306 to cap the expenditure of medicines not included in the publicly funded HBP. Most of these are innovative medicines, including products developed by PhRMA member companies. The regulations would establish a budget ceiling for medicines currently approved for marketing in Colombia but not included in the HBP; non-covered innovative medicines that are subsequently approved would be included under the same budget cap. As the budget cap would remain set at its historical levels, this policy would in effect block new innovative medicines from entering the country.

The calculation of these estimates for 2020 has been strongly criticized by virtually all sectors of the health system and academia for technical limitations. These problems are aggravated in the draft methodology published for 2021, which proposes to set caps based on the historical minimum prices paid and atypical utilization volumes observed during 2020 because of the COVID-19 pandemic. As part of this calculation, the government publishes the estimated prices for each product according to the information reported by EPS, which may contain errors and does not provide opportunity for relevant stakeholders to verify the quality of the information. PhRMA and its member companies request that any cost containment measures consider the entire health care system, be

developed and implemented through a participatory process with relevant stakeholders and include appropriate transition periods.

Maximum Reimbursement Values

In 2019, the MoH established reimbursement caps (VMR) for more than one thousand products reimbursed by the government. The maximum reimbursement values correspond to the maximum cost that can be reclaimed from the Administrator of the Resources of the General System of Social Security in Health (ADRES) by the government-sponsored HMO system (EPS). Maximum values per unit for each active ingredient are calculated based on past reimbursement values during the reference period (2015-2018), adjusted for inflation. This formula skews toward lower prices by taking the 25th percentile of these values for multi-sourced products and the 10th percentile for single-sourced products. This reimbursement caps came into effect in May 2019 for 50 medicines and on January 1, 2020, for the remaining group of medicines.

New Drug Price Regulation Methodology

During 2019, the National Drug Pricing Commission began reviewing its regulation methodology in place since 2013. The MoH is expected to make its system of international reference pricing more restrictive by expanding the number of reference countries from 17 to 19 and changing the mix of countries to include those that are less supportive of innovation (*e.g.*, replacing Germany with Greece, South Africa and Turkey).

PhRMA and its member companies have additional concerns about the new price regulation methodology, including the frequency of price adjustments and a new cost containment mechanism that would adopt the lowest unit price observed domestically or internationally among groups of products that differ in strength, formulation, delivery system and quality. This approach fundamentally punishes continued innovation to better meet diverse patient needs. The final methodology was expected to be issued by the end of 2020 for implementation by March 2021. To date, the review process lacks transparency and the MoH has not disclosed next steps or anticipated timelines.

Increased Regulatory Barriers under the National Development Plan

Colombia's National Development Plan, which was enacted on May 7, 2015 as part of Law 1753, undermines recent gains Colombia has made to encourage innovation, delays patient access to cutting edge technologies, and is inconsistent with Colombia's international commitments. Specifically, Article 72 states that for certain identified drugs, including innovative medicines, a health technology assessment by the Instituto de Evaluación Tecnológica en Salud (IETS) and the setting of a price by the MoH based on that evaluation should both be prerequisites for marketing approval and renewal.

The MoH, following a warning from the Colombian Constitutional Court, implemented regulations for Article 72 that would separate INVIMA's market approval processes from HTA and price measures. However, the Council of State responded by

issuing Decree 710 of 2018, which partially and provisionally suspended these regulations and again required new drugs to be assessed by IETS before INVIMA could issue a marketing approval: "IETS must carry out the assessment ... simultaneously with the Sanitary Register process before INVIMA. The assessment carried out by IETS cannot be a condition for the granting of the Sanitary Register by that entity, which may issue it once its own assessment procedure is completed."

At this time, the Council of State is reviewing an appeal filed against its provisional suspension. If a full suspension is declared, the HTA carried out by IETS would be required for INVIMA to issue a marketing approval as set forth by Article 72. It is additionally concerning that no maximum term is provided for IETS to carry out its assessments, as the 180-day term initially contemplated was removed by Decree 710. Without a fixed term for IETS to complete its HTA and price assessments, these requirements could severely delaying market access for innovative medicines in Colombia.

Arbitrary and Non-Transparent Pricing Policies

Colombia sets a maximum price for both the public and private markets at the distributor level. These different channels are dissimilar in most characteristics, in that they serve different patient populations via different business models.

Moreover, the pricing system is highly subjective. For example, certain price control exceptions may be permitted for products with a significant technical benefit over medicines containing the same active ingredient (*i.e.*, standard versus extended release tablets), yet the criteria required to grant such exceptions are unclear. On January 27, 2020, the MoH issued its most recent circular through which the National Commission for the Regulation of Prices of Medicines and Medical Devices (CNRPMDM) limits the maximum sale price of more than 1,800 medications and chemical compounds, including products such as contraceptives, anti-hypertensives and psychiatric drugs. These products have faced an average price reduction of 50 percent since January 2019. The criteria for the pre-selection of products subject to these price controls remains unclear and unpredictable.

MEXICO

PhRMA and its member companies operating in Mexico are increasingly concerned with recent changes to Mexico's pharmaceutical policies, particularly with respect to market access delays due to challenges in the regulatory approval process, accessing public formularies and new public procurement processes, weak patent enforcement and other significant intellectual property (IP) issues, and, more broadly, with growing legal uncertainty and a lack of transparency around government decision-making processes. With the United States-Mexico-Canada Agreement (USMCA) now in effect, it is critical that Mexico implement and maintain systems that are consistent with its trade commitments.

Key Issues of Concern:

- Market access delays: The Federal Commission for Protection against Health Risks (COFEPRIS) has put on hold the marketing authorization process for pharmaceutical products since the beginning of the López Obrador administration. In addition, significant existing market access barriers remain due to lengthy, non-transparent and unpredictable reimbursement processes. A lack of transparency around the implementation of a National Medicines Compendium and disease-specific treatment guidelines, as well as challenges and uncertainty in accessing the formularies of public health institutions, create additional delays which restrict patient access to innovative medicines. The recent restructuring of COFEPRIS to report into the Undersecretariat of Prevention and Health Promotion raises broad constitutional and statutory concerns related to the independence and autonomy of COFEPRIS, as well as calling into question whether COFEPRIS reforms will be implemented consistent with Mexico's USMCA commitments.
- Challenges with new public procurement practices: Following on the uncertainty created by Mexico in 2019 in consolidating and transferring authority for the public procurement of medicines from the individual public health institutions to the Ministry of Finance, in 2020 Mexico decided to completely outsource its purchases of medicines to the United Nations Procurement Office (UNOPS). The UNOPS process has lacked transparency and predictability and raises serious questions about Mexico's compliance with its public procurement and antitrust laws as well as its commitments under USMCA. These many significant changes and unreasonable implementation timelines have created significant market access barriers for PhRMA member companies, have resulted in supply chain challenges and product shortages for Mexican patients and raise concerns about pharmacovigilance and patient safety.
- Weak patent enforcement and regulatory data protection failures: Mexico amended relevant portions of its IP law ahead of the USMCA entering into force on July 1, 2020. However, implementing regulations for these amendments have not yet been issued. Despite Mexico's commitments under NAFTA and now under

USMCA, PhRMA member companies are currently unable to obtain accurate and timely information from COFEPRIS prior to marketing authorization being granted on a generic or biosimilar drug where the innovator product is used as a reference. As a result, PhRMA members have little to no notice that a potentially patent infringing product is entering the market. Further, obtaining effective preliminary injunctions or final decisions on cases regarding IP infringement within a reasonable time (as well as collecting adequate damages when appropriate) remains the exception rather than the norm. Further, Mexico still lacks measures to restore a portion of the patent term lost during the lengthy development and regulatory approval process, and consolidation of substantive regulatory data protection (RDP) in a federal law, is still pending.

For these reasons, PhRMA requests that Mexico be placed on the **Priority Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Weak Patent Enforcement

Several deficiencies have confounded the effective enforcement of patents in Mexico. Recognizing that these deficiencies hinder its new commitments to protect and enforce patents in the USMCA, Mexico enacted a new IP law on July 1, 2020 in order to address them. However, implementing regulations for these amendments have not been released, and at this point PhRMA and its member companies are unable to assess whether these changes will address the deficiencies in Mexico's patent enforcement system as outlined below.

To ensure adequate and effective protection of IP rights for the research-based biopharmaceutical sector, mechanisms that provide for the early resolution of patent disputes before an infringing product is allowed to enter the market are critical. Mexico has taken some positive steps to improve patent enforcement, including adopting the Linkage Decree of 2003, although the decree has not been implemented in a comprehensive and consistent manner. The publication in the Official Gazette of medicine-related patents is a positive step toward the goal of eliminating unnecessary, costly and time-consuming court actions to obtain appropriate legal protection for biopharmaceutical patents. However, COFEPRIS appears to apply linkage inconsistently and possibly in a discriminatory manner. In some cases, marketing authorizations have been issued despite patents listed in the Official Gazette. As a result, there have been concerning instances (at least three in April 2017) where COFEPRIS granted marketing authorization for entry of products for which a valid patent exists. This undermines company confidence in the IP system in Mexico and impedes companies' ability to do business in Mexico.

Further, PhRMA member companies are unable to obtain accurate and timely information from COFEPRIS prior to marketing authorization being granted on a generic

or biosimilar drug where the innovator product is used as a reference. As a result, innovators have little to no notice that a potentially patent infringing product is entering the market. Securing effective preliminary injunctions or final decisions on cases regarding IP infringement within a reasonable time (as well as collecting adequate damages when appropriate) remains the exception rather than the norm. Although injunctions may be initially granted subject to the payment of a bond, counter-bonds, or in some proceedings only on applications, motions may be submitted by the alleged infringer to lift the injunction and allow the challenged product to enter the market.

Even if an innovator successfully enforces its IP rights in Mexico, seeking monetary damages is extremely burdensome. In order to claim damages from patent infringers in Mexico, litigants are required to first obtain a final administrative action and then seek damages through a civil action, actions that can take longer than ten years.

Mexico has repeatedly committed to provide effective patent enforcement mechanisms in NAFTA, the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), and most recently in the USMCA. It is critical that Mexico act on its commitments by implementing an effective patent enforcement system. In order for Mexico to succeed in this effort, it will be essential that Mexico reject calls from some in Congress as well as prior COFEPRIS proposals that would inappropriately limit the scope of Mexico's patent linkage system. PhRMA and its member companies encourage the Mexican Government to hasten patent infringement proceedings, use all available legal mechanisms to enforce Mexican Supreme Court decisions, and implement procedures necessary to provide timely and effective preliminary injunctions.

Additionally, on November 18, 2020, COFEPRIS issued an executive order under which it will expedite the market authorization process for medicines that have been approved by certain foreign regulatory agencies, including the U.S. Food and Drug Administration, European Medicines Agency, or the World Health Organization Prequalification Program for Medicines and Vaccines. ²⁵⁸ Applications for these medicines will be automatically approved within five days unless COFEPRIS issues a request for further information from the applicant. As yet, it is unclear how COFEPRIS plans to ensure that any medicines approved under this new mechanism will not infringe on an innovator's IP rights, mindful of Mexico's international commitments.

Lack of Patent Term Restoration (PTR)

Mexico remains one of the few members of the OECD that does not provide PTR for effective patent term lost during the lengthy development and regulatory approval process. This situation is exacerbated by the current delays of COFEPRIS in approving medicines, resulting in significant patent term lost due to no fault of the inventor or patent owner. PhRMA appreciates that Mexico has agreed to implement such term restoration

²⁵⁸ Agreement dated November 18, 2020, available at: https://www.dof.gob.mx/nota_detalle.php?codigo=5605237&fecha=18/11/2020 (last visited Jan. 27, 2021).

in the USMCA subject to a 4.5 year transition. Nonetheless, the lack of such protection undermines the term of patent protection in Mexico and consequently undermines the ability of our members to sustainably bring new therapies to Mexican patients. PhRMA urges USTR and other federal agencies to encourage Mexico to implement appropriate PTR provisions as soon as possible.

Regulatory Data Protection Failures

Biopharmaceutical innovators work with hospitals, universities and other partners to rigorously test potential new medicines and demonstrate they are safe and effective for patients who need them. Less than 12 percent of medicines that enter clinical trials ever result in approved treatments.²⁵⁹

To support the significant investment of time and resources needed to develop test data to prove that a new medicine is safe and effective, the international community has developed a mechanism recognized as essential to biopharmaceutical innovation whereby the data submitted is protected from unfair commercial use for a period of time. The mechanism is enshrined in TRIPS Article 39.3, which requires WTO members to protect undisclosed test and other data submitted for marketing approval in that country against disclosure and unfair commercial use.

RDP is essential for all medicines, and particularly critical for biologic therapies. Produced using living organisms, biologics are complex and challenging to manufacture and may not be protected adequately by patents alone. Unlike generic versions of traditional chemical compounds, biosimilars are not identical to the original innovative medicine and there is greater uncertainty about whether an innovator's patent right will cover a biosimilar version. Without the certainty of some substantial period of market exclusivity, innovators will not have the incentives needed to conduct the expensive, risky and time-consuming work to discover and bring new biologics to market.

In June 2012, COFEPRIS issued guidelines to implement RDP for a period not less than five years – an important step toward fulfilling Mexico's international obligations. PhRMA members initially welcomed this decision as an important confirmation of Mexico's obligations and its intention to fully implement the NAFTA and TRIPS provisions.

As guidelines, however, their validity may be questioned when applied to a concrete case. Further, they could be hard to enforce and may be revoked at any time. Therefore, PhRMA members strongly urge the passage of binding federal regulations on RDP to provide certainty regarding the extent and durability of Mexico's commitment to

https://static1.squarespace.com/static/5a9eb0c8e2ccd1158288d8dc/t/5ac66afc6d2a732e83aae6bf/1522952963800/Tufts_CSDD_briefing_on_RD_cost_study_-_Nov_18%2C_2014..pdf (last visited Jan. 27, 2021).

²⁵⁹ DiMasi JA, Grabowski HG, Hansen RW; Tufts Center for the Study of Drug Development. Innovation in the pharmaceutical industry: new estimates of R&D costs. In: Briefing: Cost of Developing a New Drug, available at

strong IP protection, consistent with Mexico's international commitments under the USMCA.

Potential Abuse of the "Bolar" Exemption

Mexico allows generic manufacturers to import active pharmaceutical ingredients and other raw materials contained in a patented pharmaceutical for purposes of preparing marketing authorizations during the last three years of the medicine's patent term (or the last eight years for a biologic), per the *Bolar* exemption. However, since the secondary regulations of the new IP Law are still pending, Mexico fails to impose any limits on the amount of raw materials that can be imported under this exception.

Given some of the import volumes reported, PhRMA's members are very concerned that some importers may be abusing the *Bolar* exemption by stockpiling and/or selling patent-infringing and potentially substandard medicines in Mexico or elsewhere. PhRMA members encourage Mexican authorities to establish clear criteria for the issuance of import permits that respect patent rights and appropriately limit imports to quantities required for testing bioequivalence.

Market Access

Market Access Delays

The local innovative pharmaceutical industry association, Asociación Mexicana de Industrias de Investigación Farmacéutica (AMIIF), has estimated that it takes four years on average for Mexican patients to access innovative medicines and that this delay is growing given the changes made by the current administration. Key reasons for this delay are the need to obtain the approval of the New Molecules Committee prior to filing a marketing authorization request, excessive times required for public formulary inclusion and the five-year marketing authorization renewal process, all of which significantly exceed stated timelines. COFEPRIS previously made improvements to the marketing authorization process despite limited resources. However, since the beginning of the current administration, progress backtracked as the agency ceased communication with the biopharmaceutical industry and put on hold the work and processes of its New Molecules Committee. There are currently 500 clinical trials pending a response from COFEPRIS and 51 delayed new molecule applications, 42 of which have already been approved by reference regulatory agencies.

Once COFEPRIS grants a marketing authorization, there remain significant barriers for patients, primarily those covered by public institutions, in accessing important medicines. This additional delay is caused by the lengthy, non-transparent, and uncertain reimbursement system used in Mexico, which adds, on average, two years to patient access timelines in the public sector (if a medicine is made available at all). In addition, inclusion into the basic formulary of a public health institution does not automatically result in the purchase and subsequent availability of those medicines to patients.

More specifically, after COFEPRIS grants marketing authorization, the National Health Council (NHC) decides which medicines should be included on the national formulary. Until 2018, recommended prices of patented and single-source medicines (or those with exclusive distributors) for all public health institutions were negotiated with the Coordinating Commission for the Negotiation of Prices of Medicines and Other Medical Supplies under the supervision of the Ministry of Public Function (SFP) and the Mexican Antitrust Authority (COFECE). Following this recommendation, the public health institutions at federal and local levels – such as the Mexican Institute for Social Security (IMSS), Institute of Security and Social Services for State Workers (ISSSTE) and Institute of Health for Welfare (INSABI) – then procured the medicines at the negotiated prices. While this process had significant flaws, it has been largely supplanted since the beginning of the current administration.

The announcement on August 19, 2020, that COFEPRIS would be restructured so that it reports into the Undersecretariat of Prevention and Health Promotion, has further complicated the possibility of reforming the agency's market approval processes, and has raised significant concerns under both Mexican statutory and constitutional law related to the continued independence and autonomy of COFEPRIS. It is critical that marketing authorization decisions in Mexico are scientifically grounded, and that a new medicine is assessed solely on its safety, efficacy and quality. The existing lack of transparency at COFEPRIS and its unwillingness to engage with industry will only serve to exacerbate concerns that the marketing authorization process is not appropriately focused on the scientific assessments COFEPRIS is tasked to perform.

Challenges with New Public Procurement Practices

In 2019, the Mexican Government further consolidated and transferred authority for the public procurement of medicines from the individual public health institutions (e.g., IMSS, ISSSTE, INSABI, etc.) to the MoF. The NHC supports this centralized process by developing disease-specific treatment guidelines aimed at reducing the number of medicines on the National Medicines Compendium, but without clear criteria and transparency. Several tenders and purchases without tenders were conducted under this process, based on new rules that lack transparency in process and requirements, and that are inconsistent with Mexican public procurement and antitrust laws, as well as Mexico's obligations under NAFTA (in force at that time) and USMCA. For example, Mexico bypassed its normal procurement process and conducted open international tenders. While the Mexican Government asserted that the price preference granted under such tenders for Mexican products would be extended to products originating in its FTA trading partners, the speed and lack of transparency around how the awards were granted raised questions as to whether those assurances were honored.

Following on the uncertainty created by Mexico in making these public procurement changes, in 2020 Mexico published executive orders that would allow the procurement of medicines not approved by COFEPRIS and amended the procurement law to completely outsource its purchases of medicines to UNOPS. These sweeping

changes are being made without meaningful stakeholder consultation and are further contributing to an unviable business environment for PhRMA member companies:

- In January 2020, the Mexican Government published executive orders that would allow procurement and importation of medicines that have not been approved by COFEPRIS. Instead, the products will simply need regulatory approval from either (1) the country of origin; (2) regulatory authorities in Australia, Canada, Europe, Switzerland or the United States; (3) PAHO/WHO Regional Reference Authorities which additionally include Argentina, Brazil, Chile, Cuba and Colombia; or (4) any of the 53 authorities participating in the Pharmaceutical Inspection Cooperation Scheme (PIC/S). We urge the Mexican Government to limit the procurement process to products approved by COFEPRIS and that meet all relevant regulatory standards.
- On August 11, 2020, the Mexican Government amended the Federal Procurement Law to exclude medicines from its requirements, thereby permitting the procurement of medications, vaccines and medical equipment directly from international organizations – such as the Pan American Health Organization (PAHO) and UNOPS - outside of Mexico's normal procurement process. The changes to the Procurement Law apply to open tenders, restricted tendering, qualification of suppliers and selective tendering. The reforms do not establish a clear methodology or government accountability for procurement through international organizations or include any specifications on how market research will be conducted to determine whether it is appropriate and efficient to purchase medications through international organizations. Nor do they ensure the protection of patent and other IP rights by requiring exclusive procurements for patented medicines. Moreover, the measure does not ensure that U.S. suppliers will be allowed to participate in the tenders. This exclusion opens a wide range of medicines procurements to being conducted outside of the normal legal framework.

Chapter 13 of the USMCA obligates Mexico to adhere to agreed-upon multilateral standards in how it conducts government procurements for goods and services, including maintaining open tendering procedures under Article 13.4.4. One of the limited exceptions to this commitment (Article 13.2.4(e)(iii)) states that Chapter 13 does not apply to procurement conducted "under the particular procedure or condition of an international organization, or funded by international grants, loans, or other assistance if the applicable procedure or condition would be inconsistent with this Chapter." While this exception enables government projects to allow for the participation of international organizations, it does not provide a mechanism for the Mexican Government to sidestep its USMCA commitments by procuring all products from an international organization. As such, the amendment to the Mexico Procurement Law, which permits the direct procurement of medicines with international organizations without restrictions, appears to exceed the limited exception provided by Article 13.2.4 of the USMCA.

Furthermore, in September 2020, the Mexican Congress began discussions to further amend the Federal Procurement Law. Discussions on these proposals are ongoing but do not appear to have considered Mexico's government procurement commitments. On the contrary, many of the proposals deviate from those commitments and could become barriers to trade. For example, certain proposals suggest that "market research" provisions could be used to exclude tenders from certain countries, including the United States. This raises broad national treatment concerns as well as inconsistencies with Mexico's government procurement commitments under the USMCA. The innovative biopharmaceutical industry is concerned that if these proposals are enacted, many of the benefits anticipated by U.S. manufacturers under the USMCA would be eliminated.

Since the implementation of this restructured procurement process, Mexico has experienced significant supply chain challenges, resulting in persistent shortages of medicines, including treatments for diabetes, hypertension, cancer and HIV. PhRMA member companies are deeply concerned that these continuing procurement changes and shifting implementation timelines could result in further shortages of medicines for Mexican patients and create concerns for pharmacovigilance and patient safety. Based on industry's experience with these new procurement practices, as well as the nature of the proposed changes, we urge the Mexican Government to provide greater clarity in process and requirements, ensure consistency with Mexican law and international commitments and allow for appropriate lead times so that companies can make any necessary operational adjustments to ensure supply continuity. A coalition of biopharmaceutical industry stakeholders in Mexico (Cámara Nacional de la Industria Farmacéutica, or CANIFARMA), which includes AMIIF, has appealed the reforms to the Federal Procurement Law.

Differentiated Packaging

In November 2019, the Mexican government enacted an amendment to the General Law of Health which requires different packaging for pharmaceutical products supplied to the Federal Health Service. In September 2020, draft implementation regulations were published on the National Commission for Regulatory Improvement (CONAMER) website. One of the measures proposed in these regulations would require manufacturers to print "Not allowed for sale" or "Governmental Property" on all packaging for medicines sold to the Federal Health Service. Compliance with this measure would require manufacturers to use special packaging for medicines intended for the Mexican public market. Since proper handling of medicines prohibits the manipulation of blister packs after packaging, this would, in practice, require pharmaceutical manufacturers to develop a separate line of production and inventory of pharmaceutical products for Mexican government purchasers. Making the investment necessary to fulfill this requirement would be particularly challenging for procurements that do not include a minimum purchasing commitment. Apart from the additional cost involved in creating such lines of production. PhRMA's member companies are concerned that imposing this requirement could create shortages during a pandemic.

Further, it is unclear as a technical matter as to why Mexico is requiring specialized blister packs and other differentiated packaging for medicines. At no point has Mexico notified its trading partners of these new technical requirements, nor has it explained the technical justification for imposing them. As such, these requirements would appear to be a technical barrier to trade that imposes unnecessary obstacles contrary to Mexico's commitments in Chapters 11 and 13 of the USMCA as well as the WTO Technical Barriers to Trade Agreement. Finally, even though these implementation regulations have not yet been published in the Federal Official Gazette and gone into effect, UNOPS procurements on behalf of the Mexican Government are already beginning to require differentiated labelling, which has created a trade barrier for PhRMA's member companies.

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ALGERIA

Algeria's policies and actions pose significant market access and intellectual property challenges for PhRMA members. PhRMA and its member companies believe, however, that Algeria has the potential to foster investment in pharmaceutical innovation and to address the unmet medical needs of the country. Notably, since the election of a new government in December 2019, a new Ministry of Pharmaceutical Industry (MoPI) has been established with a mandate to energize the sector and improve its contribution to economic growth.

PhRMA noted some success in collaborating with the prior government in place until mid-2012, with that government stating publicly its support for a new strategy that better integrates the innovative pharmaceutical sector into Algeria's economy and health care system. Subsequent Ministers have reaffirmed their commitment to boosting Algeria's competitiveness in the innovative biopharmaceutical sector, but dozens of proposed reforms have not been implemented. Despite deterioration in the overall business and investment environment, PhRMA's member companies are hopeful for a cooperative dialogue with the government to address the key challenges they face in Algeria. Recently, the new MoPI hosted meetings and working sessions with industry which have included the Minister and his team. PhRMA members are contributing to the successful implementation of the national health care law through the local innovative pharmaceutical association as well as preparation and submission of other policy proposals as a contribution to ministerial orders (covering pricing, registration and access to innovation).

Key Issues of Concern:

- Import restrictions and forced localization: Algeria prohibits imports of most pharmaceutical products that compete with similar products that are manufactured domestically. Pharmaceutical products and active pharmaceutical ingredients (APIs) that are not locally manufactured are subject to annual import quotas.
- Weak patent enforcement and regulatory data protection failures: Algeria has
 inadequate patent protection, ineffective mechanisms to enforce patents, and does
 not grant regulatory data protection (RDP). Judicial training to handle complex
 patent disputes would greatly assist in improving the patent enforcement
 environment in Algeria. PhRMA appreciates recent meetings hosted by the MoPI
 during which they expressed willingness to work with our members to improve
 patent enforcement in Algeria.
- Pricing procedures: Algeria's pricing and reimbursement mechanisms are cumbersome and delayed. Historically, some patented medicines have been referenced against generic products deemed to be in the same therapeutic class. In addition, the new drug pricing procedure issued in August 2015 has key weaknesses related to its reference pricing system and the frequency of updates.

As a result, prices in Algeria do not recognize the value of innovative products, nor do they reward the significant investment involved in developing new medicines or encourage the development of tomorrow's cures. Notably, the new government has expressed interest in revising pricing procedures and it is anticipated that the local association will be invited to contribute through policy proposals.

- Cumbersome and slow regulatory system: Despite significant improvements in the Ministry of Health's (MoH's) registration process in 2013, the registration process remains slow and burdensome. As a result, patient access to innovative medicines in Algeria lags significantly behind peer countries. A new National Agency of Pharmaceutical Products (ANPP) has been created under the supervision of the MoPI and given the challenge of resolving the registration backlog of around 700 products awaiting clearance. The local association is proposing to support solutions to the backlog such as regulatory reliance.
- Failure to renew representative office licenses: Many pharmaceutical companies operating in Algeria have established representative offices. Licenses for such offices must be renewed every two years, and yet in 2018 the Ministry of Commerce suspended renewing these licenses until September 2019. (Renewals have been granted for companies in other sectors, but not for the pharmaceutical industry.) In addition to creating significant uncertainty as to the ability of these companies to continue operating in Algeria, it has resulted in local banks blocking access to member accounts and MoH suspending promotional activities as per an October 28, 2019 notice, until their office licenses are renewed. So far, concerned companies have been asked by the Minister of Commerce to submit again some files. Still the renewal would only be for one year.

For these reasons, PhRMA requests that Algeria remain on the **Priority Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Weak Patent Enforcement

Marketing approval authorities in Algeria improperly interpret current laws and regulations by granting marketing approval to patent infringing follow-on products while relevant patent(s) are still in effect. Despite patent owners' repeated attempts to alert Algerian authorities, Algeria's marketing approval agency has approved infringing follow-on products many years in advance of the original product patent expiration.

Compounding these actions, effective judicial remedies are not available to prevent infringement of patent rights. Algerian courts do not provide injunctive relief that could prevent irreparable harm prior to the resolution of the patent dispute, thus placing originators in an untenable position with no possibility to defend their rights. Violations of Algerian patents that have occurred in recent years have still not been corrected.

Regulatory Data Protection Failures

Algeria does not protect pharmaceutical test and other data from unfair commercial use and disclosure. Algeria should correct this deficiency through implementation of meaningful RDP.

Market Access Barriers

Import Restrictions

On October 21, 2008, the Algerian Government issued a decision²⁶⁰ stipulating that, effective January 2009, the importation of pharmaceutical products that compete with similar products that are being manufactured locally is prohibited. This decision was essentially a reinstatement of a previous ministerial decree²⁶¹ that was suspended as part of the WTO accession process. Subsequently, the MoH published lists of such products comprising hundreds of branded medicines, and this import policy continues to be implemented in a non-transparent and arbitrary manner. Repealing this decision should be a prerequisite before Algeria can join the WTO.

In August 2015, the MoH issued a procedure for the inclusion of products on a list of pharmaceutical products prohibited for import. The innovative pharmaceutical industry is highly concerned about the proposed procedures to ban imports of certain products to promote local manufacturing. This proposal contradicts the government's aspirations to attract more investment by the innovative biopharmaceutical industry and for Algeria to accede to the WTO. As the procedures themselves recognize, such restrictions could have major consequences on patient access to innovative products as well as on the operations and sustainability of our member companies in Algeria.

In 2017, the Algerian Government arbitrarily imposed volume restrictions on imports of pharmaceutical products that compete with similar products produced domestically and/or imported generic products.

Algeria's restrictions on the importation of pharmaceuticals severely restrict patient access to innovative medicines, discriminate unfairly against PhRMA members, and are a significant barrier to trade. They have resulted in shortages of some drugs, further harming Algerian patients. During numerous discussions over the last few years between the Algerian Government and industry, officials signaled their intent to reform the system to improve access and minimize stock disruptions. As of today, however, the system remains unchanged. At the end of 2020, the MoH established a new commission to review the value of new drugs and evaluate innovative supply agreements.

²⁶⁰ The decision was published in November 2008 under the name "Arrêté du 30 novembre 2008 relatif àl'interdiction des produits pharmaceutiques et dispositifs médicaux destinés à la médicine humaine fabriqué en Algérie."

²⁶¹ Instruction #5 for the Generalization of Generics (Sept. 2003).

Investments and Commercial Laws

In December 2008, the Algerian Government declared that any company engaged in foreign trade should have a minimum of 51 percent of local Algerian shareholders. While the 2020 Finance Bill removed this restriction for "non-strategic sectors", complementary legislation enacted in July 2020 identified the pharmaceutical industry as a strategic sector. As yet, however, the government has not defined what activities constitute investment.

Since 2009, importers have been required to secure letters of credit and set aside a percentage of the import value as a deposit on their purchase.

In May 2010, the MoH issued a circular that prohibits local manufacturers from selling products to wholesalers, and requires them to sell such products directly to pharmacies. Therefore, PhRMA members who invested in local manufacturing will now also have to invest in distribution infrastructure. While this circular has never been applied, the uncertainty of the regulation continues to concern PhRMA members.

In January the Finance Law 2021 was enacted, which further restricts the ability of foreign owned companies to import innovative products, seemingly in order to promote local manufacturing. The new regulations lack clarity and seem to contradict aspects of the Algerian constitution. We would kindly request the Algerian Government to provide immediate clarity on the intention of the Finance Law 2021 and the extent to which they will further impact imports into Algeria.

Volume Control

Algeria continues to impose an annual import quota for medicines and active pharmaceutical ingredients with the requirement that each shipment receives prior clearance from the MoPI.

The government routinely blocks imports as a temporary cost-containment tool. The unintended consequence, however, is that it leads to shortages in the market, to the detriment of Algerian patients. The narrow focus on cost means that it cannot capture the underlying value of promising new medicines for patients or reduce other costs in the health care system, such as avoiding expensive hospitalizations, surgery, rehabilitative or long-term care.

Pricing Procedures

The Algerian Government uses international reference pricing (IRP) to set the prices of medicines. As a general matter, IRP suffers from serious flaws as a mechanism for pharmaceutical pricing. It assumes similarity across all countries in the reference basket and implicitly imports the pricing policies of those countries without accounting for circumstances that justify price differentiation. Importantly, IRP ignores the local value of the product, patient benefits and physician requirements, existing standards of care.

placement within the health care system, patterns of disease burden, socioeconomic factors including ability to pay, stage in the pharmaceutical life cycle, etc. IRP also ignores circumstances unrelated to a product's value such as budget overruns that lead to price cuts. In short, IRP as a policy is inconsistent with Algeria's goal of promoting a local innovative biopharmaceutical industry.

In August 2015, the Algerian Government issued a new procedure for determining pharmaceutical prices. Key weaknesses in Algeria's pricing procedure and the IRP model include:

- The pricing procedure references a basket of countries including Greece and Turkey, which are inappropriate comparators. Prices in Turkey are based on deflated prices in Europe as a result of a discriminatory fixed Euro-Turkish Lira exchange rate, and prices in Greece have been set based on the ongoing economic crisis in that country. In short, the artificially low prices in both countries do not reflect the value of innovative medicines and certainly are not consistent with a country seeking to encourage local R&D. This measure ignores the damage that such policies have had on the innovative biopharmaceutical industry in those countries, where investment has stagnated and the industry is in a state of contraction. As such, Turkey and Greece should be removed from Algeria's basket of reference countries.
- To ensure greater predictability and fairness, the IRP calculation should be based on the average or median price in the basket of countries, not the lowest price in the basket.
- Re-referencing should be predictable, objective (*i.e.*, following the same procedures for both price increases and decreases in the reference countries) and limited to reasonable intervals, such as every five years during the marketing approval renewal process. While the industry commends Algeria for providing a process for allowing manufacturers to seek adjustments during the marketing approval renewal process to account for changes in the reference countries, it is not reasonable to require manufacturers to continually monitor prices in all of the reference countries (a significant administrative burden) and report on relevant alterations.
- Greater clarity is needed in the procedures around the exchange rates to be used to determine prices in the reference countries and how Algeria defines "the country of origin."
- While the innovative pharmaceutical industry commends the Algerian Government for providing an appeal mechanism, ten days is an insufficient period for a company to prepare the appropriate supporting documents for the appeal, particularly given that this will likely require coordination with regional offices and headquarters in other countries. Instead, we would propose that the appeal

deadline should be extended to 30 days after the date of the notification of the price established by the Economic Committee.

Cumbersome and Slow Regulatory System

Despite some improvements in the MoH's registration process since 2013 and recent structural changes to MoH's engagement with the pharmaceutical industry, the registration process remains slow and is now falling further behind regulatory reform trends observed in the region, namely in the largest pharmaceutical markets Egypt and Saudi Arabia. In those countries, new review procedures are expected to significantly reduce the time it takes to register new medicines by 90 percent. This will accelerate marketing authorizations and enable patients to access promising new treatments in as little as 30-60 days after those new medicines are approved for use in Europe or the United States. Algeria should adopt similar review procedures to achieve the same results.

Additional burdensome requirements for obtaining registration to market pharmaceutical products, especially innovative products, have been implemented. As a result, patient access to innovative medicines in Algeria lags significantly behind peer countries.

While the agencies responsible for drug registration processes in Algeria have been reorganized under the MOIP (with the goal of streamlining the drug registration), the agency still lacks sufficient resources and staffing to handle the current backlog in drug registration, price approval and testing on importation (TOI). Furthermore, for new drug applications, no assessment of pre-submissions has taken place since September 2018. Additionally, 700 new applications have been submitted to the Agency which are pending registration due to the Agency's lack of quality testing capabilities

In addition, the innovative industry continues to face significant and growing access challenges within the Reimbursement Committee (CRM) process led by the Ministry of Labor (MoL):

- The MoH via the Price Committee (MoL is a member of this committee) approves a price for the new medicine as part of the marketing approval process. However, this price is rarely accepted during the separate reimbursement process, even though MoH is a member of CRM. As a result, manufacturers are required to enter into separate reimbursement negotiations with the CRM, and the new lower price must then be re-approved by the MoH. These combined procedures are inefficient, redundant, and unfair to innovative pharmaceutical manufacturers.
- There is no clarity or fixed timeline between the first submission to the CRM of the
 dossier for reimbursement and the application at the pharmacy level. While the
 intent of the MoL is to reduce the maximum number of products on the list of
 reimbursable products, this particularly affects imported products so that a new
 (innovative) product has a very low chance of being reimbursed. And recently even

locally produced medicines are affected. Further, even when MoH lists the products, hospitals have not been supplied with those products creating significant uncertainty and operational challenges for PhRMA member companies and lack of access for Algerian patients.

Finally, since June 2010, pharmaceutical companies have noticed lengthy delays of many months in approving variations for imported products already available on the market, albeit that there have been some improvements in recent months.

Industry is hopeful that the newly established MoPI, which has been made responsible for all aspects of regulating the sector, will be better positioned to improve the regulatory environment in Algeria. The Ministry is expected to issue several decrees and PhRMA appreciates the involvement and consultations with industry regarding the draft decrees.

Failure to Renew Representative Office Licenses

Many pharmaceutical companies operating in Algeria have established representative offices. Licenses for such offices must be renewed annually, and yet in 2018 the Ministry of Commerce suspended renewing these licenses. In addition to creating significant uncertainty as to the ability of these companies to continue operating in Algeria, it has resulted in local banks blocking access to member accounts and MoH suspending promotional activities as per an October 28, 2019 notice, until their office licenses are renewed.

SAUDI ARABIA

PhRMA and its member companies welcomed Saudi Arabia's bold "Vision 2030" plan, which aims to transform the country into "a vibrant society, a thriving economy, and an ambitious nation" by the year 2030. 262 To achieve this goal, Saudi Arabia established the National Industrial Development and Logistics Program (NIDLP), which identifies the pharmaceutical industry as one of the promising and competitive industries prioritized for development. Specifically, the NIDLP aspires to further promote innovation in the pharmaceutical sector to encourage increased local production as well as research and development. In addition to the NIDLP, the Vision 2030 program also establishes the National Transformation Program, which sets strategic objectives for improving health care in Saudi Arabia and increasing the quality of life and life expectancy of citizens. 265

As part of these efforts, in 2019 Saudi Arabia established a new authority responsible for intellectual property (IP) protection and enforcement (Saudi Authority for Intellectual Property – SAIP) to create and develop IP regulations, guidelines and mechanisms for IP protection and enforcement in coordination with other relevant agencies, including the Saudi Food and Drug Authority (SFDA). The Ministry of Justice established a commercial court dedicated to resolving commercial law disputes including IP cases.

Biopharmaceutical innovators have sought to engage SAIP and relevant ministries to inform these developments and establish an IP regime in Saudi Arabia that can achieve the bold goals of Vision 2030. However, continued actions by SFDA, including authorizing and procuring generic medicines which violate patents or rely unfairly on innovator regulatory data, are undermining these positive developments and the investment climate in Saudi Arabia. SAIP has issued compulsory licensing guidelines and proposed regulations on regulatory data protection (RDP) that further weaken – rather than improve – IP protections in the Kingdom.

Key Issues of Concern:

 Ineffective patent protection, patent enforcement and RDP: In mid-2017, the SFDA started granting marketing approval to generic versions of innovative medicines during the term of the patent(s) protecting those treatments or the period

²⁶² See, e.g., Kingdom of Saudi Arabia, Vision 2030, p. 13. (2017), available at https://vision2030.gov.sa/sites/default/files/report/Saudi_Vision2030_EN_2017.pdf (last visited Jan. 27, 2021)

²⁶³ Kingdom of Saudi Arabia, National Industrial Development Logistics Program, Delivery Plan 2018-2020, pp. 10, 98 (Jan. 2019), available at

https://vision2030.gov.sa/sites/default/files/attachments/NIDLP%20Delivery%20Plan%20-%20English%20Jan%202019.pdf (last visited Jan. 27, 2021).

²⁶⁴ *Id.*, pp. 87, 113-14.

²⁶⁵ Ministry of Health, Health Sector Transformation Strategy, p. 13, available at https://www.moh.gov.sa/en/Ministry/vro/Documents/Healthcare-Transformation-Strategy.pdf (last visited Jan. 27, 2021).

of RDP. SFDA's repeated approval and related price listings of generic copies of innovative medicines is contrary to Saudi Arabia's own patent enforcement and data protection rules. These actions also contradict the country's World Trade Organization (WTO) commitments. SAIP has issued proposed regulations on compulsory licensing and RDP that have further weakened or would further weaken IP protections in Saudi Arabia.

- Pricing guidelines do not appropriately value innovative medicines: The SFDA pricing guidelines set prices for medicines in Saudi Arabia by generally taking the lowest price in a basket of reference countries and imposing other repricing rules. This flawed methodology does not appropriately recognize the value of innovative medicines for the Saudi health system and patients. While the revised guidelines effective in January 2021 are a step forward compared to an earlier draft, the current rules are inconsistent with Saudi Arabia's vision to establish a more value-based approach to health care.
- Government procurement system lacks transparency and discriminates in favor of local manufacturers: Frequent renegotiation of tenders, combined with the lack of clear timelines, have resulted in an unpredictable government procurement system. The recent creation of the Local Content and Government Procurement Authority (LCGPA) to identify lists of products that must be procured from local manufacturers, combined with 30 percent price preferences for medicines made with locally manufactured active pharmaceutical ingredients (API), serve to discriminate against foreign manufacturers and increase uncertainty in the Saudi market.
- Ensuring the new health technology assessment (HTA) system supports
 value-based health care: Industry stands ready to work with the Saudi authorities
 to ensure that the new HTA system is not used exclusively as a cost-containment
 tool, but rather supports timely Saudi patient access to innovative medicines and
 moves the country towards the value-based health care system outlined in the
 Saudi Health Sector Transformation Strategy.

For these reasons, PhRMA requests that Saudi Arabia remain on the **Priority Watch List** in the 2021 Special 301 Report. Further, we encourage the U.S. Government to continue the **Out-of-Cycle Review** that it initiated in 2020 so it may continue to evaluate the progress on these important issues and dedicate the required bilateral attention necessary to make progress on the barriers confronted by U.S. businesses in Saudi Arabia.

Intellectual Property Protection

Ineffective Patent Protection, Patent Enforcement and RDP

Despite creating mechanisms to provide for effective patent enforcement and RDP, in mid-2017 the SFDA started granting marketing authorization to domestic drug companies to produce copies of innovative medicines produced in the United States and other countries during the period of patent or RDP protection. Furthermore, the Ministry of Health (MoH) has proceeded to procure the infringing products despite multiple appeals from the relevant innovators and, in one case, despite a favorable Saudi court decision. The local drug companies are now distributing these copies to the MoH and selected hospitals. Despite Saudi Arabia being on the Priority Watch List since 2019 and multiple political commitments to solve ongoing cases, rather than end this practice, SFDA is actively soliciting on its website for manufacturers to seek approval for generic products even where the innovative product is still subject to IP protections.

SFDA's actions appear designed to benefit Saudi Arabia's local industry, as evidenced by the tenders awarded by NUPCO. These actions harm U.S. manufacturers, infringe proprietary technology and damage U.S. exports. Contrary to the country's aspirations to promote local investment, IP infringement, and the lack of effective enforcement sends a hostile message to U.S. inventors and investors that their valuable IP rights are not secure in Saudi Arabia.

These actions also appear contrary to Saudi law and to Saudi Arabia's WTO commitments. For example, Article 5 of a Council of Ministers' Trade Secrets Protection Regulation (decision No. 3218, dated 25/03/1426 H, May 4, 2005), as amended by Ministerial Decision No. 431 of 1.5.1426H (June 8, 2005) states that the submission of confidential tests or other data, obtained as a result of substantial efforts, for the approval of the marketing of drugs or agricultural products which utilize a new chemical entity, shall be protected by the competent authority against unfair commercial use for at least five years from the approval date. Unfortunately, the Kingdom of Saudi Arabia has not complied with its own regulation and WTO commitments which gave rise to the regulations. Specifically, Saudi Arabia confirmed during its accession to the WTO that:

[Its] Regulations provided for protection of undisclosed tests and other data submitted to obtain approval of a pharmaceutical or agricultural chemical against unfair commercial use for a minimum period of five years from the date of obtaining the approval including the establishment of the base price. No person other than the person who submitted such data could, without the explicit consent of the person who submitted the data, rely on such data in support of an application for product approval. Any subsequent application for marketing approval would not be granted a market authorization unless the applicant submitted its own data, meeting

the same requirements applied to the initial applicant, or had the permission of the person initially submitting the data to rely on such data.²⁶⁶

The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) imposes more than a non-disclosure obligation. Rather, TRIPS Article 39.3 additionally requires WTO Member States to implement an effective system of pharmaceutical drug registration, which prevents "unfair commercial use" of data generated by others. This is fulfilled by preventing reliance on regulatory test data and approvals based on such data for a fixed period of time. In other words, protected data may not be used to support marketing approval for follow-on products for a set amount of time unless authorized by the original submitter of the data. Unfortunately, the SFDA is interpreting the Saudi Regulations in a restrictive way limited to non-disclosure that allows it to rely on the innovator's regulatory data or limited data published in scientific journals.

In September 2020, SAIP published new draft regulations for the protection of confidential business information, including regulatory test data. Far from improving on a prior draft issued in December 2019, the new draft would further weaken RDP in Saudi Arabia. Among other things, the draft contains a general provision on RDP without specifying the term of protection and explicitly states that reliance on the clinical data package submitted by the innovator to SFDA does not constitute unfair commercial use. The draft also lacks clarity with respect to the scope of products covered, contains overly broad exceptions to RDP and continues to lack the necessary mechanisms for effective enforcement.

In addition to making no progress on RDP, in April 2020, SAIP issued damaging final regulations on the compulsory licensing of patents, which have the potential to frustrate Saudi Arabia's efforts to promote innovation and economic growth. The final regulations largely disregard comments pharmaceutical innovators provided on draft regulations SAIP published in July 2019. PhRMA believes governments should grant compulsory licenses (CLs) in accordance with international rules and only in exceptional circumstances and as a last resort. Decisions should be made through fair and transparent processes that involve participation by all stakeholders and consider all relevant facts and options. By allowing SAIP to take patents away three years after they are lawfully granted for almost any reason and without prior notice to the patent holder, the regulations risk encouraging excessive use of CLs and denying patent holders the right to adequately defend their property interests.

PhRMA members acknowledge certain positive intentions to strengthen patent protection through a new initiative on protecting IP issued in Summer 2020. However, not only is it limited to patents, but it also falls short of providing a truly effective patent enforcement system. In particular, the proposed initiative puts the entire burden of

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²⁶⁶ Report of the Working Party on the Accession of the Kingdom of Saudi Arabia to the World Trade Organization, WT/ACC/SAU/61 (Nov. 1, 2005) ¶ 261, available at https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/WT/ACC/SAU61.pdf (last visited Jan. 27, 2021).

enforcement on the innovator, provides for relatively short timelines to detect potential infringements and raise objections, while not providing any notification system which is common practice in many other countries with robust IP protection systems.

Biopharmaceutical innovators have repeatedly engaged or sought to engage SAIP and other relevant Saudi ministries to address these concerns and to improve IP protection in the Kingdom. While some limited progress has been achieved, SFDA continues to act in ways that violate IP protections and that seemingly invite others to violate such protections. Rather than serve as a champion of innovation, SAIP appears to be moving towards weakening IP protection and enforcement. However, PhRMA and its member companies are encouraged by the new leadership of SAIP which may help to make progress against the challenges that are currently being faced by innovator companies and PhRMA will continue engaging with and maintaining an open dialogue with the Saudi authorities to best improve the IP environment in the country.

Market Access

Pricing Guidelines Do Not Appropriately Value Innovative Medicines

The SFDA uses international reference pricing (IRP) to set the prices of medicines. As a general matter, IRP suffers from serious flaws as a mechanism for pharmaceutical pricing. It assumes similarity across countries in the reference basket and implicitly imports the pricing policies of those countries without accounting for circumstances that justify price differentiation. Importantly, IRP ignores the local value of medicines, patient benefits and physician requirements, existing standards of care, placement within the health care system, patterns of disease burden, socioeconomic factors, stage in the pharmaceutical life cycle, etc. IRP also ignores circumstances unrelated to a product's value such as budget overruns that lead to government price cuts.

In August 2020, SFDA issued draft pricing regulations that would have compounded many flaws of the existing system. Following consultation with industry, a new version of the guidelines was implemented in January 2021 that makes several improvements over the draft version that will increase transparency and predictability. These include reducing the number of countries in the reference basket, limiting the circumstances of repricing after two years with five years remaining the rule, as well as a capping price reduction to 30 percent. While the system still does not appropriate value innovation and several provisions still require clarification, the industry acknowledges that these changes are a step forward compared to the previous draft which, if implemented, would have had detrimental effects on PhRMA member companies operating in Saudi Arabia.

Government Procurement System Lacks Transparency and Discriminates in Favor of Local Manufacturers

The tendering and purchasing of pharmaceuticals in Saudi present many challenges. Although the tendering system is supposed to be closed, the practice of routine price renegotiations limit predictability, sustainability and fair competition. The lack of clear timelines for the procurement process hinders the ability of companies to plan and invest in bringing new medicines to the market and exposes Saudi Arabia to the risk of supply shortages. In addition, Saudi Arabia recently adopted a newly designed therapeutic class review process, whereby only a single product is identified for inclusion on formularies and for procurement. Such approaches unduly restrict patient and physician choice in identifying the most appropriate treatment for each patient. Finally, contrary to current practice, the National Unified Procurement Company for Medical Supplies (NUPCO) should not disclose confidential negotiated net prices as it harms competition and access to innovation.

In addition to these deficiencies in the procurement process, Saudi Araba recently constituted the Local Content Government Procurement Authority (LCGPA) to identify lists of products that government institutions must procure from local manufacturers. The first list of products has been released, and it identifies more than 100 medicines that are limited to local providers. Additionally, Saudi Arabia recently announced a price preference initiative of up to 30 percent for 42 locally manufactured products made using API manufactured in the country. These actions discriminate against foreign manufacturers and increase uncertainty in the Saudi market.

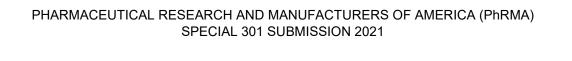
Ensuring the New HTA System Supports Value-based Health Care

Saudi Arabia is intensifying efforts to establish a formal HTA system. The Saudi HTA Center was recently established and began a pilot program in 2020 with voluntary submissions focused on innovative medicines in certain therapeutic areas (e.g., rare disease, oncology and HIV). When designed well and used appropriately, HTA of medical tests, treatments and health care services can represent one of many tools to support well-informed, patient-centered health care. When misapplied, HTA has the potential to impose one-size-fits-all policies that impede patients' and physicians' ability to tailor care to individual needs and preferences. Poor forms of HTA can also hinder progress in developing innovative new therapies that address unmet medical needs.

PhRMA and its member companies recognize the ongoing efforts of the Saudi authorities to build an HTA system and stand ready to offer their expertise based on international experience. While we appreciate that the primary goal is to inform decisions on effective use of resources, it is critical that HTA not be used exclusively as a cost-containment tool, but rather is designed to improve patient choice and access. Rather than overlaying the proposed HTA system on the already complex pricing and reimbursement framework, PhRMA recommends that the new HTA system progressively replace certain features of the existing system – including IRP and the current tendering

process – that are incompatible with the value-based health care approach that Saudi Arabia aims to achieve through its Health Sector Transformation Strategy. We therefore encourage the newly established Saudi HTA Center to engage PhRMA member companies in an open dialogue and seek their support to inform a fit-for-purpose HTA framework for the country.

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ASIA - PACIFIC

AUSTRALIA

PhRMA and its member companies support the U.S.-Australia Free Trade Agreement (AUSFTA) ratified by both countries in 2004. The Agreement has contributed to expanded patient access to new medicines in Australia, a key priority for PhRMA member companies. However, we believe there is much more to do to further improve market access as well as protect and strengthen Australia's intellectual property (IP) regime for new and innovative medicines, which will also serve to foster innovation in Australia's pharmaceutical and biotechnology sectors – a key priority of the Australian Government.

In the Pharmaceuticals Annex to the AUSFTA, Australia and the United States agreed to provisions for increased transparency and accountability, and enhanced consultation between the United States Government, industry and the Australian Government to improve the operation of Australia's Pharmaceutical Benefits Scheme (PBS). Annex 2-C of the AUSFTA at [1] commits the Parties to four principles to facilitate high quality health care and continued improvements in public health. These principles are: "(a) the important role played by innovative pharmaceutical products in delivering high quality health care; (b) the importance of research and development in the pharmaceutical industry; (c) the need to promote timely and affordable access to innovative pharmaceuticals through transparent, expeditious and accountable procedures; and (d) the need to recognize the value of innovative pharmaceuticals through the operation of competitive markets or by adopting or maintaining procedures that appropriately value the objectively demonstrated therapeutic significance of a pharmaceutical." Annex 2-C of the AUSFTA at [3] also establishes a Medicines Working Group (MWG) to promote discussion and mutual understanding of the importance of pharmaceutical research and development to continued improvement of health care outcomes.

While progress has been made in implementing these agreed principles, on-going collaboration is required to ensure that the full potential of the pharmaceutical industry can be realized. We look forward to constructive outcomes from the locally established, bilateral (Government-Industry) Access to Medicines Working Group (AMWG), first established in 2006 as part of reforms to the PBS. Industry has also welcomed the implementation of a tranche of reforms to the regulations for the registration and market approval of medicines and medical devices in Australia. These reforms are starting to streamline processes and regulations and make some life-saving medicines and medical devices available to Australian patients in a more timely manner.

PhRMA is encouraged by the recent bilateral discussions regarding the reconvening of the MWG. PhRMA recommends that, as set out in the AUSFTA, regular meetings under the MWG (which is distinct from AWMG) resume as a matter of urgency; it has been approximately ten years since this MWG last met. While intervening negotiations and meetings may have provided opportunity for our officials to remain in contact, those contacts have been insufficient to address industry issues.

Key Issues of Concern:

- Difficulties in listing new medicines on the PBS: PhRMA member companies continue to face challenges and uncertainty in securing positive recommendations from the Pharmaceutical Benefits Advisory Committee (PBAC) to list new medicines on the PBS. While the recent New Medicines Funding Guarantee is a welcome improvement, the PBS remains one of the only health programs required to demonstrate a particular standard of cost-effectiveness, and investment remains low in comparison to the overall health budget. Policies such as lowest cost comparator selection, legislated price reductions and subsidy caps that can set prices below the cost-effectiveness standard do not support investment in innovation and ultimately result in delayed access to innovative medicines for Australian patients. Nearly 90 percent of new medicines launched globally since 2011 are available in the United States compared to just 39 percent in Australia, with Australia patients waiting an average of 20 months from global first launch for the fewer medicines that do become available.²⁶⁷
- Weak patent law enforcement: Contrary to its obligations under Art. 17.10(4) of the AUSFTA, Australia has not yet implemented a system by which patent holders, as a matter of practice, receive advance notice of third-party applications for marketing approval of potentially patent-infringing pharmaceutical products. The lack of adequate patent holder notification makes it difficult to resolve patent challenges prior to competitor market entry, creating significant uncertainty for patent right holders. In the rare circumstances where any such advance notice is provided, the amount of notice may be inadequate to enable the final resolution of any patent infringement claims before the relevant third-party product obtains regulatory approval for market entry during the term of the relevant patent/s.

PhRMA welcomes the Australian Government's response to the 2019 Therapeutic Goods Administration (TGA) consultation on "[w]hether the TGA should publish that a prescription medicine is under evaluation." In response to public demand for increased information on prescription medicines that are under evaluation, the Government has decided to implement enhanced transparency measures for prescription medicines. These measures will include: publishing a description of major innovator medicine applications that are under evaluation by the TGA from January 2021 forward; and for patent holders to be notified before a first generic or biosimilar medicine application has been accepted for TGA evaluation. We are encouraged by this progress and look forward to seeing the proposals in more detail including the legislation that underpins the patent notification requirement.

• Market-size damages: In cases of patent invalidation by the courts, the Australian Government has joined legal action against innovators for damages attributed to a delay in the PBS price reduction while the patent dispute is being resolved. These

²⁶⁷ PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2019. June 2020.

so-called "market-sized damages" create significant uncertainty for pharmaceutical patent owners, who need to be able to rely on the rights conferred by granted patents (unless and until they are finally invalidated). It also undermines the rights of patent holders in Australia by introducing a strong disincentive to exercise their core right to enforce their IP protections and is inconsistent with Australia's international commitments under the AUSFTA and the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

Compulsory licensing: In August 2019, the Government passed amendments to
the intellectual property legislation which appear inconsistent with AUSFTA and
which would unnecessarily broaden the scope of compulsory licensing. These
amendments could permit compulsory licensing on grounds that are not related to
a judicially or administratively determined remedy for anticompetitive behavior, a
national emergency, or other circumstance of extreme urgency.

For these reasons, PhRMA requests that Australia be placed on the **Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Weak Patent Law Enforcement

Mechanisms that provide for the early resolution of patent disputes before a potentially infringing product is allowed to enter the market are critical to ensuring adequate and effective protection of IP rights for the research-based pharmaceutical sector. Such mechanisms prevent marketing of a product potentially covered by a patent until expiration of the patent or until any dispute relating to infringement or validity of such a patent is resolved. An effective early resolution mechanism provides a procedural gate or safeguard. It ensures drug regulatory entities do not enable marketing authorization, PBS listing or the launch of a product which has been asserted to infringe patent rights. In this regard, the Australian Government's approach is highly concerning to PhRMA members because it encourages unnecessary, costly, and lengthy litigation processes. The Australian Government has indicated that it will grant an application to list a competing generic product on the PBS, even when it has received a certificate submitted by the patent holder that:

- patent infringement proceedings in respect of that product have been commenced in good faith;
- the proceedings have reasonable prospects of success;
- the proceedings will be conducted without unreasonable delay; and
- even when a court has granted a preliminary injunction preventing the generic company supplying that generic product.

As indicated above, the AUSFTA provides that when marketing approval is sought by an applicant for a generic product or "product for an approved use," where the product or approved use is claimed by a patent, the Party (here, Australia) should "provide measures in its marketing approval process to prevent" marketing of the generic product or use during the patent term without consent or acquiescence of the patent owner. Further, if Australia permits a third party to request marketing approval for a product or approved use claimed by a patent identified as claiming that product or approved use, it "shall provide for the patent owner to be notified of such request and the identity of any such other person." This should include a database or other mechanism by which a third party may determine whether there are patents that may be infringed by the product or use for which the third party is seeking approval.

However, originator pharmaceutical companies in Australia generally do not receive any notice of a third party's intention to enter the market with a product that may infringe a valid and enforceable patent prior to its listing on the ARTG.

Originator companies are significantly impacted when generic medicines enter the market prior to the expiry of the originator patent, in part through mandatory and irreversible price cuts for innovator products listed on the PBS, and through market share erosion. The only legal option available to the innovator patentee to prevent the generic company from launching is to obtain preliminary injunctive relief (or equivalent relief), which in the case of PBS listing must be obtained in the weeks between the time marketing approval of the generic product is published on the ARTG and the next possible PBS listing date, in order to prevent the irreversible price reduction. The preliminary injunction process also comes with risk of market-sized damages as discussed below.

Currently, the lack of effective mandatory notification, the absence of an effective mechanism for the early resolution of patent disputes before an infringing product is launched in Australia, and the unduly prejudicial penalties being sought by the Australian Government from patent holders for seeking to defend their IP (including liability for market-sized damages as discussed in detail above) significantly weakens the level of IP protection for pharmaceutical innovation in Australia, serving to deprive patent holders of expected benefits under international agreements including the AUSFTA.

In light of these shortcomings, PhRMA welcomes the Australian Government's response to the 2019 Therapeutic Goods Administration (TGA) consultation on "whether the TGA should publish that a prescription medicine is under evaluation." In response to public demand for increased information on prescription medicines that are under evaluation, the government has decided to implement enhanced transparency measures for prescription medicines. This will include two broad measures. The first will be for the TGA to publish a description of major innovator medicine applications that are under evaluation by the TGA from January 2021 forward. The second measure is subject to the Australian parliament passing legislative amendments that were expected to be introduced in late 2020. These amendments will "require" that a patent holder must be

²⁶⁸ See Article 17.10(4) of AUSFTA.

notified by the sponsor of a generic or biosimilar medicine when their application has been accepted for evaluation by the TGA, before the TGA commences the evaluation. This obligation will apply to the first generic or biosimilar medicines that would be listed on the ARTG after the innovator's medicine.

We look forward to seeing these measures in greater detail, particularly the legislative amendments relating to earlier patent holder notification. If implemented appropriately, the resulting mechanism will benefit not only innovators, but also generics and biosimilar manufacturers and the Australian Government alike, by allowing all parties involved to assess, and hopefully resolve, possible patent infringement issues before generic products and biosimilars are approved. We note that the legislation was not introduced into the Australian Parliament in 2020 as anticipated. Medicines Australia will continue to work with the TGA and await the opportunity to review the draft legislation when it becomes available.

Market-Size Damages

Biopharmaceutical innovators must be able to rely on and enforce patents issued by competent government authorities. Laws or policies that allow governments or other non-parties to join a patent dispute to collect "market-size damages" from innovators that pursue unsuccessful patent claims after being granted a preliminary injunction unfairly penalize and discourage the use of provisional enforcement measures as part of well-functioning early resolution mechanisms. These policies undermine legal certainty, predictability and the incentive provided by patents to invest in new treatments and cures.

Australia's Therapeutic Goods Act, as amended by the legislation implementing the AUSFTA, provides for the award of damages in limited specific circumstances, where a court determines that the patent holder has engaged in improper conduct specifically identified in that legislation in commencing proceedings or seeking a preliminary injunction.²⁶⁹ Damages under this scheme have not been sought since its introduction. However, outside of that scheme, and pursuant to the usual undertaking as to damages provided by patent holders as a requirement for obtaining a preliminary injunction, since around 2012 the Australian Government has stated its intent to seek - and has sought market-size damages from biopharmaceutical innovators that have legitimately but ultimately unsuccessfully pursued patent claims. It has done so even where the preliminary injunction was granted several years before the Australian Government first stated its intention to seek such damages. Those claims are purported to compensate the PBS for the effect of any delays in price reductions for patented medicine during the period of a preliminary injunction. The PBS imposes automatic price cuts on medicines as soon as competing versions are listed on the PBS, but the policy does not include any corresponding mechanism for PBS to reimburse innovators if it is found that those competing versions listed on the PBS were infringing the innovator's patents.

²⁶⁹ See Schedule 7 of the US Free Trade Agreement Implementation Act 2004, available at https://www.legislation.gov.au/Details/C2004A01355/ (last visited Jan. 27, 2021).

By pursuing market-size damages, the Australian Government is unfairly tipping the scales in pharmaceutical patent disputes – and discouraging innovators from enforcing their granted patents. This policy permits the same court that granted a provisional enforcement measure in a patent dispute to allow that measure to be used as the basis for a claim for compensation by the government or another non-party to the dispute. It exposes innovators to significant additional compensation claims that may be difficult to quantify and were not agreed to or contemplated at the time the preliminary injunction was granted. The punitive size of these additional claims effectively equates legitimate patent enforcement, in circumstances where the market effects of infringing generic entry are difficult to quantify, with patent abuse. Allowing governments or other non-parties to a patent dispute to collect market-size damages, undermines legal certainty, predictability and the incentives that patents provide for investment in new treatments and cures. Australia's practice appears to be inconsistent with the AUSFTA and with WTO intellectual property rules, including with respect to provisional measures.

Indeed, in the course of claiming market-size damages, representatives of the Australian Government have stated that the Australian Government will grant an application to list a competing generic product on the PBS (the effect of which is an automatic price cut), even when:

- the patentee has lodged a certificate, required as a result of the amendments to the Therapeutic Goods Act as a result of the legislation implementing the AUSFTA as a precondition for commencing patent infringement proceedings, stating that infringement proceedings in respect of that product have been commenced in good faith, have reasonable prospects of success, and will be conducted without unreasonable delay; and/or
- a preliminary injunction has been granted by a court which prohibits the supply of that product by the generic company.

Such comments typify the Australian Government's conflict of interest, as well as the disregard paid by the Australian Government to the legitimate interests of innovators in enforcing their granted patent rights.

PhRMA members urge USTR and other federal agencies to prioritize actions to address Australia's pursuit of market-size damages. The Australian Government should immediately and publicly abandon its policy of seeking market size damages, or any damages, when a patent holder has legitimately sought to enforce its patent rights.

Compulsory Licensing

October 2019 amendments to Australia's intellectual property legislation on compulsory licensing, including Crown use, are unnecessary, weaken patent protection, discourage investment and limit the potential benefits of innovation for Australians. These changes may encourage or make it easier for third parties to acquire innovative technologies without authorisation, which could have significant unintended

consequences. The amendments could also permit compulsory licensing on grounds that are potentially broader than the circumstances outlined in AUSFTA Article 17.9.7.

Inadequate Regulatory Data Protection

Biopharmaceutical innovators work with hospitals, universities and other partners to rigorously test potential new medicines and demonstrate that they are safe and effective for patients who need them. Less than 12 percent of medicines that enter clinical trials ever result in approved treatments.²⁷⁰

To support the significant investment of time and resources needed to develop test data showing that a potential new medicine is safe and effective, governments around the world protect such data submitted for regulatory approval from unfair commercial use for a period of time. Indeed, TRIPS Article 39.3 requires each WTO member to protect undisclosed test and other data submitted for marketing approval in that country against disclosure and unfair commercial use.

RDP is essential for all medicines, and particularly critical for biologic therapies. Made from living organisms, biologics are complex and challenging to manufacture and may not be protected adequately by patents alone. Unlike generic versions of traditional chemical compounds, biosimilars are not identical to the original innovative medicine and there is greater uncertainty about whether an innovator's patent right will cover a biosimilar version. Without the certainty of some substantial period of market exclusivity, innovators may not have the incentives needed to conduct the expensive, risky and time-consuming work to discover and bring new biologics to market.

Strengthening RDP in Australia – in terms of the length and scope of protection - so it is aligned with global best practice would further enhance Australia's ability to compete for foreign investments in the knowledge- and innovation-intensive biomedical sector that can drive future economic growth. Australia should implement RDP terms that are consistent with international best practices.

Market Access

Difficulties in Listing New Medicines on the PBS

The purpose of the PBS is to provide timely, reliable and affordable access to medicines for all Australians. Prescription medicines accessed via the PBS constitute the

²⁷⁰ DiMasi JA, Grabowski HG, Hansen RW; Tufts Center for the Study of Drug Development. Innovation in the pharmaceutical industry: new estimates of R&D costs. In: Briefing: Cost of Developing a New Drug, available at

https://static1.squarespace.com/static/5a9eb0c8e2ccd1158288d8dc/t/5ac66afc6d2a732e83aae6bf/1522952963800/Tufts_CSDD_briefing_on_RD_cost_study_-_Nov_18%2C_2014..pdf (last visited Jan. 27, 2021).

vast majority of prescription medicines dispensed in Australia.²⁷¹ Accordingly, the reimbursement process to obtain PBS listing, as well as PBAC guidelines and decision making, in effect dictate access to the Australian market. Unfortunately, policies such as lowest cost comparator selection, legislated price reductions and subsidy caps that can set prices below the cost-effectiveness standard do not support investment in innovation and ultimately result in delayed access to innovative medicines for Australian patients. Nearly 90 percent of new medicines launched globally since 2011 are available in the United States compared to just 39 percent in Australia, with Australia patients waiting an average of 20 months from global first launch for the fewer medicines that do become available.²⁷²

The PBAC's approach of comparing new innovative products to the lowest cost comparator, combined with low thresholds for cost-effectiveness, creates an increasingly difficult barrier to patient access. In too many cases, comparators are old, off-patent medicines that are subject to generic or biosimilar competition and have undergone several rounds of price reductions. This practice undermines the intent of Australia's split F1 and F2 formulary system – which was originally designed to recognize the value of innovation by excluding patented products from the price reductions applied to off-patent products. Today's innovative medicines offer more personalized and targeted treatments for some of the most serious conditions. Comparing these medicines to older existing medicines that are less complex and developed decades earlier does not represent fair value for the innovation involved and is an additional disincentive to bringing innovative medicines to Australia. Recent activities to provide clarity on this issue have not led to widespread selection of the most appropriate comparator. Industry welcomes the Australian Government's commitment to consider the issue of comparator selection as part of the AMWG discussions.

In 2017, Medicines Australia signed a five-year Strategic Agreement with the Australian Government to secure greater predictability and stability in the PBS and policy environment. This Agreement was not without significant cost to the industry by cementing the application of a structured series of price reductions for patented medicines in the single-brand F1 formulary at 5-, 10- and 15-years post listing. Additionally, the Agreement aims to resolve issues with the interpretation of section 99ACB of the National Health Act and commits to no new determination of therapeutic groups during the term of the Agreement.

More recently, the October 2020 budget announcement from the Australian Government establishes a New Medicines Funding Guarantee for new and amended listings. Approximately \$2.8 billion in new funding is expected to be committed over the next four years for the listing of new medicines on the PBS. Industry also welcomes the government's reaffirmation that the PBS is an uncapped, demand-driven medicines

²⁷² PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2019. June 2020.

²⁷¹ See Australian Statistics on Medicines 2014, available at http://www.pbs.gov.au/statistics/asm/2014/australian-statistics-on-medicines-2014.pdf (last visited Jan. 27, 2021).

access system upon which all medicines recommended by the PBAC should be listed, as well as a new commitment to no longer require equal budget offsets for new medicine listings. These changes should help improve the timely listing of new medicines recommended by the PBAC.

Moving forward, it is important that the PBS and associated PBAC processes streamline and evolve as new and more advanced health technologies become available. Significant progress has made in consultation with industry to improve regulatory review with the implementation of the Medicines and Medical Devices Review, including new fast-track regulatory pathways such as Priority Review and Provisional Approval. However, unlike other jurisdictions, there is currently no corresponding change in the health technology assessment (HTA) and reimbursement system to accommodate these new pathways. Industry looks forward to working with the Australian Government to implement a fit-for-purpose HTA and reimbursement system to ensure that Australians have timely access to lifesaving and life-changing innovative medicines.

Government-Initiated Post-Market Reviews of PBS Listed Medicines

The Australian Government conducts post-market reviews of PBS-listed medicines to inform decision-making and to improve health outcomes for all Australians.²⁷³ While the stated objective of these reviews has been to improve the quality use of medicines, most reviews have had an imbalanced focus on cost-containment. Industry hopes that considering the statutory price reductions included in the Strategic Agreement, the focus of future post-market reviews will be to improve the quality use of medicines.

Public Summary Document Changes

The PBAC has implemented new requirements for Public Summary Documents in which it will publish all clinical evidence relied upon by the PBAC to inform its decision-making process. The only exception will be for academic-in-confidence information. The PBAC does not consider that commercial-in-confidence issues should apply to the publishing of clinical data used for deliberations. While there has been ongoing consultation with the industry on this matter, industry remains concerned that the clinical data redaction criteria are too narrow and may discourage submission of commercial-in-confidence data in PBAC submissions. To that end, industry will proactively monitor this issue to address any unintended consequences or access barriers that arise.

Biosimilars

Contrary to Australia's goal of fostering a biotechnology industry, the government elected in early 2018 not to implement a unique naming convention for biologic medicines. The absence of such a policy has the potential to weaken pharmacovigilance, postmarket monitoring and confidence in the introduction of biosimilar medicines. Moreover,

²⁷³ See http://www.pbs.gov.au/info/browse/reviews (last visited Jan. 27, 2021).

the impact of the government's policy of allowing decisions regarding substitution (*i.e.*, enabling a patient's medicine to be switched) between biologic and biosimilar products at the pharmacy level, particularly in a health system that does not support unique naming conventions for biological medicines, has not yet been assessed. It will be important to ensure that policies seeking to increase the use of biosimilars do not inadvertently disincentivize or hamper competition and discourage innovative manufacturers of original biologics to enter and remain in the Australian market. PhRMA strongly encourages the Australian Government to deepen consultation with industry as it seeks to develop evidence-based, consistent and comprehensive biosimilars policies that support appropriate use of biologics and biosimilar medicines.

INDONESIA

PhRMA and its members companies see tremendous opportunities to contribute further to Indonesia's health care goals. However, longstanding market access and intellectual property (IP) barriers in this large and growing market continue to hinder possible partnerships from delivering on their full potential. The Indonesian Government appears sincere in its desire to address these barriers, notably through recent regulatory reforms in the 2020 Omnibus Law. The Law revises 76 existing laws including a significant partial revision of the 2016 Patent Law and the 2014 Halal Law, including clarifying patent working requirements. PhRMA's member companies are encouraged by this reform and the steps taken to achieve meaningful results and improvements to the IP environment in Indonesia.

Additionally, PhRMA recognizes that the Indonesian Government has initiated a process to more comprehensively amend the 2016 Patent Law. This process has included positive steps such as meetings with stakeholders in Jakarta and we are hopeful that legislation will be passed in 2021. Such revised legislation would be an even more significant indication that Indonesia is serious about positively changing their investment environment and perception globally. PhRMA member companies are prepared to work collaboratively with Indonesian authorities to find solutions that benefit patients in Indonesia while maintaining adequate and effective IP protections. However, PhRMA member companies remain concerned that the issuance of the Presidential Regulation No. 77/2020, related to government use of compulsory licenses, will negate some of the recent steps taken by the Indonesian Government to protect intellectual property.

Key Issues of Concern:

- Compulsory licensing: In July 2020, Indonesia issued Presidential Regulation No. 77/2020 on government use of compulsory licenses (CLs). The regulation was published in final form without consulting stakeholders. The regulation broadly enables government agencies to request CLs for pharmaceutical products to address emergency needs in the public interest. If a CL is granted and the government is unable to implement the patent, it may appoint a third party to do so. Despite efforts in 2019 to address and revise existing CL regulations to more appropriately align with global norms and best practices, this new regulation and the process by which it was developed and issued sends a troubling signal to innovators.
- Restrictive patentability criteria: 2016 amendments to the Patent Law preclude patents on new uses (indications) and establish an additional patentability criterion of "increased meaningful benefit" for certain forms of innovation, such as new salts or new dosage forms. These restrictions are overly broad and will undermine support for important innovations and appear to conflict with existing international obligations by imposing additional or heightened patentability criteria that discriminate against particular classes of technology. The Patent Office has been

implementing technical guidelines that remove this impermissible restriction, but the underlying provisions in the 2016 Patent Law remain unchanged. In addition, the 2016 Patent Law still imposes new patent disclosure requirements regarding the source and origin of genetic resources. Such requirements introduce uncertainties into the patent system that inhibit innovation in relevant technologies and undermine the potential of benefit-sharing.

- Forced localization requirements: While the recent revisions to Article 20 of the 2016 Patent Law in the 2020 Omnibus Bill are a positive step forward, other forced localization requirements still remain in Decree 1010. PhRMA looks forward to additional measures to address outstanding concerns regarding Decree 1010 to ensure that Indonesian patients have access to new medicines.
- Cost-focused formulary decisions: While Indonesia is to be commended for developing guidelines and an online portal for listing new medicines on the Indonesian National Formulary, actual listing decisions appear to be primarily based on price and the overall Social Insurance Administration Organization (BPJS) budget. Consistent with Indonesian Government guidelines, listing decisions should better reflect all evidence submitted, including scientific data demonstrating the product's safety and efficacy. To this end, PhRMA member companies are encouraged that the government procurement agency is considering implementation of a more holistic approach to health technology assessment (HTA) for procuring medicines.
- Mandatory halal certification: On September 25, 2014, the Indonesian Parliament passed the Halal Products Law. The Law has broad application to all consumables, including pharmaceuticals, and requires that producers label their products as "halal" or as "non-halal," based on whether the products are halal certified. PhRMA's member companies are strongly supportive of religious and cultural sensitivities but are concerned that this mandatory labeling requirement could have unexpected negative implications on patient health and the broader public health agenda.

For these reasons, PhRMA requests that Indonesia be placed on the **Watch List** in the 2021 Special 301 Report. Further, we urge USTR to conduct an **Out-of-Cycle Review** for Indonesia so that appropriate resources are devoted to working with the Indonesian Government to finalize the necessary amendments to the Patent Law and ensure appropriate protection of IP in Indonesia.

Intellectual Property Protection

Restrictive Patentability Criteria

The Patent Law precludes patents on new uses (indications) and establishes an additional patentability criterion of "increased meaningful benefit" for certain forms of innovation, such as new salts or new dosage forms. These restrictions undermine support

for important innovations and are contrary to existing international obligations by imposing additional or heightened patentability criteria in a manner that discriminates against particular classes of technology. While this issue has been partially addressed through revisions to the Patent Office's internal technical guidelines, the underlying 2016 Patent law provisions remain unchanged. Such requirements introduce uncertainties into the patent system that inhibit innovation in relevant technologies and undermine the potential of benefit-sharing.

Additional substantive requirements for patentability beyond that the invention be new, involve an inventive step and capable of industrial application, are inconsistent with the TRIPS Agreement. Article 27 of the TRIPS Agreement provides a non-extendable list of the types of subject matter that can be excluded from patent coverage, and this list does not include new uses of existing compounds. Therefore, the Patent Law appears to be inconsistent with the framework provided by the TRIPS Agreement. Moreover, the Patent Law imposes an additional hurdle for patents on inventions specifically relating to chemical compounds and, therefore, is in conflict with the non-discrimination principle provided by TRIPS Article 27.

To bring valuable new medicines to patients, biopharmaceutical innovators must be able to secure patents on *all* inventions that are new, involve an inventive step and are capable of industrial application. Restrictions that narrow patentability prevent innovators from building on prior knowledge to develop valuable new and improved treatments that can improve health outcomes and reduce costs by making it easier for patients to take medicines and improving patient adherence to prescribed therapies.

Burdensome and Vague Disclosure Obligations

The Patent Law also requires disclosure of the origin of genetic resources or traditional knowledge "related" to inventions. We support the objectives of the Convention on Biological Diversity ("CBD") and recognize the national sovereignty of States over biological resources. However, such requirements introduce uncertainties into the patent system that inhibit innovation in relevant technologies and undermine the potential of benefit-sharing. We therefore recommend eliminating this vague requirement, which is likely to cause uncertainty for innovators and undermine the sustainable use of technology related to biological resources.

Compulsory Licensing

In July 2020, Indonesia issued Presidential Regulation No. 77/2020, on government use of CLs. The regulation was published without consulting stakeholders. The regulation enables government agencies to request CLs for pharmaceutical products to address emergency needs in the public interest and establishes a process to evaluate requests. If a CL is granted and the government is unable to implement the patent, it may appoint a third party to do so, subject to certain conditions. While the government must notify the patent holder when a request is accepted for review, there is no formal procedure allowing patent holders to dispute claims in a request or recommend

alternatives. If a CL is granted to address emergency needs, the right holder must continue to pay fees to maintain the patent. The regulation also does not expressly permit or prohibit imports or exports of products manufactured under CLs.

While this new regulation is not targeted at particular products, it clearly poses an immediate threat to COVID-19 treatments and vaccines and could be used against other products the government deems necessary for emergency purposes in the future without due process or engagement with the patent holder. PhRMA and its members are concerned about the Indonesian Government's implementation of government-use licensing for COVID-19 medicines such as remdesivir. Such proposals for compulsory or government-use licenses should first consider the unprecedented industry collaboration and access strategies, including voluntary licensing, deployed by pharmaceutical companies to address emergencies like the current COVID-19 pandemic. CLs will not necessarily speed access to complex set of treatments and vaccines that are currently being tested and developed, and should only be used in accordance with international rules and as a measure of last resort. Further, such actions are likely to undercut Indonesia's effort to attract foreign investment and negate the recent positive steps undertaken to align public policy reforms to global best practices. The Indonesian Government should focus on accelerating the necessary regulatory approvals and streamlining procurement processes for COVID-19 medicines, rather than assuming intellectual property as a barrier to access medicines.

The 2016 Patent Law and implementing regulations create further uncertainty in this area by discouraging voluntary licensing agreements between private parties and promoting compulsory licensing on grounds that are vague or appear to be inconsistent with Indonesia's international obligations. In particular, Article 79 of the Patent Law unnecessarily requires disclosure of private licensing agreements. However, we welcome that the newly issued Omnibus Law decouples the local production requirement from CLs, and aligns Indonesia's patent working requirements with international rules to include the manufacture, importation, and/or licensing of a patented invention in Indonesia.

PhRMA and its member companies also welcome the process the MLHR has initiated to separately amend the existing Patent Law (2016). Indonesia should make clear in the revised law that any compulsory licensing action needs to be taken on a patent-by-patent basis with full consideration of particular circumstances in each case. CLs should only be used in extraordinary circumstances as a last resort rather than standard government practice. As a general matter, CLs are not a sustainable or effective way to address health care needs. Voluntary arrangements independently undertaken by member companies better ensure that current and future patients have access to innovative medicines.

Market Access

Forced Localization Requirements

Ministry of Health (MoH) Decree 1010/MENKES/PER/XI/2008 ("Decree 1010"), formally implemented in November 2010, prevents multinational research-based pharmaceutical companies from obtaining marketing authorization for their products. Under Decree 1010, only companies registered as "local pharmaceutical industry" are granted marketing approval. As several of PhRMA's member companies do not manufacture products in Indonesia, they are instead classified as distributors, or "PBF" enterprises. They are so classified despite following globally recognized good manufacturing practices in the same manner as other high quality pharmaceutical firms manufacturing in Indonesia. Products of multinational research-based pharmaceutical companies and other foreign companies are barred from the Indonesian market unless (1) a local manufacturing facility is established; or (2) sensitive IP is transferred to another pharmaceutical firm with local manufacturing facilities in Indonesia. The first condition is not possible for many PhRMA member companies, given the structure of their global pharmaceutical supply chains. The second condition poses a serious threat to IP protection and patient safety.

Another key concern with Decree 1010 is the requirement to locally manufacture imported products within five years after the first importation with some exceptions, *e.g.*, products under patent protection. Even for companies with local manufacturing facilities in Indonesia, this is not always possible for several reasons, including the structure of their global pharmaceutical supply chains and lack of required technology within their local facilities to produce innovative products.

Rather than amend Decree 1010 to mitigate damaging provisions, the MoH created Decree 1799 on December 2010, altering the definition of local manufacturing and introducing the concept of partial manufacture. PhRMA member companies have sought clarification on several vague and conflicting provisions of Decree 1799 since its release. The guidelines for Drug Registration (popularly known as the Brown Book) developed by Food and Drug Monitoring Agency (BPOM), issued in July 2011 and revised in 2013 and 2016, were comprehensively renewed in November 2017; some of the provisions in this latest Brown Book provided leeway for PhRMA member companies to comply with the requirement to locally manufacture imported products within five years of patent expiration. While PhRMA member companies acknowledge the initial steps taken by BPOM to engage in consultations, key concerns remain unresolved with the existing provisions in Decree 1010 and Decree 1799.

Recently, in October 2020, the Indonesian parliament passed the government-initiated Omnibus Bill into law that revises 76 existing laws, including partial revision of the 2016 Patent Law. Specifically, the Omnibus Law revises Article 20 of the 2016 Patent Law, such that a manufacturer is no longer required to locally produce the product in order to be considered "working" the patent in Indonesia. This is as a very positive development to strengthen the IP environment in Indonesia. As a result of this change, patent holders

are required to ensure the availability of the patented products in Indonesia in order to preserve their patents, which can be achieved through importation or licensing.

Another important issue is the local content requirement established as a result of Presidential Instruction No. 6/2016, as a means to accelerate the development of the biopharmaceutical and medical device industry in Indonesia. Under the regulation, a local content requirement calculation is imposed as a threshold criterion for government procurement of biopharmaceutical and medical device products. The method to calculate the threshold as set forth in MOI Regulation No. 16 of 2020 on the Provisions and Procedures for the Calculation of Local Content Level of Pharmaceutical lacks clarity such that it may be impossible to implement or monitor. It is critical that these requirements are not applied in a manner that restricts patient access to innovative medicines in Indonesia.

In short, PhRMA member companies are concerned about Indonesia's localization requirements as well as the lasting harm to market access, IP protection and patient health if left unresolved.

<u>Cost-Focused Formulary Decisions</u>

Indonesia's national formulary (FORNAS) serves as a basis for pharmaceutical reimbursement and public-sector procurement. While Indonesia should be commended for developing guidelines and an online portal (eFORNAS) for listing new medicines on FORNAS, actual listing decisions appear to be primarily based on price and the overall BPJS budget. PhRMA encourages FORNAS to consider broader health and economic evidence for listing decisions that improve health outcomes for Indonesian patients. Moreover, although products can be added or removed annually, formal updates to the FORNAS only take place every two years. Recent moves to delist products based on arbitrary standards for cost-effectiveness have raised additional concerns.

Consistent with Indonesian Government guidelines, listing decisions should reflect all evidence submitted, including clinical evidence demonstrating the product's safety and efficacy. To this end, PhRMA and its member companies are encouraged that the government procurement agency is considering implementation of a more holistic approach to HTA (e.g., multiple criteria decision analysis) for procuring medicines. PhRMA encourages the establishment of a more transparent, credible and evidence-based decision-making process. PhRMA also encourages FORNAS to consider more flexible, innovative contracting models to increase patient access to medicines.

Mandatory Halal Certification

Indonesia's Mandatory Halal Certification Bill, enacted in September 2014, mandates Halal certification and labeling for food and beverages, medicines, cosmetics, chemical products, biological products, and genetically-engineered products. The legislation establishes a new Halal certification authority called BPJPH, and requires pharmaceutical firms to hire a Halal specialist and disclose sensitive product formulas to the new Halal authority.

Despite public opposition to the Law, including the objection of the MoH, Regulation No 31/2019 on the implementation of the Halal Law was signed by the President on April 29, 2019, stipulating a phased implementation of the law. According to the Decree of Minister of Religious Affairs no. 26/2019, dd. October 15, 2019, manufacturers will be required to provide halal certification for over the counter drugs between October 2019 to October 2029 and for prescription drugs between October 2021 to October 2034. However, it is understood that the President and the MoH are drafting further regulations that will provide biopharmaceutical products and vaccines with a grace period. It is important that Indonesia adopt a waiver for Halal certification requirements for all COVID-19 therapeutics and vaccines recognizing that the current pandemic and emergency context requires speed of access; the pharmaceutical industry already complies with existing BPOM regulations regarding disclosure of ingredients and excipients, and stakeholder consultations for the draft Presidential regulations regarding a grace period are ongoing.

The newly issued Omnibus Law includes revisions to the Halal Law that are intended to streamline the process of halal certification, simplify the certification renewal process and provide clearer timelines. PhRMA's member companies recognize and support the religious and cultural sensitivities of all Indonesians, but are concerned that these measures may have negative implications for patient health. In particular, significant questions remain regarding the process for securing halal certification, labeling, and how the government will ensure that the new requirements do not impact patient access to the medicines they need.

Counterfeit Medicines

Although PhRMA's member companies welcome Indonesia's ongoing efforts to promote the use of safe medicines, there is an urgent need to expand national enforcement efforts. New leadership at BPOM have focused their efforts on combatting counterfeit food and medicine products, but the budget and resources for this effort remain inadequate. Increasing and enforcing the penalties for criminals caught manufacturing, supplying, or selling counterfeit pharmaceuticals as well as unsafe medicines will greatly assist Indonesia's efforts to reduce the harmful impact of counterfeit medicines.

Research conducted by Masyarakat Indonesia Anti-Pemalsuan (MIAP), Indonesia's anti-counterfeiting society, suggests that losses incurred by the state as a result of counterfeiting continue to rise each year. Greater collaboration and government initiatives, such as a nationwide campaign and devoted budget to combat counterfeit products, should be intensified to ensure the health and safety of Indonesian patients.

Hence, PhRMA's member companies support Indonesia's current legislation agenda for finishing the Drug and Food Supervision Bill in 2021 as a legal basis for creating a stronger drug administrator and drug supervision process.

THE PHILIPPINES

PhRMA members face serious and imminent market access and intellectual property (IP) threats in the Philippines. PhRMA members are deeply concerned about the government's fading commitment to the free market. The Philippine Government is creating an environment that seeks to institutionalize price regulation, disregard IP, and impose discriminatory policies. Of particular concern are mandatory price cuts of up to 50 percent and proposed additional price cuts of up to 96 percent. These measures adversely impact PhRMA member companies operating in the Philippines.

The impending price cuts, compulsory licensing proposals and burdensome regulatory processes threaten access to innovative medicines in the Philippines.

Key Issues of Concern:

- Price control measures: Despite recent passage of the Universal Healthcare Act and National Integrated Cancer Control Act that both contain tools to reduce prices for medicines, the Department of Health (DoH) has imposed draconian price cuts in the Philippines through the Maximum Retail Price (MRP) policy. Issued in February 2020, the initial list covers 133 drug formulations with a mandatory price reduction of up to 50 percent from prevailing market prices. The policy also contains provisions to cover another set of 72 drug formulations, with initial price reduction proposals ranging from 50 percent up to a staggering 96 percent, despite calls to suspend such measures due to the COVID-19 pandemic. These measures are the beginning of future intended price cuts, as the DoH has stated that it intends to cover up to 54 percent of all prescription medicine formulations. The price cuts are estimated to decrease industry's annual revenues by approximately PHP 57 billion (over USD 1 billion).
- Philippine National Formulary (PNF) and health technology assessment: While industry supports the appropriate use of evidence to inform formulary decisions, existing delays in introducing innovative medicines could be further exacerbated by the recent establishment of health technology assessment (HTA) as a prerequisite for PNF inclusion. Specifically, in January of this year, the DoH halted the nomination process in order further solidify certain HTA details. Furthermore, the HTA process and methods guides were only recently published, including Administrative Order 2020-0041 (The New Implementing Guidelines on Health Technology Assessment to Guide Funding Allocation and Coverage Decisions in support of Universal Health Care). It is estimated that it will take 2 years before a product completes the HTA process.
- Regulatory hurdles: The current target for approval (and issuance of the Certificate of Product Registration (CPR)) is 254 calendar days. However, in practice, the process takes two to four years. With new management in place, coupled with the monitoring of the Anti-Red Tape Agency (an agency tasked with

monitoring the efficiency of government agencies), PhRMA members have seen improvements in the regulatory process. Another hurdle is the FDA's backward step of unnecessarily reinstituting local Post Marketing Surveillance (PMS) studies versus relying on Periodic Safety Update Reports (PSURs). This has led to significant additional costs for PhRMA members, as well as delayed access to medicines.

- Intellectual property protection: The Cheaper Medicines Act amended the Philippines Intellectual Property Code to limit the patentability of new forms and uses of pharmaceutical products. The Act appears to be inconsistent with the World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) since the limitation appears to be designed to discriminate against certain technologies. Additionally, the Philippines does not have a robust system or a set of coordinated procedures across relevant government agencies such as the Intellectual Property Office and the Food and Drug Administration to allow patent holders to effectively and efficiently resolve patent disputes prior to the marketing of generic copies of pharmaceutical products by third parties.
- Compulsory licensing guidelines: In 2019, the DoH proposed a guideline on the
 use of compulsory licenses (CLs). PhRMA and its member companies are
 concerned that the Guidelines may be inconsistent with international best practices
 and the Philippines' international obligations, in that they appear to be based on
 an erroneous understanding of TRIPS, allow for the grant of CLs on overly broad
 grounds, provide inadequate opportunity for patent holders to respond to CL
 petitions and discriminate against pharmaceutical patents.

For these reasons, PhRMA requests that the Philippines be placed on the **Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Cheaper Medicines Act

PhRMA members continue to have concerns that certain provisions in the Cheaper Medicines Act adversely affect effective protection of intellectual property and result in certain market access barriers. For example, certain provisions appear to create additional patentability requirements for new forms and uses of pharmaceutical products, thereby discriminating against the pharmaceutical sector, and raising questions as to its consistency with the TRIPS Agreement. There is also a need to engage the judiciary to ensure more consistent interpretation of intellectual property protections in the Philippines.

Effective Patent Enforcement

It is important that the Philippines adopt processes and mechanisms to allow for the efficient resolution of patent issues prior to the marketing of follow-on products by third parties. Such a mechanism was in place before a 2005 DoH Administrative Order (A.O. No. 2005-0001) took effect that required pharmaceutical patent holders to pursue costly and time consuming legal remedies to protect products from patent infringement prior to patent expiration. PhRMA member companies recommend that the government take a holistic approach with respect to IP rights to ensure that patents are effectively enforced by the Government of the Philippines. This would include a coordinated effort by the IPOPHL and the FDA to preclude issuance of a CPR for a follow-on medicine by FDA until the relevant patents on the originator product have expired, or there has been sufficient time for resolution of a patent infringement dispute.

Compulsory Licensing Guidelines

In 2019, the DoH proposed a guideline on the Use of Special CLs and CLs. PhRMA and its member companies are concerned that the Guidelines may be inconsistent with international best practices and the Philippines' international obligations, in that they appear to be based on an erroneous understanding of TRIPS, allow for the grant of CLs on overly broad grounds, provide inadequate opportunity for patent holders to respond to CL petitions (as well as appeal from CL grants) and discriminate against pharmaceutical patents.

PhRMA believes governments should grant CLs in accordance with international rules and only in exceptional circumstances and as a last resort. Decisions should be made through fair and transparent processes that involve participation by all stakeholders and consider all relevant facts and options.

Market Access

Government Pricing Policies

Despite recent passage of the Universal Healthcare Act and National Integrated Cancer Control Act that both contain tools to reduce prices for medicines, DoH has imposed draconian price cuts in the Philippines through the MRP. Issued by the President in February 2020, Executive Order No. 104, entitled "Improving Access to Healthcare through the Regulation of Prices in the Retail of Drugs and Medicines," covers an initial list of 133 drug formulations with a mandatory price reduction of up to 50 percent from prevailing market prices. The policy also contains provisions to cover another set of 72 drug formulations, with initial price reduction proposals ranging from 50 percent up to a staggering 96 percent, in spite of calls to suspend such measures due to the impact of COVID-19 on the industry. The combined list includes molecules for hypertension, diabetes, cardiovascular disease (CVD), chronic lung diseases, neonatal diseases, major cancers, chronic renal disease, psoriasis and rheumatoid arthritis, among others.

These policies are the beginning of further price regulations to come in the future, as the DoH intends to cover 1,154-2,394 preparations or 26-54 percent of the medicines available in the market. The local innovative pharmaceutical trade association (PHAP) estimates that this could reduce industry's annual revenues by approximately PHP 57 billion or almost USD 1.1 billion if fully implemented.

To fully operationalize this plan, the DoH released in August 2020 guidelines to implement MRP under Administrative Order No. 2020-0039. The AO includes the: (1) constitution of a Drug Price Advisory Council, responsible for drug price evaluations and for recommending which drugs will be under price regulation and at what level; (2) the medicine review process, including the basket of countries for external reference pricing, medicine selection algorithm (incorporating public nomination of medicines for MRP), and formula for calculating MWP and MRP; (3) implementation guidelines, including exhaustion of inventory, publication and posting requirements; and (4) monitoring and evaluation (impact assessment).

As part of these actions to move away from allowing the free market to dictate prices in the Philippines, the DoH has also proposed to Congress the creation of a Drug Price Regulatory Board (DPRB) to oversee the MRP mechanism, with the sole task of regulating medicine prices.

The MRP policy has contributed to a contraction in the prescription medicine market by as much as 18.2 percent (Q3 2020 vs. Q3 2019). Three products covered in the first wave of MRP have been withdrawn from the market, as the price cuts were unsustainable to maintain.

In addition to the MRP policy, the Philippines continues to mandate discounts for certain patient populations such as senior citizens, persons with disabilities, national athletes, solo parents and many others. Ambiguities in the implementation of laws related to the 20 percent discount granted to senior citizens and persons with disabilities have resulted in the cost of the discount being borne entirely by manufacturers and retailers, *i.e.*, with no contribution from the government, disproportionately burdening PhRMA member companies.

Proposed Constitution of Price Negotiation Board and Guidelines on Price Negotiation

The DoH is undertaking an online consultation for the creation of a Price Negotiation Board (PNB), which would negotiate prices on behalf of the DoH and the Philippine Health Insurance Corporation (PhilHealth), a corporation attached to DoH incharge of managing the country's social health insurance. If implemented, it is critical that the negotiation criteria, budget allocation and target population are developed through meaningful consultations and clearly identified before negotiations begin. Fundamentally, however, the creation of this Board will merely add another layer in the process, and will not address core issues related to access and affordability. As such, PhRMA's members would strongly encourage the government to consider facilitating access to public funding

through measures such as accelerated formulary inclusion, government procurement and multi-year contracts.

The Philippine National Formulary

While industry supports the appropriate use of evidence to inform formulary decisions, existing delays in introducing innovative medicines could be further exacerbated by the recent establishment of health technology assessment (HTA) as a prerequisite for PNF inclusion. Specifically, in January of this year, the DoH halted the nomination process in order further solidify certain HTA details. Furthermore, the HTA process and methods guides were only recently published, including Administrative Order 2020-0041 (The New Implementing Guidelines on Health Technology Assessment to Guide Funding Allocation and Coverage Decisions in support of Universal Health Care). The process and requirements described therein could take as long as two years and undermine patient access to innovative medicines.

An outdated PNF not only negatively affects patient access to essential medicines and vaccines; it also becomes a barrier for PhRMA member companies to participate in government procurement of medicines and vaccines. It is imperative, therefore, that a fit-for-purpose and a transparent and efficient PNF listing process be put in place by the government.

New Product Registration

The FDA's registration process has been known to be inefficient and slow, posing barriers to the introduction of medicines into the market. The current target for approval (and issuance of the Certificate of Product Registration (CPR)) is 254 calendar days. However, in practice, the process takes two to four years. With new management in place coupled with the monitoring of the Anti-Red Tape Agency (an agency tasked with monitoring the efficiency of government agencies), PhRMA members have seen improvements in the regulatory process.

A more immediate hurdle is the FDA's issuance of Circular No. 2018-012, which unnecessarily reinstituted local PMS studies versus relying on PSURs. We believe that the requirement to conduct local PMS studies that are "uncontrolled and observational in nature" is a retrogressive step, exacerbating the operating environment for innovative pharmaceutical manufacturers with significant additional costs, as well as delayed access to these medicines for patients.

Counterfeit Medicines

The Government of the Philippines continues to expand its anti-counterfeiting activities in partnership with PhRMA member companies and raise public awareness regarding the dangers of unsafe medicines. Nonetheless, according to a report by the United Nations Office on Drugs and Crime released in 2019, around 193 of 673 counterfeit crimes reported from 2013 to 2017 in Southeast Asia were perpetrated in the Philippines,

the highest in the region. Moreover, PhRMA and its members are concerned by FDA proposals in the context of drafting Implementing Rules and Regulations of the Special Law on Counterfeiting that would potentially exacerbate the problem by no longer treating the sale of an unauthorized drug in the Philippines as the sale of a counterfeit drug.

In addition, the current pandemic has highlighted the proliferation of unauthorized online sellers of prescription medicines and vaccines. PhRMA's member companies are concerned that medicines procured through these outlets may be counterfeit and/or inappropriately handled, thereby jeopardizing patient safety.

SINGAPORE

PhRMA member companies face several market access barriers in Singapore despite the country otherwise serving as a strong model for protecting intellectual property, supporting clinical trials and incentivizing manufacturing. With continued collaboration between PhRMA member companies and the Singapore Government, and with U.S. Government support, the innovative biopharmaceutical industry is confident that we can resolve outstanding issues and strengthen the country's business environment.

Key Issues of Concern:

- Formulary listing practices in the public sector: Public healthcare institutions exercise autonomy in maintaining independent formulary and subsidy funding based on undisclosed criteria and varied timelines across different hospitals and clinics. Public hospital listing relies on annual physician-led decisions and submissions to initiate the process, which results in delayed patient access. At a national level, industry acknowledges recent efforts to expedite funding considerations in tandem with regulatory timelines, beginning with an oncology pilot program that allows manufacturer-led submissions in January 2021. While industry welcomes this change, manufacturer-led submissions should be permitted for other therapeutic areas to allow timely access to innovative treatments.
- Government drug subsidies: The Agency for Care Effectiveness (ACE) is the national health technology assessment agency that conducts drug evaluations to recommend government subsidy decisions on medicines and produces guidance on their appropriate use for public hospitals and institutions. While industry acknowledges recent efforts to improve engagement, further opportunities remain for greater patient, provider, industry and other stakeholder involvement in the initiation and subsidy decision-making input process. There is also an opportunity for funding to be made available on a timelier basis and for a greater number of medicines.
- Review of Medishield Life program: Medishield Life (MSL) is a national health care insurance that provides hospital and selected outpatient benefits in public and private health care settings. The scheme has recently completed its first major review since being introduced in 2015, following public consultation in September and October 2020. As the health care financing stakeholders in the Ministry of Health (MoH) and the MSL Council regularly review the scheme for sustainability and adequacy of coverage, with oncology therapies identified as the upcoming area for review, it is imperative that a broad range of stakeholders including industry are consulted to ensure that the revised program does not delay or restrict patient access to innovative oncology therapies.

- Challenges in conducting clinical trials: Singapore is consistently recognized as a leading location to conduct clinical trials as a result of its high-quality sites and renowned researchers. However, the high cost and administrative complications of setup of clinical trials in Singapore are observed as key barriers. Besides high administrative and resource costs, patients enrolled in clinical studies are charged at private patient rates. Lack of coordinated setup and infrastructure compounded with already inherent challenges of low patient enrolment and retention are significant obstacles for establishing effective clinical trial research and development.
- Intellectual property protection: Singapore generally maintains a strong intellectual property protection and enforcement system. However, Singapore artificially limits patent term restoration (PTR) for biopharmaceutical inventions to the product registration period in Singapore, even when that registration relies on clinical trials conducted outside of Singapore. Improvements to the manner in which Singapore provides PTR, as well as its data protection regime would support the country's goal of becoming a global hub for biomedical innovation.

For these reasons, PhRMA requests that Singapore be placed on the **Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Market Access

Singapore has earned a reputation as an innovation hub through investing and attracting investment in biopharmaceutical R&D. However, there must also be demand for innovative products, which means the health care sector and the whole-of-government needs to recognize the value of medical innovations. Singapore currently risks falling behind if the primary considerations for making health technologies available are primarily based on price rather than value. PhRMA member companies are committed to working with the Singapore Government to develop policies that will ensure patient access to current and future medicines and cement the country's position as an innovation hub.

Formulary Listing Practices in the Public Sector

Public healthcare institutions exercise autonomy in maintaining independent formulary and subsidy funding based on undisclosed criteria and varied timelines across different hospitals and clinics. While PhRMA member companies are encouraged by the formation of three public institution clusters, gaps between market access and variations in timelines could be improved through an integrated and standardized evaluation process across the public health care institutions within each cluster.

In addition, public hospital listing relies on annual physician-led decisions and submissions to initiate the process, which can result in delayed patient access. At a national level, industry acknowledges recent efforts to expedite funding considerations in tandem with regulatory timelines, beginning with an oncology pilot program that allows

manufacturer-led submissions in January 2021. While industry welcomes this change, manufacturer-led submissions should be permitted for other therapeutic areas to allow timely access to innovative treatments.

Moreover, industry engagement in the formulary evaluation process and policy decision-making processes should be improved. PhRMA's member companies believe that such measures will enhance consistency and transparency of the listing process in public formularies and a broader range of medicinal choices will create more effective treatment options for patients and physicians in public institutions.

Government Drug Subsidies

ACE is the national health technology assessment agency in Singapore. Established by the MoH, it conducts drug evaluations to recommend government subsidy decisions on treatments and produces guidance on the appropriate use in public health care settings and institutions in Singapore. PhRMA's member companies recognize ACE's effort to work toward a process that allows greater involvement both of the industry during the listing initiation and subsidy decision-making input processes and of the general public in the near future. This could enhance the quality of submissions and speed of decision making, thereby expediting patient access to innovative new medicines in the public sector.

There is also an opportunity for government subsidies to be provided on a timelier basis and for a greater number of medicines. In the current process, typically only one but sometimes two medicines may be considered, with a third medicine considered only on an exceptional basis, which limits patient and physician treatment options. A protracted review process including Drug Advisory Council meetings for final decisions also delays patient access to innovation.

The government announced from November 1, 2020 that it would fully subsidize all vaccines included in the National Adult and Childhood Immunization schedules in line with recommendations from the Healthy SG Task Force. This is a positive move that should increase vaccination rates by reducing out-of-pocket expenses. However, strong concerns remain on price confidentiality. PhRMA member companies engaged with the MoH with a good faith understanding that price confidentiality would be observed. Unfortunately, the dissemination of information about the program proved otherwise. In addition, the implementation of price caps on manufacturers poses a threat to innovation and new vaccines development.

Review of Medishield Life Program

The MoH needs to carefully consider the impact of any potential changes to national health care insurance in Singapore, including Medishield Life which provides hospital and outpatient benefits. While containment of health care expenditures is a key concern of the government, this needs to be carefully balanced with timely availability and broad accessibility of innovative oncology therapies to cancer patients in Singapore. As

the healthcare financing officials in the MoH and the MSL Council consider coverage for cancer treatment in its next review, PhRMA member companies encourage both organizations to continue engaging in dialogue, and involve all impacted stakeholders such as health care professionals, public health care institutions and patient groups in guiding their decisions moving forward. It is imperative that the revised program does not delay or restrict patient access to innovative oncology therapies.

Challenges in Conducting Clinical Trials

Clinical trials in Singapore can be better promoted by managing the high cost of clinical trials and accelerating the speed of setup and recruitment through standardizing clinical trial agreement/contract across all public institutions. Industry welcomes the setup of CRIS (Consortium for Clinical Research & Innovation, Singapore) with the goals to centralized activities to achieve operational efficiencies, scale and scalability, consistencies of practice, and better governance/compliance across the research platforms and programs in Singapore. PhRMA member companies urge the MoH to continue work with industry to find collaborative solutions to encourage conducting more clinical trials in Singapore.

Intellectual Property Protection

Singapore generally maintains a strong intellectual property protection and enforcement system. PhRMA members fully support the country's objective of and progress toward becoming a global hub for biomedical science and innovation hub. To fully realize this goal, and in keeping with the U.S.-Singapore Free Trade Agreement, Singapore should adjust its PTR mechanism to compensate the patent holder for the time invested in conducting clinical trials either in Singapore or in any other market when such data is a condition of obtaining marketing approval in Singapore.

In addition, PhRMA continues to urge Singapore to improve its regulatory data protection regime. In particular, Singapore should extend regulatory data protection to new formulations, combinations, indications and dosage regimens.

TAIWAN

PhRMA and its member companies have long supported closer economic ties between Taiwan and the United States, including opportunities to build on the bilateral Trade and Investment Framework Agreement and to contribute further to Taiwan's national health care goals. We commend positive steps by the Government of Taiwan to improve intellectual property (IP) protections for innovative medicines, including the establishment of a patent linkage (PL) system effective August 20, 2019. We also value ongoing discussions with the Government of Taiwan on health policy reform measures designed to bring stability and predictability to the national pharmaceutical market.

If implemented in a manner consistent with international best practices, the PL system will greatly improve Taiwan's climate for biopharmaceutical research and development. PhRMA is particularly pleased that the PL implementation rules include biologic treatments, which are likely to account for most new medicines developed in the coming years. However, we are concerned that the Taiwan Food and Drug Administration (TFDA) is excluding patents from the PL system that protect new doses, new dosage forms or new unit strengths. PhRMA is also concerned that Taiwan's drug pricing and reimbursement process does not appropriately value and reward innovation.

PhRMA looks forward to working with the Taiwan Government to support full implementation of an effective PL system that is consistent with international best practices and to address serious concerns regarding Taiwan's pricing and reimbursement policies. We appreciate the commitment of the Government of Taiwan to continue its dialogue with PhRMA and its member companies as part of broad stakeholder consultations. This communication will ultimately help achieve the common goal of Government and industry: enabling patients to live longer, healthier, and more productive lives. PhRMA urges the Taiwan Government to continue developing sound IP protections and drug pricing and reimbursement policies with stakeholder involvement. We also urge USTR and other federal agencies to continue their engagement with the Taiwan Government to support and monitor PL implementation and to ensure a transparent and predictable new drug pricing and reimbursement process that follows the government's official pricing methodologies.

Key Issues of Concern:

• Intellectual property protection: In July 2019, the Taiwan Food and Drug Administration (TFDA) published the final PL regulation on its website and shortly thereafter the Executive Yuan announced implementation of the PL system effective August 20, 2019. While we applaud the establishment of a PL system, we are concerned that the TFDA is excluding from the PL system patents that protect new doses, new dosage forms or new unit strengths. If allowed to continue, this action will seriously undermine the value of Taiwan's PL system. PhRMA and its member companies stand ready to work with the Taiwan Government to support full implementation of the PL regulation. In December 2017, Taiwan's legislature

passed important amendments to the Pharmaceutical Affairs Act to provide three to five years of RDP for new indications.

- Government pricing and reimbursement mechanisms: Beginning with implementation of the second generation of National Health Insurance (NHI) in January 2013, the pricing and reimbursement process for new medicines has become much more complicated due to the Pharmaceutical Benefit & Reimbursement Scheme (PBRS). Under the scheme, average prices and approval rates for new medicines continue to be low and do not appropriately recognize the value of innovative medicines. Further, the approval process is inefficient and negotiations can be lengthy, resulting in overall timelines that can exceed two years. Finally, the system fails to recognize various forms of biopharmaceutical innovation, instead focusing on cost-containment.
- Insufficient budget for new drugs and indications: Under the current structure, most new medicines and indications are either rejected or experience delays in inclusion in the formulary due to insufficient budget allocation. This challenge significantly impacts patient access to treatments for life-threatening diseases such as cancer. PhRMA appreciates the Taiwan Government's budget proposal for new medicines and indications for 2021 which is more adequate than that of 2020. However, due to the COVID-19 pandemic and the impact to economic growth, the result may not be as positive as originally planned. For 2021, the Taiwan Central Bank recently forecasted 3.3 percent economic growth. We urge the Taiwanese Government to plan a more realistic budget for new medicines and indications for 2022.
- Drug expenditure target (DET): Under this price adjustment scheme, only compound and combination patented products are afforded some protection from price cuts. In order to encourage innovation, these price protections should be available to all products during their patent term, as well as to all products with regulatory data protection (RDP). PhRMA recognizes the efforts of the Ministry of Health and Welfare (MoHW) with respect to the DET, and we support the continued piloting of DET to improve the methodologies and implementation. We urge the Government of Taiwan to engage industry on implementation to ensure continued patient access to high quality innovative medicines. Any pharmaceutical expenditure regulations should appropriately recognize the value of innovative medicines.

For these reasons, PhRMA requests that Taiwan be placed on the **Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Effective Patent Enforcement and RDP

In July 2019, the TFDA published the final PL regulation and shortly thereafter the Executive Yuan approved implementation of the PL system effective August 20, 2019. We commend the Taiwan Government for taking this important step to improve Taiwan's climate for biopharmaceutical research and development. Specifically, the PL implementation rules confirm that the PL system includes both chemically synthesized and biologic medicines. Since biologics are the fastest growing segment of innovative medicines development and already account for a substantial share of pipeline products, applying the regulations to biologics and biosimilars will extend benefits of the amendments for domestic and overseas innovators alike.

While PhRMA applauds the establishment of a PL system, we are concerned that the TFDA is interpreting Taiwan's new linkage system in a way that is unduly narrow. Specifically, the TFDA has interpreted Taiwan's Pharmaceutical Affairs Act (PAA) to exclude patents protecting new doses, new dosage forms or new unit strengths from the linkage system. According to TFDA, drugs in these categories are not "new drugs," and consequently, the permit holders for these drugs are not eligible to submit patent information to the PL system under Article 48-3 of the PAA. This interpretation is inconsistent with the PAA and contradicts the purpose and policy behind a linkage system, as well as the expectations by all stakeholders that the system provide an efficient means to timely resolve any patent dispute before a generic or biosimilar version of an innovative drug is launched.

PhRMA urges TFDA to acknowledge that permit holders are, and must be, eligible to submit patent listing information on patents claiming a drug's new dosage form, new dose or new unit strength. Delisting, or not being allowed to list, the patents for a drug's new dosage form, new dose or new unit strength provides a significant loophole to follow-on manufacturers who may seek to sidestep the PL enforcement mechanism and the protections that it provides to an innovative product by simply seeking approval of the new dosage form, new dose or new unit strength.

In the longer-term, this action would undermine the certainty that PL is designed to provide and would discourage companies from researching, developing and launching new dosage forms, new doses or unit strengths in Taiwan. It is vital to encourage this type of development because a drug's dosage form, dose, or unit strength can have a valuable impact on its safety, effectiveness, or convenience – and better serve patient needs. For example, changes to the formulation and delivery of a drug have been shown to be effective in encouraging adherence across a number of therapeutic areas. Implementing a robust PL system in Taiwan is a critical step towards ensuring that companies continue to innovate in ways that improve patient outcomes in Taiwan. We look forward to continuing to work with the Government of Taiwan to ensure full and timely implementation of the new PL system.

Also, in December 2017, Taiwan's legislature passed amendments to the Pharmaceutical Affairs Act to provide three to five years of RDP for new indications. PhRMA and its members commend Taiwan for implementing these RDP amendments.

Market Access

Government Pricing and Reimbursement Mechanisms

Despite constructive engagement with the National Health Insurance Administration (NHIA) regarding the PBRS, average drug prices in Taiwan continue to be low compared to median A10 countries and even by global standards.²⁷⁴ According to the latest NHIA report, "Comparisons of New-drug Approved Prices and International Drug Prices in Recent Years," current new-drug approval practices have resulted in prices far below levels which incentivize innovation.

A key factor suppressing the prices of new medicines in Taiwan is that prices are determined based on comparator products which have experienced several rounds of annual price cuts and stand at new low prices at the time of comparison. Moreover, under the current NHI reimbursement mechanism, the lowest price among new drugs in the same therapeutic group is used as the benchmark price for reimbursement. This mechanism fails to reflect the clinical differences among new products and does not appropriately recognize the value of innovative medicines.

Uncertainty over the prices approved by NHIA has also increased. NHIA-approved prices are often much lower than what companies had forecasted based on NHIA's pricing methodologies, and re-submission and re-negotiation of prices takes considerable time. This results in overall timelines that can exceed two years, particularly for oncology medicines. We urge NHIA to improve the transparency and predictability of its pricing processes, so that companies may bring new medicines to patients in Taiwan with reasonable certainty of their timing and reimbursement.

In summary, low reimbursement prices decrease incentives to bring innovative medicines to Taiwan and to make further investments. PhRMA and its member companies urge NHIA to review and revise the current pricing system to more appropriately value innovative medicines.

Insufficient Budget for New Drugs and Indications

Under the current structure, most new medicines and indications are either rejected or experience delays in formulary listing due to insufficient budget allocation. This challenge significantly impacts patient access to needed treatments for life-threatening

(last visited Jan. 27, 2021)

²⁷⁴ Chen G.T., Chang S.C., and C.J. Chang . New Drug Reimbursement and Pricing Policy in Taiwan. Value Health Reg Issues. 2018 May; 15:127-132, available at https://pubmed.ncbi.nlm.nih.gov/29704659/

diseases such as cancer. PhRMA appreciates the Taiwan Government's budget proposal for new medicines and indications for 2021 which is more adequate than that of 2020. However, due to the COVID-19 pandemic and the impact to economic growth, the result may not be as positive as originally planned. For 2021, the Taiwan Central Bank recently forecasted 3.3 percent economic growth. We urge the Taiwanese Government to plan a more realistic budget for new medicines and indications for 2022.

Drug Expenditure Target

In March 2017, the Taiwanese Government implemented a price adjustment designed to maintain national spending targets that ultimately granted only compound and combination patented products some protection from price cuts, creating an unfair pricing environment for other patented medicines. In order to encourage innovation, these price protections should be available to all products during their patent term, as well as to all products during their RDP term. As a starting point, we recommend that NHIA provide price protection to single-source products for which no alternatives are available, including products which carry no patent protection but have been granted 5 years of RDP. PhRMA recognizes the efforts of the MoHW with respect to the DET and supports the continued piloting of DET to improve the methodologies and implementation.

PhRMA urges the Taiwanese Government to engage in renewed consultation with the innovative biopharmaceutical industry to ensure that this and other government pharmaceutical pricing and reimbursement policies are transparent, offer due process to interested stakeholders and are based on scientific evidence and patient needs and benefits. Moreover, in the interest of rewarding innovation, developing new medicines for Taiwan's unmet medical needs, and ensuring that Taiwanese patients have access to innovation, PhRMA strongly recommends that the U.S. Government encourage the Taiwanese Government to implement fair and reasonable price adjustment policies.

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EUROPEAN UNION

PhRMA member companies face a variety of government restrictions across Europe that jeopardize incentives for biopharmaceutical innovation and patient access to innovative medicines. As a result of Europe's on-going economic challenges, several European Union (EU) and European Free Trade Association (EFTA) Member States continue to seek additional cost savings at the expense of the innovative biopharmaceutical sector, thereby not carrying their fair share of costs to research and develop new medicines, as well as undermining U.S. biopharmaceutical competitiveness.

In addition, while the EU generally maintains intellectual property (IP) protections and other incentives that enable such research and development, PhRMA and its member companies are concerned by the direction of the European Commission's (EC's) Pharmaceutical Strategy for Europe and options under consideration regarding IP and other incentives for orphan and pediatric medicines, that could weaken IP rights in one of the world's largest markets. The EU Pharmaceutical Strategy, published on November 25, neither appropriately recognizes the significant contribution of innovative medicines to the patients and economies of Europe, nor does it properly address the EU's role in this innovative sector. There is a clear need for the EU to strengthen, rather than undermine, key conditions that promote and enable tomorrow's innovations. PhRMA and its members also welcome the EC's "IP Action Plan" to unleash the EU's innovation potential and support resilience as a step in the right direction. However, PhRMA members are extremely concerned that proposals for compulsory licensing coordination in the Plan could undermine the EU's innovation and IP framework. Furthermore, certain Member States' compulsory licensing policies run counter to the EC's position of using such policies as "means of last resort." PhRMA member companies welcome the opportunity to collaborate with the EU in determining the best way to address these issues.

Key Issues of Concern:

Strategy, the EC is conducting an analysis of the current EU legislative instruments and related incentives that aim to facilitate and support the investment in the development of medicinal products. Following recent policy announcements, PhRMA and its member companies are concerned that this review will result in the weakening of existing incentive mechanisms for biopharmaceutical innovation and create an unlevel playing field for transatlantic medicines trade and investment. In 2019, the EU introduced changes to its legislation amending Regulation EC 469/2009 concerning the supplementary protection certificate (SPC) for medicinal products, to introduce an SPC export and stockpiling waiver (in force as of July 1, 2019). The waiver allows companies to manufacture generic and biosimilar products in Europe during the effective SPC period for export purposes to third (non-EU) countries and to stockpile during the last six months of the validity of the SPC for the domestic market. The SPC manufacturing waiver weakens the scope

of the exclusive rights conferred by an SPC and sends a negative signal to the world that the EU is weakening its commitment to IP incentives and innovation. Most recently, on November 25, 2020, the EC released its 'Pharmaceutical Strategy', its 'Intellectual Property Action Plan' and its 'Inception Impact Assessment' on the Orphan & Pediatric Regulations, with legislative proposals expected by the end of the year. Troublingly, these policy documents include a number of proposals to weaken existing incentives, particularly for medicinal products to treat rare diseases and children.

Government price controls and patient access to innovative medicines: Among numerous government price controls in effect, many EU and EFTA Member States set prices of patent-protected innovative medicines based on policies that restrict availability, limit patient access and fail to recognize the value of state-of-the-art medicines for patients and societies. Some examples include regulations that set prices based on the prices in less wealthy countries or in countries with policies that do not support innovation, and based on the prices of older and less innovative products deemed to be comparable, including generics. These and other government practices, coupled with rigid health technology assessment (HTA) interpretations of value, put at risk biopharmaceutical innovation and seriously harm patient access to needed medicines. As such policies and regulations continue to ratchet European prices lower, there are increased calls for cross-border sharing of confidential price information that undermines the ability to adapt to the different needs of each country. Furthermore, although EU legislation²⁷⁵ requires transparent and timely processes (e.g., within 180 days) for national pricing and reimbursement decisions, delays for medicines launched in Europe average 504 days and are particularly significant in some European countries.²⁷⁶ Nearly 90 percent of new medicines launched globally since 2011 are available in the United States compared to just 42 percent in EU Member States, on average.²⁷⁷ These requirements for transparent and timely processes need to be enforced more rigorously across Europe and with broader oversight of national practices.

For these reasons, PhRMA requests that the European Union be placed on the **Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

²⁷⁵ European Council Directive 89/105/EEC, 1988, available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31989L0105 (last visited Jan. 27, 2021).

²⁷⁶ EFPIA Patient W.A.I.T. Indicator 2019 Survey, 2020, available at

https://www.efpia.eu/media/554526/patients-wait-indicator-2019.pdf (last visited Jan. 27, 2021). Note that the Patient W.A.I.T. indicator also reflects delays which are not requirements under European Council Directive 89/105/EEC.

²⁷⁷ PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2019. June 2020.

Intellectual Property Protection

EU Pharmaceutical Strategy

In June 2016, the European Member State Health Ministers requested the European Commission to undertake a review of existing intellectual property-related incentives for the biopharmaceutical industry to gauge their effectiveness and impact on innovation and the availability, accessibility and affordability of medicines. The Commission undertook a review process which concerns the following pieces of legislation: SPCs (Regulation EC 469/2009), Medicinal products for human use (Directive 2001/83/EC and Regulation EC 726/2004), Orphan medicinal products (Regulation EC 141/2000) and Pediatrics (Regulation EC 1901/2006). The review involves a number of studies (many of which have been completed), which could lead to a reopening of existing legislation.

On August 11, 2020, the EU Commission published a study and staff working document (SWD) providing an analysis of orphan and pediatric incentives critical for the development of medicines for underserved populations. The SWD acknowledges that orphan and pediatric regulations have had positive effects and resulted in considerable progress in the development of medicines for patients suffering from rare diseases and children in certain therapeutic fields. However, on November 25th, as part of its Pharmaceutical Strategy, the Commission published its "Inception Impact Assessment" for public consultation which lays out some options for revising the "Orphan and Paediatric Regulations," including the incentives for these medicines. PhRMA and its member companies are very concerned that the EU's approach will set a negative precedent and lead to weakening of existing incentive mechanisms that support biopharmaceutical innovation. This would go against the EC's stated objective of supporting the European biopharmaceutical industry to remain a world leader in medical innovation, without contributing to the Commission's other objective to improve access to medicines for unmet medical needs. The failure to effectively safeguard these incentives in one of the world's largest markets for innovative medicines would harm American exports and jobs and reduce investment in new treatments and cures for patients in Europe and around the world. The EU is considering both legislative and non-legislative actions, which could reduce the existing incentives that would further undermine the ability of innovative companies to bring new medicines to European patients. As noted in PhRMA's broader comments on the EU Pharmaceutical Strategy, there is a clear need for the EU to strengthen, rather than undermine, key conditions (including IP protections) that promote and enable tomorrow's innovations.

Supplementary Protection Certificates

As part of the broader incentives review, PhRMA is very concerned about the SPC manufacturing waiver which weakens the scope of the exclusive rights conferred under an SPC and may encourage other countries to reduce or eliminate intellectual property protections.

On May 28, 2019, the EC published legislation amending the SPC Regulation (469/2009) to introduce an SPC manufacturing waiver. The waiver allows companies to manufacture generic and biosimilar products in Europe during the effective SPC period for export purposes to third (non-EU) countries and stockpile during the last six months of the validity of the SPC for the EU market. This legislation reduces IP rights and sends a signal to the world that Europe is weakening its commitment to IP incentives and innovation.

SPCs are a critical part of the European IP system. They partially restore the effective patent term and thereby help to compensate for a portion of the time incurred during the testing and regulatory review period that may "make the period of effective protection under the patent insufficient to cover the investment put into that research." The SPC Regulation itself declares that: "[p]harmaceutical research plays a decisive role in the continuing improvement in public health." It states that "[m]edicinal products, especially those that are the result of long, costly research will not continue to be developed in the Community and in Europe unless they are covered by favourable rules that provide for sufficient protection to encourage such research."

Preventing potential abuses of the SPC waiver will be very difficult. Such abuses may consist of illegal diversion of medicines produced pursuant to the exception within Europe, or in foreign markets where the relevant patent term has not expired. In the end, it may well be impossible to ensure that the exemption is used only to achieve its intended purpose. This could further reduce the effective protections SPCs are intended to provide.

In addition, the SPC waiver may be copied by other economies and may also encourage other countries to maintain or even weaken their already-low patent protection standards — possibly in an exaggerated form that is even more damaging to biopharmaceutical innovators in the United States, Europe and elsewhere around the world. Already, lawmakers in one Asian country have proposed to permit "manufacturing for export" during the 20-year patent term, which would be inconsistent with World Trade Organization rules.²⁸¹ If a leading developed economy like the European Union bends the rules, others are sure to break them.

²⁷⁸ See EC Regulation No. 469/2009 concerning the supplementary protection certificate for medicinal products (May 6, 2009), available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009R0469 (last visited Jan. 27, 2021), at Recital 4.

²⁷⁹ Regulation No. 469/2009; *see also* Council Regulation (EEC) No. 1768/92 of 18 June 1992 concerning the creation of a supplementary protection certificate for medicinal products (no longer in force), available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31992R1768 (last visited Jan. 27, 2021).

²⁸⁰ Regulation No. 469/2009.

²⁸¹ E. Solovy and D. Raju, "A Manufacturing-for-Export Exception to Patent Protection: A Proposal for Exporting Violations of the TRIPS Agreement and Beyond?" *Journal of Intellectual Property Law & Practice*, Sep. 2017, available at https://doi.org/10.1093/jiplp/jpx161 (last visited Jan. 27, 2021).

Market Access

Government Price Controls and Patient Access to Innovative Medicines

As detailed further below, many EU countries engage in government pricing and reimbursement practices that restrict availability, limit patient access, and fail to recognize the value of state-of-the-art medicines for patients and societies. Moreover, since the U.S. research-based industry is the world leader in the development of new medicines, PhRMA member companies and their innovative products disproportionately bear the brunt of these measures as they undermine the financial incentives for privately sponsored research and development. Not only does this threaten the development of new treatments and cures, it directly threatens the competitiveness of the U.S. biopharmaceutical industry and its workers. Furthermore, although EU legislation requires transparent and timely processes (e.g., within 180 days) for national pricing and reimbursement decisions, delays for medicines launched in Europe average 504 days and are particularly significant in some European countries.²⁸² Nearly 90 percent of new medicines launched globally since 2011 are available in the United States compared to just 42 percent in EU Member States, on average. 283 These requirements for transparent and timely processes need to be enforced more rigorously across Europe and broader oversight of national practices should be in place.

<u>Austria</u>

Since 2017, Austria has adopted a spate of new cost-containment measures. Despite being one of the wealthiest countries in Europe, ²⁸⁴ Austria sets relatively low ceiling prices on medicines with corresponding impacts on access. Specifically, Austria uses a traffic light colored box system in which ceiling prices of medicines in the reimbursed green box cannot exceed the average price across 26 EU countries including Bulgaria, Croatia and Romania; ceiling prices of medicines in the reimbursed yellow box also cannot exceed the average price across 26 EU countries but have restricted prescribing; ceiling prices of medicines in the non-reimbursed box (although reimbursed in certain cases) cannot exceed the average price across 26 EU countries. In practice, medicines reimbursed by the statutory social insurance system, including in the hospital sector, are subject to additional price cuts and heavy prescribing restrictions. ²⁸⁵

Industry has grown increasingly concerned about the unilateral nature of these recent measures, which were made without meaningful opportunity for engagement and despite the clawbacks already required as part of a framework agreement that was in

²⁸² EFPIA Patient W.A.I.T. Indicator 2019 Survey, 2020, available at https://www.efpia.eu/media/554526/patients-wait-indicator-2019.pdf (last visited Jan. 27, 2021). Note that the Patient W.A.I.T. indicator also reflects delays which are not requirements under European Council Directive 89/105/EEC.

²⁸³ PhRMA analysis of IQVIA Analytics Link and country regulatory data on new active substances first launched globally between January 2011 and December 2019. June 2020.

²⁸⁴ IMF World Economic Outlook, 2020.

²⁸⁵ IQVIA (2019). Pricing and Reimbursement Country Report: Austria.

place at the time. In fact, since 2008, the industry and the social insurance institutions have worked together on a contractual basis to support the efficiency of health insurance, in particular with patients. This framework agreement expired in 2018.

Belgium

The Belgian government sets maximum manufacturer's selling prices (MSP) for all reimbursed prescription medicines, and also institutes several cost containment measures that impact innovative medicines. For example, a turnover tax (7.73 percent) and marketing tax (0.13 percent) are applied to sales of reimbursed medicines. For orphan medicines, the turnover tax ranges from zero to five percent depending on the turnover. In addition, when the government's medicines budget is exceeded, manufacturer revenues are clawed back through a subsidiary tax up to 4 percent of the medicines budget. Finally, domestically manufactured new medicines are permitted a 10 percent price premium in the manufacturing cost component of their MSP calculation, to the disadvantage of imported products.²⁸⁶

Czech Republic

While the Czech government has increased investment in health care and expanded access to innovative medicines, the country's pharmaceutical share of total health spending has nevertheless declined considerably in the past decade from 22.1 percent in 2009 to 16.0 percent in 2018 due to rigid cost containment regulations such as its "double referencing" system. Under this system, the price of a new medicine cannot exceed the average price of the lowest three countries among 19 EU countries. In addition, in most cases, the reimbursed price will then be set at the lowest EU price of a therapeutic cluster of medicines, which can combine patented, off-patent and generic medicines. ²⁸⁸

In addition to facing some of the lowest prices in Europe, innovative medicines in the Czech Republic are subject to non-transparent and lengthy reimbursement processes that reduce patient access. The target timeline for pricing decisions is 75 days from receipt of an application, and 165 days for joint pricing and reimbursement decisions. In practice, decisions take more than a year on average. One additional provision of the Czech health care legislation which could represent a significant threat to PhRMA member companies is mandatory delivery of medicinal products to wholesalers based on their market share, which imposes inappropriate limits on a manufacturer's freedom to select and contract with specific wholesalers and obstacles to entering the market.

²⁸⁶ IQVIA (2019). Pricing and Reimbursement Country Report: Austria.

²⁸⁷ IQVIA (2020). Market Prognosis: Czech Republic.

²⁸⁸ *Id.*

²⁸⁹ *Id*.

Denmark

Although Danish law does not directly regulate prices, the government decides which medicines are reimbursed and in effect sets the prices of those products through an agreement with the local innovative pharmaceutical industry association that requires international reference pricing, price caps, tendering and other cost-containment measures. In 2019, approximately 20 percent of new medicines in Denmark failed to secure general reimbursement.²⁹⁰ Moreover, the government rejected reimbursement applications over concerns that the medicines might be used outside of the target patient population, creating unforeseen expenditure.

Manufacturers also face pricing pressure from parallel imports across Europe, which comprise approximately 25 percent of the Danish retail market and which are eligible for hospital tenders. Finally, except for a 2 percent annual inflationary adjustment, the prices of medicines have been capped since 2006.²⁹¹ Overall, these practices have created uncertainty for biopharmaceutical innovators and have resulted in a situation in which Denmark, despite its relative wealth, spends much less per capita on medicines than the OECD average.

Finland

Finland operates highly restrictive pricing and reimbursement policies, including price controls on reimbursable out-patient medicines and tenders for in-patient medicines. Although there is no price setting formula, the government sets prices of outpatient medicines based on prices in other European Economic Area (EEA) countries. The practice of comparing new innovative medicines against older medicines in a therapeutic cluster create challenges for demonstration of cost-effectiveness. In addition, Finland operates a two-tier disease-based reimbursement scheme in which products for certain diseases are eligible for higher subsidies. All new products are initially only eligible to apply for basic reimbursement that covers just 40 percent of a medicine's cost. New medicines in Finland also undergo frequent reimbursement reviews, with the first approved price valid for under two years. Although a risk-sharing system established in 2017 has improved reimbursed access, cost containment measures over the past 15 years have brought the country's pharmaceutical spending as a percentage of total health spend well below the OECD average. 292

France

Characterized by a notoriously slow market access process, France heavily regulates the price of new innovative medicines and has established since 2004 annual plans of budget savings through price cuts, including a goal of saving €640 million in 2021

²⁹⁰ IQVIA (2020). Market Prognosis: Denmark.

²⁹¹ **Id**.

²⁹² OECD Health Statistics (last accessed Sept. 2020).

through price cuts alone. Over time, France has adopted punitive policies toward innovators through layered mechanisms such as taxes, price-volume clauses that trigger price cuts or clawbacks, and an industry-wide clawback modified in 2019 when national spending growth on reimbursed medicines exceeds 1 percent. Clawbacks were up to 70 percent of net sales revenue in 2019.²⁹³

Additionally, there are serious challenges with France's HTA system, which rates the clinical added value of a product as major (ASMR I), important, (ASMR II), moderate (ASMR III), minor (ASMR IV) or no clinical improvement (ASMR V), with corresponding impacts on pricing. In practice, only one-third of new innovative medicines are assigned ASMR ratings of I, II or III (with a majority assigned ASMR III ratings) which means that health authorities judge two-thirds of new innovative medicines as providing only moderate, minor or no clinical improvement. The average delay for a product to complete France's centralized pricing and reimbursement process is about a year and half, which significantly exceeds EU requirements of 180 days. ²⁹⁴ However, for certain products that treat severe or rare diseases and that have not yet received European marketing authorization, this delay in market access can be moderated through the Temporary Use Authorization (ATU) process.

Moreover, positive signals have recently been sent to the innovative biopharmaceutical sector. Following an agreement signed between the local innovative pharmaceutical industry association, Les Entreprises du Médicament (LEEM), and the French Government to hasten lengthy reimbursement processes, President Macron announced an approximately €300 million reduction in price cuts for 2021, from €920 million to €640 million. Furthermore, the ATU process will be simplified and improved beginning in July 2021. Nevertheless, the medicines spending bill for 2021 remains challenging. Overall, market growth has been flat since 2009, and lower than in peer countries as French authorities seek savings from medicines to preserve social security finances.

<u>Germany</u>

Germany's Pharmaceutical Market Restructuring Act (AMNOG) of 2011 restructured its pricing and reimbursement process away from market-based pricing toward a government-managed and payer-led system of clinical evaluation and price-setting. Under AMNOG, new medicines are promptly reimbursed after European Medicines Agency (EMA) approval at manufacturer prices for one year, while the government oversees a rigid early clinical benefit assessment by the Federal Joint Committee (G-BA) and price negotiations with the umbrella organization of the German payers that are tied to the outcome of the G-BA assessment. The prices of products deemed not to provide additional clinical benefits are generally limited to the price of the

²⁹³ IQVIA (2019). Pricing and Reimbursement Concise Guide: France.

comparator set by the G-BA or to the lower price of a therapeutic cluster of products.²⁹⁵ Lowest-cost comparators and generics are often considered by the G-BA to be appropriate comparators; however, research shows that in 43 percent of cases, medical societies opposed the comparator because it was clinically inappropriate.²⁹⁶ In addition, since 2010 Germany has operated a price freeze through 2022 on reimbursed medicines deemed to provide added clinical benefit, although began adjusting prices for inflation in 2018.

One of the chief complaints with the AMNOG procedure concerns the serious restrictions on the types of study designs and clinical endpoints that are admissible for demonstrating proof of additional clinical benefit. By 2020, this rigid assessment process and requirements resulted in G-BA deeming 60 percent of all assessments of innovative medicines to demonstrate no additional clinical benefit in the specified patient subpopulation (52 percent of non-orphan innovative medicines were deemed to demonstrate no additional clinical benefit in any patient subpopulation). ²⁹⁷ In contrast, many of these treatments have been widely recognized as important and even breakthrough therapies in the United States and other countries.

In July 2019, a new law (GSAV) enabled the G-BA to also recognize registry data in the assessment of certain medicines (e.g., medicines for orphan conditions or with conditional approval). It remains to be seen whether this new law will facilitate greater recognition of real-world data and a less rigid assessment system, or if the G-BA will create additional pricing hurdles for certain medicines. The GSAV also calls for the introduction, after three years, of mandatory automatic substitution in pharmacies for biosimilars.

Greece

Greece's pharmaceutical environment remains among the most challenging in Europe given onerous price controls and excessive mandatory clawbacks and rebates that undermine innovation and significantly delay patients access to new medicines. The government budget for outpatient medicines declined by 62 percent from €5.1 billion in 2009 to €2.0 billion in 2019, while the amount of budget overrun increased significantly over this period. The clawback for 2019 was expected to reach €790 million, which is a 38 percent increase over 2018 and an amount equal to 41 percent of the public budget for outpatient medicines.²⁹⁸ The Greek Government established a separate budget for vaccines for 2021 and 2022, and exempted it from clawbacks, as well as abolished a mandatory market entry rebate for innovative medicines (which is required on top of other rebates) that requires companies to pay back 25 percent of an innovative medicine's sales for two years following admission to the reimbursement list. In 2020, the Greek Government implemented a new law that excludes generics and off-patent medicines

²⁹⁵ IQVIA (2019). Pricing and Reimbursement Concise Guide: Germany.

²⁹⁶ Bleß et al., "Impact of scientific opinions in the benefit assessment of medicinal products," IGES Institute, 2016

²⁹⁷ Kearney analysis of AMNOG procedure database, 2019.

²⁹⁸ IQVIA (2019). Pricing and Reimbursement Concise Guide: Greece.

from the growth rate component of the clawback and thus puts a disproportionate share of the clawback burden on patented medicines.

<u>Hungary</u>

Government pricing and reimbursement of medicines in Hungary has been under substantial pressure since the Pharma Economic Act of 2007 and the two Széll Kálmán austerity plans. With the amount spent on pharmaceutical reimbursement frozen since 2010, Hungary additionally cuts the prices of innovative medicines by capping the prices for new products in Hungary to the lowest price at launch in any EU country. Hungary also engages in a "blind bidding system" for therapeutic reference pricing groups which can be comprised of both patented medicines that have been marketed for at least one year and off-patent medicines. The system requires manufactures to submit "blind" price reductions to the National Health Insurance Fund of Hungary (NEAK) every six months. ²⁹⁹

In late 2020, the Hungarian Government granted a compulsory license for remdesivir, a COVID-19 treatment conditionally approved by the EMA, citing newly promulgated emergency Law Decrees 283/2020 and 478/2020. This action is unnecessary as Hungary already has full access to Veklury (remdesivir) via the EC's Joint Procurement Agreement (JPA) with the patent holder, and continues to use it to meet its national needs. Throughout this process, the Hungarian Government did not contact the patentee to suggest that a CL was needed, and the CL was granted with only a day's notice to the patentee. PhRMA and its members believe that this CL is unnecessary and unwarranted, and runs counter to the EC's IP Action Plan, which states that CLs can only "be used as a means of last resort and a safety net, when all other efforts to make IP available have failed."

Ireland

Ireland's commercial operating environment remains challenging for the innovative biopharmaceutical industry. Ireland continues to lag many other European countries when it comes to availability of new medicines, ranking 19 out of 34 for speed of patient access to some new treatments.³⁰⁰ Meanwhile, the industry is among the Irish economy's strongest performers, with robust growth in medicines exports contributing positively to the national gross domestic product. Nonetheless, the slow adoption of new medicines continues to harm Ireland's reputation and health care standards. In the Irish Government's budget plans for 2021, €50 million was allocated for new medicines, reversing a policy decision by the previous Government to stop reimbursing the latest innovative treatments. The allocation will help to reduce a backlog of new medicines deemed cost-effective and cover some new medicines that will launch this year.

²⁹⁹ IQVIA (2020). Pricing and Reimbursement Concise Guide: Hungary.

³⁰⁰ EFPIA Patient W.A.I.T. Indicator 2019 Survey, 2020, available at

https://www.efpia.eu/media/554526/patients-wait-indicator-2019.pdf (last visited Jan. 27, 2021).

In July 2020, the local innovative pharmaceutical industry association, the Irish Pharmaceutical Healthcare Association (IPHA), and the Irish Government agreed to a six-month extension to the Framework Agreement on the Supply and Pricing of Medicines to the Health Services for 2016-2020. The extension gave policymakers additional time to address the COVID-19 pandemic and to secure the supply of medicines. The extension provided for the application of industry savings to fund some new medicines. With that extension expiring and the pandemic ongoing, the industry is negotiating a short-term bridging arrangement with the Irish Government that hopefully will lead to a successor Framework Agreement. The bridging arrangement is needed because COVID-19, whose incidence has recently spiked dramatically, still consumes much, if not all, of the time of policymakers. The challenge for industry and patients remains an insufficient and unpredictable budget allowed by the government for innovative medicines that ultimately delays the reimbursement process and patient access. We urge the U.S. Government to engage with their counterparts in the Irish Government to address these systemic delays that impede the ability of U.S. innovators to bring new therapies to Irish patients.

Italy

Italy employs cost containment measures for innovative medicines at national, regional and local levels. For example, national procurement tenders can force patented medicines to compete against generic medicines, where price is the only selection criteria. Policies that govern spending on medicines in Italy also heavily penalize PhRMA member companies. These more innovative product portfolios are mainly present in hospital and direct purchasing channels, accounting more than 85 percent of spending. Unfortunately, hospital budgets for medicines are significantly underfunded, and companies are called upon to refund 50 percent of budget overruns, paying back a total of €3.1 billion over 2013-2018. The gap between government funding and actual expenditure has widened over the past several years. In contrast, in the retail channel, government funding more than covers the actual expenditure (a difference of €900 million in 2019), yet the surplus is used to pay for non-pharmaceutical spending. This imbalanced funding and the clawback system have resulted in innovative U.S. companies paying for 47 percent of the clawback despite accounting for only 30 percent of spending on medicines.

In 2019, the industry and the Italian Government signed an agreement which provided for the payment of the outstanding clawback together with a rebalancing of government financing to ensure that government funds not used for spending on retail medicines would be applied to increase funding for hospital medicines. The industry paid the requested clawback, but the imbalanced clawback system remains largely unchanged. Some improvements were introduced in the 2021 Budget Law that provided greater financing of hospitals that will reduce the hospital clawback. However, companies have been requested to pay a significant part of the 2018 clawback by the end of February 2021.

In December 2020, the Italian Medicines Agency (AIFA) published draft guidelines on the pricing of medicinal products. The draft guidelines include potentially critical

elements on the assessment and choice of comparators, information on marketing in other countries, and domestic public funding and R&D incentives received by companies. PhRMA and its member companies believe that such approaches to pricing medicines based on input costs would create inefficiencies and disincentivize the development of innovative treatments and cures.

Netherlands

PhRMA and its member companies are concerned about the Netherlands Government's rising interest in using compulsory licensing as a way to lower spending on medicines. In 2019, the government commissioned an academia-led compulsory licensing committee to examine legal and economic issues related to the use of compulsory licensing. In June 2020, the commission completed its work as it was unable to reach a joint conclusion. The Ministry of Economic Affairs took note of the commission's work and concluded that the existing legal framework was sufficient.

Recently, some legislators have refocused discussions on compulsory licensing COVID-19 related technologies, including vaccines and therapies, to increase access to these technologies. PhRMA believes that future discussions about compulsory licensing need to consider the devasting effects on innovation and the research and development environment more generally. We welcome the Prime Minister's recent statements making clear the government's position that compulsory licensing would not improve access to COVID-19 technologies.

Another area of concern is the use of compounding to abrogate intellectual property rights and lower spending on medicines. With national elections scheduled for early 2021, there is a heightened risk of some candidates promoting this approach. However, a recent ruling by the highest court of the Netherlands concluded that any compounded medicine must comply with all existing legislative and regulatory requirements before it can be reimbursed.

The Netherlands has also recently intensified cost containment measures on innovative medicines. For example, the government began a pilot program in 2015 that places innovative medicines into a reimbursement "lock" system that denies patient access until completion of a health technology assessment and subsequent price negotiations. The Netherlands initially implemented this system on a case-by-case basis but announced in May 2018 that it would apply to all new medicines with an annual cost exceeding €50,000 per patient (when combined costs exceed €10 million) or a combined cost of €40 million. Decision making criteria lack transparency, and there is no time limit on the lock period, currently estimated to be 380 days. The Dutch Government plans to further erode the prices of innovative retail medicines deemed by the Ministry of Health, Welfare and Sport to be therapeutically interchangeable by recalculating

³⁰¹ IHS Global Insights (May 2018). Netherlands expands criteria for inclusion of high-cost drugs in "reimbursement lock," renegotiates price of Tecentriq® and Soliris®.

³⁰² Association of Innovative Medicines in the Netherlands, June 2020.

reimbursement limits to not exceed the average price of the therapeutic group, which can include off-patent medicines and generics. Additionally, beginning in 2020, all medicines were subject to an updated international reference pricing system that replaced Germany with Norway, where prices are an average of 9-13 percent lower than those in the Netherlands. This change was delayed from April to October 2020. It is estimated this change will reduce prices in the Netherlands by 5-10 percent and reduce annual spending on medicines by around €300 million.³⁰³ In addition to facing these cost containment measures, most new medicines in the Netherlands are required to navigate a complex path from regulatory approval to reimbursement formulary listing that takes 252 days³⁰⁴ to complete on average.³⁰⁵ Recognizing this challenge, the Medicines Evaluation Board and the Dutch National Healthcare Institute began a pilot in collaboration with industry to reduce reimbursement delays.

In September 2020, the Ministry of Economic Affairs and the Ministry of Finance announced a €20 billion national growth fund to stimulate public and private investment, including in education and research and development. This presents many opportunities for public-private partnerships in the life sciences and health care. Recently, the local innovative pharmaceutical industry association, Vereniging Innovative Geneesmiddelen (VIG), published an eight-point plan to make the Netherlands a more attractive environment for biopharmaceutical innovators.

Poland

Total health care spending in Poland was 6.3 percent of GDP in 2019 (of which 4.6 percent of GDP was from public sources), ranking 33 of 37 OECD countries. 306 In this context, the share of public spending on medicines has remained relatively stable and under the 17 percent ceiling at which point industry clawbacks are mandated; however, the ratio has decreased from nearly 17 percent in 2017 to 15 percent in 2020. Despite the introduction of several innovative medicines to Poland in recent years, the government has constricted this share growth through a combination of therapeutic reference pricing that can tie the price of patented medicines to the lowest price generics, price cuts, fixed margins, high co-pays and other cost containment measures. 307 Poland's government pricing and reimbursement system is discriminatory, non-transparent and significantly backlogged, taking more than 823 days on average from EMA marketing authorization to patient access. 308 As a result, Poland lags far behind most other developed countries in the availability of innovative medicines. 309 More recently, the

³⁰³ IQVIA (2020). Market Prognosis: Netherlands.

³⁰⁴ EFPIA Patient W.A.I.T. Indicator 2019 Survey, 2020, available at

https://www.efpia.eu/media/554526/patients-wait-indicator-2019.pdf (last visited Jan. 27, 2021).

³⁰⁵ IHS Global Insights, 2019.

³⁰⁶ OECD Health Statistics (last accessed Sept. 2020).

³⁰⁷ IQVIA (2020). Pricing and Reimbursement Concise Guide: Poland.

³⁰⁸ EFPIA Patient W.A.I.T. Indicator 2019 Survey, 2020, available at

https://www.efpia.eu/media/554526/patients-wait-indicator-2019.pdf (last visited Jan. 27, 2021).

³⁰⁹ PhRMA analysis of IQVIA Analytics Link and FDA, EMA and PMDA data, June 2020.

government announced in February 2018 that public health care spending would continue to be increased to reach 6 percent of GDP by 2023. While the 2019 budget was finalized with a \$1 billion increase to the total health care budget, there was no increase for medicines, prompting concerns from patient groups.³¹⁰ To promote access to innovation needed by patients, Poland should ensure that medicines are allocated a sufficient share of public health care spending.

Romania

The Romanian health care system has historically been one of the most underfunded in Europe, comprising an estimated 5.3 percent of GDP in 2019 from public sources.³¹¹ While this percentage of GDP has remained stable over time, budget challenges remain due to several factors including the many contribution exemptions introduced over the years.

Romania imposes significant market access barriers for medicines, including government price controls, other cost-containment measures and administrative hurdles that significantly delay patient access (e.g., an average of 775 days between EMA approval and government reimbursement³¹²). The government sets prices based on the lowest price in a basket of 12 EU countries, and the reimbursement process is strongly dependent on the completion of reimbursement processes in other European countries. While this pricing policy was originally intended to protect patients in a lower GDP per capita country, it has ultimately led to product shortages and a lack of patient access, all of which is exacerbated as wealthier European countries seek to reference lower Romanian prices. Moreover, the inclusion of new medicines on the reimbursement list is an unpredictable process, often delayed by budget constraints.

In 2020, the government's claw back tax was capped at 25 percent of sales but still differentiated in ways that discriminate against foreign-based innovative companies: a 25 percent clawback tax on innovative products, a 20 percent clawback tax on generic medicines and a 15 percent clawback tax on medicines produced in Romania. Overall, the lack of health care funding, onerous pricing policies, and long delays in accessing innovative medicines need to remain high on the political agenda. The new government has indicated a willingness to increase health care spending to six percent of GDP and to identify alternative funding to improve access to innovation.

Moreover, although Romania has high potential for clinical trials, the number of clinical trials has drastically declined since 2008. Romania (98 clinical trials in 2019) lags behind smaller countries such as Bulgaria (108) and Hungary (207), thus further limiting

³¹⁰ IHS Global Insights (May 2019). Polish patient groups oppose MoH's decision to increase healthcare funding without raising drug reimbursement.

³¹¹ Health at a Glance: Europe 2020 STATE OF HEALTH IN THE EU CYCLE,© OECD, EU Commission, PART II, Chapter 5, Health expenditure and financing, p.160 / European Union 2020.

³¹² EFPIA Patient W.A.I.T. Indicator 2019 Survey, 2020, available at

https://www.efpia.eu/media/554526/patients-wait-indicator-2019.pdf (last visited Jan. 27, 2021).

patient access to innovative therapies. The market for clinical trials in Romania, could have the potential to reach EUR 802 million and even EUR 1.4 billion compared to the best performing EU countries.³¹³

<u>Spain</u>

During the financial crisis of 2010-2012, Spain imposed aggressive cost containment measures that remain in place despite the country's economic rebound. Since 2010, these measures have collectively reduced pharmaceutical spending by 30 percent. Specific measures included the reimbursement delisting of more than 400 medicines, frequent direct and indirect price cuts, imposition of a 7.5 percent mandatory discount on reimbursed innovative medicines, restricted access for certain patient subpopulations and changes in pharmaceutical co-payment policies (e.g., pensioners began contributing a 10 percent co-payment, subject to caps and other limits). In an effort to provide greater predictability and avoid further ad hoc cost-containment measures, the local innovative pharmaceutical industry association, Farmaindustria, and the current administration recently agreed to tie growth in public spending on original branded medicines to GDP growth. However, in practice, historical market access barriers and government price controls persist.

Additional market access challenges have emerged with recent administrations. These include therapeutic reference pricing of innovative medicines based on a group of products that includes generics and biosimilars, mandatory prescribing by active ingredient for small molecules and biologics, and mandatory automatic substitution of biosimilars. Only 55 percent of new medicines reviewed by Health Minister's Advisory Committee in 2018 were admitted to reimbursement. In 2019, an unprecedented level of rejections and delays by the Ministry of Health have negatively impacted patient access to new medicines.

<u>Sweden</u>

Although Sweden is one of the wealthiest countries in Europe, the proportion of national health expenditure accounted for by pharmaceuticals has fallen from 14.5 percent in 2000 to just 9.8 percent in 2018. Moreover, the Swedish Krona has declined against the Euro for more than a decade, accounting for approximately 60 percent of the decline in the overall price index with European countries since 2014. According to the Dental and Pharmaceutical Benefits Agency (TLV), about 60 percent of the price reductions for innovative medicines over 2014-2019 were due to changes in exchange rates. With more than 25 countries referencing Sweden – including Canada, Germany, and Switzerland – the global knock-on effects of the currency devaluation are significant.

³¹³ IQVIA (2020). Clinical Studies: Foreign investments in Romania, available at https://www.accscr.ro/images/upload/images/Clinical%20Trials%20Study%20Romania_20200827_RAPO RT%20FINAL_RO.pdf (last visited Jan. 27, 2021)

Innovators face an increasingly challenging and non-transparent environment for government pricing and reimbursement. For example, manufacturers must submit a proposed price to the TLV as part of their combined pricing and reimbursement application. Unless the medicine has been identified as a candidate for a managed entry agreement, the application is either accepted or rejected in a nontransparent fashion. Although rejections can be appealed, the manufacturer is not permitted to provide new evidence to support its case. In making pricing decisions, the TLV employs an opaque "value-based" system which compares new products against comparators it deems therapeutically equivalent, including medicines used outside the reimbursement system and medicines used off-label. The TLV also engages in frequent re-assessments of reimbursed medicines, which commonly result in price cuts, new restrictions and even delisting.

Switzerland

Switzerland has compulsory private health insurance, but the government regulates which medicines are reimbursed and sets the prices of those products based on the prices in other European countries (all with lower GDP per capita) as well as based on the prices of alternative therapies which may represent a lower standard of care.

Moreover, the pricing and reimbursement system lacks predictability and transparency, and fails to appropriately account for currency appreciations as well as the local cost structure. For example, in 2015 Switzerland expanded the basket of countries used in its international reference pricing system for setting and adjusting prices of patented medicines. However, given the strength of the Swiss franc relative to other currencies in the basket (Euro, UK Pound, Swedish Krona and Danish Krone), the practice has become even more damaging as many of these currencies continue to lose value. Compounding this issue, in 2017 the Swiss Government began setting prices based on giving equal weight to the average international reference price and the average therapeutic reference price. Every year, one-third of the reimbursement list is subject to price adjustments based on this approach. For the group of 543 original brand medicines reviewed in 2018, 288 (53 percent) had their prices cut by an average of 19 percent. Similarly, for the group of 478 original brand medicines reviewed in 2019, 257 (54 percent) had their prices cut by an average of 17 percent. Manufacturers may also be required to pay back revenue after a product's first triennial price review if the price was reduced by more than 3 percent and if the previous price generated more than CHF 20,000 in excess revenue.

Over the past two years, government pricing authorities began using additional tools such as capitation, pay for performance, indication-based pricing, budget impact tests and rebating for drugs using in combination or by indication. As a result of these combined policies, Switzerland has experienced more pronounced market access delays for certain innovative medicines in recent years.

UNITED KINGDOM

PhRMA and its member companies operating in the United Kingdom (UK) continue to work with the UK Government, the National Institute for Health and Care Excellence (NICE), NHS England and NHS Improvement, as well as National Health Service (NHS) partners to support implementation of policies that strengthen the innovative pharmaceutical industry and address long-standing market access and pricing issues. Of particular concern are the continued lack of patient access to innovative medicines, intellectual property (IP) threats post Brexit and the need for continued support for the government's life sciences strategy.

Key Issues of Concern:

- Longstanding restrictions on the valuation of innovative medicines and patient access: Rigid health technology assessment (HTA) that require increasing discounts to meet low thresholds for cost-effectiveness combined with overlapping cost containment measures across the health system designed to limit pharmaceutical spending below that of most developed markets inhibit the ability of UK patients to access the latest innovative medicines and remain significantly challenging. In comparison to peer countries, adoption of the newest medicines often remains low and slow, and variable across the health system.
- Continued need to deliver on ambitions for the life sciences sector: The UK Government was elected on a platform which included ambitious commitments for innovative, R&D intensive sectors including the life sciences sector. PhRMA and its member companies welcome the proposed changes contained in the 2017 Life Sciences Industrial Strategy (LSIS) report. However, we continue to encourage the full implementation of LSIS policies in the NHS and elsewhere to enhance the UK life sciences environment and to foster adoption of new life sciences technologies for the benefit of UK patients.
- Intellectual property and other threats from Brexit: With the UK's exit from the European Union (EU), it is important that the United Kingdom maintain strong IP protections, including effective periods of regulatory data protection and supplementary protection to restore a portion of the time lost during the marketing approval process. Ongoing and future U.S.-UK trade negotiations provide an opportunity for the United Kingdom to affirm high-standard IP standards.

For these reasons, PhRMA requests that the UK remain/be placed on the **Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Effective intellectual property protections and enforcement is essential to develop new medicines for patients who need them. Subsequent to the United Kingdom exiting the European Union, it is important that the United Kingdom maintain robust IP protections and that the United Kingdom and European Union systems remain sufficiently aligned to ensure business continuity and certainty for PhRMA member companies. In addition, the United Kingdom should seek to benefit from the opportunity to distinguish its innovation environment for the life sciences from the European Union by enhancing incentives where the European Union has unfortunately weakened its innovation framework. For example, the United Kingdom should consider eliminating the recently adopted EU "SPC waiver" that undermines life sciences innovation by exempting from infringement manufacturing of inventions during the SPC term.

Brexit does not change the UK's membership under the European Patent Convention (EPC), and any patent granted under the EPC can still be validated and enforced in the United Kingdom after Brexit. However, other IP rights already obtained or available in the United Kingdom under EU law or applications thereof, should continue to be in force as a matter of UK law. Following the end of the post Brexit transition period, it is critical that the United Kingdom revise its legislation to calculate the duration of SPCs from the date of UK marketing authorization (rather than the earliest date of authorization in the European Union/European Economic Area or United Kingdom, as now). Continuing to make the duration of IP protection offered in the United Kingdom potentially still dependent on the acts of EU authorities is illogical, now that the UK and EU medicines regulatory systems are operating independently of each other, and consequently may erode the effective protection period in the UK.

Despite industry having raised these specific concerns strongly with the UK Government this issue remains unresolved. This is extremely concerning as it will lead to the weakening of the UK IP protection framework – making the United Kingdom less competitive at a time when it has ambitions to become a 'science super power' and retain its commercial attractiveness in the eyes of global pharmaceutical companies.

As the UK Government considers future free trade agreements post-Brexit, as well as the UK's opportunities to build its life-sciences sector, it should seek to affirm its commitment to strong IP protections. In particular, it should enshrine the provision of stable RDP, orphan and pediatric exclusivities that meet the highest international standards (at a time when some in the European Union are seeking to undermine those incentives), and recognize that it is never appropriate to threaten compulsory licenses in order to secure price cuts.

Market Access

Government Restrictions on the Valuation of Innovative Medicines and Patient Access

New medicines in the United Kingdom can be launched upon regulatory approval, potentially making it one of the world's fastest countries for market access. However, in practice, UK patients experience materially longer delays in being treated with new medicines due to long standing cost-containment policies and a lack of leadership focus on the adoption of innovation across the NHS.³¹⁴ According to the UK Government, for every 100 patients in comparable countries who get access to a new medicine in its first year of launch, just 21 patients in the United Kingdom receive the same (even if the medicine has been recommended by NICE). Even five years after the launch of a new medicine, only 75 patients in the United Kingdom receive the same.³¹⁵ Nearly 90 percent of new medicines launched globally since 2011 are available in the United States compared to just 59 percent in the UK, with UK patients waiting an average of 11 months from global first launch for the fewer medicines that do become available.

Another key reason why UK patients experience reduced access to new medicines is the high rate of either outright rejections by NICE or "optimized" recommendations that unduly restrict the patient populations who can access those medicines. When making recommendations, NICE assesses medicines using a baseline cost-effectiveness threshold of between £20,000 and £30,000 per quality-adjusted life year (QALY). This baseline threshold has not been revised - even in line with inflation - since NICE's inception in 1999, which means that the threshold has declined in real terms by over 30 percent over the past two decades. Innovative medicines exceeding a cost per QALY threshold of £30,000 (or £50,000 for end-of-life interventions) are generally viewed as not cost-effective, leaving patients without access to clinically superior products. In addition, as companies develop new therapeutic advances, often in areas where there are many older off-patent medicines that are much lower in cost, demonstration of costeffectiveness becomes exceedingly difficult. Moreover, NICE's inflexibility surrounding new medicines for which there is greater uncertainty about data (e.g., due to the immaturity of data or single-arm trials) disproportionately impacts patient access to treatments for small patient populations (e.g., rare conditions) or for subsets of populations (e.g., targeted therapies).

Using primarily cost per QALY to measure cost-effectiveness in this way fails to appropriately recognize the value of innovative medicines. In this context, between March 2000 and January 2021, just 54 percent of all technology appraisals were recommended by NICE in line with marketing authorization; while 24 percent were recommended in a restricted subset of patients, 4 percent were temporarily recommended under the Cancer Drug Fund (CDF), and 3 percent in research only – and 14 percent were rejected altogether. Recommendations for cancer medicines were even more restrictive with just

³¹⁴ IQVIA, P&R Concise Guide: United Kingdom (2017).

³¹⁵ Office for Life Sciences, "Life sciences competitiveness indicators," June 2019.

50 percent of cancer appraisals recommended in-line with marketing authorization; while 14 percent were recommended in a restricted subset of patients, 12 percent under the CDF, 3 percent in research only – and 22 percent rejected altogether.³¹⁶

Given these trends, industry welcomes the ongoing NICE Methods Review and looks forward to meaningful reforms to support UK patients getting access to innovative medicines. NICE's recognition of the need for decision modifiers that better account for the severity of disease, health inequalities, uncertainty and the benefits of innovative technologies is a positive step forward. Ultimately, given the well-known limitations of QALYs, the United Kingdom should introduce a broader and more flexible framework to ensure that its assessments of innovative medicines more appropriately recognize the comprehensive health and non-health benefits to patients, the health system and society.

PhRMA members recognize NHS England's interest in controlling health care spending but spending on medicines is not currently a driver of growing health care costs. On the contrary, in the five years up to 2019, NHS spending on the majority of branded medicines was capped to 1.1 percent growth on average per year, a decline of 0.4 percent after inflation while overall NHS spending rose at 3.3 percent over the same period. Innovations in prevention and treatment will be vital to creating a more effective and resilient UK health system, as well as to improving health outcomes and providing high-quality care. Indeed, with the new Voluntary Scheme, the UK Government has certainty that spending on branded medicines will not rise more than 2 percent per year, so there is no reason not to bring access requirements for new products in line with other leading nations. Currently, the VPAS commitments have still not come to fruition and uptake of new medicines approved by NICE remains low and slow due to system fragmentation and insufficient health care budgets.

Therapeutic Tendering of Classes of Patented Medicines

The NHS has traditionally subjected off-patent medicines to competition through public procurement that invites bids from manufacturers of the same generic medicine. Recently, however, NHS England has used public procurement for entire therapeutic classes of patented medicines with the aim of obtaining prices below the prices that NICE established when making coverage recommendations. In addition to disrupting established incentives for patented medicines, this emerging practice undermines NICE guidance, ignores clinical non-interchangeability of products, freedom of choice for providers and patients and represents a fundamental shift in the UK model. Therapeutic tendering of classes of patented medicines sends a strong anti-innovation signal to the industry and contradicts the UK Government's stated ambition to be a global leader in the life sciences. NHS England should abandon the practice of therapeutic tendering of patented medicines and focus on providing access consistent with available guidance

³¹⁶ National Institute for Health and Care Excellence (NICE), available at https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-technology-appraisal-guidance/summary-of-decisions (last visited Jan. 27, 2021).

and clinical choice, within the existing voluntary framework which has capped medicines expenditure.

Delivering on ambitions for the life sciences sector

PhRMA members welcomed the proposed changes contained in the 2017 Life Sciences Industrial Strategy (LSIS) report. The report was developed with the Association of the British Pharmaceutical Industry (ABPI) and its industry partners, and led by Professor Sir John Bell. When the current UK Government was elected in 2019, it ran on an ambitious platform with goals to increase R&D expenditure to 2.4% of GDP across the economy and make the United Kingdom a leading hub for life sciences.

To deliver on these objectives, the ABPI continues to call for implementation of all the recommendations in the LSIS. The UK Government has now published a new R&D Roadmap, and it is critical that this Roadmap is followed working in partnership with the life sciences sectors. This could be a powerful way to support the sector's economic contribution to the United Kingdom, but will only be meaningful if coupled with other reforms to ensure that UK patients have access the latest innovative medicines. To realize the UK's ambitions, the Government should:

- Continue to invest in the UK's strong science base;
- Ensure the United Kingdom continues to have globally competitive and attractive economic incentives to support the sector and secure inward investment;
- Build foundations and infrastructure for the research, development and production of innovative therapies in the United Kingdom;
- Transform the NHS into an early adopter of new medicines and technologies which are adopted at pace and scale;
- Ensure that the ongoing NICE Methods review results in meaningful reforms;
- Enable the NHS to make best use of data and digital tools to support research and improve patient care;
- Recognize the potential challenges and opportunities for the industry as a result of Brexit and beating COVID-19, and prioritize regulatory cooperation and the ability to trade medicines following the transition period; and
- Continue to be a leader in intellectual property rights globally.

SPECIAL 301 SUBMISSION 2021
MIDDLE EAST / AFRICA

EGYPT

PhRMA and its member companies remain concerned about market access issues and the intellectual property (IP) environment in Egypt. PhRMA member companies struggle with stabilizing and growing their operations in a populous country with significant unmet medical needs that is undergoing major health system reforms to support universal health coverage. During the past several challenging years, PhRMA and its member companies have tried to work in good faith with Egyptian officials to address health and industrial issues. Specifically, in 2017, PhRMA and its member companies faced major challenges in meeting the Health Minister at that time to address the government pricing challenges facing the industry. These challenges were a consequence of the Egyptian Government's decision in November 2016 to liberate the foreign exchange rate. That decision triggered a precipitous decline in the value of the Egyptian Pound, jeopardizing the largest, most established pharmaceutical sector in the Middle East region.

The Egyptian President approved a law in August 2019, establishing the Egyptian Drug Authority (EDA) and the Egyptian Authority for Unified Procurement, Medical Supplies and the Management of Medical Technology. The creation of these two authorities aims to develop the health system and medical industries, ensure the stable supply of medicines, counter monopolies in the health sector, and combat counterfeit medicines in Egypt.

The EDA has adopted an open and flexible approach to support individual companies in alleviating some of the losses due to the devaluation of the Egyptian pound via repricing proposals. In addition, PhRMA notes that the former Minister of Investment and International Cooperation and the Minister of Health, and recently the chairman of the EDA have shown a willingness to meet and discuss issues of concern and potential comprehensive solutions. Those officials recognize the threat to the industry and have expressed interest in supporting the innovative biopharmaceutical industry and encouraging investment in the country.

Key Issues of Concern:

- Weak patent enforcement and compulsory licensing threats: Egypt lacks
 effective patent enforcement, enabling manufacturers to obtain marketing licenses
 for follow-on products prior to the expiration of the patent on the original product.
 Recently, the Egyptian Government has taken steps to set up a ministerial
 committee with broad discretion to issue compulsory licenses.
- Government pricing policies: Despite the support of the EDA in alleviating some
 of the losses on an individual company basis, PhRMA member companies remain
 concerned that Egypt has yet to develop a transparent and fair pricing system that
 would systematically address the drawbacks of the current pricing system, such
 as a methodology for absorbing currency fluctuations.

For these reasons, PhRMA requests that Egypt remain on the **Watch List** in the 2021 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved.

Intellectual Property Protection

Weak Patent Enforcement

Egypt does not provide an effective mechanism to ensure that marketing licenses are not granted to companies making products that infringe on an originator's patent. Some Egyptian officials have opposed putting in place an effective patent enforcement system similar to the process used by the United States or in other neighboring countries.

In those neighboring countries, regulators who receive a marketing application from a generics company are required to check for any existing patents applying to the reference drug. If an existing patent applies, the patent holder should be notified and the MoH should have a procedure in place whereby it can either: (i) defer review of the generics company's application for examination closer to the date of the patent's expiration, (ii) defer grant of the application until after a sufficient period to resolve the patent dispute, or (iii) grant a marketing license that is valid only after the expiration of the innovator's patent.

As Egypt is a World Trade Organization (WTO) member, has enacted patent laws, and issues patents through the Egyptian Patent Office, it follows that the Egyptian MoH should have in place an effective mechanism whereby it can defer marketing approval of newly licensed medicines until after the expiration of any applicable patents, or at least until after a sufficient period to allow for resolution of any underlying patent disputes.

Compulsory Licensing Decree No. 251/2020

In early February 2020, the Prime Minister issued Decree no. 251/2020 forming the Ministerial Committee stipulated in Article 23 of the Law with the authority to compulsory license or expropriate any patented product or process. The Decree and Egypt's Patent Law (Law no. 82/2002) give the committee broad discretion to take patents for almost any reason. The votes of only three of the five members of the committee are necessary to issue a compulsory license.

The fact that the Government of Egypt has established a ministerial committee at this specific time – nearly two decades after the Patent Law entered into force – and without any prior notification to or engagement with the private sector has sent an alarming signal to the companies we represent and to many other innovative industries.

Experience and research demonstrates that compulsory licensing is not an effective way to improve access or achieve other public health objectives. It does not necessarily lower prices or speed access in the short-term, or provide sustainable or comprehensive solutions to longer-term challenges. It does not address systemic barriers

to access – from weak health care delivery systems to low national health care funding and high taxes and tariffs on medicines. Compulsory licensing is particularly ineffective relative to the many alternatives available. Biopharmaceutical innovators support different tools and programs that make medicines available to patients who could not otherwise afford them.

PhRMA believes governments should grant compulsory licenses (CLs) in accordance with international rules and only in exceptional circumstances and as a last resort. Decisions should be made through fair and transparent processes that involve participation by all stakeholders and consider all relevant facts and options.

Market Access Barriers

Government Pricing Policies

Despite the support of the EDA in alleviating some of the losses on an individual company basis, our member companies remain concerned that Egyptian authorities have yet to develop a new transparent and fair pricing system that would systematically address the drawbacks of the current pricing system, such as a methodology for absorbing currency devaluations. On a positive note, industry is engaged in constructive discussions with the new Minister of Health on the gaps in the currently effective pricing Decree no. 499/2012 regarding the pricing of innovative medicines.

While the Egyptian Government has been open to seeking input from the industry on the law during the drafting process, PhRMA strongly urges that the constructive dialogue continue, as this law and its executive regulations have set critical and unclear policies that will impact access to innovative products and hence the future of the innovative biopharmaceutical industry in Egypt.

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UNITED ARAB EMIRATES

The United Arab Emirates (UAE) has made great progress in recent years to provide an increasingly competitive environment for operating and investing in the life sciences and innovative biopharmaceutical sector. This effort has resulted in attracting the regional headquarters for many international companies, increased investment in clinical research, and expanding regional logistics, warehousing and manufacturing operations. There is a continuous dialogue on policy issues with pharmaceutical companies and their local trade association Policies promoting transparency, predictability in the business environment and intellectual property protection have served as mainstay elements contributing to the growth of the sector. In recent years, the UAE has taken additional steps, including accelerating licensing procedures to ensure that patients have timely access to cutting-edge vaccines and medicines.

Nevertheless, in 2017, a significant concern arose related to intellectual property protections for innovative pharmaceutical products. Specifically, contrary to UAE law and its international commitments, the Ministry of Health and Prevention (MOHAP) registered generic pharmaceutical products for sale in the UAE that appeared to infringe the patents on innovative medicines produced by our member companies. Following significant engagement with the UAE Government on the concerns raised by these actions, the UAE has responded with Decree 321. This highly promising decree provides the framework for a regulatory data protection (RDP) system (with eight years of protection) and includes provisions calling for the return of effective patent enforcement in the UAE. Industry looks forward to continuing its constructive engagement with the UAE Government to ensure that the Decree (and in particular the unique exception outlined in Article 5) are consistent with the UAE's international commitments and that it is implemented in a manner that provides effective and meaningful patent protection and RDP for all innovative pharmaceuticals (including biologics).

Key Issues of Concern:

• Effective patent enforcement and regulatory data protection: Contrary to Ministerial Decree 404, in 2017, MOHAP registered generic pharmaceutical products for sale in the UAE that appeared to infringe the patents on innovative medicines produced by our member companies. At that time, the patents in the countries of origin remained in force and thus should have been honored in the UAE as required by Decree 404. Moreover, the UAE has not historically had an adequate RDP framework to ensure that generic and biosimilar manufacturers cannot prematurely rely on the confidential information that innovators must submit to regulatory authorities to demonstrate the safety and efficacy of a medicine for marketing approval. Promisingly, on September 21, 2020, the UAE released Decree 321, which has the potential to address these deficiencies. We stand ready to work with the government to ensure that Decree is implemented consistently with international obligations (in particular the proposed exception in Article 5) and in a manner that provides effective and meaningful patent protection.

For these reasons, and recognizing the significant progress that the UAE has already achieved, PhRMA requests that the USTR conducts an **Out-of-Cycle Review**, so that the U.S. Government can continue to partner with the UAE Government on the implementation of Decree 321 and thereby ensure that the promise of that Decree is fully realized in 2021.

Intellectual Property Protection

Effective Patent Enforcement and Regulatory Data Protection

The UAE's commitment to protect IP started in earnest with the issuance of Ministerial Decree No. 404 on April 30, 2000, which prohibits the registration of any pharmaceutical product until the expiry of the patent term of the original product. Furthermore, the UAE clarified its commitments in Decree 404 via a letter to the U.S. Ambassador (Memorandum of Understanding or MOU) which specifically clarifies that for any drug registration application filed after January 1, 2000, the "protection period shall be extended and remain valid during the validity period of protection related to patent in the Country of Origin of the original drug."

Contrary to Decree 404, in 2017, MOHAP registered generic pharmaceutical products for sale in the UAE that appeared to infringe the patents on innovative medicines produced by our member companies. At that time, the patents in the countries of origin remained in force and thus should have been honored in the UAE as required by Decree 404.

PhRMA and its member companies engaged extensively with MOHAP and MOE to address these longstanding concerns, including MOHAP's ability to register generic or biosimilar pharmaceutical products for sale in the UAE without taking into regard relevant intellectual property rights of the originator products. Following that engagement, the UAE issued Decree 321 on September 21, 2020. This highly promising decree provides eight years of RDP and anticipates the implementation of new systems in the UAE to ensure the effective enforcement of patents on innovative pharmaceutical products (including the enforcement of Decree 404 for innovative products approved prior to Decree 321 being published in the official gazette). The PhRMA and its member companies look forward to continuing our constructive engagement with the UAE Government to ensure that the Decree (and in particular the proposed exceptions in Article 5) are consistent with the UAE's international commitments and that it is implemented in a manner that provides effective and meaningful patent protection and RDP for all innovative pharmaceuticals (including biologics).

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³¹⁷ Consistent with the MOU between the United States and the United Arab Emirates, it will be critical for the UAE to provide clarity on how it will define the country of origin of the original drug in order to ensure that the appropriate term of patent protection is provided.