

**PHARMACEUTICAL RESEARCH AND
MANUFACTURERS OF AMERICA
(PhRMA)
SPECIAL 301 SUBMISSION 2016**

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PhRMA 2016 SPECIAL 301 OVERVIEW

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The Pharmaceutical Research and Manufacturers of America (PhRMA) appreciates the opportunity to provide this submission for the *2016 Special 301 Report*.

The following overview highlights the critical role adequate and effective intellectual property rights protections and fair and equitable market access play in enabling biopharmaceutical innovators in the United States to research, develop and deliver valuable new medicines for patients who need them around the world. It describes serious and pressing intellectual property and market access barriers abroad and recommends steps the Office of the U.S. Trade Representative (USTR) and other federal agencies can take to address and resolve these barriers. The attached country profiles provide additional details and examples.

This submission focuses on the most urgent barriers and threats in 20 countries that are significant and increasingly important markets for medicines invented, developed and manufactured in the United States. For the reasons explained in the following pages, PhRMA urges USTR and other federal agencies to prioritize action to address and resolve challenges in **Canada, China, India** and other countries recommended for inclusion on the Priority Watch List.

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.¹ Innovators in this critical sector depend on strong intellectual property protection and enforcement and on fair and transparent 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 and contribute powerfully to the American economy and jobs.

A. Biopharmaceutical innovation delivers value for patients and economies

PhRMA member companies and the more than 810,000 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.² They work in partnership with universities, clinical researchers, patient organizations, healthcare providers and others to bring new treatments and cures to

¹ 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://www.phrma.org/sites/default/files/pdf/phrma_growthplatformforeconomiesaroundtheworld_20120508.pdf (last visited Feb. 5, 2016).

² Battelle Technology Partnership Practice, *The Economic Impact of the U.S. Biopharmaceutical Industry*, July 2013, available at <http://phrma.org/sites/default/files/pdf/The-Economic-Impact-of-the-US-Biopharmaceutical-Industry.pdf> (last visited Feb. 5, 2016).

patients who need them at home and abroad – introducing nearly 550 new therapies since 2000³ and investing in many of the over 7,000 new drugs currently in development worldwide.⁴

Pioneering work by biopharmaceutical innovators in the United States contributes significantly to economic growth and supports good-paying jobs in all 50 states. In 2014, biopharmaceutical research and development activity added \$790 billion to the U.S. economy and supported 3.4 million American jobs, including indirect and induced jobs.⁵ 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.⁶ In 2014, the industry exported \$54 billion in biopharmaceuticals,⁷ making the sector one of the top-five exporters among intellectual property-intensive industries.⁸

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 healthcare costs. Between 1950 and 2009, life expectancy for women and men in the United States increased by a full decade and continues to rise⁹ – adding trillions of dollars to the U.S. economy.¹⁰ New medicines are responsible for much of this increase. According to a National Bureau of Economic Research working paper, new treatments accounted for three-quarters of life

³ U.S. Food and Drug Administration, “Summary of NDA Approvals & Receipts, 1938 to the present,” available at [http://www.fda.gov/aboutfda/whatwedo/history/product regulation/summaryofndaapprovalsreceipts1938tothepresent/default.htm](http://www.fda.gov/aboutfda/whatwedo/history/product%20regulation/summaryofndaapprovalsreceipts1938tothepresent/default.htm) (last visited Feb. 5, 2016); and U.S. Food and Drug Administration, Center for Drug Evaluation and Research, *Novel Drugs 2015*, Jan. 2016, available at <http://www.fda.gov/downloads/Drugs/DevelopmentApprovalProcess/DrugInnovation/UCM481709.pdf> (last visited Feb. 5, 2016).

⁴ *Adis R&D Insight database*, accessed Mar. 2015.

⁵ Battelle Technology Partnership Practice, *The Economic Impact of the U.S. Biopharmaceutical Industry*, July 2013, available at <http://phrma.org/sites/default/files/pdf/The-Economic-Impact-of-the-US-Biopharmaceutical-Industry.pdf> (last visited Feb. 5, 2016).

⁶ *Id.*

⁷ PhRMA analysis of data from the United States International Trade Administration (ITA), *TradeStats Express: National Export Data*.

⁸ Industry R&D data from National Science Board of the National Science Foundation, *Science and Engineering Indicators 2012*, 2012; Industry export data from PhRMA analysis of data from U.S. ITA, *TradeStats Express: National Export Data*; Software publishers data from the International Intellectual Property Alliance.

⁹ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, *Health, United States, 2014*, Table 16, May 2015, available at <http://www.cdc.gov/nchs/data/health/health14.pdf> (last visited Feb. 5, 2016).

¹⁰ Between 1970 and 2000, increased longevity added about \$3.2 trillion per year to national wealth in the United States. See Murphy, Kevin M. and Robert 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 Feb. 5, 2016).

expectancy gains in the United States and other high-income countries between 2000 and 2009.¹¹

For example, the AIDS death rate has dropped nearly 85 percent since the approval of antiretroviral treatments in 1995.¹² Today, a 20-year old diagnosed with HIV can expect to live another 50 years.¹³ New medicines have cut heart disease deaths by 30 percent, according to the Centers for Disease Control and Prevention.¹⁴ More than 80 percent of the increase in life expectancy of cancer patients since 1980 is attributable to new treatments.¹⁵ New hepatitis C therapies approved since 2013 cure over 90 percent of patients – a more than two-fold increase from previously available treatment options.¹⁶

PhRMA member companies are building on these achievements and pioneering new treatments and cures for some of the world's most devastating diseases. They are developing close to 400 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.¹⁷ Advances in biotechnology and genomics are propelling the discovery of new medicines to treat a range of chronic and infectious diseases. Derived from living organisms, biologic medicines are revolutionizing the treatment of cancer and autoimmune disorders. Biologics are critical to the future of the industry and

¹¹ Lichtenberg, Frank 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 Feb. 5, 2016).

¹² 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/health/health14.pdf> (last visited Feb. 5, 2016).

¹³ *Id.*

¹⁴ 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 <http://www.cdc.gov/media/dpk/2013/dpk-vs-heart-disease.html> (last visited Feb. 5, 2016).

¹⁵ 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://meeting.ascopubs.org/cgi/content/short/26/15_suppl/6616 (last visited Feb. 5, 2016); A more recent article by the American Cancer Society (dated Jan. 7, 2016) reported that cancer death rates have been reduced nearly 23 percent since 1991. See <http://www.cancer.org/cancer/news/news/cancer-statistics-report-death-rate-down-23-percent-in-21-years> (last visited Feb. 5, 2016).

¹⁶ See, for example, U.S. Food and Drug Administration News Release, "FDA approves Viekira Pak to treat hepatitis C," Dec. 19, 2014, available at <http://www.fda.gov/newsevents/newsroom/pressannouncements/ucm427530.htm> (last visited Feb. 5, 2016).

¹⁷ PhRMA, 2013 Medicines in Development – Infectious Diseases Report, Pharmaceutical Research and Manufacturers of America, Dec. 2013, available at <http://phrma.org/sites/default/files/pdf/MedsInDevInfectiousDiseases2013.pdf> (last visited Feb. 5, 2016).

promise progress in the fight against conditions like Alzheimer's, which today lack effective treatments.¹⁸

New medicines can lower the overall cost of treating these and other devastating diseases. They can increase worker productivity 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. healthcare system at least \$5 billion.¹⁹ Every \$24 spent on new medicines for cardiovascular diseases in OECD countries saves \$89 in hospitalization costs.²⁰ Treating high blood pressure according to clinical guidelines would result in annual health system savings of about \$15.6 billion.²¹

PhRMA members are working to overcome significant systemic challenges that can prevent the poorest patients from accessing medicines. Together with governments and others, they are leading more than 340 initiatives with more than 600 partners to help shape sustainable solutions that improve the health of all people.²² In the last decade, biopharmaceutical innovators provided over \$9.2 billion in direct assistance to healthcare for the developing world, including donations of medicines, vaccines, diagnostics, and equipment, as well as other materials and labor.²³ Between 2000 and 2011, they contributed an estimated \$98.4 billion dollars toward achieving health-related Millennium Development Goals.²⁴

B. Intellectual property powers prevention, treatments and cures

Strong protection and enforcement of patents, regulatory test data and other intellectual property, and fair and transparent market access to overseas markets

¹⁸ *Id.*

¹⁹ 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 <http://content.healthaffairs.org/content/31/10/2276.full.pdf> (last visited Feb. 5, 2016).

²⁰ 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 Feb. 5, 2016).

²¹ Cutler, D.M., G. Long et al., "The Value of Antihypertensive Drugs: A Perspective on Medical Innovation," *Health Affairs*, Jan. 2007, available at <http://content.healthaffairs.org/content/26/1/97.full> (last visited Feb. 5, 2016).

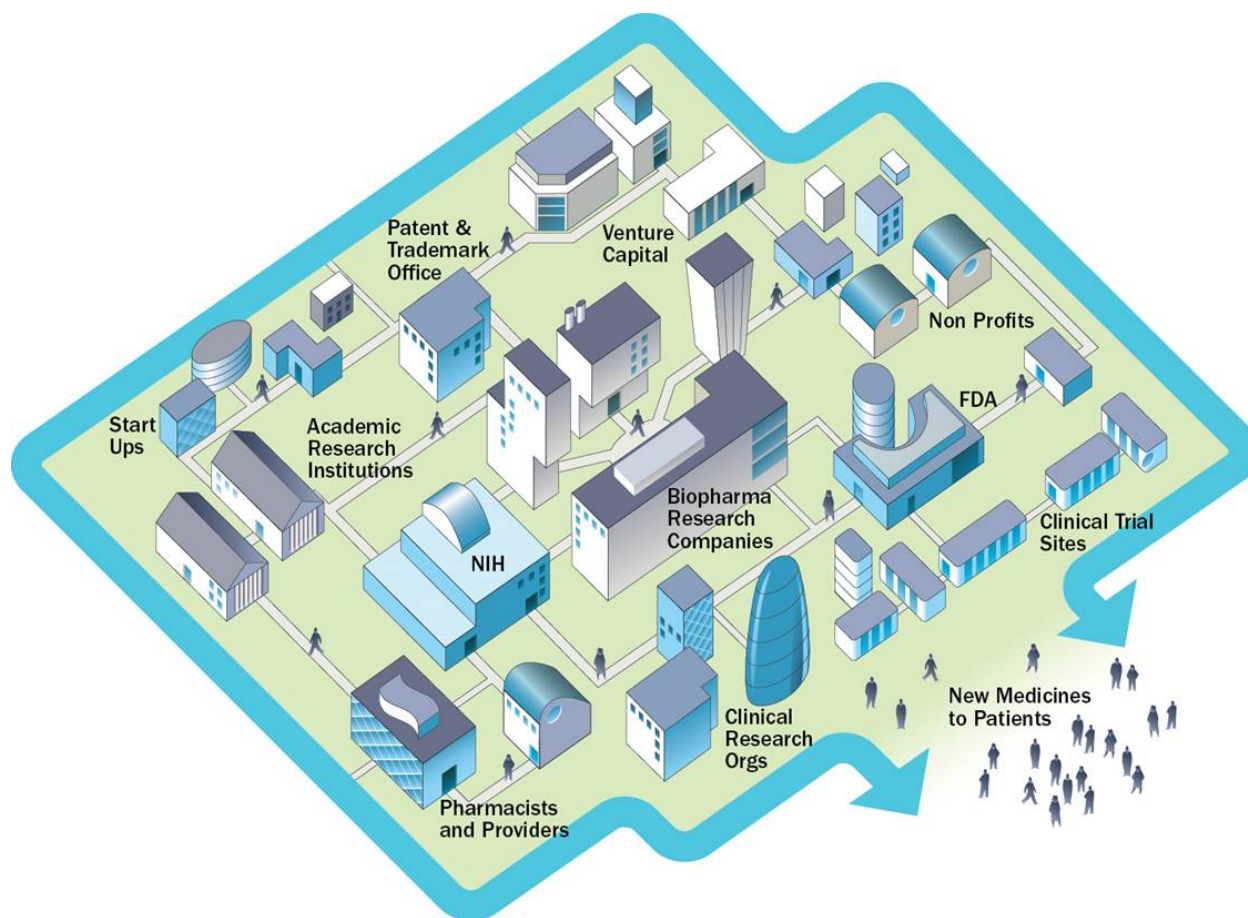
²² See Global Health Progress, available at <http://www.globalhealthprogress.org>.

²³ International Federation of Pharmaceutical Manufacturers and Associations (IFPMA), "The IFPMA Health Partnerships Survey," *validated by LSE Health and Social Care at the London School of Economics and Political Science*, Mar. 2006, available at: http://www.policy-centre.com/downloads/IFPMA_LSE_Report_08Mar06.pdf (last visited Feb. 5, 2016).

²⁴ 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_contributions_to_the_un_millennium_development_goals.pdf (last visited Feb. 5, 2016).

provide powerful incentives that drive and sustain substantial investments in valuable treatments and cures. Where markets are open and intellectual property is protected and enforced, biopharmaceutical innovators have the predictability and certainty they need to collaborate with partners, compete successfully and accelerate the launch of new medicines.

Figure 1: Collaboration and the biopharmaceutical R&D process



As highlighted in Figure 1 above, research, development and distribution of innovative medicines increasingly involves collaboration 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. Patents promote competition and greater treatment options. In exchange for the limited period of protection 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.²⁵

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 strong patent protection accelerates new product launches in higher and lower income countries alike.²⁶ Launching a medicine in a particular country also has important effects on the whole healthcare system. For instance, when a new medicine is introduced, biopharmaceutical companies invest in educating healthcare providers on the science and appropriate use of that medicine.²⁷ This investment later enables accelerated acceptance of generic versions once relevant patents expire.

Strong intellectual property protection and enforcement at home and abroad provides essential incentives for investment in the biopharmaceutical sector and in all of the innovative industries that today account for more than one-third of U.S. gross domestic product.²⁸ 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-quarters of all venture capital-backed internet startups fail.²⁹ 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.³⁰ Of the approximately 1,200 biopharmaceutical companies in the United States, more than 90 percent do not earn a profit.³¹

²⁵ International Federation of Pharmaceutical Manufacturers and Associations (IFPMA), *The New Frontiers of Biopharmaceutical Innovation*, 2012, available at http://www.ifpma.org/fileadmin/content/Publication/2012/IFPMA_New_Frontiers_Biopharma_Innovation_2012_Web.pdf (last visited Feb. 5, 2016).

²⁶ Cockburn, I.M. et al., "Patents and the Global Diffusion of New Drugs," *National Bureau of Economic Research*, Sept. 2014, available at <http://nber.org/papers/w20492> (last visited Feb. 5, 2016).

²⁷ Wilsdon, Tim and Glyn Chambers, "The role of the innovative industry in 'developing' the market for new medicines in emerging markets," *Charles River Associates*, Apr. 2013.

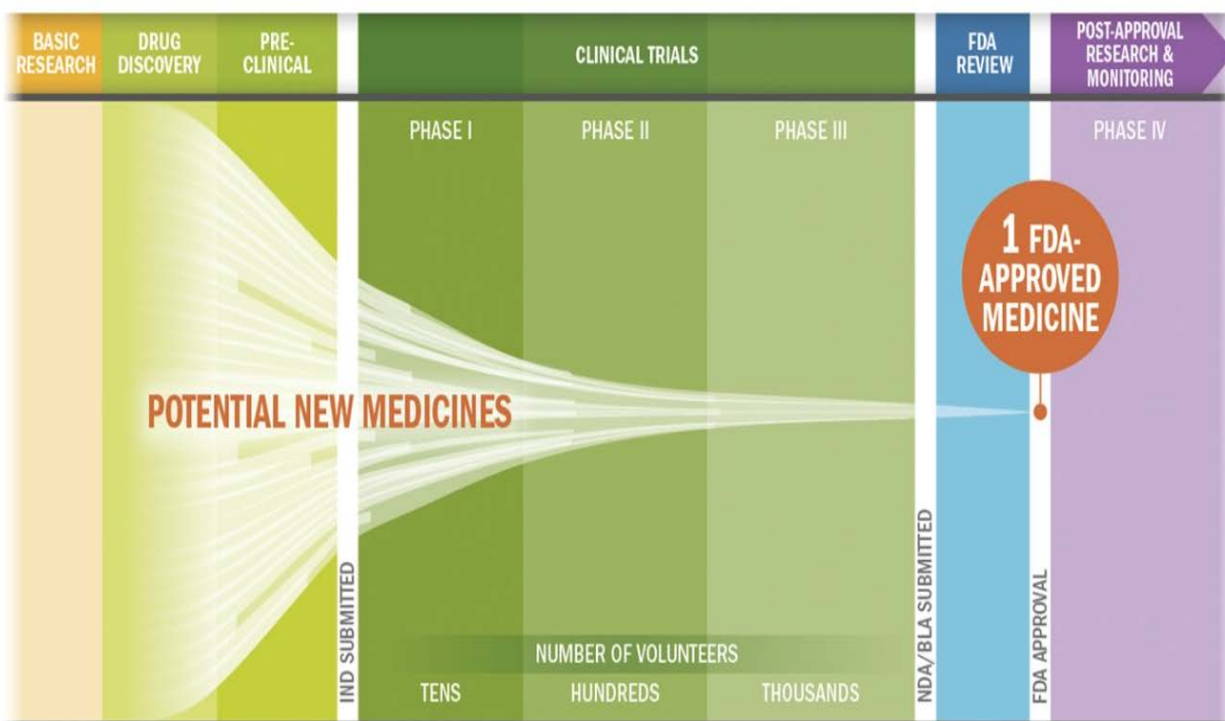
²⁸ PhRMA, *2015 Profile Biopharmaceutical Research Industry*, Apr. 2015, available at http://www.phrma.org/sites/default/files/pdf/2015_phrma_profile.pdf (last visited Feb. 5, 2016).

²⁹ Gage, D., "The Venture Capital Secret: 3 Out of 4 Start-Ups Fail," *The Wall Street Journal*, Sept. 20, 2012, available at <http://www.wsj.com/articles/SB10000872396390443720204578004980476429190> (last visited Feb. 5, 2016).

³⁰ 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 Feb. 5, 2016).

³¹ Biotechnology Industry Organization, *Unleashing the Next Generation of Biotechnology Innovation*, available at <http://www.bio.org/sites/default/files/Whitepaper-Final.pdf> (last visited Feb. 5, 2016).

Figure 2: The biopharmaceutical research and development process



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

However, long times to market make the research-based biopharmaceutical sector particularly reliant on the temporary protection intellectual property rights provide. 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.³² In 2013, the innovative biopharmaceutical industry sponsored nearly 6,200 clinical trials across all 50 states.³³ 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

³² 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* available at http://csdd.tufts.edu/files/uploads/Tufts_CSDD_briefing_on_RD_cost_study_-_Nov_18,_2014..pdf (last visited Feb. 5, 2016). U.S. Food and Drug Administration, *Drug Approval Process*, available at <http://www.fda.gov/downloads/Drugs/ResourcesForYou/Consumers/UCM284393.pdf> (last visited Feb. 5, 2016).

³³ Battelle Technology Partnership Practice, *Biopharmaceutical industry-sponsored clinical trials: impact on state economies*, Battelle Memorial Institute, Feb. 2015, available at <http://www.phrma.org/sites/default/files/pdf/biopharmaceutical-industry-sponsored-clinical-trials-impact-on-state-economies.pdf> (last visited Feb. 5, 2016).

this sector invest twelve times more in research and development per employee than the average of all other manufacturing industries.³⁴ In each of the last three years, the U.S. biopharmaceutical sector invested more than \$50 billion annually in research and development.³⁵ 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.³⁶ 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.³⁷

Advances in the treatment of diseases typically are not driven by large, dramatic developments, but more commonly build on a series of incremental 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 healthcare providers gain real-world experience. Incremental improvements and the further development of therapeutic classes of medicines often leads 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.³⁸ And more than 60 percent of therapies on the World Health Organization's (WHO's) Essential Medicines List relate to improvements on older treatments.³⁹ This step by step transformation in knowledge has led to increased survival, improved patient outcomes and enhanced quality of life for many patients.⁴⁰

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

³⁴ 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 Feb. 5, 2016).

³⁵ PhRMA, *Annual Membership Survey*, 2015.

³⁶ IFPMA, *New Frontiers of Biopharmaceutical Innovation*, 2012, available at http://www.ifpma.org/fileadmin/content/Publication/2012/IFPMA_New_Frontiers_Biopharma_Innovation_2012_Web.pdf (last visited Feb. 5, 2016).

³⁷ PhRMA, *2015 Profile Biopharmaceutical Research Industry*, Apr. 2015, available at http://www.phrma.org/sites/default/files/pdf/2015_phrma_profile.pdf.

³⁸ See G. Jin 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 Feb. 5, 2016).

³⁹ See J. Cohen and K. Kaitin, "Follow-On Drugs and Indications: The Importance of Incremental Innovation to Medical Practice," *American Journal of Therapeutics*, Jan.-Feb. 2008.

⁴⁰ T.F. Goss, E.H. Picard, and A. Tarab, *Recognizing the Value in Oncology Innovation*. Boston Healthcare Associates, Inc., June 2012, available at http://www.phrma.org/sites/default/files/flash/phrma_innovation_oncology.pdf (last visited Feb. 5, 2016).

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.

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,⁴¹ 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 not only fully and effectively implementing, but also in reiterating and enforcing, TRIPS minimum standards.

Through WTO accessions and regional and bilateral trade agreements, the United States and other countries have given effect to and built on the global minimum standards of protection international rules provide. U.S. trade agreements have helped to drive and sustain biopharmaceutical innovation by eliminating restrictive patentability criteria, addressing unreasonable patent examination and marketing approval delays, promoting the early and effective resolution of patent disputes and protecting regulatory test data. They have established rules and principles that promote fair, transparent, reasonable and non-discriminatory market access for innovative medicines and other health technologies.

Despite these achievements, 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 adequate and effective intellectual property protection and/or fair and equitable market access for innovative medicines. In many cases, they appear to be inconsistent

⁴¹ Currently 162 countries.

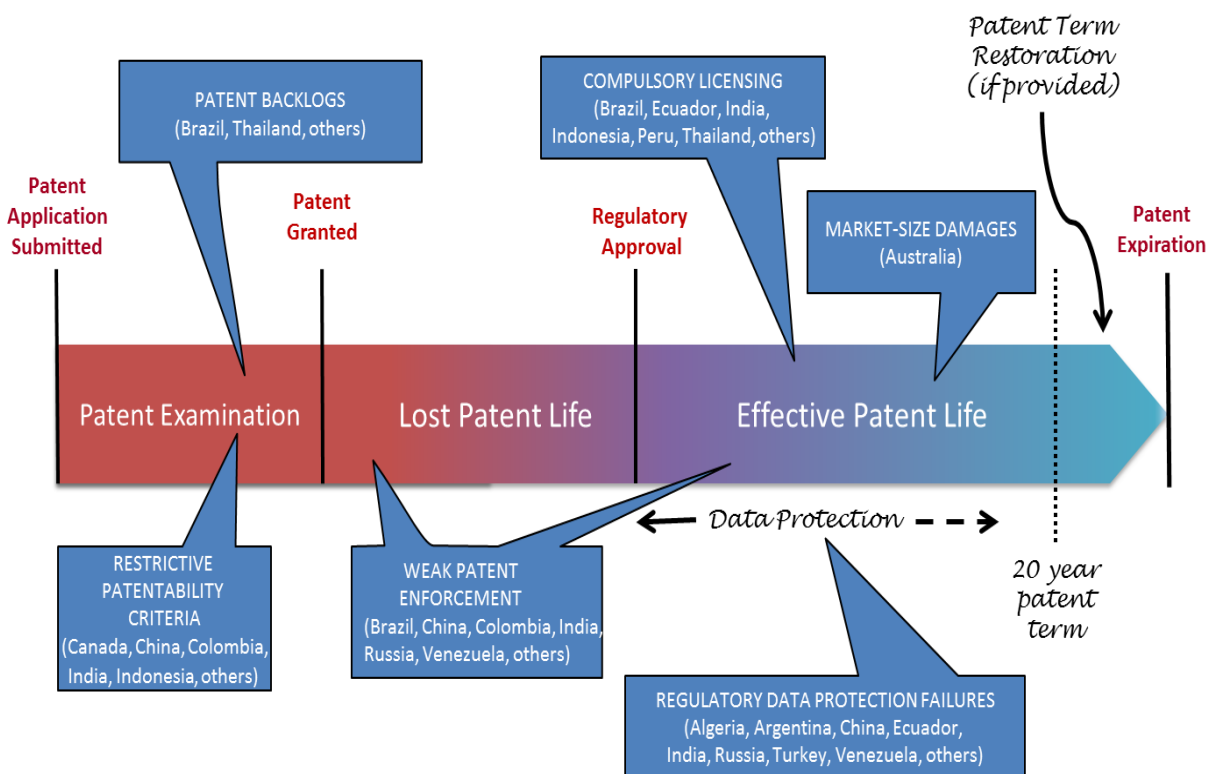
with global, regional and bilateral rules. The following sections highlight the most serious challenges facing PhRMA members. The acts, policies and practices of specific countries are described further below.

PhRMA members urge USTR and other federal agencies to highlight these countries and challenges in the 2016 Special 301 Report and to use all available tools to address and resolve them.

A. Practices that undermine biopharmaceutical innovation

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

Figure 3: Biopharmaceutical intellectual property challenges



Patent Backlogs

Long patent examination and approval backlogs harm domestic and overseas inventors in every economic sector. Backlogs undermine incentives to innovate and prevent 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. 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. 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. In 2015, India granted one patent based on an application filed 19 years earlier.⁴² In Brazil, the patent backlog challenge is compounded by an unnecessary dual examination process for biopharmaceutical patent applications. The Brazilian Health Surveillance Agency (ANVISA) must review all patent applications for new medicines, in addition to the formal patent examination process conducted by the Brazilian Patent Office.

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.⁴³ Patent backlogs are a particular challenge for small start-up firms that are playing an increasingly important role in biopharmaceutical innovation. According to a recent 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.⁴⁴ 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.⁴⁵

⁴² 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 Feb. 5, 2016).

⁴³ London Economics, *Patent Backlogs and Mutual Recognition report to the UK Intellectual Property Office*, January 2010, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/328678/p-backlog-report.pdf (last visited Feb. 5, 2016).

⁴⁴ Farre-Mensa, J., D. Hegde, and A. Ljungqvist, "The Bright Side of Patents," USPTO Economic Working paper No. 2015-5, Dec. 15, 2015, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2704028 (last visited Feb. 5, 2016).

⁴⁵ *Id.*

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 Australia, China, the European Union, Japan, Korea, Mexico and elsewhere are succeeding in reducing patent examination delays. Further work is needed to consolidate these gains and extend effective models to other countries.

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.⁴⁶ 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 outcomes⁴⁷ and reduce costs⁴⁸ by making

⁴⁶ See, generally, TRIPS Article 27.1.

⁴⁷ 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 percent, compared to about 50 percent 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 Feb. 5, 2016).

⁴⁸ 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 incremental 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 healthcare providers. See Osterberg, Lars and Terrence Blaschke, “Adherence to Medication,” *New England Journal of Medicine*, Aug. 2005, available at <http://www.nejm.org/doi/full/10.1056/NEJMra050100> (last visited Feb. 5, 2016); 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/lww-medicalcare/Abstract/2004/03000/Variations_in_Patients__Adherence_to_Medical.2.aspx (last visited Feb. 5, 2016); 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/legacy-page/price-trends-prescription-pharmaceuticals-1995-1999-147076> (last visited Feb. 5, 2016).

it easier for patients to take medicines and 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:

- *Heightened patent utility requirements.* Based on a novel legal theory found nowhere else in the world, courts in **Canada** have invalidated 24 patents on 20 innovative medicines over the last decade. That legal theory – known as the “promise utility doctrine” – imposes a heightened and unworkable standard for determining the utility of biopharmaceutical products. The promise utility doctrine requires not only that the invention be useful, but that data available *at the time the patent application is filed* prove that the invention serves whatever “promise” a court infers *post hoc* to have been made in the patent’s specification. As a result, the judicially imposed doctrine places innovators in the biopharmaceutical industry in an untenable situation. If a drug developer aims to meet Canada’s enhanced utility test, which may include carrying out long-term clinical trials *before* filing a patent application so that data proving fulfillment of the court-chosen “promise” are more likely to be in hand, it must delay patent filings. Such significant delays would increase the risk of patent refusal and patent invalidity in numerous countries on the basis of an earlier patent filing, intervening publication of additional prior art, or the legally mandated disclosures that attend clinical trials. Even then, because the “promise” Canadian courts will perceive is difficult to identify in advance, delaying the patent application provides no assurance of ultimate patent protection.
- *Patentability restrictions and additional patentability criteria.* **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**, a new law limited the patentability of new forms and uses. **India**’s Patent Law prohibits patents on known substances, unless applicants can demonstrate they meet an additional “enhanced therapeutic efficacy” test. **Indonesia** is considering new patent legislation that would impose restrictions similar to those found in Indian law.
- *Restrictions on post-filing submissions.* Unlike patent offices in the United States, Europe, Japan, Korea and other major markets, **China**’s State Intellectual Property Office does not consistently accept data generated after a patent is filed during patent prosecution to describe inventions or satisfy inventive step requirements. This practice has caused significant uncertainty about the ability to obtain and maintain biopharmaceutical patents in China and caused denials of patents on new medicines in that country that received patents in other jurisdictions. China continues to prohibit post-filing data despite a December 2013 commitment in the U.S.-China Joint Commission on Commerce and Trade (JCCT) to allow patent applicants to submit additional data after filing patent applications.

Restrictive patentability criteria in many of these countries and others appear contrary to WTO rules, which require WTO Members 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 to make patents available without discrimination as to the field of technology. PhRMA members appreciate steps 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 progress and real results. Further action is needed to resolve these challenges in particular countries and to prevent others from adopting similar practices.

Weak Patent Enforcement

To continue to invest in the research and development of new medicines, biopharmaceutical innovators must be able to effectively enforce patents on their inventions. Mechanisms such as patent linkage that provide for the early resolutions 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.

PhRMA appreciates steps the United States and other economies around the world have taken to promote effective patent enforcement, including by providing for early resolution mechanisms in trade agreements and encouraging the creation of specialized intellectual property courts. We are closely following work in **Taiwan** to establish early resolution mechanisms and look forward to positive results there and elsewhere. Early resolution mechanisms are sorely needed in **China, 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, such as stays, preliminary injunctions or interlocutory injunctions, to prevent the sale of such products.

PhRMA members encourage USTR and other federal agencies to continue to promote and support effective patent enforcement abroad, including in bilateral forums, such as the JCCT and the U.S.-India Trade Policy Forum, and through the full implementation of trade agreement commitments.

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 a patent dispute to collect “market-size damages” 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. They undermine legal certainty, predictability and the incentive patents provide to invest in new treatments and cures.

Australia's Department of Health is seeking damages from biopharmaceutical innovators that pursue 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.

Australia's market-size damages policy unfairly tips the scales in commercial patent disputes encouraging competitors to launch at risk and discouraging innovators from enforcing their patents. It 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 additional, unquantifiable and significant compensation claims that were not agreed at the time provisional enforcement measures were granted. The size of these additional claims equates legitimate patent enforcement with patent abuse.

Laws or policies that allow 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. They appear to be inconsistent with WTO intellectual property rules, including with respect to provisional measures. PhRMA members urge USTR and other federal agencies to prioritize actions to address and resolve this challenge in Australia.

Compulsory Licensing

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

Some governments, including **Ecuador**, **India** and **Indonesia**, have issued compulsory licenses (CLs) that allow local companies to make, use, sell or import particular patented medicines without the consent of the patent holder. 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 the 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 prices⁴⁹ or speed access⁵⁰ in the short-term, or provide sustainable or comprehensive solutions to longer-term challenges. It does not address systemic barriers to access – from weak healthcare delivery systems to low national healthcare 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.⁵¹ In sub-Saharan Africa, for example, the majority of antiretrovirals are manufactured under voluntary licenses to local generic drug companies.⁵²

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. In 2013, for example, 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.⁵³ PhRMA members urge USTR and other federal agencies to closely monitor the consideration and use of CLs and to encourage decisions on public health grounds and through fair and transparent procedures that involve participation by all stakeholders.

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.

⁴⁹ Beall, Reed 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 Feb. 5, 2016).

⁵⁰ 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, Eric and Kamal 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.pdf (last visited Feb. 5, 2016).

⁵¹ IFPMA Policy Position, *Voluntary Licenses and Non-Assert Declarations*, available at http://www.ifpma.org/fileadmin/content/Innovation/IP%20and%20Access/IFPMA_Position_on_VL_and_Non-Assert_Declarations_18FEB2015.pdf (last visited Feb. 5, 2016).

⁵² Chien, Colleen, "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 Feb. 5, 2016).

⁵³ Chatterjee, P., "India's First Compulsory License Upheld, But Legal Fights Likely to Continue," Intellectual Property Watch, Apr. 3, 2013, available at <http://www.ip-watch.org/2013/03/04/indias-first-compulsory-licence-upheld-but-legal-fights-likely-to-continue/> (last visited Feb. 5, 2016).

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.⁵⁴ 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 filled by generics soared from 19 percent in 1984 to 74 percent in 2009. Today, generics account for 88 percent of all prescriptions filled in the United States.

RDP is particularly critical for biologic medicines, which may not be adequately protected by patents alone. Derived from 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, Congress included provisions in the Affordable Care Act providing 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.⁵⁵

Unfortunately, many U.S. trading partners do not provide adequate, if any, RDP. This is clearly 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. Examples described further in the country profiles below include **Algeria, Argentina, Ecuador, Egypt, India and Turkey**. Other countries, such as **Mexico** and **Peru** provide RDP for small-molecule treatments, but not for biologics. In **Chile** and some other countries, RDP is not made available to biopharmaceutical innovations related to new uses, formulations, composition, or dosage forms. **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.

PhRMA members urge USTR and other federal agencies to address these and other RDP failures in bilateral forums and to seek and secure RDP commitments in trade agreement negotiations that reflect the high standards found in U.S. law.

B. Practices that deny fair and equitable market access

The Special 301 provisions of the Trade Act of 1974 also require USTR to identify countries that deny fair and equitable market access to U.S. persons who rely on intellectual property protection. PhRMA members increasingly encounter acts, policies and practices abroad that deny fair and equitable market access. These

⁵⁴ 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.

⁵⁵ See, for example, Grabowski, H. et al., “Data exclusivity for biologics,” *Nature Reviews – Drug Discovery*, January 2011, available at <https://fds.duke.edu/db/attachment/1592> (last visited Feb. 5, 2016).

barriers undermine the ability of biopharmaceutical innovators in the United States to bring new medicines to patients around the world and to invest in future treatments and cures. They delay access or reduce the availability of new medicines in key countries, contribute to an unpredictable business environment, and threaten U.S. exports and jobs. Some examples of the most serious barriers that prevent access to innovative medicines include:

- *Import barriers.* High tariffs and taxes limit access to new treatments in key overseas markets. The value of biopharmaceutical trade with countries outside the WTO pharmaceutical zero-for-zero initiative increased at a combined annual growth rate of more than 20 percent between 2006 and 2013. This means that a larger proportion of medicines distributed around the world are potentially subject to tariffs. In **India**, basic import duties on biopharmaceutical products and active ingredients average about ten percent, but additional duties and assessments can raise the effective import duty to as high as 20 percent. Federal and state taxes on medicines in **Brazil** can add 38 percent to the price of medicines – the highest tax burden on medicines in the world. Other countries that maintain high tariffs and taxes on imported medicines include **Argentina**, **Russia** and **Thailand**.
- *Regulatory approval delays.* The process of approving a medicine in **China** takes much longer than international practice and a policy regarding the acceptance of multi-regional clinical trial data is further extending this timeline. PhRMA is encouraged by commitments in the 2014 JCCT and by some aspects of the 2015 State Council Drug Reform Opinion to reduce the drug application backlogs and streamline the review and approval system. Accelerating the regulatory approval process will improve the efficiency of global drug development and reduce the time it takes for new medicines to reach Chinese patients.
- *Lack of transparency and due process.* Lack of transparency, due process, and delayed reimbursement decisions are widespread across the world. In **Australia**, the government continues to make significant policy changes, particularly in relation to the Pharmaceutical Benefits Scheme (PBS) – often without adequate consultation with the industry. In **Mexico**, it takes 1,500 days on average for patients to access innovative medicines, compared to 230 days in other countries.⁵⁶ These excessive delays are compounded by consolidated 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 produce lengthy timelines that significantly postpone patient access to innovative medicines.

⁵⁶ 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://efpia.eu/documents/33/64/Market-Access-Delays> (last visited Feb. 5, 2016).

PhRMA members appreciate steps USTR and other federal agencies have taken 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. Further action is needed to address and resolve existing barriers and ensure patients have faster access to new treatments and cures.

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, Turkey** and **Vietnam**, 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 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 and fair and equitable market access for new medicines, vaccines and other health technologies. Some examples of the most serious kinds of 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 a number of countries provide tax and other incentives for companies to conduct research and development and to manufacture in their countries, an alarming number are seeking to grow their economies by discriminating against foreign innovators. For example, **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 EAEU manufacturers for a particular class of medicine. **India** has proposed an amendment to its Patent Rules that would provide for expedited examination of patent applications only in cases where the patent applicant, her assignee or licensee is manufacturing or will manufacture the invention for which the patent was filed in India.
- *Mandatory technology transfer.* In 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. 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.

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. Secure strong commitments in global, regional and bilateral negotiations

Global, regional 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. 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, reducing unnecessary regulatory barriers and promoting transparent, timely and predictable medicines pricing and reimbursement processes can promote biopharmaceutical innovation and improve market access.

PhRMA members are disappointed that the Trans-Pacific Partnership (TPP) negotiations concluded last year failed to secure twelve years of data protection for biologic medicines, which represent the next wave of innovation in the biopharmaceutical industry. This term of protection was the result of a long debate in Congress, which determined that twelve years captured the appropriate balance that stimulated research but gave access to biosimilars in a timely manner. PhRMA will

continue working with USTR and other federal agencies and with Members of Congress to address this issue and thereby ensure the TPP is not a missed opportunity to encourage innovation that can lead to more important, life-saving medicines that improve the lives of patients.

Ongoing Transatlantic Trade and Investment Partnership (T-TIP) negotiations between the United States and European Union provide a vital chance to further reduce unnecessary regulatory barriers, promote fair and transparent market access and set a global standard for strong intellectual property protection and enforcement. The United States and the European Union are already home to most of the world's biopharmaceutical research and development,⁵⁷ and a comprehensive and high-standard T-TIP could further strengthen an already vibrant transatlantic life sciences ecosystem – improving collaboration and boosting two-way trade in biopharmaceuticals that is already valued at more than \$100 billion.⁵⁸

B. Enforce and defend global, regional and bilateral commitments

USTR and other federal agencies should leverage all available tools to ensure America's trading partners live up to their obligations in global, regional and bilateral trade and investment agreements. PhRMA members appreciate steps the Administration has taken to monitor implementation of agreements and to strengthen enforcement coordination and capacity, including through creation of the Office of the Intellectual Property Enforcement Coordinator and the Interagency Trade Enforcement Center. They welcome and value the actions USTR and other federal agencies have taken to address challenges and promote compliance through timely and effective bilateral engagement.

Stepping up enforcement activity in the months ahead will be critical to address longstanding intellectual property challenges in many countries that are U.S. trade and investment agreement partners. These agreements 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. **Chile, Peru** and other U.S. trading partners fail

⁵⁷ See EFPIA, *The Pharmaceutical Industry in Figures, Key Data 2014*, available at http://www.efpia.eu/uploads/Figures_2014_Final.pdf (last visited Feb. 5, 2016); and Battelle Technology Partnership Practice, *The Economic Impact of the U.S. Biopharmaceutical Industry*, Battelle Memorial Institute, July 2013, available at <http://phrma.org/sites/default/files/pdf/The-Economic-Impact-of-the-US-Biopharmaceutical-Industry.pdf> (last visited Feb. 5, 2016).

⁵⁸ European Commission, *Transatlantic Trade and Investment Partnership: The Economic Analysis Explained*, Sept. 2013, available at http://trade.ec.europa.eu/doclib/docs/2013/september/tradoc_151787.pdf (last visited Feb. 5, 2016); and PhRMA and EFPIA, *The EU—U.S. Transatlantic Trade and Investment Partnership: Towards better health outcomes for patients and economic growth*, available at <http://www.phrma.org/sites/default/files/pdf/EFPIA-TTIP-Brochure.pdf> (last visited Feb. 5, 2016).

to adequately comply with some or all of these obligations.⁵⁹ USTR and other federal agencies should consider a process to systematically review compliance with trade and investment agreements and take steps necessary to ensure agreed rules are followed.

The Special 301 Report 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 build on this year's report by developing action plans to resolve challenges in Priority Watch List markets. Those plans should consider all available tools and leverage to deliver real results, including diplomatic engagement, trade preference programs and global, regional and bilateral trade and investment agreements.

Where necessary, USTR should consider bringing dispute settlement cases to secure compliance with trade and investment agreement commitments.

C. Ensure transparency and due process of pricing and reimbursement

PhRMA members are and seek to be partners in solutions to healthcare challenges facing patients and their communities around the world. However, some governments have proposed or implemented pricing and reimbursement policies that lack predictable, transparent, and consultative processes. These measures can undermine the ability of biopharmaceutical innovators to bring new medicines to patients who need them and invest in future treatments and cures.

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. 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. 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.

⁵⁹ For example, 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. Specifically, 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." Similarly, there remain a number of deficiencies in Chile's RDP regime that appear to be inconsistent with Article 17.10.1 of the U.S.-Chile FTA. See separate Peru chapter for examples of commitments contained in the U.S.-Peru Trade Promotion Agreement that are yet to be fully implemented.

D. Combat the worldwide proliferation of counterfeit medicines

PhRMA members view counterfeit medicines as a critical public health and safety concern threatening patients worldwide. At best, counterfeit medicines have no effect on patients.⁶⁰ At worst, they may contribute to drug-resistant forms of tuberculosis and other serious diseases and contain impurities or toxins that can cause harm or even death.⁶¹ This challenge is exacerbated by the ease with which counterfeiters can offer fake medicines over the Internet and ship them by mail to patients and consumers worldwide.⁶²

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. But in too many countries, customs and other law enforcement officials are not able to seize counterfeit medicines, particularly goods in transit, goods in free trade zones and goods offered for sale on the Internet. In those countries and others, violations of limited laws on the books often are not effectively enforced or do not come with sufficient, deterrent penalties.⁶³

According to the WHO, regions where protection and enforcement systems are weakest also see the highest incidence of counterfeit medicines. The manufacture of counterfeit medicines and active pharmaceutical ingredients is especially prevalent in countries like **Brazil, China, India, and Russia** that have drug production capacity, weak regulatory oversight and often ineffective intellectual property protection and enforcement regimes. Illegitimate and often dangerous products manufactured in these and other countries are not only sold domestically, but also exported around the world.⁶⁴

⁶⁰ Testing reported last year in the *Lancet* found one-third of anti-malarial medicines in sub-Saharan Africa and South East Asia lacked active ingredients. See 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 Feb. 5, 2016).

⁶¹ An International Policy Network study found that fake tuberculosis and malaria drugs kill 700,000 people a year in developing countries. See Harris, J., et al., "Keeping It Real," *Health Issues*, International Policy Network, May 2009.

⁶² Institute of Medicine (IOM), *Countering the Problem of Falsified and Substandard Drugs*, Feb. 2013, available at https://iom.nationalacademies.org/~media/Files/Report%20Files/2013/Substandard-and-Falsified-Drugs/CounteringtheProblemofFalsifiedandSubstandardDrugs_RB.pdf (last visited Feb. 5, 2016). The IOM notes that "because the internet facilitates easy international sales, online drug stores have spread the problem of falsified and substandard drugs...."

⁶³ *Id.* (noting that "unscrupulous manufacturers and criminal cartels take advantage of the comparatively weak drug regulatory systems in these countries, knowing that the regulators are poorly equipped for surveillance or enforcement").

⁶⁴ See, generally, *Pharmaceutical Security Institute Analysis* available at <http://psi-inc.org/index.cfm> (last visited Feb. 5, 2016).

To combat the global proliferation of counterfeit medicines and active pharmaceutical ingredients, PhRMA supports strengthening efforts 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 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 USTR and other federal agencies are already taking to strengthen cooperation with other governments. Bilateral forums like the Transatlantic IPR Working Group have helped to build understanding and to identify and advance common priorities. They can be a model for similar engagement with other countries. 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. Fostering and strengthening coalitions that support innovation will be particularly critical in international organizations, such as the WHO, the World Intellectual Property Organization (WIPO), the WTO and United Nations funds and programs. In these forums and others, discussions increasingly are focused on limitations and exceptions to intellectual property rights. This is even the case at WIPO – an organization that was created to “encourage creative activity” and to “promote the protection of intellectual property throughout the world.”⁶⁵ The United States must remain vigilant in these organizations and work with other like-minded countries to advocate for robust intellectual property protection and enforcement.

⁶⁵ See, generally, Convention Establishing the World Intellectual Property Organization, July 14, 1967, available at http://www.wipo.int/treaties/en/text.jsp?file_id=283854 (last visited Feb. 5, 2016).

IV. Country Designation Index

A. Priority Watch List

PhRMA recommends that 13 countries be included on the Priority Watch List. We further recommend that China continue under Section 306 Monitoring. The detailed information presented in the country-specific sections below demonstrates that the acts, policies and practices of these countries are denying adequate and effective intellectual property protection and 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.

PhRMA urges USTR and other federal agencies to use all available tools to remedy serious intellectual property and market access concerns in these countries. To evaluate progress on these important issues and dedicate the bilateral attention necessary to secure action and results, PhRMA recommends that USTR conduct Out-of-Cycle Reviews for **Canada, Ecuador and India**.

B. Watch List

PhRMA recommends that seven countries be included on Watch List. We urge USTR and other federal agencies monitor developments in these countries and address specific intellectual property and market access concerns through bilateral and multilateral engagement.

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 pro-innovation healthcare system. However, we remain concerned about the lack of effective regulatory data protection and patent enforcement, inconsistent patent examination guidelines, the lengthy and non-transparent regulatory approval process, delayed government reimbursement, restrictive government pricing policies, rampant counterfeiting of medicines, and under-regulated active pharmaceutical ingredients.

PhRMA is particularly concerned by an August 2015 State Council Opinion on the Reform of the Evaluation and Approval System for Drugs and Medical Devices (Drug Reform Opinion) and November 2015 China Food and Drug Administration (CFDA) reform plan for chemical drug registration categories that defines a "new drug" as a chemical entity that is "new to the world." This proposed policy creates a risk that a drug approved or marketed first outside of China may receive slower regulatory consideration and weaker or no exclusivity in China. Furthermore, it is unclear whether and how the proposed new drug definition may be applied outside of the regulatory process, potentially impacting intellectual property protection as well as government pricing, reimbursement and tendering determinations.

PhRMA is encouraged by China's ongoing work to amend the Patent Law, Drug Administration Law (DAL) and Drug Registration Regulation (DRR) as this provides a critical opportunity to enhance patient access to innovative medicines and address many of the following issues of concern. PhRMA is eager to continue supporting China in this reform effort and urges revisions to the Patent Law, DAL and DRR that strengthen regulatory data protection, patent enforcement and patent examination guidelines, accelerate and simplify the regulatory approval process, improve the environment for simultaneous global drug development, and promote drug quality.

Key Issues of Concern:

- **Restrictive Patentability Criteria:** In December 2013, China changed its patent examination guideline to allow patent applicants to file additional biological data after filing their applications and confirmed that its 2006 patent examination guidelines would no longer be applied retroactively. PhRMA recognizes and welcomes this positive step, but uncertainty remains as to when such data will be accepted. PhRMA is also concerned that the State Intellectual Property Office (SIPO) appears to be imposing new – and unfair or inappropriate – limitations on the use of post-filing data to satisfy inventive step requirements.
- **Weak patent enforcement:** Transparent mechanisms are needed in China to ensure that patents are linked to regulatory approval and to ensure patent disputes are resolved before potentially infringing pharmaceutical products are launched on the market. Neither China's DAL nor the DRR provide an effective

mechanism for enforcing an innovator's patent rights vis-à-vis regulatory approval of follow-on products.

- **Regulatory data protection failures:** China committed as part of its accession to the World Trade Organization (WTO) to provide a 6-year period of regulatory data protection (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's RDP system is not effective. PhRMA continues to encourage meaningful implementation of China's commitment made during the 2012 meeting of the U.S.-China Joint Commission on Commerce and Trade (JCCT) to implement an RDP system that is consistent with international research and development practices and China's international obligations. PhRMA is concerned that the August 2015 State Council Drug Reform Opinion and November 2015 CFDA reform plan to revise the definition of "new drug" creates a risk that a drug approved or marketed first outside of China may receive weaker or no exclusivity in China, and may thus potentially impact China's JCCT RDP commitment.
- **Regulatory approval process:** The process for approving a medicine in China takes much longer than international practice and the CFDA policy regarding the acceptance of multi-regional clinical trial (MRCT) data is further extending this timeline. Accelerating the regulatory approval process will improve the efficiency of global drug development and reduce the time it takes for innovative new medicines to reach Chinese patients. While PhRMA is encouraged by commitments in the 2014 U.S.-China JCCT and some aspects of the August 2015 State Council Drug Reform Opinion to reduce the drug application backlog and streamline the review and approval system, we are concerned that CFDA's ongoing drug reform is not fully transparent and some proposed measures are inconsistent with international standards.
- **Government pricing and reimbursement:** The National Reimbursement Drug List (NRDL) has not been updated since 2009. The lengthy process for updating the NRDL delays market access to innovative pharmaceuticals and prevents their timely availability to patients. Chinese patients would best be served by a model that allows new drugs to be reviewed for government reimbursement on a regular, or rolling, basis. In addition, lack of stakeholder engagement in the development of new government pricing policies and procedures has created an uncertain business environment and could reduce the reward for innovation, restrict patient access to high-quality medicines and undermine China's healthcare reform and innovation policy objectives.
- **Counterfeit medicines:** China has been implementing national plans to improve drug safety and severely 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 remain rampant in China and continue to pose a threat to

China and its trading partners. PhRMA looks forward to meaningful implementation of China's commitment made during the sixth meeting of the U.S.-China Strategic and Economic Dialogue (S&ED) in July 2014 related to effective regulatory control of APIs and anti-counterfeiting.

For these reasons, PhRMA requests that China remain on the **Priority Watch List** and be subject to **Section 306 Monitoring** for the 2016 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

Pursuant to the 2006 patent examination guidelines,⁶⁶ SIPO had been requiring a significant amount of biological data to support pharmaceutical patent applications submitted pursuant to Article 26.3 of China's Patent Law. Article 26.3 provides that the application must include a "clear and comprehensive description of the invention or utility model so that a technician in the field of the relevant technology can carry it out."⁶⁷ This is similar to provisions in U.S. patent law, the European Patent Convention, and Japanese patent law, as well as the Patent Cooperation Treaty (PCT).⁶⁸

In 2006, however, SIPO's examination guidelines were amended regarding the technical patent disclosure requirement for pharmaceutical compounds (though the Patent Law was not changed), causing examiners to require a significant amount of experimental data to satisfy Article 26.3. This generally meant that data on the biological activity of the compounds needed to be included in the patent specification as filed. Further, this guideline was being applied to applications filed and even granted before the new standard was adopted. This requirement to disclose experimental data at the time of filing placed a much larger burden on companies than faced in the other IP5 Member States (*i.e.*, the United States, the European Union, Japan, and Korea) and belied the timeline realities of pharmaceutical drug development. Moreover, in contrast with the practices of the U.S. Patent and Trademark Office, Japan Patent Office, and European Patent Office, as well as the standard provided by the PCT (of which China is a member), under these guidelines, SIPO would not accept data generated after the patent application was filed to support patentability during patent prosecution. The adoption and implementation of this 2006 guideline caused concerns about the validity of existing patents granted prior to 2006 and caused denials of patents to medicines that had received patents in other jurisdictions.

⁶⁶ See Guidelines for Patent Examination, State Intellectual Property Office (2010), Rule 17.

⁶⁷ Patent Law of the People's Republic of China (SIPO translation), Art. 26, available at http://english.sipo.gov.cn/laws/lawsregulations/201101/t20110119_566244.html (last visited Feb. 5, 2016).

⁶⁸ Patent Cooperation Treaty, 28 U.S.T. 7645 (1970), Art. 28.

It should also be noted that SIPO has been imposing unfair or inappropriate limitations on the use of post-filing data to satisfy inventive step requirements under Article 22.3 of China's Patent Law. In practice, SIPO does not consistently accept experimental data after the filing date of pharmaceutical patent applications that would ordinarily be provided to establish inventive step. In other cases, SIPO may accept experimental data during patent prosecution, but not if the data was created after the filing date. These practices cause significant uncertainty about the ability to obtain and maintain pharmaceutical patents in China when patents have been granted on those same inventions in other jurisdictions.

In December 2013, China committed through the JCCT to change its patent examination guidelines regarding technical patent disclosure requirements for pharmaceutical compounds to allow patent applicants to file additional biological data after filing their applications. This JCCT commitment is a critical step in the right direction, but implementation is essential. China's commitment should be executed publicly in writing, and in a manner that is binding on Chinese patent examiners, patent appellate bodies and the courts. Further, for meaningful implementation, China must ensure that patent applications filed prior to 2006 are not being opposed based on retroactively applied standards, and that patent applications that were adversely affected prior to this commitment are reinstated. The JCCT commitment speaks broadly to the acceptance of post-filing, or supplemental, data, and should, therefore, address the inventive step issue as well. PhRMA appreciates the ongoing technical discussions between the U.S. and Chinese governments on the supplementation of data and welcomes the commitment by both sides in the 2014 JCCT to continue exchanges and engagement on specific cases. Like the 2013 commitment, implementation and follow-through is critically important. Uncertainty remains as to when such data will be accepted. Issuance of new patent examination guidelines with examples would be a good way to resolve this uncertainty.

Weak Patent Enforcement

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, CFDA has approved infringing follow-on products, and research-based pharmaceutical companies have not been able to consistently resolve patent disputes prior to 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. Transparent mechanisms are therefore needed in China to ensure that patent issues can be resolved before potentially infringing pharmaceutical products are launched on the market.

Articles 18 and 19 of CFDA's DRR govern the current patent enforcement mechanism, recognizing patents associated with drug registration.⁶⁹ The DRR do not

⁶⁹ Provisions for Drug Registration (SFDA Order No. 28), Arts. 18 and 19.

provide, however, an effective mechanism for enforcing an innovator's patent rights vis-à-vis regulatory approval of follow-on products. For example, the current DRR provisions do not explicitly address the circumstances and processes through which disputes over the patents will be resolved prior to market entry by follow-on products. The regulation states that if an infringement dispute occurs during the application period, it "shall be settled in accordance with relevant laws and regulations on patent."⁷⁰ However, the patent laws require there to be sales in the marketplace before an infringement suit can be filed.

Although CFDA is in the process of revising the DRR, there are indications that the DRR amendments may not provide any improvements or, in fact, may undermine existing (albeit insufficient) patent enforcement tools. PhRMA and its member companies were very concerned by at least one proposed amendment to the DRR that would eliminate Article 19, thereby abolishing China's only existing protection against marketing approval for patent-infringing products and seriously undermining incentives for biopharmaceutical innovation in China. Although more recent drafts of the DRR amendments would modify, but not delete, Article 19, failure to improve the existing mechanism will continue to inject uncertainty into the business environment for both innovators and follow-on manufacturers who seek to avoid litigation after product launch.

A proposal from CFDA in August of 2015 suggested that the Agency might begin to monitor potentially infringing research more strictly. CFDA proposed not to accept CTAs more than six years prior to the expiration of the innovator drug's patent, which would be a step forward in preventing infringing generics from coming to the market early. It should be noted, however, that the subsequent State Council Drug Reform Opinion did not include this proposal.

To avoid the unnecessary costs and time of litigating damages claims in patent litigation, to increase market predictability for both innovators and follow-on manufacturers, and following the model of other countries, China – through the DRR and DAL reform processes – should institute mechanisms that ensure the originator manufacturer is notified of relevant information within a set period of time when a follow-on manufacturer's application is filed. China should also enable patent holders to file patent infringement suits before marketing authorization is granted for follow-on products and afford sufficient time for such disputes to be resolved before marketing occurs. This might include a form of automatic postponement of drug registration approval, either pending resolution of the patent dispute or for a fixed period of time.

Regulatory Data Protection Failures

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

⁷⁰ Id., Art. 18.

Trade-Related Aspects of Intellectual Property Rights (TRIPS).⁷¹ Indeed, China's DAL and DRR, administered by the CFDA, establish a six-year period of protection for test data of products containing a new chemical ingredient against unfair commercial use.⁷² In practice, however, China's regulatory environment allows for unfair commercial use of safety and efficacy data generated by PhRMA member companies.

China's RDP system in practice is inconsistent with TRIPS Article 39.3 in several ways. First, certain key concepts such as "new chemical ingredient" and "unfair commercial use" are undefined. This leads to the inconsistent and arbitrary application of the law by CFDA, in addition to confusion and uncertainty for sponsors of marketing approval applications. The term "new chemical ingredient" should be clearly defined in the DAL, DRR, and other relevant laws and regulations to include biologic and chemically synthesized drugs, recognizing the considerable investment by innovative biopharmaceutical companies in developing and proving safety and efficacy of a new product. China is currently amending both the DAL and DRR.

Second, RDP should be granted to any product that is "new" to China, *i.e.*, has not been approved by CFDA. In practice, however, China grants RDP only 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.

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."⁷³ Following many years of discussion in the JCCT and other venues, this commitment was a positive development. Unfortunately, this commitment remains unfulfilled. Effective implementation of this commitment is necessary. Although the U.S. Government has actively engaged CFDA to revise the definition of new chemical entity, little progress has been made.

An August 2015 State Council Opinion Drug Reform Opinion and November 2015 CFDA reform plan for chemical drug registration categories proposes to define a "new drug" as a chemical entity that is "new to the world." PhRMA is concerned that this revised definition of "new drug" may signal a similar narrowing of thinking with respect to

⁷¹ 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.

⁷² See Regulations for Implementation of the Drug Administration Law of the People's Republic of China, Art. 35; Provisions for Drug Registration (SFDA Order No. 28), Art. 20.

⁷³ 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 Feb. 5, 2016)).

the definition of new chemical ingredient, and therefore, creates a risk that a drug approved or marketed first outside of China may receive weaker or no exclusivity in China. In addition, this revised definition of “new drug” could potentially impact China’s JCCT RDP commitment.

Third, China’s regulatory procedures permit non-originator, or follow-on, applicants to rely on a foreign regulatory agency’s approval of the originator product in another market during the RDP term in China. 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 to a foreign regulatory agency – 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 CFDA. CFDA should not approve follow-on drugs during the RDP period unless the follow-on applicant submits full clinical trial data that it has independently developed or received a license to cross-reference from the innovative drug manufacturer. This approach would be consistent with the goals of encouraging innovation in China by protecting innovators’ investment in clinical trials. To meet these goals, China will need to ensure that it has regulatory and legal systems that are compatible with other major markets. While the systems need not be identical, implementation of a meaningful RDP mechanism can promote harmonization and enable companies to function more easily in multiple markets. PhRMA notes that it has been 14 years since China’s WTO commitment to provide RDP. Thus, prompt and meaningful RDP reform should be a high priority.

Anti-Monopoly Law

As one of the three anti-monopoly agencies in China, China NDRC appears to take a leading role in the making and enforcement of IP related antitrust rules. Currently there seems to be a lack of transparency and clear standards with regard to many related issues. While NDRC issued the draft IP Abuse Antitrust Guidelines (the “draft Guidelines”) on Dec 31 2015, NDRC only allowed a very short period of time (20 calendar days) for public comments. Since the draft Guidelines will likely be considered departmental measures, they may be approved without being required to seek public comments for a second time. It is noted that the underlying financial implication of an IP abuse antitrust violation by a large global company could often be astronomical. We urge NDRC to allow additional opportunities and longer period of time for global industries to provide inputs and comments before finalizing the draft Guidelines.

Market Access Barriers

Regulatory Approval Process

China is making significant strides in reforming and strengthening its regulatory framework, but remains an outlier in the drug approval process, with new medicines

typically taking four to six years longer to reach the China market than other major markets.⁷⁴

Clinical Trials Applications (CTAs)

Approval of clinical trial applications in China takes much longer than in other countries and is a major contributor to the lengthy drug approval timeline. A late 2013 policy change regarding the acceptance of MRCT data has further extended the drug approval timeline. This policy change is contrary to CFDA's stated goals to promote innovation and harmonize its regulatory framework with international standards. Overall, the lengthy CTA approval process is impeding patient access to new innovative medicines and is a significant barrier to global drug development.

To help China further integrate into the global innovation network and reduce the time it takes for innovative medicines to reach patients, steps should be taken to shorten the CTA review and approval timeline. Underlying the CTA delay is a misalignment between CFDA human resource capacity and growing industry innovation activities. PhRMA recognizes and applauds the important steps CFDA is taking to enhance agency capacity and capability by encouraging investment in additional resources and trained evaluators. Based on PhRMA member company experience in other major markets, agencies have been successful in addressing lengthy review approval timelines when they have established clear timelines and metrics as well as a transparent system for reporting on progress.

Specifically, we are encouraged that the JCCT commitments support the use of MRCT as a viable pathway to drug development in China and the implementation of new measures to reform the Certificate of Pharmaceutical Product (CPP) requirements. These actions should allow for drug development in China to occur simultaneously with global drug development. To ensure accelerated patient access to innovative treatments, China should take immediate steps to implement these important commitments.

Drug Approvals Process

PhRMA welcomes the 2014 JCCT commitments and many aspects of the August 2015 State Council Opinions seeking to reduce the drug application backlog and streamline the review and approval system for new innovative medicines. PhRMA is eager to support CFDA's drug reform efforts, but is concerned that certain measures are inconsistent with international standards and implementation of those measures is not fully transparent.

In order to further improve the regulatory environment in China, PhRMA recommends that the CFDA adopt a flexible and adaptive regulatory system and

⁷⁴ Liberti, et al., Center for Innovation in Regulatory Sciences. *Characterizing the Influencers of Submission Lag Time for Medicines in the Emerging Markets* (Aug. 2012).

policies that are science-based and consistent with international standards. Specifically, PhRMA recommends revisions to the DAL and DRR that accelerate and simplify the drug regulatory approval process, for instance to de-link the approval of clinical trials applications from the actual drug approval process, further improve the environment for simultaneous global drug development, and promote drug quality. 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.

Government Pricing and Reimbursement

Government Reimbursement List

Once drug approval is achieved in China, patients must often wait an additional six years or more⁷⁵ before they receive access through national reimbursement. Over the past twelve years, the Government of China has only undertaken two substantive updates (2004 and 2009) to the NRDL. The lengthy process for updating the NRDL delays market access to innovative pharmaceuticals and prevents their timely availability to patients. PhRMA recommends an accelerated update to the NRDL and provincial reimbursement drug list (PRDL) followed by the establishment of a transparent, predictable, and regular reimbursement review – for example, on an annual basis. A regular review would remove the ambiguity of when a formal update will occur, provide a more stable business environment and significantly improve patient access to innovative medicines.

Government Pricing Policies

China, as part of its WTO accession, committed to apply price controls in a WTO-consistent fashion, taking into account the interests of exporting WTO members, and without having the effect of limiting or impairing China's market access commitments on goods and services.⁷⁶ Notwithstanding that commitment, PhRMA is concerned that reforms to China's government pricing mechanisms have created an uncertain business environment and could further reduce reward for innovation, restrict patient access to high-quality medicines and undermine China's healthcare reform and innovation policy objectives. In particular, PhRMA is seeking additional detail regarding the proposed National Health and Family Planning Commission (NHFPC) negotiation mechanism for patented drugs and the August 2015 State Council Drug Reform Opinion related to drug pricing. PhRMA encourages the Chinese Government to engage innovative pharmaceutical companies to evaluate and 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.

⁷⁵ IMS Consulting Group, *China Drug Lag and the Impact of Reimbursement Delays* (July 2014).

⁷⁶ Report of the Working Party on the Accession of China to the World Trade Organization, WT/MIN(01)/3 (Nov. 10, 2001), at para. 64.

China's Essential Drugs Policy

PhRMA strongly supports China's development of essential drugs policy aimed at making pharmaceuticals available to the underserved populations across China. It is critical that China's essential drugs policy is consistent with international principles, and that the mechanism established by the Central and Provincial governments to procure and administer the products on the Essential Drugs List is transparent, predictable, includes provisions for appeal, and is not based solely on the cost of products, but recognizes their quality and relative value. Such a system will ensure that safe and efficacious essential medicines are available to Chinese patients, within a broad sustainable healthcare system.

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 active pharmaceutical ingredients (API) used to manufacture counterfeit products. China has been stepping up enforcement efforts against counterfeited drugs in recent years, both through legislative reforms and increased police activity. However, online distribution of counterfeit medicines and unregulated API remain the most serious challenges in China.

Under current pharmaceutical regulations, there is no effective regulatory control over the manufacture and distribution of API, which creates a major regulatory loop-hole that impacts negatively on the security of China's upstream drug supply chain. During the Sixth Meeting of the U.S.-China S&ED in July 2014, China also committed to develop and seriously consider amendments to the DAL requiring regulatory control of API. To effectively reduce the risks caused by unregulated API to patient health, a multi-prong approach or "road map" is needed. Targeted measures may include:

- amending the Criminal Code to ease the burden of proof to prosecute brokers or API suppliers who knowingly deal with illegal APIs;
- empowering CFDA to regulate any party that manufactures API even if that party has not declared an intent to do so;
- empowering CFDA to penalize factors based on *prima facie* evidence of a product as having medicinal use or being an "API" or a "chemical drug substance" without cGMP certification;
- amending the DAL to require adherence to ICH Q7A (*Good Manufacturing Practice Guidance for Active Pharmaceutical Ingredients*) with meaningful penalties for failure to do so; 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 CFDA 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.

China continued to coordinate joint special enforcement campaigns targeting counterfeit drug crimes.⁷⁷ It also appears that China is beginning to spend more efforts tackling the sale of counterfeits on the Internet. In 2013, CFDA and the State Information Office jointly led a 5-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.⁷⁸ 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 to protect patients. China's actions in this area could serve as a model for other countries facing similar challenges online.

PhRMA encourages China and the U.S. Government 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 cooperation can serve as a best practice for other bilateral and multilateral efforts to reduce the global counterfeit drug trade.

Finally, while we commend China for improvements in customs regulations, which include monitoring and seizure of imports and exports, Chinese Customs authorities rarely exercise their authority to monitor biopharmaceutical exports. Accordingly, PhRMA believes that more resources and support should be targeted to monitoring biopharmaceutical 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.

⁷⁷ See, e.g., "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 Feb. 5, 2016); "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 Feb. 5, 2016).

⁷⁸ 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 the CFDA. 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 percent of all blocked websites or approximately 40,606 websites.

PRIORITY WATCH LIST

ASIA-PACIFIC

INDIA

PhRMA and its member companies remain concerned about the challenging policy environment in India. We support the Modi Administration's efforts to create a world-class intellectual property (IP) environment in India, which can foster innovation, drive economic growth, and enhance India's global competitiveness. While pharmaceutical innovators saw potentially positive signs and statements from the Indian Government in 2015, translating these positive statements into concrete progress and real results has remained a challenge. Despite initially identifying healthcare as a priority, the Indian Government has not increased investment in this critical area, leaving public healthcare spending at a very low level of approximately 1 percent of GDP. Negative policies remain and may limit Indian patient access to innovative medicines.

While important policy issues remain, on balance, we are encouraged by recent efforts to improve the Indian Patent Office's (IPO) operations, as well as recent decisions by the IPO and Indian courts with respect to innovator pharmaceutical patent protection and enforcement. We hope the forthcoming National Intellectual Property Rights (IPR) Policy will reflect the Prime Minister's desire to "work on [India's] intellectual property rights guidelines to match global standards."⁷⁹ In addition to supporting the Government's "Make in India" program goals of fostering innovation, facilitating investment, and protecting IP,⁸⁰ a strong IPR Policy promoting consistent and predictable rules could accelerate the progress required to stimulate innovation, improve health and bring new medicines to market for Indian patients. Depending on the substance of the forthcoming National IPR Policy, it could be a catalyst for considering revising India's position in the context of the Special 301 going forward.

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 the U.S. and Indian Governments to improve access to medicines, and healthcare overall, by removing market access barriers and fostering legal and regulatory certainty for the protection of IP in India.

Key Issues of Concern:

- **Generally weak IP environment:** India's legal and regulatory systems pose procedural and substantive barriers at every step of the patent process, ranging from the impermissible hurdles to patentability posed by Section 3(d) of India's Patents Act to the narrow patentability standards applied in pre-grant and post-grant opposition proceedings. Not only is this a concern in the Indian market, but also in other emerging markets that may see India as a model to be emulated.

⁷⁹ Economic Times, "India must align patent laws with global standards to boost trade: PM Narendra Modi," Apr. 24, 2015, available at http://articles.economictimes.indiatimes.com/2015-04-24/news/61493468_1_services-exports-global-services-trade-services-sector (last visited Feb. 5, 2016).

⁸⁰ See www.makeinindia.com.

Since early 2012, roughly twenty-five products have had their patent rights undermined in India. In 2015 alone, at least six products have faced issues due to the continued denial of applications under Section 3(d), infringement due to state-level marketing authorization for generic versions of on-patented drugs, and the threat of compulsory licenses (CLs), all of which demonstrate that there have been no concrete policy improvements in India.

- **Regulatory data protection failures:** The Indian Regulatory Authority relies on test data submitted by originators to seek approval in another country when granting marketing approval to follow-on pharmaceutical products. This indirect reliance results in unfair commercial use prohibited by the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and discourages the development of new medicines that could meet unmet medical needs.
- **High tariffs and taxes on medicines:** Medicines in India face high effective import duties for active ingredients and finished products. Though the basic import duties for pharmaceutical products average about 10 percent, additional duties and assessments bring the effective import duty to approximately 20 percent. India collects more in taxes on pharmaceuticals than it spends on medicines.
- **Discriminatory and non-transparent market access policies:** A decision by an Inter-Ministerial Committee on a patented medicines pricing policy is still pending. The lack of transparency in the Committee process and the threat of an existing recommendation for strict price controls represent an effort to significantly reduce the benefits of patent protection, which will discriminate against importers and create an unviable government pricing framework and business environment for medicines in India.⁸¹ In addition, a provision under the Drug Price Control Order 2013 discriminates against foreign pharmaceutical companies by exempting new medicines developed through indigenous research from price controls.
- **Burdensome environment for clinical research:** While the Government is keen to reinvigorate clinical research in India, ambiguities continue to prevail in the Indian regulatory space. In particular, the ambiguities in the definition of “trial related injury”, a lack of appeals mechanism in decisions about causation, and criminal penalties for trial sponsors who deviate from clinical trials protocol continue to perpetuate a burdensome environment for clinical research and undermines the availability of new treatments and vaccines for Indian patents.

As noted above, the issues outlined in USTR’s 2015 Special 301 Report remain significant areas of concern. In its 2015 report, USTR noted its expectation that “new

⁸¹ 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.

channels for engagement created in the past year will bring about substantive and measurable improvements in India's IPR regime" and that it would "monitor progress over the coming months...." Continued attention to IP and market access barriers in India has been a strong signal of the importance of these issues to the bilateral relationship and has been critical in preventing further deterioration of the innovation environment in that country. However, no meaningful action has been taken to address these barriers, and significant unpredictability in IP protection and enforcement remains.

For these reasons, PhRMA requests that India remain on the **Priority Watch List** in the 2016 Special 301 Report. Further, we urge USTR to provide an opportunity for a meaningful assessment of India'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 translate India's commitments into substantive and real policy change in the IP and market access barriers confronted by U.S. businesses in India.

Intellectual Property Protection

Following Prime Minister Modi's visit to the United States in September 2014, India announced it would constitute an IPR Think Tank to draft a national policy on IP policy and advise the government on best IP practices to be followed in trademark offices, patent offices and other government offices in order to create an efficient and transparent system of functioning.⁸² India's Draft National IP Policy, published for stakeholder comments in December 2014,⁸³ recognized 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, but fell short of putting forward any meaningful improvements to patent protection and enforcement for medicines. The final policy, which is under deliberations within the relevant government ministries, is expected to put forward important administrative and procedural improvements, but do little to improve the business environment for the biopharmaceutical sector.

Restrictive Patentability Criteria

TRIPS requires that an invention which is new, involves an inventive step, and is capable of industrial application, be entitled to patent protection. Section 3(d) of the Indian Patents Act as amended by the Patents (Amendment) Act 2005 adds an impermissible hurdle to patentability by adding a fourth substantive criteria 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, and other derivatives of known substances are presumed to be the

⁸² Department of Industrial Policy and Promotion, Press Release, Oct. 22, 2014, available at http://dipp.nic.in/English/acts_rules/Press_Release/ipr_PressRelease_24October2014.pdf (last visited Feb. 5, 2016).

⁸³ National IPR Policy, First Draft Submitted by IPR Think Tank, Dec. 19, 2014, available at: http://dipp.nic.in/English/Schemes/Intellectual_Property_Rights/IPR_Policy_24December2014.pdf (last visited Feb. 5, 2016).

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 efficacy.

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 forms of known substances lacking enhanced 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 principle provided by TRIPS Article 27.⁸⁴ From a policy perspective, Section 3(d) undermines incentives for biopharmaceutical innovation by preventing patentability for improvements which do not relate to efficacy, for example an invention relating to the improved safety of a product.

Other examples of the overly restrictive standards for patentability in India are the recent patent revocations using “hindsight” analyses made during pre- and post-grant oppositions citing a lack of inventiveness concluding that the patent applications are based on “old science” or failed to demonstrate an inventive step.

Weak Patent Enforcement

Indian law permits state drug regulatory authorities to grant marketing approval for a generic version of a medicine four years after the original product was first approved.⁸⁵ 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 authorization from the 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 should close this regulatory loophole in order to provide effective patent protection and enforcement for pharmaceutical patent holders.

⁸⁴ The additional patentability hurdle imposed by section 3(d) was recently reinforced by the Pharmaceutical Patent Examination Guidelines issued in October 2014.

⁸⁵ Rule 122E of the Drugs and Cosmetics Rules states that a new drug shall continue to be considered as new drug for a period of four years from the date of its first approval or its inclusion in the Indian Pharmacopoeia, whichever is earlier. The Drugs and Cosmetics Act goes on to specify that “Where an application under this Rule is for the manufacture of drug formulations falling under the purview of new drug as defined in rule 122-E, such application shall also be accompanied with approval, in writing in favor of the applicant, from the licensing authority.” Thus, to obtain a manufacturing license for a new drug, the Central Drug Regulatory must provide written approval. In the case of drugs which do not meet the definition of a new drug, an “Application for grant and renewal of license to manufacture for sale or distribution of drugs shall be made to the licensing authority appointed by the State Government.” See Ministry of Health and Family Welfare, “The Drugs and Cosmetics Rules, 1945 (As amended up to the 30th June 2005)”, available at <http://www.cdsco.nic.in/writereaddata/Drugs&CosmeticAct.pdf> (last visited Feb. 5, 2016).

Moreover, India does not provide mechanisms for notification or resolution of patent disputes prior to marketing of third party products. Such mechanisms are needed to prevent the marketing of patent-infringing products and resolve disputes in a timely manner. In recent examples, the patent holder waited two and a half years before the Court provided injunctive relief.⁸⁶ In another example, the patent holder waited seven years before receiving a Court decision upholding its patent. The Court, however, neglected to grant an injunction because the patent is set to expire in early 2016.⁸⁷ The pending Commercial Courts, Commercial Division and Commercial Appellate Division of High Courts Bill, 2015, provides for the creation of commercial divisions and commercial appellate divisions in high courts, and commercial courts at the district level to assist in addressing disputes in a timely manner. Additionally, the draft National IPR Policy proposes to establish specialized patent benches at the High Court level and designate an IP court at the district level.⁸⁸ While this is a promising development, these courts will require a significant amount of technical expertise and commitment of resources to be properly implemented.

Compulsory Licensing

The Indian Government appears to have taken a more measured and cautious approach in responding to recent CL cases, including the denial of two CLs this year. We are encouraged by this trend. However, the grounds for issuing a CL under the provisions are broad, vague and appear to include criteria that are not clearly related to legitimate health emergencies. The Ministry of Health (MOH) continues to make recommendations to impose CLs on certain anti-cancer medicines under the special provisions of Section 92 of India's Patents Act, which would make it even more difficult for patent owners to defend their patents.⁸⁹ Moreover, Indian pharmaceutical companies continue to use Section 84 of the Patent Act as a commercial tool under the guise of better access to medicines, rather than a measure of last resort. The ongoing threat of CLs perpetuates the unreliable environment for patent protection in India.

The research-based pharmaceutical industry believes that the findings on the working requirements in the CL decision for a patented anti-cancer medicine in March 2012 contravene India's obligations under the TRIPS Agreement (as well as the General Agreement on Tariffs and Trade and the WTO Agreement on Trade-related

⁸⁶ Times of India, "Delhi high court restrain Glenmark from selling anti-diabetes drugs" Oct. 7, 2015, available at <http://timesofindia.indiatimes.com/business/india-business/Delhi-high-court-restrain-Glenmark-from-selling-anti-diabetes-drugs/articleshow/49262612.cms> (last visited Feb. 5, 2016).

⁸⁷ Times of India, "Cipla infringing Roche's cancer drug patent: HC" Nov. 28, 2015, available at <http://timesofindia.indiatimes.com/business/india-business/Cipla-infringing-Roches-cancer-drug-patent-HC/articleshow/49956000.cms> (last visited Feb. 5, 2016).

⁸⁸ Department of Industrial Policy and Promotion, Press Release, Oct. 22, 2014, available at http://dipp.nic.in/English/acts_rules/Press_Release/ipr_PressRelease_24October2014.pdf (last visited Feb. 5, 2016).

⁸⁹ See, for example, "The Dasatinib Dance Continues: Compulsorily Licensing and Public Non Commercial Use" Nov. 11, 2014, available at <http://spicyip.com/2014/11/the-dasatinib-dance-continues-compulsorily-licensing-and-public-non-commercial-use.html> (last visited Feb. 5, 2016).

Investment Measures), which prohibit WTO members from discriminating based on whether products are imported or locally produced. The Bombay High Court further interpreted the working requirement to specify that satisfaction of the working requirement “would need to be decided on a case to case basis” and that “the patent holder would nevertheless have to satisfy the authorities under the Act as to why the patented invention was not being manufactured in India.”⁹⁰ The Indian Supreme Court refused to hear the appeal arising out of the Bombay High Court judgment thereby perpetuating the ambiguity of the CL criterion and terms of use.

India’s use of CLs in these circumstances distorts provisions that were intended to be used in limited circumstances into tools of industrial policy. We further believe that resort to CLs is not a sustainable or effective way to address healthcare 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.⁹¹ 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. India should also clarify that importation satisfies the “working” requirement, pursuant to TRIPS Article 27.1.

Regulatory Data Protection Failures

Contrary to its TRIPS Article 39.3 obligation, India fails to ensure that there is no unfair commercial use of the regulatory data submitted by another party in securing marketing approval in a third country. Rather, when a pharmaceutical product has been previously approved by a Regulatory Authority 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 for review by India’s Regulatory Authority. Moreover, in some instances when an applicant seeks approval for a drug that has already been approved abroad, Indian authorities waive the requirement to submit even this data.⁹² In those circumstances, any subsequent approval of the drug in India is based entirely on the prior approval of the drug 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 based on third-

⁹⁰ *Bayer v. Union of India*, Writ Petition No. 1323 of 2013.

⁹¹ See, e.g., <http://thehill.com/blogs/congress-blog/campaign/316883-india-honors--not-dishonors--patent-laws> (last visited Feb. 5, 2016). These allegations 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.

⁹² See Rules 122A and B of the Ministry of Health and Family Welfare, “The Drugs and Cosmetics Rules, 1945 (As amended up to the 30th June, 2005)”, available at <http://www.cdsco.nic.in/writereaddata/Drugs&CosmeticAct.pdf> (last visited Feb. 5, 2016).

country approvals amounts to indirect reliance on the clinical trial and other test data that underlie the third-country approvals. This indirect reliance results in unfair commercial use prohibited by TRIPS Article 39.3.

Administrative Burdens

Section 8 of the Patents Act sets forth overly burdensome requirements that effectively target foreign patent applicants in a discriminatory manner since foreign applicants are more likely to have filed patent applications for the same invention 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 same 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. Further, 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 countries. 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 easily available to the Indian Patent Office Examiners.

Additionally, recent 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.

Moreover, 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.⁹³

⁹³ See, e.g., *Ajantha Pharma Ltd. v. Allergan*, Intellectual Property Appellate Board (2013).

Market Access Barriers

High Tariffs and Taxes on Medicines

PhRMA member companies operating in India face high effective import duties for active ingredients and finished products. Though the basic import duties for pharmaceutical products average about 10 percent, additional duties and assessments are imposed that bring the effective import duty total to approximately 20 percent. In fact, India collects more in taxes on pharmaceuticals than it spends on medicines. Broad analysis indicates total annual Government expenditure on drugs in India around \$1.15B⁹⁴ in comparison to the \$1.22B⁹⁵ it receives in taxation of pharmaceuticals. Moreover, excessive duties on the reagents and equipment imported for use in research and development and manufacture of biotech products make biotech operations difficult to sustain. Compared to the other Asian countries in similar stages of development, import duties in India are very high.

Discriminatory and Non-Transparent Market Access Policies

PhRMA's members are concerned about the general lack of access to health care in India. The Indian government circulated a draft National Health Policy⁹⁶ early in 2015 that called for greater access to healthcare for low-income patients. India has an insufficient numbers of qualified healthcare personnel, inadequate and poorly equipped healthcare facilities, and most importantly lacks a comprehensive system of healthcare financing which would pool financial risk through insurance and help to share the cost burdens.⁹⁷ Still, government spending on healthcare remains at 1 percent of GDP, one of the lowest levels of expenditure in the world.⁹⁸ In the absence of increased resources and reform, high out-of-pocket spending on healthcare and pressure on the cost of medicines persist. Despite decades of government price controls in India, the objective of which has been to improve access to medicines, essential medicines are still not easily accessible; for example, essential medicines may only be available at government pharmacies 20 percent of the time.⁹⁹ 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.¹⁰⁰

⁹⁴ High Level Expert Group (HLEG) report on Universal Healthcare Coverage for India 2011, Instituted by Planning Commission of India.

⁹⁵ Includes domestic tax (VAT and excise duty) and import taxes; based on broad analysis of 2011 data representative at National level – state level data not investigated. Source: Indian Department of Pharmaceuticals Annual Report 2012, HLEG report on Universal Healthcare Coverage for India 2011.

⁹⁶ "National Health Policy 2015 Draft." Ministry of Health & Family Welfare. Dec. 2014.

⁹⁷ "Health Systems Financing: The Path to Universal Coverage," *The World Health Report*, World Health Organization, 2010.

⁹⁸ "National Health Policy 2015 Draft." Ministry of Health & Family Welfare. Dec. 2014.

⁹⁹ "Health workforce, infrastructure, essential medicines", World Health Statistics 2013, The World Health Organization.

¹⁰⁰ Analysis based on IMS MIDAS Data.

Expansion of price controls to a larger range of medicines will not substantially improve access to medicines in India because lack of access is more a function of insufficient healthcare financing systems, poor access to physicians, and inadequate healthcare facilities.¹⁰¹ For example, medicines and vaccines which are offered free of charge often do not reach the patients who need these medicines.¹⁰² A recent study by IMS on “Analyzing the Impact of Price Controls on Access to Medicines” found that price controls are neither an effective nor a sustainable strategy for improving access to medicines. The study further found that the primary beneficiaries of price controls have been high-income patients, rather than the intended low-income population.¹⁰³ 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.¹⁰⁴

The Department of Pharmaceuticals (DoP) Committee on Price Negotiation for Patented Drugs released a report in February 2013 which recommended an international reference pricing scheme with a purchasing power parity adjustment for government procured patented medicines, and those patented medicines provided through health insurance. The Committee also considered whether the price negotiation of a patented medicine should be linked with its marketing approval. In 2014, an Inter-Ministerial Committee was constituted to suggest a methodology to be applied to pricing of patented medicines before their marketing in India.¹⁰⁵ While the Committee has met several times in recent months, the decision on a patented medicines pricing policy is still pending. PhRMA members are highly concerned that the lack of transparency in to the Committee process and the threat of the existing recommendation represent an effort to significantly reduce the benefits of patent protection, which will *de facto* discriminate against importers, and will create an unviable government pricing framework and business environment for innovative pharmaceutical companies.

In July 2014, the National Pharmaceutical Pricing Authority (NPPA), without prior notice to industry, issued 50 identical orders setting prices for 108 non-scheduled diabetes and cardiovascular medicines beyond the scope of the existing Drugs Prices

¹⁰¹ “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 Feb. 5, 2016).

¹⁰² “India Turns to Mobile Phones in Bid to Improve Vaccination Rate,” *India Real Time/Wall Street Journal*, Aug. 4, 2011. 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 Feb. 5, 2016).

¹⁰³ IMS, “Assessing the Impact of Price Control Measures on Access to Medicines in India.” June 2015.

¹⁰⁴ “Pharmaceutical Price Controls in OECD Countries: Implications for U.S. Consumers, Pricing, Research and Development, and Innovation,” U.S. Dept. of Commerce, Int’l Trade Administration, Dec. 2004. Vernon, John, “Drug Research and Price Controls,” *Regulation*, Winter 2002-2003.

¹⁰⁵ 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.

Control Order (DPCO), 2013, which sets ceiling prices for 348 essential medicines.¹⁰⁶ The notifications fall under Paragraph 19, which authorizes the NPPA “in case of extraordinary circumstances, if it considers necessary so to do in public interest, [to] fix the ceiling price or retail price of any Drug for such period, as it may deem fit.”¹⁰⁷ Subsequently, NPPA withdrew the underlying guidelines,¹⁰⁸ but continued to pressure the industry to implement the prices fixed by the July 2014 orders. Transparency and predictability are paramount to a robust environment for business investment. These recent pricing decisions, as well as the broad authority granted to NPPA under this provision, do not respect the need for transparency, predictability, and trust in the decision-making process.

Finally, Paragraph 32 of the DPCO 2013 exempts from the pricing formula, for a period of five years, new medicines developed through indigenous research and development that obtain a product patent, are produced through a new process, or involve a new delivery system. This section creates an un-level playing field that favors local Indian companies and discriminates against foreign pharmaceutical companies.

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

Burdensome Environment for Clinical Research

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. Still, India faces the consequences of a burdensome and unpredictable

¹⁰⁶ NPPA, Copies of Gazette Notifications for Ceiling Prices/retail price under DPCO, 2013, available at <http://www.nppaindia.nic.in/wh-new-2014/wh-new-44-2014.html> (last visited Feb 5, 2016).

¹⁰⁷ Drugs (Prices Control) Order, 2013. Published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section(ii) dated May 15, 2013.

¹⁰⁸ Indian Express, “NPPA stripped of powers to cap non-essential drug prices,” Sept. 24, 2014, available at <http://indianexpress.com/article/business/business-others/nppa-stripped-of-powers-to-cap-non-essential-drug-prices/#sthash.sbDX0d5Q.945mHOQF.dpuf> (last visited Feb. 5, 2016).

regulatory environment as clinical trials move out of the country¹⁰⁹ and new medicines face significant launch delays.¹¹⁰

We welcome the fact that the MOH and the Central Drugs Standard Control Organization (CDSCO) have undertaken regulatory reform efforts with the goal of strengthening the regulatory regime and reinvigorating clinical research. However, inconsistencies and ambiguities continue to prevail in the Indian regulatory space resulting in lack of clarity and burdensome approval process for trial sponsors. In particular, the ambiguities in the definition of “trial related injury”, a lack of appeals mechanism in decisions about causation, and criminal penalties for trial sponsors who deviate from clinical trials protocol are particularly burdensome.

The current clinical trial injury compensation regulations—consisting of the January and February 2013 regulations and the December 2014 amendments thereto—are overly broad and lack a legally or scientifically sound process for determining causality of injury. In addition, there are no appeals of causation determinations made by the Ethics Committee, Expert Committee, and Licensing Authority, and no mandated opportunity for the clinical trial sponsor or investigator to introduce their own assessments of causation for those committees or the Licensing Authority to consider. As a result, there is great uncertainty relating to future costs and liabilities associated with conducting trials in India, resulting in many sponsors not siting trials in India until these uncertainties have been resolved.¹¹¹

The proposed Drugs and Cosmetics (Amendment) Bill, 2015¹¹² makes deviation from clinical trial protocol a criminally punishable conduct. By failing to distinguish between intentional violations of conditions, inadvertent mistakes, genuine misinterpretations of such conditions, or even scientifically valid reasons for deviating from protocol, the legislation fails to comprehend the complex requirements and conduct of clinical trials. Such uncertainty in the regulatory process for clinical trials threatens the overall clinical research environment in India, as well as the availability of new treatments and vaccines for Indian patients.

Further, despite the July 3, 2014 CDSCO Office Order on waiver of local clinical trial requirements, the criteria established for waiver of local clinical trials limiting them to only cases of national emergency, extreme urgency, epidemics and for orphan drugs

¹⁰⁹ Asia Sentinel “Southeast Asia Steals Indian Pharma,” July 14, 2014, available at <http://www.asiasentinel.com/econ-business/southeast-asia-steals-indian-pharma/> (last visited Feb. 5, 2016).

¹¹⁰ Ernst R. Berndt and Iain M. Cockburn. The Hidden Cost of Low Prices: Limited Access to New Drugs in India. *Health Affairs*, 33, no.9 (2014): 1567-1575.

¹¹¹ Pugatch Consilium, “Quantifying the Economic Gains of Strengthening India’s Clinical Research Policy Environment.” Sept. 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 Feb 5, 2016).

¹¹² Drugs and Cosmetics (Amendment) Bill, 2015, available at <http://www.mohfw.nic.in/showfile.php?lid=3016> (last visited Feb. 5, 2016).

for rare diseases and drugs indicated for conditions/diseases for which there is no therapy are very restrictive.¹¹³ Clinical trials for life threatening conditions are often lengthy and complex, thus delaying their entry into the market. Under the current norms, all new drugs which have not been used in India have to undergo trials on a specified minimum number of patients to gain marketing approval from the Drug Controller General of India (DCGI). The DCGI has the ability to grant an exemption only if deemed to be in the “public interest” or if they fall under the criteria as per the CDSCO Office Order dated July 3, 2014. The current list of criteria for a waiver are very narrow, ambiguous and open to subjective interpretation thus limiting the ability for medicines treating serious or life-threatening disease to receive such a waiver. Greater clarity and predictability are needed for administrative procedures of drug registration applications and drug review standards and procedures.

¹¹³ CDSCO, “Guidance for New Drug Approval.” July 2014.

INDONESIA

PhRMA and its member companies operating in Indonesia remain concerned with the country's intellectual property (IP) and discriminatory market access barriers as well as limited anti-counterfeiting enforcement efforts. These barriers stem from the lack of legislative and regulatory transparency and advance consultation. As a result, PhRMA's member companies continue to face significant market access constraints.

Key Issues of Concern:

- **Compulsory licensing:** In recent years (2004, 2007, and 2012), Indonesia has issued "government use"-type compulsory licenses (CLs) on nine patented pharmaceutical products, despite concerns raised by the affected PhRMA member companies. PhRMA is troubled by Indonesia's decision to issue these licenses, which were promulgated without attempts to engage with the affected PhRMA member companies to find more sustainable and long-term solutions and in a manner that appears inconsistent with Indonesia's international obligations. PhRMA member companies are prepared to work collaboratively with Indonesian authorities to find a solution that benefits patients in Indonesia while maintaining adequate and effective IP protection.
- **Forced localization requirements:** The local manufacturing and technology transfer requirements of Decree 1010 are discriminatory, are implemented inconsistently, and raise national treatment concerns under Article III of the General Agreement on Tariffs and Trade (1994) that will have lasting implications for market access and patient health in Indonesia. To prevent import restrictions on innovative medicines, it is imperative that a solution is reached to allow all legitimate high quality pharmaceuticals to be traded, sold and distributed, regardless of origin.
- **Registration delays:** PhRMA member companies continue to face burdensome regulatory delays in the registration process of new products, in contravention of Indonesia's own regulations. We understand that efforts to achieve stronger conformance with international best practices are being made with respect to regulatory timelines and processes as part of the ASEAN Pharmaceutical Regulatory Harmonization. We encourage the Indonesian Government to also make efforts to achieve stronger conformance with international best practices with respect to regulatory data protection and bioequivalence requirements.
- **Non-transparent policies:** The selection criteria for new molecules to be listed on the Indonesian National Formulary (FORNAS) remains unclear. There is a lack of clarity over how products are selected for the formulary and whether these products will stay on the formulary. The pharmaceutical industry urges the Indonesian government to work with stakeholders to develop a methodology that explains the formulary selection process. In addition, decisions regarding

approvals should be based on science and efficacy of a new medicine and the process should be clearly defined.

For these reasons, PhRMA requests that Indonesia remain on the **Priority Watch List** for the 2016 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

Compulsory Licensing

In recent years, Indonesia issued compulsory licenses (CLs) on nine patented pharmaceutical products. PhRMA is troubled by Indonesia's decision to issue government use permits without attempts to engage the affected PhRMA member companies in discussions to find more sustainable and long-term solutions. We are further concerned that a number of patents on different products were aggregated together and dealt with as a group rather than considering each on its merits as required in Article 31(a) of the World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). In addition, other than the stipulated remuneration, there is no ability to appeal the compulsory license or otherwise obtain judicial or other independent body review, as required by TRIPS Article 31(i).

These matters, among others, raise significant issues about the consistency of these CLs with Indonesia's obligations under TRIPS and other international norms. Moreover, such drastic measures 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 healthcare needs. Voluntary arrangements independently undertaken by member companies better ensure that current and future patients have access to innovative medicines. PhRMA member companies are willing to work with Indonesian authorities to find solutions that benefit patients in Indonesia, while maintaining adequate and effective IP protections that are essential to sustain research toward the next generation of treatments.

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. Product 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 of PhRMA member companies 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 16, 2010, altering the definition of local manufacturing and introducing the concept of partial manufacture. PhRMA's member companies have sought clarification on several vague and conflicting provisions of Decree 1799 since its release. Furthermore, in July 2011, Indonesia's National Agency of Drug and Food Control, known as BPOM, released a draft of the Brown Book containing implementation guidelines for several Decree 1010 and 1799 provisions. Final revisions to the Brown Book were released on September 14, 2011, following BPOM's review of stakeholder comments, and some of the provisions in the revised Brown Book provided some leeway for PhRMA's member companies in complying with the requirement to locally manufacture imported products within five years of patent expiration. While PhRMA's member companies acknowledge the initial steps taken by BPOM to engage in consultations, key concerns remain unresolved and several provisions of Decree 1010 and 1799 still require further clarification.

In short, PhRMA's member companies are concerned about the discrimination of Decree 1010 as well as the lasting implications to market access, IP protection, and patient health if unresolved.

Unreasonable Treatment of Accumulated Annuities Post-Patent Abandonment as Debt

The Indonesian government's treatment of up to three years of accumulated annuities post-patent abandonment as the patentee's debt to the government is unreasonable and inconsistent with practices in other countries. It is a common practice in most countries that a patentee intending to abandon a patent may simply skip the payment of a post-grant annuity without incurring additional liability. Article 115(1) of Indonesian Patent Law provides that a patent is not fully abandoned until three consecutive years of missed annuity payments. The 3-year period is provided as an opportunity for the patentee to re-consider whether to revive the patent. However, the Directorate General of Intellectual Property Rights of Indonesia has interpreted this law to mean that the 3 years of accumulated annuities post abandonment is a debt that must be paid by the patentee regardless of whether there was clear intent on the part of

the patentee to abandon the patent. The sanction for non-payment of back annuities is still unknown. This unreasonable interpretation of the law imposes an inappropriate financial burden and creates legal uncertainty for PhRMA's member companies.

Market Access Barriers

Registration Delays

PhRMA's member companies continue to face burdensome regulatory delays in the registration process of new products. There are a variety of causes for the unpredictable delays, which ultimately result in new products being temporarily or permanently blocked from entering the market. It is uncertain whether the lack of attention to new product applications is due to insufficient personnel capacity or other regulatory reasons. In addition to regulatory delays, PhRMA's member companies would like to see Indonesia take steps to bring the National Agency for Food and Drug Control (BPOM) further in line with international best practices, namely in regards to regulatory data protection and bioequivalence requirements.

PhRMA's Members are encouraged to note that BPOM hired 20 additional registration staff in 2015. Both BPOM and the industry have agreed to improve the know-how and skills of their registration staff in order to improve the timeliness of the regulatory review process.

Negative Investment List (NIL)

In 2014, the Government of Indonesia amended the NIL to increase the percentage of foreign ownership allowed in pharmaceutical firms designated as manufacturers from 75 percent to 85 percent. Many multinational research-based pharmaceutical companies are currently classified as distributors, or "PBF" enterprises, and many are 100 percent foreign-owned as permitted under the grandfather clause in the NIL. At present, the NIL requires any PBF enterprise to be 100 percent local-owned whereas multinational pharmaceutical companies' investment is capped to 85 percent foreign owned (subject to a "grandfather clause" for existing investments). These requirements limit Indonesia's ability to attract foreign investments in the pharmaceutical sector and hence limit the competitiveness of Indonesia's domestic pharmaceutical industry vis-à-vis its peers in the region. The MOH and Indonesia Investment Coordinating Board (BKPM) have expressed some support for reducing these limitations in the NIL to allow 100 percent foreign-owned companies in Indonesia.

Non-Transparent Policies

The Indonesian Government's policies and regulations are regularly developed and implemented without providing multinational companies an opportunity for consultation or a clear and transparent sense of the process whereby they will be implemented. This lack of transparency is an underlying concern in each of the issues specified above, and significantly contributes to the uncertainty PhRMA's member

companies face regarding investment and IP protections in the market. PhRMA's member companies propose that the Indonesian Government extend access to its formal consultation process to incorporate input from stakeholders in the multinational private sector.

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. Although new leadership at BPOM have focused their efforts on combatting counterfeit food and medicine products, the budget and resources for this effort remain inadequate. Increasing and especially 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 practices 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 the Indonesian people.

THAILAND

PhRMA's member companies continue to have concerns over the intellectual property (IP) environment and market access barriers in Thailand.

Key Issues of Concern:

- **Generally weak IP environment:** PhRMA's member companies recognize and commend the Department of Intellectual Property's (DIP's) inclusion of industry in the discussion and construction of the Patent Examination Guidelines. However, additional improvement in the intellectual property environment in Thailand remains necessary to avert negative impact on market access. Concerns include delays in obtaining pharmaceutical patents, inadequate regulatory data protection (RDP), and weak patent protection and enforcement regimes.
- **Discriminatory government procurement:** The current regulations governing government procurement for medicines in Thailand are discriminatory and lack transparency. Requirements that hospitals purchase medicines exclusively from the state-owned Government Pharmaceutical Organization (GPO) discriminate against foreign manufacturers and the selection criteria and process for setting the ceiling purchasing price for public procurement lack transparency and do not sufficiently value innovative medicines.
- **Counterfeit medicines:** PhRMA's member companies recognize the advancements made by the Royal Thai Customs in enforcing IP, but encourage the Royal Thai Government to place a higher priority on curbing the distribution and use of counterfeit medicines through increased resources and penalties for criminals caught manufacturing, supplying, or selling them.

For these reasons, PhRMA requests that Thailand remain on the **Priority Watch List** for the 2016 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

In 2013, DIP finalized the Patent Examination Guidelines to complement the Thai Patent Act. The innovative biopharmaceutical industry was invited to provide its input during the drafting, which was appreciated. The Patent Examination Guidelines were intended to set clear benchmarking and examination rationale which would enhance transparency in patent registration as well as help ensure balance and fairness with respect to innovative products.

However, unresolved issues remain, including how to clear the patent backlog and ensure that there are sufficient resources to maintain the patent registration

process. The waiting-period for a patent review and grant in Thailand is unpredictable and averages 10 years after application submission. Further, these 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. 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.

Restrictive Patentability Criteria

Thailand's patentability criteria restrict patent protection for new uses of biopharmaceutical products. PhRMA's member companies strongly encourage the Royal Thai Government to recognize the significant health, scientific, and commercial benefits of new uses for existing pharmaceuticals. Patent applications for new improvements, advances, and next generation products should be reviewed in accordance with internationally recognized patentability criteria as well as applied consistently among all technology dependent sectors. Although industry representatives have been asked to sit on the Patent Amendment Committee and Patent Examination Guideline committee, PhRMA's member companies encourage the Royal Thai Government to work with all technology-based industries so that the patent system can improve for the benefit of all innovators in all fields of technology. This approach will ensure that the incentive for innovation is preserved as well as that all technologies are granted equal treatment with respect to patent grant criteria and patent prosecutions.

Weak Patent Enforcement

PhRMA's member companies strongly encourage the Thai Food and Drug Administration (TFDA) to implement effective mechanisms to allow for sufficient time to resolve patent disputes before follow-on products are approved. Effective patent enforcement could greatly enhance the business environment in Thailand by: (1) providing transparency and predictability to the process for both innovative and generic firms; (2) creating a more predictable environment for investment decisions; and (3) ensuring timely redress of genuine disputes.

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 drug applicants, for a fixed period of time, from relying on the innovator's regulatory data to gain approval for generic 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 generics producers to rely directly or indirectly on the originators'

data, unless consent has been provided by the originator, for the approval of generic 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 pharmaceutical product.

Compulsory Licensing

Despite assurances that Thailand would be judicious in its use of compulsory licenses (CLs) and consult with affected parties as required by the World Trade Organization's 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.

Market Access Barriers

Discriminatory and Non-Transparent Government Procurement Regulations

As a result of special procurement privileges granted to Thailand's state-owned Government Pharmaceutical Organization (GPO), competition remains increasingly difficult for PhRMA's member companies. Procurement Regulation B.E. 2535 (Sections 60-62) issued by the office of the Prime Minister, requires that hospitals affiliated with the Ministry of Public Health must spend 80 percent of their allocated pharmaceutical budget on medicines listed on the National List of Essential Medicines (NLEM). Furthermore, products produced or supplied by the GPO must be selected for hospital procurement when using public funds, even when sold at higher prices. The GPO is also exempt under the Drug Act (Articles 12 and 13) from the requirement to obtain a license from the TFDA to produce, sell, or import pharmaceutical products. The proposed Public Procurement Bill is intended by the Royal Thai Government to promote transparency, fair competition and efficient and effective public procurement. While the Bill should ensure that the GPO shall be subject to the same regulatory requirements as the private sector, without a clear statement on the GPO's existing privilege under the current procurement system, there is the risk that the GPO's privilege will be retained even after passage of the Bill through the ministerial regulation.

The innovative pharmaceutical industry would like to better understand the overall selection criteria and process for setting the ceiling purchasing price, known as the "Median Price or Maximum Procurement Price (MPP)" for public procurement in Thailand. The current methodology and implementation of the MPP setting process lacks clarity and transparency. The government has selectively referenced generic prices to price innovative, life-saving medicines. The process has been implemented in a manner that is often arbitrary in nature. The government of Thailand should revise the

current process to ensure that the pharmaceutical industry has an opportunity to provide timely input about innovative products for Thai patients. Greater stakeholder engagement between the pharmaceutical industry and the government regarding pricing decisions that affect the availability of innovative medicines for Thai patients would be mutually beneficial.

New Drug Act Amendment

Thailand's new amendment to the Drug Act presently awaits approval by the Cabinet for passage by the National Legislative Assembly. Key concerns expressed by the innovative biopharmaceutical industry include articles related to patented medicines that would enable the regulatory authority to deny marketing authorization based on price and a determination of cost-effectiveness.

This proposed legislation disproportionately impacts innovative medicines, threatens patient access to innovative therapies, and undermines the government's goals of making Thailand a regional trading center and a leader in the area of medical innovation. The innovative biopharmaceutical industry recommends that the draft legislation be opened to stakeholder comment through a transparent consultation process before it is passed on to the National Legislative Assembly.

Regulatory Reform

PhRMA's member companies are encouraged by recent developments to reform regulatory processes for innovative drug registrations. The Licensing Facilitation Act, effective as of July 21, 2015, requires the TFDA to publish operating manuals which outline all regulatory processes related to drug and medical registration. Industry is hopeful that this reform will improve TFDA accountability and transparency and, in the process, ensure a more secure business environment for innovative biopharmaceutical companies. PhRMA also encourages the implementation of processes like e-submissions and abridged reviews during TFDA registration applications in order to improve lengthy Thai processing times.

Counterfeit Medicines

PhRMA's member companies are encouraged by the Royal Thai Government's efforts to develop the National IPR Center of Enforcement; however, most of the focus has been on products such as clothing and media, rather than on pharmaceuticals. Enforcement has also been limited to those illicit products sold online. Moving forward, there is also an urgent need to address counterfeits in the pharmaceutical sector and enhance penalties for criminals caught manufacturing, supplying, or selling counterfeit or unsafe medicines. While the Royal Thai Government has acknowledged the need to suppress counterfeits in a Memorandum of Understanding (MoU) for "Cooperation on Prevention and Suppression of Trademark Infringing Pharmaceuticals" signed on September 2010, no action has yet been taken to implement the MoU. There is also an urgent need to take action against non-trademark counterfeit pharmaceuticals.

CANADA

CANADA

PhRMA and its member companies operating in Canada are extremely concerned about Canada's intellectual property (IP) environment, which continues to be characterized by significant uncertainty and instability for U.S. innovative biopharmaceutical companies. Canada's IP regime lags behind that of other developed nations in several significant respects.

Key Issues of Concern:

- **Restrictive patentability criteria:** Contrary to the Canadian Patent Act (the Act), Canada's treaty obligations under the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), the North American Free Trade Agreement (NAFTA), and established international norms, the Canadian judiciary has created a new and heightened standard for patentable utility.
- **Weak patent enforcement:** The Canadian Patented Medicines (Notice of Compliance) Regulations include several key deficiencies that weaken Canada's enforcement of patents, including the nature of patent dispute proceedings, lack of effective right of appeal for patent owners, and limitations and inequitable eligibility requirements on the listing of patents in the Patent Register. Recent jurisprudence under the regulations has also resulted in a heightened level of liability for lost generic manufacturer profits in cases where the innovator has sought an injunction but is ultimately unsuccessful.
- **Lack of patent term restoration:** Canada's IP regime currently provides no form of patent term restoration (PTR). PhRMA member companies believe Canada should support innovation by adopting a PTR system consistent with the U.S. and other developed nations to ameliorate the effects of delays caused by its regulatory processes, which can significantly erode the duration of the IP rights of innovators.
- **Standard for the disclosure of confidential business information:** In November 2014, Canada enacted legislation to update its Food and Drugs Act (Bill C-17). Provisions in that law granted the Health Minister discretion to disclose a company's confidential business information (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 under NAFTA and TRIPS.

For these reasons, PhRMA requests that Canada be placed on the **Priority Watch List** for the 2016 Special 301 Report. Further, we urge USTR to provide an opportunity for an assessment of Canada'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 IP barriers confronted by U.S. businesses in Canada.

Intellectual Property Protection

Restrictive Patentability Criteria

PhRMA members are extremely concerned that recent decisions by the Canadian judiciary have created a new and heightened requirement for patentable utility for pharmaceutical patents that is both inconsistent with common practice in other major countries and unpredictable in practice. This heightened standard has done great damage to the patent rights of innovative U.S. pharmaceutical companies.¹¹⁴ It is also inconsistent with Canada's international trade treaty obligations because it: (i) imposes onerous and unjustified patentability criteria, narrowing the scope of inventions that receive patent protection; and (ii) discriminates against innovative pharmaceutical companies, as this additional requirement has disproportionately impacted pharmaceutical patents. Furthermore, as a result of mixed and conflicting case law from the Canadian court system on this new and heightened utility requirement, it is unclear precisely what standard must be met by innovators in order to address the issue and safeguard their IP. This issue must be addressed given that it undermines the ability of innovative pharmaceutical companies to enforce and defend their existing patents in the court system, and also limits their ability to obtain new patents from the Canadian Intellectual Property Office, which has incorporated this standard into its patent practice manual.

In Canada, innovators are now required to “demonstrate” or “soundly predict” the utility of a pharmaceutical as “promised” at the time of filing the patent application. Such a standard is fundamentally inconsistent with TRIPS and NAFTA, as well as the realities of the R&D timeline for pharmaceuticals. To meet the utility requirement, TRIPS and all developed countries require only that an invention be “useful” or “capable of industrial application.” It is not reasonable or financially feasible to require pharmaceutical firms to

¹¹⁴ See, e.g., *Merck & Co. Inc. v. Apotex Inc.*, 2005 FC 755; *Abbott Labs. v. Canada (Minister of Health)*, 2005 FC 1095; *Abbott Labs. v. Canada (Minister of Health)*, 2005 FC 1332, aff'd 2007 FCA 153; *Aventis Pharma Inc. v. Apotex Inc.*, 2005 FC 1283, aff'd 2006 FCA 64; *Pfizer Canada Inc. v. Apotex Inc.*, 2007 FC 26, aff'd 2007 FCA 195; *Eli Lilly Canada Inc. v. Apotex Inc.*, 2008 FC 142, aff'd 2009 FCA 97; *Shire Biochem Inc. v. Canada (Minister of Health)*, 2008 FC 538; *Glaxosmithkline Inc. v. Pharmascience Inc.*, 2008 FC 593; *Eli Lilly Canada Inc. v. Novopharm Ltd.*, 2009 FC 235; *Sanofi-Aventis Canada Inc. v. Apotex Inc.*, 2009 FC 676, aff'd 2011 FCA 300; *Ratiopharm Inc. v. Pfizer Ltd.*, 2009 FC 711, aff'd 2010 FCA 204; *Lundbeck Canada Inc. v. Ratiopharm Inc.*, 2009 FC 1102; *Sanofi-Aventis Canada Inc. v. Ratiopharm Inc.*, 2010 FC 230; *Pfizer Canada Inc. v. Ratiopharm Inc.*, 2010 FC 612; *AstraZeneca Canada Inc. v. Apotex Inc.*, 2010 FC 714; *Eli Lilly and Co. v. Teva Canada Ltd.*, 2010 FC 915, aff'd 2011 FCA 220; *Apotex Inc. v. Pfizer Canada Inc.*, 2011 FCA 236, rev'g 2010 FC 447; *Eli Lilly Canada Inc. v. Novopharm Ltd.*, 2011 FC 1288, aff'd 2012 FCA 232; *Pfizer Canada Inc. v. Pharmascience Inc.*, 2013 FC 120; *Novartis Pharms. Canada Inc. v. Teva Canada Limited*, 2013 FC 283; *Alcon Canada Inc. v. Cobalt Pharms. Co.*, 2014 FC 149; *Pharmascience Inc. v. AstraZeneca Canada Inc.*, 2014 FCA 133, rev'g 2012 FC 1189; *AstraZeneca Canada Inc. v. Apotex Inc.*, 2014 FC 638, aff'd 2015 FCA 158; *Eli Lilly Canada Inc. v. Mylan Pharms.*, 2015 FC 125; *Servier Canada Inc. v. Apotex Inc.*, 2015 FC 108; *Gilead Sciences v. Idenix Pharms.*, 2015 FC 1156; *Eli Lilly Canada Inc. v. Hospira*, 2016 FC 47.

undertake substantial risks and invest substantial resources in clinical drug development before a patent application is even filed. Canada's "promise utility doctrine" discourages the investment of significant resources to develop new medicines and, in the long run, negatively affects the patients and families who rely upon our sector to innovate new cures and treatments.

In April 2015, the WTO released a Trade Policy Review (TPR) Secretariat Report on Canada which noted: "In particular, in a number of cases over the review period, courts have continued to develop the Canadian legal doctrine that the 'promise of the patent' . . . has to be demonstrated or soundly predicted on the basis of information disclosed in the patent application at the filing date."¹¹⁵ A number of Canada's trading partners, including the United States, raised issues with Canada's utility standards in their submissions to the TPR.

In light of the ongoing unpredictability of the promise utility doctrine case law, PhRMA members urge the U.S. Government to press the Government of Canada to resolve this issue through, for example, clarifying amendments to the Patent Act. The promise doctrine effectively imposes a higher utility standard to the patentability of pharmaceutical inventions than to other inventions. TRIPS requires that there be no discrimination as to the field of technology. Furthermore, this heightened utility standard is fundamentally incompatible with the realities of pharmaceutical development, and is causing significant commercial uncertainty for U.S. pharmaceutical companies operating in Canada.

Weak Patent Enforcement

In 1993, the Patented Medicines (Notice of Compliance) Regulations (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. Despite these challenges, PhRMA acknowledges that, in 2015, the Canadian government helped resolve a significant issue related to inappropriate court decisions that prevented the listing of patents relevant to combination inventions, seriously undermining patent enforcement actions relevant to those inventions. However, serious and systemic deficiencies remain with the PM (NOC) Regulations that need to be addressed. There is ample evidence that the PM (NOC) 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 and NAFTA. For example:

1. Proceedings under the PM (NOC) Regulations

With respect to patents that are listed on the Patent Register, when a generic producer files an Abbreviated New Drug Submission seeking marketing approval on the basis of a comparison to an already approved brand-name product, it must address any

¹¹⁵ See https://www.wto.org/english/tratop_e/tptr_e/s314_e.pdf, at p.104 (last visited Feb. 5, 2016).

such listed patents that are relevant. In doing so, the generic producer may make an allegation that patents are not valid or will not be infringed. It must notify the patent owner of any such allegation. The patent owner then has a right to initiate judicial procedures to challenge any such allegation. If procedures are triggered, approval of the generic drug is stayed for a maximum period of up to 24 months pending judicial review.

In the United States, such a challenge to an allegation of non-infringement or patent invalidity proceeds as a full action for infringement on the merits. However, under the Canadian PM (NOC) Regulations, a challenge proceeds by way of summary judicial review aimed only at determining if the allegation is “justified.” As a result of the summary nature of the proceeding, there is no discovery and there may be constraints on obtaining and introducing evidence and cross-examination. This, in combination with various other limitations and shortcomings discussed below, can make it difficult for the patent owner to prove its case.

2. No Effective Right of Appeal in PM (NOC) Proceedings

The restrictive nature of the PM (NOC) regime means that a patent owner, unlike a generic drug producer, does not have an effective right of appeal. This is because the PM (NOC) Regulations provide that a generic product may be approved for marketing (through the issuance of a Notice of Compliance, or “NOC”) following a decision by the Court in the first instance in favor of the generic producer; and because the regulations only allow for the prohibition against the issuance of a NOC and not its revocation, once the NOC issues, an appeal filed by the patent owner becomes moot.¹¹⁶ The patent owner is then left with no alternative but to start a new proceeding outside of the framework of the PM (NOC) Regulations, *i.e.*, commencing an action for patent infringement once the generic product enters the market, essentially having to restart a case it had already spent up to two years litigating under the Regulations. Moreover, irreparable harm often results by the time the patent owner obtains a favorable decision in such a separate infringement case.

In contrast, a right of appeal is available to the generic under the PM (NOC) Regulations if the patent owner prevails in the first instance. PhRMA member companies ask that the U.S. Government strongly encourage Canadian authorities to rectify this fundamental, discriminatory, and unjustifiable imbalance in legal rights and due process in a way that will ensure there is a meaningful and effective right of appeal for patent owners while maintaining other patent enforcement tools.

While a patent owner may separately choose to proceed later by way of a patent infringement action, and may apply for an interlocutory injunction to maintain its patent rights and to prevent the market entry of the generic product or to seek its withdrawal from the market, these interlocutory injunction motions rarely succeed in Canada even if there is compelling evidence of infringement.

¹¹⁶ *Eli Lilly Canada Inc. v. Novopharm Ltd.*, 2007 FCA 359.

Additionally, it often takes at least two years before an action for patent infringement is tried, and far longer to obtain damages once a generic has been successfully sued for infringement.¹¹⁷ By then, the innovative company's market share can be almost completely eroded by the marketing of the generic product. Provincial and private payer policies mandating the substitution of generics for brand-name products guarantee rapid market loss.

These various deficiencies frequently result in violations of the patent rights of PhRMA member companies operating in Canada with attendant, and often irreparable, economic losses.

PhRMA understands that the unratified final text of the Comprehensive Economic Trade Agreement (CETA)¹¹⁸ negotiated between Canada and the European Union contains a commitment to provide all litigants equivalent and effective rights of appeal, but the Canadian government has yet to provide any clarity with respect to how it will implement this commitment. PhRMA therefore will be closely monitoring the implementation of this commitment to ensure that the Government of Canada rectifies these issues through appropriate legislative or regulatory changes that will ensure that PhRMA members have meaningful and effective patent protection under either the PM (NOC) Regulations or alternative procedures and remedies.

3. 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.

PhRMA members are pleased that the Government of Canada recently amended the PM (NOC) Regulations to address recent jurisprudence which held that an innovator cannot list a patent claiming a single medicinal ingredient of a Fixed Dose Combination (FDC) product on the Patent Register.¹¹⁹ These judicial interpretations were contrary to Health Canada's long standing policy, as set out in the Health Canada Guidance

¹¹⁷ For example, on July 16, 2013, the Federal Court released a decision granting the largest award of damages for patent infringement in Canadian history. *Merck & Co., Inc. v. Apotex Inc.* (2013 FC 751) ("Merck"). While the award quantum was widely reported, less reported was the fact that the case dated back to 1993 when Apotex first served a Notice of Allegation in which it undertook not to infringe Merck's patent if it obtained a Notice of Compliance (NOC). This judgment has also been appealed, further delaying any eventual damages award.

¹¹⁸ See CETA, Final Text as of Sept. 26, 2014, as published by the European Commission, available at http://trade.ec.europa.eu/doclib/docs/2014/september/tradoc_152806.pdf (last visited Feb. 5, 2016).

¹¹⁹ The three decisions from which this issue arose are: *Gilead Sciences Inc. v. Canada (Minister of Health)*, 2012 FCA 254; *ViiV Healthcare ULC v. Teva Canada Ltd. et al.*, 2014 FC 328; and *ViiV Healthcare ULC v. Apotex Inc. et al.*, 2104 FC 893. ViiV has appealed these decisions.

Document, which explicitly allows for such a practice.¹²⁰ These amendments restore certainty with respect to the listing criteria for patents on FDC products, which otherwise would not have been eligible to obtain the benefits of the PM (NOC) Regulations.¹²¹

4. Heightened 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 lost profits for the period of time they could have been selling the product, but for the innovator's action.

PhRMA members are concerned that Canadian courts have taken an approach to Section 8 damages that allows for excessive damages that are punitive in nature. The SCC 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.¹²² Since this was the first Section 8 case to be heard by the SCC, and given that it is unlikely that another will be granted leave for some time, the dismissal of the appeal provides parties to Section 8 damages litigation with no guidance with respect to how these damages are to be calculated in future lower court decisions, creating significant uncertainty for innovators.

In light of the failure of the SCC to provide guidance and clarity with respect to the calculation of Section 8 damages, PhRMA members request that the U.S. Government urge Canada to implement amendments to the PM (NOC) Regulations to address this issue.

Lack of Patent Term Restoration

Patent Term Restoration (PTR) provides additional patent life 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. Canada's IP regime includes no form of PTR system.

¹²⁰ See http://www.hc-sc.gc.ca/dhp-mps/alt_formats/pdf/prodpharma/applic-demande/guide-ld/patmedbrev/pmreg3_mbreg3-eng.pdf (last visited Feb. 5, 2016).

¹²¹ See <http://canadagazette.gc.ca/rp-pr/p2/2015/2015-07-01/html/sor-dors169-eng.php> (last visited Feb. 5, 2016).

¹²² *Sanofi-Aventis, et al. v. Apotex Inc., et al.*, SCC. 35886.

PhRMA member companies believe Canada should support innovation by adopting PTR to ameliorate the effects of delays caused by its regulatory processes.

PhRMA members urge the U.S. Government to engage with the Government of Canada on this issue, and encourage Canada to join the ranks of other industrialized countries who are champions of IP protection internationally and to provide for PTR measures in Canada. The unratified final CETA text indicates that Canada has agreed to implement a “*sui generis* protection” period of between 2 to 5 years (noting, however, that the Government of Canada has separately stated that it only plans to implement the minimum level of 2 years required by CETA).¹²³ Steps taken by Canada to implement meaningful protection that is equivalent in duration and effectiveness to the PTR regimes in the U.S. and in other developed nations (e.g., up to 5 years) would constitute an important positive precedent. PhRMA is also concerned that the *sui generis* protection will not grant the full patent protections that PTR is intended to provide, i.e., may be implemented at the expense of other patent rights for innovators. Any implementation of PTR that does not confer full patent rights, e.g., that would provide an exception for “manufacturing for export” or other infringing activities, would not be consistent with the fundamental purpose of restoring patent term lost due to marketing approval delays and should be avoided.

Standard for the Disclosure of Confidential Business Information

PhRMA members are concerned with provisions of the recently enacted Bill C-17, An Act to Amend the Food and Drugs Act,¹²⁴ which could allow for an unprecedented disclosure of CBI contained in clinical trial and other data submitted by pharmaceutical companies to Health Canada 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, are inconsistent with Canada’s treaty obligations under NAFTA and TRIPS, and are also inconsistent with the standards and practices of other national health regulators, including the FDA.

Both NAFTA 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

¹²³ See <http://international.gc.ca/trade-agreements-accords-commerciaux/agr-acc/ceta-aecg/understanding-comprendre/technical-technique.aspx?lang=eng#p5> (last visited Feb. 5, 2016).

¹²⁴ See <http://www.parl.gc.ca/HousePublications/Publication.aspx?Language=E&Mode=1&DocId=6676418&File=4> (last visited Feb. 5, 2016).

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. NAFTA 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 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.¹²⁵ 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 Bill-C17. However, the document is a non-binding guidance as opposed to binding law or regulations, and as such Health Canada has the discretion not to follow its requirements, and it is also potentially vulnerable to future legal challenges.

PhRMA members therefore urge the U.S. Government to press the Government of Canada to ensure that the Bill C-17 implementing regulations are consistent with Canada’s international treaty obligations.

¹²⁵ 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-droguessedangereuses-amendments-modifications-eng.php> (last visited Feb. 5, 2016).

EUROPE

RUSSIA

PhRMA and its member companies operating in Russia are concerned that a number of the policies being implemented or considered by the Russian Government do not adequately protect intellectual property or reward the value of innovation and the benefits it brings to Russian patients. PhRMA's members also face numerous market access barriers in Russia, especially due to import substitution policies.

Key Issues of Concern:

- **Weak patent enforcement:** Currently, 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. The Russian courts are also reluctant to issue court injunctions in patent infringement cases related to pharmaceuticals. 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.
- **Compulsory licensing and restrictive patentability criteria:** Notwithstanding the Russian Government's goal to stimulate the development of an innovative pharmaceutical industry in Russia (as described in the *Pharma 2020* proposal¹²⁶) and existing localization policies, Russia is considering compulsory licensing mechanisms. The Federal Anti-monopoly Service (FAS) has also expressed its intent to adopt restrictive patentability criteria for pharmaceuticals.
- **Regulatory data protection failures:** On August 22, 2012, Russia officially acceded to the World Trade Organization (WTO). Russia's commitments on regulatory data protection (RDP) embedded in the Law on the Circulation of Medicines are an integral part of Russia's WTO obligations and came into force on the date of Russia's WTO accession. However, revisions to these protections were included in amendments to the Law on the Circulation of Medicines¹²⁷ (the relevant amendments enter into force in 2016). PhRMA and its member companies are concerned that some of the provisions of the Law on the Circulation of Medicines weaken RDP protection for innovative medicines in Russia. Russian court rulings in 2015 not upholding RDP protections also demonstrate a worrying trend.
- **Discriminatory public procurement:** Despite committing to work toward accession to the WTO Agreement on Government Procurement (GPA), Russia continues discriminatory practices in its government procurement system by adopting a proposal that bans foreign participation in tenders, if two or more companies form the Eurasian Economic Union (EAEU), which includes, Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Russia, bid on the tender. In addition,

¹²⁶ Strategy for Developing the Russian Pharmaceutical Industry until 2020, approved by the Order of the Ministry of Industry and Trade (MIT), dated Oct. 23, 2009, No. 956.

¹²⁷ Federal Law No. 429-FZ, dated Dec. 2014.

Russia has maintained its policy of providing locally made pharmaceuticals a 15 percent price preference in government procurement tenders.

- **Emerging EAEU regulatory framework:** The common EAEU pharmaceutical market will enter into force by the end of February 2016 and measures aimed at improving and harmonizing pharmaceutical regulations across the EAEU are under development. Draft regulations (including on registration of medicines, labeling etc.) are expected to be in line with international best practices (e.g. ICH, WHO, EU/US), but because there has been little visibility into what will be included in the final, adopted regulations, PhRMA member companies are concerned that policies discriminating against foreign companies could be adopted.

For these reasons, PhRMA requests that the Russian Federation remain on the **Priority Watch List** for the 2016 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 Protections

Weak Patent Enforcement

A mechanism is needed in Russia to ensure that patent issues can be resolved before infringing pharmaceutical products are launched on the market. Currently, there is no effective mechanism for otherwise enforcing an innovator's patent rights vis-à-vis regulatory approval of generic substitutes or biosimilars. Follow-on drug manufacturers can apply for and receive marketing approval for a generic product despite the fact that a patent for the original drug is still in force.

Further, pharmaceutical innovators face significant legal challenges that limit their ability to effectively protect their innovative products against infringement. For example, the Arbitration Procedural does not, in practice, grant preliminary injunctions to patentees in pharmaceutical patent infringement cases, thereby facilitating premature market entry by patent infringing follow-on products. Unreasonable court delays also deprive patent holders of relief in a timely manner even if injunctions were practicably available. As a result, PhRMA member companies have not been able to resolve patent disputes prior to marketing of infringing follow-on products, leading to injury that is rarely compensable.

To avoid the unnecessary costs and time of litigating damages claims in patent litigation, and to increase market predictability, Russia should enable patent holder companies to file patent infringement suits before marketing authorization is granted for follow-on products and afford sufficient time for such disputes to be resolved before marketing occurs. This might include a form of automatic postponement of drug registration approval pending resolution of the patent dispute, or for a set period of time.

The patent enforcement procedures become extremely important in connection with the creation of the common EAEU market for medicines. PhRMA and its member companies are concerned that the patent protection issues are not specifically resolved in the emerging EAEU regulatory framework on medicines.

Compulsory Licensing

PhRMA and its member companies are concerned about draft amendments to the Russian Civil Code and the Law On the Circulation of Medicines that would enable the government to issue compulsory licenses (CLs) for innovative medicines. PhRMA and its members are particularly concerned that these discussions have focused on cost as one factor to be considered in granting CLs, and that CLs could be issued under the guise of antitrust enforcement for which adequate mechanisms already exist.

Restrictive Patentability Criteria

In 2015 the FAS issued a roadmap on the “Development of Competition and Improvement of the Antimonopoly Policy,” which, *inter alia*, proposes amendments to the patentability criteria for any new property of a product or new application of a known active ingredient of a medicinal product (the relevant amendments are to be finalized in February 2016). FAS has begun to collect information “in relation to the patents which may be unreasonably granted for small modifications of already existing medicines (additional or new indications, therapeutic methods, combinations of active substances, pharmaceutical forms, manufacturing methods etc.)”, which in FAS’ opinion negatively influences competition and government prices. These amendments could inappropriately restrict the availability of patents for innovative medicines in Russia, undermine the incentives to innovate and contradict Russia’s WTO commitments.

Regulatory Data Protection Failures

As part of its accession to the WTO in August 2012, Russia committed to provide a six-year period of RDP for undisclosed information 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):

The representative of the Russian Federation confirmed that the Russian Federation had enacted legislation and would adopt regulations on the protection of undisclosed information and test data, in compliance with Article 39.3 of the WTO TRIPS Agreement, providing that undisclosed information submitted to obtain marketing approval, *i.e.*, registration of pharmaceutical products, would provide for a period of at least six years of protection against unfair commercial use starting from the date of grant of marketing approval in the Russian Federation. During this period of protection against unfair commercial use, no person or entity (public or private), other than the person or entity who submitted such undisclosed data, could without the explicit consent of the person or entity who submitted such undisclosed data rely, directly or indirectly, on such data in

support of an application for product approval/registration. Notice of subsequent applications for registration would be provided in accord with established procedures. During the six year period, any subsequent application for marketing approval or registration would not be granted, unless the subsequent applicant submitted his own data (or data used with the authorization of the right-holder) meeting the same requirements as the first applicant, and products registered without submission of such data would be removed from the market until requirements were met. Further, he confirmed that the Russian Federation would protect such data against any disclosure, except where necessary to protect the public or unless steps were taken to ensure that the data were protected against unfair commercial use.¹²⁸

Russia's commitment to six years of RDP was initially embedded in Article 18.6 of the Law on the Circulation of Medicines, as passed in 2010:

The results of the nonclinical trials of medicinal products and clinical trials of medicinal products submitted by the applicant for state registration of the medicinal products shall not be obtained, disclosed, used for commercial purposes and for purposes of state registration without applicant's permission within six years from the date of the state registration of the medicinal product.

Violation of the prohibition specified by this Clause shall entail the responsibility in accordance with the legislation of the Russian Federation.

The circulation of medicines in the Russian Federation registered with violation of this Clause shall be prohibited.¹²⁹

The enactment of data protection legislation in Russia was a positive step towards fulfilling Russia's obligations according to TRIPS Article 39.3 and to creating a supportive environment for pharmaceutical innovation in Russia.

PhRMA and its member companies are concerned, however, that the Law on the Circulation of Medicines, as amended, and other applicable regulations contain elements that are contrary to, or do not effectively implement, RDP consistent with Russia's WTO obligations. In particular, the amendments to the Law on the Circulation of Medicines, which are due to enter into force later in 2016,¹³⁰ allow the submission of a registration application for follow-on medicines four years following the granting of marketing authorization for a reference small molecule drug and three years after marketing authorization of a reference biologic medicine. PhRMA members are

¹²⁸ 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.

¹²⁹ Federal Law No. 61-FZ, dated Apr. 12, 2010, "On the Circulation of Medicines".

¹³⁰ Federal Law No. 429-FZ, dated Dec. 2014.

concerned that these new provisions will further weaken RDP in Russia by creating the potential for marketing authorization of infringing follow-on products during the RDP term.¹³¹

It is still not clear how all these mechanisms will be implemented in practice, specifically within the common EAEU market, where RDP issues are not resolved in the existing draft regulations. Moreover, the industry has significant concerns related to recent court decisions holding that Article 18.6 of the Law on the Circulation of Medicines does not prevent a follow-on manufacturer from indirectly relying on the innovator's approval, *i.e.*, relying on the data reported in scientific journals following approval of the innovative product, in seeking marketing approval for their follow-on product during the RDP term.¹³²

The U.S. Government should seek greater clarity on the actual implementation of the above provisions. The lack of clarity regarding data protection is creating judicial uncertainty and could result in inconsistent legal interpretation by differing courts.

Market Access Barriers

Discriminatory Practices in Public Procurement

Russia committed to working toward accession to the WTO Agreement on Government Procurement (GPA) as part of its accession to the WTO in 2012.¹³³ Russia became an observer to the GPA on May 29, 2013, as a first step toward full accession to that agreement. Notwithstanding these commitments, Russia continues discriminatory practices in its government procurement system.

On November 30, 2015 the Russian Government adopted Resolution No. 1289 "On Restrictions and Conditions of Access of Foreign Essential Medicines to State and Municipal Tenders" (the Resolution No. 1289), which codifies the so-called "three's a crowd approach" in relation to medicines included on the Essential Drugs List (EDL). According to Resolution No. 1289, if two or more EAEU pharmaceutical manufacturers bid on a tender for an EDL product, any foreign bid for that same tender must be rejected. Medicines packaged or repackaged in Russia through December 31, 2016, will

¹³¹ At the same time, the Law on the Circulation of Medicines states that the follow-on drug applicant must provide to the Ministry of Health (MOH) the consent of the reference drug manufacturer within the application for registration of a follow-on product and that the Federal Register of Medicines must include information noting the date when the follow-on product may enter the market. However, it is still not clear if the implementation of these rules will be effective.

¹³² See, e.g., Case No. A40-188378/2014, in which the cassation court affirmed in December 2015 the court of first instance, holding that the "prohibition, established by article 18.6 of the Law on the Circulation of Medicines does not relate to the information published in the specialized sources. The usage of such information [published in the open sources] should be considered by the lawmaker as lawful."

¹³³ 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. 1143.

not be subject to these restrictions, but after that date full-scale manufacturing will be required to qualify as a local EAEU manufacturer.

Medicines not subject to the new resolution (*i.e.*, for which there are not two or more local bids), will remain subject to the tender preferences established by the Ministry of Economic Development (MoED) (*e.g.*, the 15 percent pricing preferences for local products).¹³⁴ Combined, these measures clearly discriminate against foreign manufacturers.

Furthermore, in November 2013, the Russian Government approved a decree that should allow public procurement of medicines according to their trade name in cases when drug substitution is impossible. The list of branded drugs to be procured should be developed by a special governmental sub-commission, per an application process made public on August 13, 2014. There is no requirement for additional clinical trials to prove “substitutability” of the subject drug and references to international determinations (in particular, by the European Medicines Agency and U.S. Food and Drug Administration) are allowed. Procedures for inclusion lack transparency and leave room for arbitrary decisions.

Eurasian Economic Union

The Eurasian Economic Union (EAEU) comprised of Russia, Belarus Kazakhstan, Armenia, and Kyrgyzstan entered into force on January 1, 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 former Soviet countries' economies, establishing free trade, unbarred financial interaction and unhindered labor migration. Although the EAEU is just coming into effect, the first sector which it plans to integrate is the pharmaceutical sector through creation of a single pharmaceutical market. Although set to be implemented by the end of February 2016, the single pharmaceutical market is not yet operational. It will be important to monitor the IP, market access, and regulatory environment related to the EAEU given ongoing concerns in Russia.

Foreign Direct Investment Barriers

In October 2015, President Putin issued a number of rules related to insulin production in Russia.¹³⁵ Before February 1, 2016, the MOH and MIT must develop an opinion and policy proposals in relation to the possible centralization of state procurement of insulins in Russia from a single supplier. The leading contender is expected to be the National Immunobiological Company (a Rostech subsidiary) that is seeking to build a full-cycle insulin plant in Pushino-city. Earlier in 2015, the National Immunobiological Company was appointed as a sole supplier of certain vaccines, and it

¹³⁴ The list of countries for which “local” 15 percent preferences shall apply is set forth in the MoED Order No. 155 dated Mar. 25, 2014, “On the Conditions of Access of Foreign Products to State Tenders”.

¹³⁵ See <http://www.kremlin.ru/acts/assignments/orders/50503> (last visited Feb. 4, 2016).

is reported that it planning to expand its abilities to work as a sole supplier of other medicines (TB, HIV, *etc.*) on the Russia market.

A number of other measures aimed at supporting local manufacturers are under development and implementation in Russia. For instance, the Expert Council of the Industry Development Fund of the MIT approved a RUB 1.55 billion loan for four import-substitution projects in the biologic and pharmaceutical industry. Moreover, the Russian Government also proposed new types of subsidies (for compensation of costs) for full cycle local manufacturers of pharmaceutical substances.

These measures may discriminate against U.S. firms in violation of Russia's WTO commitments, and limit patient access to certain medicines in Russia.

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. Although industry, as a general matter, supports accelerated pathways for orphan drugs, the new procedure lacks sufficient detail to fully evaluate its effectiveness. PhRMA's members are hopeful that these issues will be resolved through the proposed regulations under the EAEU regulatory framework, the current drafts of which are consistent with international best practices.

Biologic and Biosimilar products in Russia

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 framework amendments (including assessment guidelines for biosimilar drugs, determining the interchangeability of biologic drugs, *etc.*). PhRMA's members are hopeful that these issues will also be resolved through the proposed regulations under the EAEU regulatory framework, the current drafts of which are consistent with international best practices.

Counterfeit Medicines

The Russian Parliament adopted new legislation aimed at the criminalization of (1) counterfeiting and (2) distribution of counterfeited and falsified medicines, falsified biologically active supplements, unregistered medicines, and medical devices. The law became effective in January 2015, and reflects the serious public health concerns associated with the distribution of fake and potentially dangerous medicines to patients. PhRMA's member companies are encouraged by this legislation but close monitoring will be necessary to ensure enforcement.

TURKEY

PhRMA and its member companies face significant market access barriers in Turkey due to the deficiencies in Turkey's intellectual property (IP) framework, slow and unpredictable product registration, reimbursement, and government pricing systems. During the last decade, Turkey has undertaken reforms to modernize its economy and expand its health care system in many positive ways for Turkish patients. A general lack of transparency and inconsistency in decision-making, however, has contributed to unclear 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 that exists between the Turkish Government and the innovative pharmaceutical industry in Turkey, still more attention needs to be paid to the link between the short-term impact of Turkish government policies and research-based pharmaceutical industries' research and development process, including the potential of PhRMA member companies to invest in Turkey.

Key Issues of Concern:

- **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. Turkey does not provide an effective mechanism for resolving patent disputes before the marketing of follow-on 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. Finally, the combination of an RDP term that starts with first marketing authorization in the European Union and regulatory approvals delays results in a severe restriction on the actual period of RDP provided. Consistent with Turkey's international obligations, the RDP term should begin when a product receives marketing authorization in Turkey. In addition, Turkey does not provide RDP for biologic-based medicines.
- **Localization policies:** Provisions in Article 46 of the 64th Government Immediate Action Plan (released on December 10, 2015), provide preferential reimbursement arrangements for healthcare products produced domestically and the delisting of imported products from the reimbursement list. PhRMA and our members believe that these measures, if implemented, would be inconsistent with Turkey's national treatment obligations under the World Trade Organization (WTO) Agreements. These measures would also contradict Turkey's goal of attracting investment from the world's leading pharmaceutical companies. The Turkish Government has also suggested it will provide more efficient regulatory approvals for products manufactured locally and, on January 26, 2016, the Minister of Health announced a program to provide a seven-year contract for a foreign firm that agrees to establish a Hepatitis A vaccine manufacturing facility in Turkey.

- **Regulatory approval delays:** While PhRMA and its member companies appreciate the Turkish Drug and Medical Device Agency's efforts to improve the period required to complete the regulatory approval procedures for medicinal products, this period exceeds on average 500 days¹³⁶, significantly more than the 210 days targeted in Turkish regulations. Regulatory approval delays have a negative impact on access to medicines in Turkey.
- **Local inspection requirements:** PhRMA and its member companies appreciate the Turkish Drug and Medical Device Agency's efforts to improve the regulatory approval procedures of highly innovative and/or life-saving products with no or limited therapeutic alternatives in Turkey. Specifically, prioritizing the Good Manufacturing Practices (GMP) audit procedures and allowing a parallel marketing application process for those products has decreased the delays in approving those 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 the absence of efficient procedures for conducting GMP inspections. These GMP inspection delays are adding to registration delays, delaying patient access to innovative medicines, and, thus, negating the benefits of the patent and data protection periods for many products.
- **Other market access barriers:** The Turkish Government continues to impose unrealistic pharmaceutical budgets that disregard parameters such as economic growth, inflation and exchange rate fluctuations, and result in forced government price discounts that hinder access to innovative medicines. Turkey's Research based Pharmaceutical Manufacturers' Association (AIFD) estimates that the financial damage to the industry from the fixed Turkish Lira (TL) to Euro conversion issue alone was 15 billion TL (\$5 billion) between July 2011 and April 2015.

For these reasons, PhRMA requests that Turkey be placed on the **Priority Watch List** for the 2016 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 Protections

Weak Patent Enforcement

Turkey does not provide an effective mechanism for resolving patent disputes. Although the Decree Law concerning Protection of Patent Rights ("Patent Decree") includes protections for patent rights holders, in practice the IP Courts' interpretation is quite narrow, with most court decisions being determined against the patent holder. And, since most courts in Turkey lack the technical expertise to hear patent issues,

¹³⁶ Based on AIFD Survey 2015.

almost all of the patent infringement proceedings are referred to expert panels, whose conclusions are almost always followed. Considering that the expert examination system has serious deficiencies – both in terms of procedural and substantive expertise – few patent related actions receive appropriate judicial review in Turkey.

In 2013, the Turkish Government attempted to resolve some IP concerns by reforming the Patent Decree Law (draft patent law 1/756). Following strong concerns expressed by the pharmaceutical and other industries, draft Law 1/756 was dismissed. However, it is expected that a new version of the draft law will be issued in early 2016. It will be important that the draft law aligns closely with Turkey's commitments under the WTO Agreements and the European Patent Convention. PhRMA and its member companies will continue to monitor the draft Bill as it moves through Parliament.

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 registered in the EU, limited by the patent protection period of the product. RDP is an independent and separate form of IP protection that should not be limited to the period of patent protection.

A significant concern for the innovative industry is that the period of RDP currently begins on the first date of marketing authorization in any country of the European Customs Union. Considering the extended regulatory approval times and delays stemming from the GMP certification approval period, current estimates are that it could take 2-3 years (approximately 500 days for registration, and 235 days for reimbursement approval) to register and reimburse a new medicine in Turkey. Under these adverse circumstances, new products will receive, in practice, no more than one to two years of RDP, undermining incentives needed for innovators to undertake risky and expensive research and testing.

Another concern of the innovative pharmaceutical industry is that the legislation governing RDP has been changed by the Regulation to Amend the Registration Regulation of Medicinal Products for Human Use.¹³⁷ The change that has been introduced is incompatible with EU standards in that it eliminates 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, as well as new indications, from new combinations of separate molecules.

In addition, Turkey does not provide RDP for biologic medicines. Made 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

¹³⁷ Official Gazette No. 27208 (Apr. 22, 2009).

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 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.

Market Access Barriers

Localization Policies

Provisions in Article 46 of the 64th Government Immediate Action Plan (released on December 10, 2015), provide preferential reimbursement arrangements for healthcare products produced domestically and the delisting of imported products from the reimbursement list. PhRMA and our members believe that these measures, if implemented, would be inconsistent with the WTO's national treatment requirements. These measures would also contradict Turkey's goal of attracting investment from the world's leading pharmaceutical companies. The Turkish Government has also suggested it will provide more efficient regulatory approvals for products manufactured locally and, on January 26, 2016, the Minister of Health announced a program to provide a seven-year contract for a foreign firm that agrees to establish a Hepatitis A vaccine manufacturing facility in Turkey.

Pharmaceutical Product Registration

Marketing of new drugs in Turkey is governed by the regulatory procedures prescribed by the Pharmaceuticals and Medical Devices Agency of Turkey and the Ministry of Health (MOH) for the approval of medicinal products. The data and documents required to register medicinal products are listed in the MOH's Registration Regulation of Medicinal Products for Human Use.¹³⁸ Although the legislation requires the Turkish MOH to assess and authorize the registration of medicinal products within 255 days of the dossier being submitted and efforts have been taken to improve the regulatory process, surveys by the AIFD indicate that the average regulatory approval period is still 438 days.

Local Inspection Requirements

The MOH's revisions to the Registration Regulation have compounded these delays.¹³⁹ Effective March 1, 2010, a Good Manufacturing Practices (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 MOH following an on-site inspection by Ministry

¹³⁸ Official Gazette No. 25705 (Jan. 19, 2005) (Registration Regulation).

¹³⁹ 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).

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. Moreover, although Turkey implemented two measures in 2015 to alleviate the problem for some applicants, these measures are exacerbating the delays for other applicants:

- 1) The period required to complete the regulatory approval procedures of highly innovative and/or life-saving products with no or limited therapeutic alternatives in the country is improved by prioritizing their GMP audit procedures and allowing a marketing application process that runs parallel to the GMP determination (rather than occurring only after the GMP process is complete). PhRMA and our members remain concerned, however, that the process for determining the innovativeness of the products lacks transparency and is often inconsistent. In addition, the focus of regulatory resources on those products which have been determined, through non-transparent means, to be highly innovative, has reduced the speed at which other products are approved.
- 2) PhRMA and its member companies appreciate the Turkish Government's decision to delay the expiration of certain GMP inspection certificates to June 30, 2016. However, since the majority of transitional GMP certifications will still expire by January 2016, this measure is not adequate as the MOH staff resources are still too minimal to handle the vast number of manufacturing sites that will require re-certification. Further delays and prolonged registration procedures are likely to occur.

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. There are, however, two significant hurdles to this mutual recognition arrangement: 1) Turkey is not yet a member of the PIC/S (Pharmaceutical Inspection Convention and Co-operation Scheme) that provides guidance on international GMP standards; and 2) Turkey will need to negotiate mutual recognition agreements with each participating country. In the meantime, registration of new medicinal products will be substantially delayed, which, in turn, hinders patients' access to innovative medicines. To avoid imposing this unnecessary non-tariff barrier to trade, Turkey, as a temporary measure, should revert to recognizing GMP certificates accepted by institutions like the FDA, EMA, or other PIC/S members for medicinal products. Such measures should remain in force until MOH either has the staff and resources necessary to conduct GMP inspections in a timely manner, or Turkey has entered into mutual recognition agreements with the United States and other key trading partners, a prospect that PhRMA recognizes may not occur in the short-term.

Non-Transparent and Delayed Reimbursement

In Turkey, pharmaceuticals' pricing is regulated by the MOH and the Pharmaceuticals and Medical Devices Agency of Turkey. The reimbursement system is based on a positive list and reimbursement decisions are the responsibility of the inter-ministerial Reimbursement Commission, led by the Social Security Institution (SSI). Reimbursement decision criteria are not clearly defined. The process is non-transparent and maintains lengthy timelines as a result of frequent delays in decision-making and erratic meeting schedules. On average, according to the AIFD survey, it takes 235 days for a listing decision on pharmaceutical products that hold marketing authorization.

In December 2009, the Turkish Government made a number of significant revisions to this pricing system, including for the following products:

- *Original products without generics:* In December 2009, Turkey imposed an additional 12 percent discount over the existing 11 percent discount. In December 2010 and November 2011, further discounts of 9.5 and 8.5 percent, respectively, increased the total social security discount for innovative products to 41 percent. Although the latter discounts were imposed ostensibly to meet short-term budget overruns in 2010-2011, those cuts were retained in Turkey's pharmaceutical budget for 2013-2015.
- *Original products with generics:* Turkey reduced prices for originals and generic products from 66 percent to 60 percent of the reference price (previously original products were at 100 percent and their generics were at 80 percent of the reference price). However, if the reference price decreases at some point in the future, no further price reductions are imposed until the reference price is equal to or below 60 percent of the original reference price. No similar relief is provided to original products without generics; if the reference price decreases at some point in the future, the SSI discounts (41 percent), as noted above, are applied on top of the reference price decrease. The pricing and reimbursement system should, at a minimum, be revised to address this inequity. For original and generic products in this category, additional discounts of 9.5 and 7.5 percent were also imposed as of December 2010 and November 2011 with a total SSI discount of up to 28 percent for this category of products.
- *Fixed Exchange Rate for Pharmaceuticals:* In April 2009, the GOT fixed the Euro to TL exchange rate, for pharmaceutical pricing purposes only, to 1 Euro to 1.9595 Turkish Liras. Following two successful lawsuits by AIFD, the Price Assessment Commission (PAC) convened on May 18, 2015, to revise the rate, but made only a nominal adjustment (changing the rate from 1.9595 TL to the Euro to 2.0 TL to the Euro). This minimal adjustment flouted the Court's finding that Turkish law requires the PAC to adjust the fixed exchange rate to match the actual exchange rate. AIFD and the IEIS officially objected to the 2.0 TL rate on June 11, 2015. On July 9, 2015, the Government of Turkey published a new Pharmaceutical Pricing Decree and annulled the former decree, which had

included the fixed exchange rate. Under the new decree, the Euro-to-TL exchange rate for pharmaceuticals will be 70 percent of the average exchange rate during the previous year. Exceptions to the new pricing regime, at the discretion of the PAC, can be granted for locally manufactured products that were not previously available in Turkey, products subject to alternative reimbursement models and certain special product groups (such as orphan drugs and biosimilars). Pursuant to the new Pricing Decree, on January 11, 2016 (with effect 45 days later), the Turkish Drug Agency set the exchange rate at 2.1166 TRY/EUR. Based on data from IMS, AIFD estimates the financial damage to the industry from the low Euro to TL conversion rate to be 15 billion TL, for the period between July 2011 and April 2015.

Orphan Drug Guidelines

In August 2015, the Ministry of Science, Industry and Technology published an in-depth analysis of the impact of rare diseases on Turkey's population within its "Pharmaceutical Sector Strategy and Action Plan of 2015". This study called for the creation of a national orphan drug policy, which is due to be fully implemented by January 1, 2019. Industry looks forward to working with key stakeholders, including the MOH, SSI, the Ministry of Science, Industry and Technology, Ministry of Economy, Ministry of Development, Ministry of Finance, Treasury and other civil society organizations, to establish a market access pathway and appropriate incentives to facilitate the development and commercialization of medicines to treat rare diseases. As part of this process, it will be critical for Turkey to define orphan drugs based on international best practices, including EU prevalence standards, and thereby better ensure that Turkish citizens have access to the medicines they need and for Turkey to emerge as a globally-competitive economy in medical innovation.

LATIN AMERICA

ARGENTINA

PhRMA and its member companies operating in Argentina are concerned about significant intellectual property (IP) and market access issues, including foreign exchange restrictions. New regulations have been introduced which clearly discriminate against foreign products. Patentability restrictions, the patent application backlog, and the lack of regulatory data protection (RDP) remain in place.

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 by the Argentina Patent Office (INPI) established guidelines that significantly limit the type of pharmaceutical inventions that can be patented. These guidelines appear 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 permits Argentine officials to rely on data submitted by originators to approve requests by competitors to market similar products.
- **Foreign exchange restrictions:** Despite the new government partially lifting quotas imposed by the former administration on the purchase of foreign currency (U.S. dollars), companies continue to have inadequate foreign currency to pay their suppliers and repatriate funds. Specifically, innovative pharmaceutical companies estimate a combined foreign currency shortfall of approximately US\$1.5 billion, jeopardizing their business operations and supply chains.
- **Discriminatory Reimbursement Policies:** On October 1, 2015, the Ministry of Health and the Secretary of Commerce issued a Joint Resolution establishing a "preferential" reimbursement system for national generics and biosimilar products, to the potential detriment of manufacturers producing medicines outside Argentina.

For these reasons, PhRMA requests that Argentina remain on the **Priority Watch List** for the 2016 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 (Nº 118/2012, 546/2012 and 107/2012), issued jointly by the Ministries of Health and Industry and the Instituto Nacional de la Propiedad Industrial (INPI – Argentina Patent Office) 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, selection patents and Markush-type claims.

The imposition of additional patentability criteria for pharmaceutical patents beyond those of demonstrating novelty, inventive step and industrial application is inconsistent with Articles 1 and 27.1 of TRIPS, as well as Argentina’s obligations under its bilateral investment treaty with the United States.

On June 6, 2012, Argentina’s innovative biopharmaceutical industry trade association, La Cámara Argentina de Especialidades Medicinales (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 pharmaceutical patent applications. That complaint is currently pending.

On October 5, 2015, INPI issued a new Resolution Nro. 283/2015 that further burdens biopharmaceutical innovation. This Resolution regulates patent filings on living matter and natural substances, including biologics. It burdens the patentability process on biologics, among others, by adding more requirements and formalities. This Resolution contradicts Law 24,481, on Patents, regarding living matter because Law 24,481 excludes patentability of all preexisting living matter, while this Resolution bans patentability of all living matter.

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. As a result, very few injunctions have been granted since 2005.

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 are particularly acute in Argentina, where pharmaceutical, chemical and biotech innovators must wait eight to nine years, on average, for patents to be granted. According to some estimates, the overall patent backlog is approximately 21,000 applications. Argentina's patent law does not provide sufficient patent term adjustment to compensate fully for unwarranted delays in the examination of patent applications.

To address this challenge, 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 140 Contracting Parties. Accession to the PCT could allow Argentina to reduce its current patent application backlog and use the PCT system to reduce the review period for future patent applications.

The Argentine Senate approved accession to the PCT in 1998. However, it was never discussed in the Lower House. In 2011, the Lower House resumed consideration at committee level, but with no results.

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.

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 allows 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 “dishonest” use.

Market Access Barriers

Foreign exchange restrictions

As a result of quotas imposed by the former administration on the purchase of foreign currency (U.S. dollars), companies have inadequate foreign currency to pay their suppliers and repatriate funds. Specifically, innovative pharmaceutical companies estimate a combined foreign currency shortfall of approximately US\$1.5 billion, jeopardizing their business operations and supply chains.

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 Argentina 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 to the average price of similar products of foreign origin.

Key terms are undefined, but on its face the new reimbursement system appears to be inconsistent 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.

BRAZIL

PhRMA and its member companies operating in Brazil remain concerned regarding restrictive patentability criteria, patent procedures, weak patent enforcement, regulatory data protection (RDP), and non-transparent government pricing policies.

Key Issues of Concern:

- **Restrictive patentability criteria:** Amendments to the Brazilian Patent Law in 1999 added Article 229-C, which has been interpreted to inappropriately permit the health regulatory agency, the Brazilian National Health Surveillance Agency (ANVISA) to review all patent applications for pharmaceuticals products and/or processes, resulting in both: i) application of patentability requirements contradictory and/or additive to those established by Brazilian Patent Law and adopted by the Brazilian Patent Authority (INPI); and ii) duplicative, prolonged patent review processes that contribute to the already existing patent backlog that averages more than 10 years.
- **Patent backlogs:** Brazil's patent backlog now stretches to ten years or more, hindering innovation, creating uncertainty and significantly raising investment risk.
- **Patent term adjustment for mailbox patents:** INPI issued a binding opinion in September 2013 followed by the filing of related lawsuits to entirely invalidate or limit the term of approximately 222 "mailbox patents" (primarily pharmaceutical patents), alleging that the products covered by those applications should not have been granted a minimum 10-year patent term as measured from the patent grant date. As of early 2015, 48 lawsuits had been filed, 18 of which had been decided at the trial level.
- **Regulatory data protection failures:** Although Brazil has enacted federal laws to ensure adequate data protection for veterinary and crop products, Brazilian law still does not provide RDP for pharmaceuticals.
- **Regressive taxes on medicines:** Combined federal and state taxes add 38 percent to the cost of medicines in Brazil – the highest tax burden on medicines in the world. The innovative pharmaceutical industry supports a proposal under consideration by the Special Committee in the House (PEC 491/11) to eliminate taxes on certain products including medicines.
- **Productive Development Partnerships (PDPs)¹⁴⁰ and government purchasing:** Brazil has developed a new regulatory framework for the establishment of PDPs. While this framework provides improved transparency around PDPs, Brazil still lacks clear rules regarding the purchasing preferences

¹⁴⁰ The Brazilian PDPs follow the same principles of regular PPP agreements with adaptations designed to respond the specificities of the local pharmaceutical market.

offered to PDPs. It remains unclear how the current PDP model might limit competition or how Brazil will apply the government purchasing program that offers preferences to locally manufactured products and services in public biddings.

For these reasons, PhRMA requests that Brazil be placed on the **Priority Watch List** for the 2016 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

One of the most serious problems facing the pharmaceutical industry today in Brazil was created by Article 229-C, the 1999 amendment to the Brazilian Patent Law that authorizes the health regulatory agency (ANVISA) to review patent applications claiming pharmaceutical products and/or processes that may present a “health risk.” This review is in addition to and given equal weight as the examination conducted by the Brazilian Patent Office (INPI).

This “dual examination” is incompatible with Brazil’s obligations under the “anti-discrimination” provisions of Article 27.1 of the World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). In addition, ANVISA does not limit its role to the review of the potential sanitary risk aspects of the subject matter of the patent application but also reviews the patentability requirements. ANVISA lacks sufficient technical expertise on patentability and can apply different patentability review standards than INPI, thus generating uncertainty for patent applicants and undermining incentives for innovation.

In October 2009, the Federal Attorney General (AGU Office) issued an opinion that ANVISA’s role in the examination process is limited to health and safety risks. As a result of that opinion, an inter-ministerial group was created to define the correct implementation of the decision released by the AGU Office. The inter-ministerial group recommended that ANVISA should analyze the patent application prior to INPI and only those applications that receive ANVISA’s approval should be submitted to INPI. The patent applications that do not receive ANVISA’s approval are extinguished without the proper examination by the patent authority (INPI), subject to an appeal to the Brazilian Courts.

In 2013, ANVISA enacted a new resolution establishing that patent applications considered strategic and of interest to the Brazilian Government will go through a substantive review of the patentability requirements by ANVISA. While Brazilian authorities argue the new administrative rule and flow bring more efficiency to the process, the unduly burdensome “dual examination” process continues to affect IP right holders. The process may have the effect of denying patentability to innovative treatments that meet urgent public health needs, thereby creating disincentives for the launching of innovative products in Brazil. As a result, the local innovative

pharmaceutical industry association, Interfarma, has challenged the resolution in court. In addition, INPI has recently started blocking patent applications previously reviewed by ANVISA. This has caused additional patent examination delays and highlighted the challenge presented by ANVISA's resolution.

PhRMA believes that the function of ANVISA in reviewing the health and safety of pharmaceutical products must be distinct from that of INPI which reviews patent applications and prior art to ensure that legal requirements for patent grant are met. We urge that a proper interpretation of 229-C which recognizes the unique role of ANVISA and INPI be implemented, for example as have been put forward by the Office of the Federal General Attorney (see e.g., Opinion No. 210/PGF/AE/2009).

Patent Backlogs

While PhRMA recognizes efforts underway at INPI to reduce the patent backlog, delays in patent grants have continued to worsen, undermining otherwise valid patent rights and incentives for companies to bring innovative products to Brazil.

As of December 2013 (the most recent data available), INPI had a backlog of approximately 184,000 applications and estimated that the average time it took to receive a patent for a pharmaceutical product in 2013 was 10.2 years. Unfortunately, this is a significant increase from the average time for all patent applications of 5.4 years in 2011 and even 8.3 years in 2010. Although President Dilma Rouseff authorized funding and filled new examiner positions in the last two years (including in the pharmaceutical and biotech fields) and INPI has announced plans to hire new examiners in 2015 to reduce the backlog, the addition of these new examiners has not mitigated the backlog.

The patent backlog for pharmaceutical patents in particular is further exacerbated by ANVISA's involvement in the "dual examination" process discussed below. As of December 2013, it took ANVISA an average of over a year to send a pharmaceutical patent application back to INPI with its decision on whether a patent can be granted.

Patent Term Adjustment for Mailbox Patents

In September 2013, INPI issued a binding opinion regarding the patent term for pharmaceutical patent applications filed between January 1, 1995 and May 14, 1997 (known as "mailbox patents"). 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 10-year protection will be given from the date of grant" (paragraph one).¹⁴¹

¹⁴¹ It should be noted that ABIFINA, a Brazilian association representing national companies with chemical interests, including many generics companies, recently filed a legal action in Brazilian court challenging the constitutionality of Brazil's guarantee of a minimum patent term of 10 years for all patents. The 10-year minimum has been critical for biopharmaceutical innovators, particularly in light of INPI's notorious patent review delays (discussed below). As such, Interfarma, among others, has successfully petitioned to participate in the legal action as amicus curiae.

Per the binding opinion, however, in the event that a company's patent was filed in Brazil after the country acceded to the WTO, but before the Patent Law came into force (mailbox period) – the “mailbox patents” – the minimum 10 years of protection from the date that the patent was granted is not available.

Under Brazil's Patent Law, approximately 220 mailbox patent applications were granted a minimum of 10 years patent protection under Paragraph One of Article 40. In other words, because the patent applications were not reviewed within 10 years, the resulting patents qualified for the 10-year minimum protection provided by Article 40. INPI's September 2013 opinion has the effect of revoking the granted 10-year minimum terms for those mailbox patents. The opinion, however, is not self-executing. As of early 2015, INPI had filed 48 lawsuits in Federal District Courts against the impacted mailbox patent holders seeking to invalidate their patents, 18 of which had been decided at the trial level, and six had settled. Adding to the uncertainty, eight of the 18 decided cases have ruled in favor of the patent-holder, with the remaining ten decided in INPI's favor.

INPI is seeking to invalidate the patents entirely or, in the alternative, to adjust the patent term expiration dates for the impacted patents to 20 years from the date of filing. In either case, pharmaceutical patents are being targeted and the patent terms which were originally granted and upon which innovators have relied are now being challenged *ex post facto*. The elimination of the 10-year minimum term for these mailbox patents is particularly galling when the only reason for this minimum level of protection is that it took INPI more than 10 years to review the patent application. This is another example of Brazil's deteriorating and unpredictable IP environment for pharmaceutical innovators.

Regulatory Data Protection Failures

Brazilian law (Law 10.603/02) provides data protection for veterinary and crop 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. While some positive steps have been taken to prevent inappropriate disclosure of these data held by the Government, 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, with limited success. 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.

Market Access Barriers

Regressive Taxes on Medicines

Combined federal and state taxes add 38 percent to the price of medicines in Brazil (the highest tax burden on medicines in the world). As such, the innovative pharmaceutical industry supports a proposal under consideration by the Special Committee in the House (PEC 491/11) to eliminate taxes on certain products including medicines.

Government Purchasing and PDPs

The Brazilian Government issued federal Law 12.349/10 granting preferences for locally manufactured products and services in public 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.

Our members understand the motivation behind the new public purchase policy and believe they can cooperate to improve Brazilian Government conditions to acquire products and services with high quality standards.

Meanwhile, a new PDP regulation (Portaria 2531/14) was issued in 2014 with participation of the private sector, which on its face appears to provide greater transparency and predictability. Recently, the Brazilian Government announced nine PDPs under the new regulation. Even still, 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.

Regulatory Burden

All participants in the pharmaceutical industry, innovative and generic alike, face numerous challenges stemming from the deadlines currently enforced by ANVISA. While Brazilian legislation adequately addresses ethics, safety and efficacy standards, it does not provide a mechanism to ensure that ANVISA has adequate capacity to execute its assigned responsibilities. PhRMA and its members commend ANVISA for hiring 280 new technicians and hopes that this will help the agency to reduce review timelines. Other improvements ANVISA should consider include:

- More predictable processes, allowing companies to be prepared in advance, resulting in shorter “clock stops” and faster approvals; and
- Introduction of an expedited process for line extensions (at least similar to the deadline for new products) providing faster access to post-approval innovations.

COLOMBIA

PhRMA member companies face several intellectual property (IP) and market access issues in Colombia, including the issuance on September 18, 2014, of Decree 1782 on sanitary evaluation for biologics, which establishes an unprecedented “third pathway” for approval of non-comparable biologics that is not in line with World Health Organization (WHO) guidelines and practices in the United States and other countries. This is in addition to *ad hoc* and non-transparent market access policies that are often paired with initiatives that undermine innovation.

Key Issues of Concern:

- **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 and, despite recent improvements, can apply unreasonably restrictive patentability criteria to biologics.
- **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.
- **Dual Patent Examination and Increased Risk of Compulsory Licenses Under the National Development Plan (NDP):** Colombia’s NDP, which passed into law 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 on IP and trade. Particular concerns include Article 72, which makes price a criterion in the regulatory approval process, and Article 70, which establishes a role for Ministry of Health and Social Security (MHSS) in reviewing pharmaceutical patent applications and elevates the risk of unjustified compulsory licenses. PhRMA supports the creation of sustainable healthcare systems, and believes this can be achieved without creating delays to new medicines and in a manner consistent with Colombia’s international obligations.
- **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 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 effective
- **Arbitrary and non-transparent market access policies:** Colombia’s international reference pricing methodology could inappropriately be used to set

the same price for both the public and private segments of the market, does not account for different margins in the reference countries, and does not reflect the realities of the Colombian market *vis-à-vis* other jurisdictions.

For these reasons, PhRMA requests that Colombia be placed on the **Priority Watch List** for the 2016 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

PhRMA continues to have concerns about restrictions on the scope of patentable subject matter in Colombia. The Colombian Patent Office (CPO) recently adopted new examination guidelines for granting patents to polymorphs, selection inventions, and pharmaceutical kits that are consistent with its TRIPS obligations. Similarly, the CPO made a number of improvements in terms of granting patents for pharmaceutical processes and biologics. These improvements are welcome, but implementation remains inconsistent and decisions continue to be unpredictable. There have been several recent cases of denials of patents for these types of inventions in first instance decisions.

Second Use Patents

The Andean Court of Justice (ACJ) has issued several legal opinions (89-AI-2000, 01-AI-2001 and 34-AI-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.

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.

Dual Patent Examination Under Article 70 of NDP

Article 70 of Colombia's National Development Plan (NDP) undermines IP rights by establishing a role for the MHSS to submit non-binding opinions on pharmaceutical patent applications, which would likely delay and introduce subjectivity into patent reviews. Article 70 additionally expands the scope of MHSS by mandating that on an ongoing basis it review patents relating to health technologies that are susceptible to compulsory licenses. As provisions that appear to apply exclusively to healthcare technologies, they discriminate against pharmaceuticals contrary to TRIPS and the U.S.-Colombia FTA.

Trademarks

In 2003, INVIMA authorized a copier to use the registered trademark of a U.S. pharmaceutical company (and a member of the local R&D pharmaceutical association) without the trademark owner's authorization. Specifically, the copier was permitted to use the U.S. company's trademark on its product's label in order to show it was the same as the original product (the approved legend is: "[COPIER PRODUCT] is bioequivalent to [ORIGINAL PRODUCT]") and without having to use any disclaimer.

This undermines the basic function of the mark as an indicator of source and origin. It also tarnished the image of the registered trademark and opened the door for copiers to freely take advantage of the innovator's reputation. This unprecedented decision by INVIMA violates Andean Community Trademark Law and Colombia's domestic law. To date, this case has been litigated before the Council of State for more than nine years, and a final decision has not been issued.

Market Access Barriers

Article 72 of NDP

Article 72 of the NDP makes significant changes to the registration process for health care products and devices. The globally accepted practice is to base regulatory approval reviews on safety, efficacy, and quality, not price. Article 72 would make price a central criterion of the registration process and prevent technologies from accessing the market to the detriment of Colombian patients. Article 72 also appears contrary to the WTO Technical Barrier to Trade (TBT) Agreement since price is irrelevant to whether medicines and medical devices meet the relevant technical requirements for market authorization, and is more trade restrictive than necessary.

Substandard Biologics Regulation

On September 18, 2014, Colombia issued Decree 1782, which establishes the marketing approval evaluation requirements for all biologic medicines. As part of the Decree, Colombia has established an unprecedented abbreviated pathway for registration of non-comparable products, which is inconsistent with both WHO and FDA

standards and could result in the approval of medicines that are not safe and/or not effective.

PhRMA members participated actively in the public consultations and engaged extensively with the Ministry of Health 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.

PhRMA members urged the Colombian government to remove this third pathway from the Decree, to no avail. This route has been justified by the Colombian Ministry of Health, and ratified by the President, as a necessary tool to lower prices of medicines by promoting the swift entry into the market of competitors. However, shaping competition policy is not the appropriate role for a sanitary regulation, which should be strictly focused on ensuring the safety and efficacy of products.

Furthermore, per the Decree, a product approved via the “Abbreviated Comparability Pathway” will use the same non-proprietary name as the innovator, despite the fact that 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, and would make it difficult to quickly trace and attribute adverse events to the correct product.

Arbitrary and Non-Transparent Market Access Policies

Colombia sets a maximum price for both the private and institutional markets by setting the price at the level of the distributor. These markets are dissimilar in most characteristics, in that they service different patient populations via different business models.

The pricing system is highly subjective. For example, it provides that certain price control exceptions may be made for products providing a significant technical benefit over medicines containing the same active ingredient (*i.e.*, regular versus modified release tablets), yet it does not clearly establish the criteria required to grant such exceptions. Furthermore under the pricing system, therapeutic areas deemed to have three or fewer competitors are subject to international reference pricing based on a reference basket of 17 countries.

Finally, the recently approved Statutory Law of Health eliminated the National Pricing Commission, which includes representatives from the Ministry of Trade, Ministry of Health, and one representative of the President, and assigns pricing authority

exclusively to the Ministry of Health. PhRMA's member companies are concerned that this will result in a one-sided approach that does not adequately consider trade and market considerations as well as promotion of innovation.

ECUADOR

PhRMA and its member companies operating in Ecuador are concerned with several intellectual property (IP) and market access barriers.

Key Issues of Concern:

- **Compulsory licensing:** The Ecuadorian Intellectual Property Institute (IEPI) has granted ten compulsory license (CL) petitions since 2010 and 11 applications are still pending. Ecuador's public pharmaceutical firm, Enfarma, is responsible for nearly a third of the CL petitions submitted to IEPI over the last six years.
- **Restrictive patentability criteria:** The Andean Court of Justice (ACJ) has issued several legal opinions (89-AI-2000, 01-AI-2001 and 34-AI-2001) holding that Andean Community members should not recognize patents for second uses. These decisions are contrary to long-standing precedents and inconsistent with Article 27.1 of the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). Further, crystalline forms and salts of compounds are considered inherent properties of the compound and not an invention.
- **Regulatory data protection failures:** Ecuador does not sufficiently support and value the rigorous testing and evaluation biopharmaceutical innovators and their partners around the world undertake to demonstrate potential new medicines are safe and effective for patients who need them. Contrary to its international commitments, Ecuador does not provide adequate regulatory data protection (RDP) for undisclosed test data.
- **Excessive patent application fees:** Since October 2012, Ecuador has increased patent fees by more than 3,500 percent, and far above fees for comparable services in other countries.
- **Detrimental market access policies:** In July 2014, Ecuador issued Decree 400 which establishes regulations for the setting of prices for medicines for human use and consumption. The Decree regulates government pricing for three categories of medications – Regulated, Direct Fixation and Free Pricing – but there remains uncertainty as to how some aspects of the Decree will be implemented.

For these reasons, PhRMA requests that Ecuador remain on the **Priority Watch List** for the 2016 Special 301 Report. Further, we urge USTR to provide an opportunity for an assessment of Ecuador'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 IP and market access barriers confronted by U.S. businesses in Ecuador.

Intellectual Property Protection

Compulsory Licensing

Ten CL petitions have been granted by the Ecuadorian Intellectual Property Institute (IEPI) since 2010, six of which were issued in 2014. To date, 32 applications for CLs have been presented; 11 of which are still pending, 2 were denied, 8 were desisted and 1 expired. Furthermore, ten of the 32 petitions received by IEPI were filed by Ecuador's public pharmaceutical firm, Enfarma.

PhRMA and its member companies are highly concerned about the CL process in Ecuador, particularly the lack of due process for the affected patent holders, in addition to the volume and rate at which such licenses are being granted. A close monitoring of this subject should be maintained to ensure that a CL for a patent covering a medicine is granted only when there is a true health emergency and as a measure of last resort. Furthermore, it is critical that the guidelines for issuing a CL are clear and provide due process for the license applicant and the patent owner in accordance with Ecuador's obligations under TRIPS.

Restrictive Patentability Criteria

The Andean Court of Justice (ACJ) has issued several legal opinions (89-AI-2000, 01-AI-2001 and 34-AI-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 Ecuador, have chosen to honor their Andean Community obligations, while ignoring their TRIPS obligations.

The failure to provide patents for second medical uses adversely affects PhRMA members who dedicate many of their research investments to evaluating additional therapeutic benefits of known molecules (second uses) in order to 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.

Furthermore, crystalline forms and salts of compounds are improperly considered inherent properties of the compound and not an invention.

Regulatory Data Protection Failures

The protection for undisclosed test data or other information submitted to obtain marketing approval of pharmaceutical products remains, in practice, inadequate.

This is because the implementation of RDP in Ecuadorian law prohibits the *release* of undisclosed test or other data except to protect the public interest, but, in practice, *reliance* on such data by a generic manufacturer seeking marketing approval is

not considered an act of unfair competition. This renders RDP in Ecuador not only ineffective but also inconsistent with Ecuador's obligations under TRIPS Article 39.3.

Excessive Patent Fees

Since October 2012, fees for patents have drastically increased in Ecuador, particularly with regard to maintenance and examination fees. Maintenance fees have increased between 800 and 3,529 percent (*i.e.*, up to \$4,514 and \$20,760 for the 10th and 20th year, respectively). The cumulated annuities amount to \$24,964 for 10 years and \$139,767 for 20 years. These amounts are between 12 and 24 times higher than Colombia, 7 and 12 times higher than Brazil, and 7 and 11 times higher than the United States, respectively.

Similarly, examination fees were raised from \$196 to between \$964 and \$1,510.40 depending on the number of pages or claims. Further, Ecuador now charges \$151.04 per page for claims exceeding 19 pages, significantly higher than the \$16 per page charged for international patent applications over 30 pages.

Trademarks

On January 15, 2015, Presidential Decree 522 was enacted, which appears to limit the use of trademarks for any medicine once patents have expired. This measure appears to deny another important form of IP protection that is critical to ensure that innovator companies can distinguish their products from others. A trademark for a medicine helps doctors and patients identify the quality, safety, and intrinsic effectiveness of a given product – reputational capital that manufacturers strive to build over time.

As of December 2015, it was reported that the Ministers of Industry, Health and Foreign Trade, were working together to reform the Decree to address this issue. PhRMA's members eagerly await resolution of this concern.

Market Access Barriers

Detrimental Market Access Policies

Ecuador has had a government price control system for pharmaceutical products since 1992. In July 2014, Ecuador passed a decree (No. 400) regulating the establishment of pricing for medicines destined for human use and consumption. Decree 400 creates three price control regulation categories: regulated, direct fixation, and free pricing.

New medicines deemed to be strategic fall within the first category – regulated – and are subject to price ceilings established by the National Council of Fixation and Revision of Prices of Medications for Human use and consumption (hereinafter the "Council").

The second category – direct fixation – is intended to be applied in exceptional cases and consists of a unilateral determination of prices by the Council, in accordance with Decree 400. This category is used when the sale prices of a medicine has exceeded the ceiling established by the Council for the corresponding market segment, when new and strategic medications are sold that have not been previously subject to the price ceilings set by the Council, and when the holder of the sanitary registration provides false information to the government, *i.e.*, is essentially a punitive category.

All other medicines are subject to free pricing under the third category, with the prices set by the sanitary registration holder notified to the Council, in accordance with the Decree.

This regulation has created uncertainty and unpredictability for pharmaceutical companies, due to, *inter alia*, an unclear definition of the scope of application and the criteria under which the Ministry of Health will categorize drugs as strategic under the first category of the regulation.

Further, in referencing prices of products deemed to be in the same therapeutic area, the pricing system does not adequately account for differences in quality, efficacy or safety, thereby discouraging quality medicines in Ecuador, threatening patient safety and decreasing incentives to bring innovative medicines to the Ecuadorean market.

VENEZUELA

PhRMA member companies face several intellectual property (IP) and market access barriers in Venezuela, including virtually non-existent IP protections, and restrictions on access to foreign currency.

Key Issues of Concern:

- **Weak patent enforcement and regulatory data protection failures:** Venezuela essentially has not granted patent protection or regulatory data protection (RDP) to pharmaceuticals since 2002.
- **Excessive patent filing and maintenance fees:** There has been a significant increase in filing and maintenance fees in Venezuela. Effective May 2015, the official cost for the filing and maintenance of patent and trademark applications and granted patents in Venezuela has increased by between 940 and 2,000 petrcent, with particular impact on foreign applicants/patentees. For example, annuities now stand at approximately \$US2,381 due at filing, with significant annual increases until year 20 (year 20 is now approximately US\$48,000).
- **Foreign currency access:** In 2003, Venezuela established restrictive foreign currency controls. Since 2010, the total amount of foreign currency authorized for pharmaceutical imports has decreased by 46.5 percent, resulting in unpaid debt to multinational laboratories, between 2010 and October 2013, of US\$3.84 billion dollars. In turn, the supply of medicines has fallen dramatically in the country with the consequent impact on health and on manufacturing and importing companies.
- **Prohibitive market access barriers:** A wide array of barriers is sharply limiting market access for medicines and other staples in Venezuela. Price controls on Essential Medicines (as defined by the World Health Organization) have been in place in Venezuela since 2003, with no price increases to account for devaluation or inflation. Likewise, beginning in 2011, maximum retail price mechanisms were put in place to limit profit margins for companies operating in areas such as food and non-essential medicines. The combination of the price controls and restrictions on free market pricing of medicines and other products has had a devastating impact on patients and consumers in Venezuela.

For these reasons, PhRMA requests that Venezuela remain on the **Priority Watch List** for the 2016 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

As a practical matter, Venezuela has not granted patent protection to pharmaceuticals since 2002. As a legal matter, Venezuela was obliged to grant patent protection to pharmaceuticals as a Member of the Andean Community (AC). However, in April 2006, Venezuela formally withdrew from the AC, and all rights and obligations for Venezuela, including application of Intellectual Property Decision 486, ceased upon withdrawal in accordance with Article 135 of the Cartagena Agreement. Although there was legal uncertainty as to whether Decision 486 still applied in Venezuela, a decision by the Supreme Court of Justice issued on March 17, 2011, confirmed that following Venezuela's withdrawal from the AC, Venezuela IP law reverted to the Industrial Property Law of 1956 (IPL). The IPL is replete with provisions that violate the international obligations of Venezuela under the World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). For example, the law prohibits the granting of patents for pharmaceutical products, and thus directly contravenes Article 27 of TRIPS and the Paris Convention.

Excessive Patent Filing and Maintenance Fees

There has been a significant increase in filing and maintenance fees in Venezuela. Effective May 2015, the official cost for the filing and maintenance of patent and trademark applications and granted patents in Venezuela has increased by between 940 and 2,000 percent, with particular impact on foreign applicants/patentees. For example, annuities now stand at approximately US\$2,381 due at filing, with significant annual increases until year 20 (year 20 is now approximately US\$48,000).

Regulatory Data Protection Failures

Although Venezuela provided RDP between 1998 and 2001, it has not done so since 2002. It has instead granted second regulatory authorizations and relied on the original data during the period when data protection should be applied, raising serious concerns under TRIPS Article 39.3.

According to the local innovative pharmaceutical association, Cámara Venezolana del Medicamento (CAVEME), it has become common practice in the last decade for the health authority (the Venezuelan National Institute of Health (INH)) to grant sanitary registration to "copy" products before the expiration of the five-year data protection period. Individual research based pharmaceutical companies have filed challenges against the government in the courts to enforce data protection, with no results to date. Many companies have also acted directly against marketers of the copy products at the Venezuelan Antitrust Agency, which has dismissed all unfair competition claims. Claims were also brought by pharmaceutical companies to the Administrative Courts and then to the Supreme Court of Justice, but both courts denied preliminary remedies and continue to process claims with no decision in sight. On June 6, 2005,

CAVEME sued the INH for not granting the data protection stipulated by TRIPS Article 39.3. The claim was accepted by the Court in 2006, but a decision has not been issued.

Market Access Barriers

Foreign Currency Access Policy

In 2003, Venezuela established restrictive controls on access to foreign currency for all economic sectors. Although the preferential (official) exchange rate may be used to fund finished medicines and pharmaceutical raw materials, requests by pharmaceutical companies to use foreign currency for transfer of capital and earnings, and to pay for technical assistance, business expenses or to import other goods and services indirectly related to the manufacture of medicines or the normal operation of companies, have generally been denied.

In February 2013, after devaluing the official exchange rate of the Venezuelan Bolivar from VEB 4.3 to 6.3 per USD, the Venezuelan government set up the Complementary System of Administration of Foreign Currency (Sistema Complementario de Administración de Divisas or SICAD) to address the purchase of foreign currency by importers operating in Venezuela who do not have access to the Commission for the Administration of Foreign Currency (Comision de Administración de Divisas or CADIVI).

In October 2013, the Government created CENCOEX (Centro Nacional de Comercio Exterior) to replace CADIVI, arguing irregularities in the previous system and lack of controls. As a result, for those importations made or services provided before October 2013 (deemed to be “old debt”), payments were suspended to “revise” the debt based on individual negotiations with each company based on goods imported, prices, *etc.* Since October 2013, the total amount of foreign currency authorized for pharmaceutical imports has decreased by 46.5 percent, resulting in payment delays exceeding two or more years.

In 2014, two additional foreign currency systems (SICAD and SIMADI) were established for other goods and services not covered by the existing foreign currency exchange systems. As a result, depending on the nature of the goods or services, importing companies are subject to three greatly varying foreign exchange rate systems:

- CENCOEX – which applies to basic goods and medicines – imposes a fixed rate of 6.3 VEF per USD;
- SICAD – which applies to “non-priority” goods such as tourism, automobiles, and liquor – imposes a fixed exchange rate of 12 VEF to the USD; and
- SIMADI – More recently, at the end of 2014, government created the “Sistema Marginal de Adquisición de Divisas” (SIMADI) with a much higher exchange rate

of 199 VEF per USD, with the intention to bring the exchange rate of a part of the market closer to the real market exchange rate.

Government Procurement

The Venezuelan Bidding Law applies to government procurement of all goods and services, including pharmaceutical products, and mandates, other than in certain limited circumstances, a competitive bidding process. However, in practice the Bidding Law is not consistently enforced by Venezuelan authorities, and it is very common for public contracts to be: (1) awarded without regard to the Bidding Law, or (2) based upon broad interpretations of the exceptions set forth in the Bidding Law in order to avoid a competitive bidding process. The government's failure to enforce the Bidding Law results in a lack of transparency with respect to government procurement.

Non Production Certificate

Venezuelan manufactured medicines have been exempted from Venezuela's value added tax (VAT) since 2002. In order to obtain a VAT exemption for imported medicines, companies must request a certificate from the government, stating either that the product is not manufactured domestically, or that it is manufactured in insufficient quantities that will not satisfy patient demands. This certificate, initially intended for the sole purpose of demonstrating eligibility for the VAT exemption, is now also required by foreign exchange authorities to provide currencies at the official rate. As restrictions in currency availability increase, the authorities have restricted the number of exemption certificates and the amount of foreign currency requested, thus creating shortages at any given time of approximately 40 percent of medicines, to the obvious detriment of Venezuelan patients.

Prohibitive Market Access Barriers

Beginning in 2003, the Venezuelan government imposed price controls for Essential Medicines (as defined by the World Health Organization) comprising close to one-third of the medicines marketed in-country. On October 6, 2005, the Government issued a Resolution to establish a system of notification that provided for price increases for all medicines not deemed to be covered under the Essential Medicines price controls. Since then, statistics released by the Central Bank of Venezuela and the National Institute of Statistics indicate that prices of medicines have not been sufficiently increased to take into account accumulated inflation (more than 799 percent), and 46.5 percent devaluation.

On July 18, 2011, the Venezuelan Government issued a Decree on Fair Costs and Prices (hereinafter "LCYPJ" as per its Spanish Acronym),¹⁴² which established the National Superintendence of Costs and Prices (hereinafter the "SUNDECOP" as per its Spanish Acronym). In turn, SUNDECOP establishes the standards for the National

¹⁴² Official Gazette N° 39.715 (July 2011).

Registry of Prices of Goods and Services, and has overall responsibility to regulate, supervise, control, and monitor prices, and set Maximum Retail Prices (PMVP) or the price range for goods and services, thereupon ending Venezuela's long-standing practice of allowing free-market pricing for non-essential medicines (accounting for approximately 90 percent of the market by value). This Decree was further revised on January 23, 2014, to establish a cost-based pricing system for locally produced medicines.

In late 2014 the government passed the "Ley Orgánica de Precios Justos" (LOPJ) which amends and restates the previous pricing regime. The LOPJ create a "Superintendencia Nacional para la Defensa de los Derechos Socio Economicos" (SUNDDE) and sets the criteria to calculate cost, expenses and profits margins.

Price controls and other restrictions described above have sharply limited market access for medicines and many other products in Venezuela, jeopardizing the ability of pharmaceutical firms to supply medicines and harming local patients and consumers.

Counterfeit Medicines

As noted by the Direction of Drugs, Medicines and Cosmetics of the Health Ministry in 2010, and recent findings by the local Investigation Police department (CICPC, May 2014), Venezuela has witnessed an increase in counterfeit medicines (more than 10 percent of the market) as well as other illicit activities, such as smuggling, robbery and adulteration. This increase can be attributed to a combination of factors: (1) the Government's lack of attention and political will to address the problem; (2) administrative inefficiency; (3) lack of enforcement of existing laws, most of which are inadequate; (4) insufficient penalties; and (5) an ineffective judicial system that does not consider counterfeit medicines a priority. Notwithstanding many other challenges, Venezuela is taking moderate steps to place a higher priority on curbing the distribution and use of counterfeit medicines through increased resources and penalties for criminals caught manufacturing, supplying, or selling them, encouraged by the efforts of the Pharmaceutical Industry, Chambers and Associations (such as CAVEME or Federación Farmacéutica Venezolana).¹⁴³

¹⁴³ See, e.g., <http://www.noticias24.com/venezuela/noticia/187872/aseguran-que-incidentes-causados-por-medicamentos-falsos-se-han-elevado-7/> (in Spanish) (last visited Feb. 5, 2016).

MIDDLE EAST/ AFRICA

ALGERIA

PhRMA and its member companies operating in Algeria believe that Algeria has the potential to foster investment in pharmaceutical innovation and address the unmet medical needs of the country. However, significant intellectual property and market access barriers remain. PhRMA noted some success in collaborating with the prior government in place until mid-2012, with that government publicly stating its support for a new strategy that better integrates the innovative pharmaceutical sector into Algeria's economy and healthcare system. Subsequent Ministers have reaffirmed that commitment. PhRMA's member companies are hopeful for a similarly cooperative dialogue with the current government.

Key Issues of Concern:

- **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).
- **Import restrictions and forced localization:** Algeria prohibits imports of virtually all pharmaceutical products that compete with similar products that are manufactured domestically. Pharmaceutical products that are not locally manufactured are subject to annual import quotas. Similarly, foreign companies are prohibited from selling to wholesalers, and therefore must establish separate distribution channels in Algeria.
- **Market access barriers:** Under Algeria's pricing system, some patented medicines with no generic equivalent on the market are nonetheless referenced against generic products deemed to be in the same therapeutic class. The resulting price does not recognize the value of innovative products, nor does it reward the significant investment involved in developing new medicines, or encourage the development of tomorrow's new cures.

All of the above constitute major barriers that curtail access for innovative pharmaceuticals, impede trade, deter investment, and jeopardize Algeria's chances of acceding to the World Trade Organization (WTO) in the near future. For these reasons, PhRMA requests that Algeria remain on the **Priority Watch List** for the 2016 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

The interpretation of the current law enables local authorities to grant marketing approval to generic copies of a patent protected product to receive marketing approval while the original patent is still in effect and not invalidated in court. The absence of

effective judicial remedies for preventing the infringement of basic patent rights, including the lack of injunctive relief that could prevent irreparable harm prior to the resolution of the case in court, puts the originator in an untenable position with no possibility to defend its 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.

Transition from Administrative Exclusivity

Pharmaceutical products were not eligible for patents in Algeria until the promulgation of Ordinance No. 03-07 on July 19, 2003. Before that date, in a good faith effort, Algerian authorities would not authorize the marketing of generic forms of pharmaceutical products covered by unexpired patents in their country of origin. In other words, Algeria provided *de facto* administrative exclusive marketing rights (EMR) to pharmaceutical inventions *in lieu* of patents. PhRMA members relied on the protection afforded by these rights.

While the 2003 Ordinance extended patent protection to pharmaceutical products, it unfortunately did not include transitional provisions to require the authorities to continue providing the EMR to pharmaceutical products that could not obtain patent protection under the Ordinance because of prior publications or sales. Accordingly, in 2005, Algerian health authorities abandoned the practice of providing *de facto* exclusive marketing rights to pharmaceutical products that could not benefit from the Ordinance, and started to approve the marketing of copies of products still covered by patents in their country of origin. Thus, PhRMA members lost the EMR upon which they had relied because of the lack of clear transitional provisions.

Market Access Barriers

Import Restrictions

On October 21, 2008, the Algerian Government issued a decision¹⁴⁴ 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 decree¹⁴⁵ that was suspended as part of the WTO accession process. Subsequently, the Ministry of Health (MOH)

¹⁴⁴ The decision was published in November 2008 under the name “Arrêté du 30 novembre 2008 relatif à l’interdiction des produits pharmaceutiques et dispositifs médicaux destinés à la médecine humaine fabriqué en Algérie.”

¹⁴⁵ Instruction #5 for the Generalization of Generics (Sept. 2003).

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 presence of our member companies in Algeria.

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,¹⁴⁶ further harming Algerian patients. During discussions that started in 2011 and continued in 2012, Government officials signaled their intent to reform the system to improve access and minimize stock disruptions. As of today, however, the system remains unchanged.

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. This decision applies prospectively, not to companies engaged in foreign trade prior to December 2008. Despite the lack of success in attracting new investment, the new government has recently confirmed that this law will continue to be enforced for the foreseeable future.

Starting in 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 have to invest also in a distribution infrastructure. While this circular has never been applied, the uncertainty of the regulation continues to concern PhRMA members.

Volume Control

Algeria continues to impose an annual import quota for medicines with the "requirement that each shipment receives prior clearance from the MOH". The

¹⁴⁶ Veille Media, "Pénurie de médicaments: le Snapo va interpellier le ministre de la Santé" (May 12, 2011).

Government practice is to block imports temporarily as a cost-containment tool. The unintended consequence, however, is that it leads to shortages in the market, to the detriment of Algerian patients.

Cumbersome and Slow Regulatory System

Despite significant improvements in the MOH's registration process in 2013, the registration process remains slow and 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 neighboring peer countries. For example, all registration dossiers must be pre-authorized prior to acceptance for review, but there is no transparent process or timeline for completing this preliminary step of the process. After submission to the MOH, registration dossiers are on hold pending National Laboratory results, which causes further delay in the registration process.

In addition, the innovative industry continues to face significant 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. But the CRM reimbursement process is entirely separate and the MOH marketing approval price is rarely accepted in the CRM (MOH is member of the CRM) process. 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.

Finally, since June 2010, pharmaceutical companies have noticed lengthy delays of many months in approving variations for imported products already available on the market. The previous government had begun to recognize the negative impact that unnecessary delays have on patients and the business climate, but the backlog continues.

Industry Association License

PhRMA's member companies have been trying for many years to establish a local pharmaceutical association to engage in public policy advocacy on behalf of the innovative medicines sector. In late 2015, there were signs that the Algerian

Government would permit the establishment of a local innovative pharmaceutical association. PhRMA member companies look forward to the working with the Government on securing the legal approval for such an association.

Other Market Access Barriers

The Algerian Government utilizes international reference pricing (IRP) to determine the government price level of medicines. As a general matter, IRP is a sub-optimal tool for setting drug prices that discourages R&D in new medicines for patients. Instead of recognizing the value that innovative medicines can provide for patients in a specific country, IRP imports prices from other countries that typically have different disease burdens, indications, willingness (preferences) and ability (income) to pay, and market structures. In short, IRP as a policy is not consistent with Algeria's goal of promoting a local innovative pharmaceutical industry. In August 2015, the Algerian Government issued a new procedure for determining drug prices. Key weaknesses in Algeria's new pricing procedure and the IRP model include:

- The new pricing procedure reference a list of countries including Greece and Turkey. Neither Greece nor Turkey are appropriate reference countries. 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 of these countries do not reflect the true value of innovative medicines and certainly are not consistent with a country seeking to encourage local R&D. As such, Turkey and Greece should be removed from Algeria's basket of reference countries.
- To ensure 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 (or even worse the lowest European price less 10 percent).
- Re-referencing should be predictable, objective (i.e., follow 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 (MA) renewal process. While the industry commends Algeria for providing a process for allowing manufacturers to seek adjustments during the MA renewal process to account for changes in the reference countries, it is not reasonable or fair 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.

WATCH LIST

ASIA-PACIFIC

AUSTRALIA

PhRMA and its member companies support the U.S.-Australia Free Trade Agreement (AUSFTA). It has helped expand patient access to new medicines in Australia, a key priority for PhRMA. However, we also believe that there is much more that still needs to be done to further improve access to new and innovative medicines in Australia and strengthen Australia's intellectual property (IP) regime.

In the Pharmaceuticals Annex to the AUSFTA, the United States and Australia agreed on provisions for increased transparency and accountability, and enhanced consultation in the operation of Australia's Pharmaceutical Benefits Scheme (PBS). Annex 2-C of the AUSFTA establishes four basic obligations that pertain to operation of the PBS, including agreed principles regarding the role of innovation, transparency, independent review process, and establishing a bilateral Medicines Working Group.

PhRMA believes that the work done to date in implementing these obligations has been significant and we look forward to seeing constructive outcomes from the locally-established Access to Medicines Working Group (a dialogue between Medicines Australia and the Department of Health (DOH) – although we note the pace of change is slower than it might be. PhRMA and its member companies remain increasingly concerned, however, about the unstable and unpredictable operating environment in Australia, as well as the lack of adequate IP protection afforded to innovative pharmaceutical products.

Key Issues of Concern:

- **Market size damages:** In 2012 Australia's Department of Health and Ageing¹⁴⁷ (DOH) announced an unprecedented fiscal policy to seek compensation for collateral damage to Australia's PBS.¹⁴⁸ According to that policy, the DOH would seek damages from originator pharmaceutical companies in the event that the DOH was adversely affected by a preliminary injunction issued during the course of a patent dispute (hereinafter "preliminary injunction policy"). This claim for damages is based on the PBS price reduction mechanism for generic medicines and is triggered when a court finds the relevant patent invalid or not infringed. Under those circumstances, the DOH claims that the preliminary injunction delayed the PBS-listing of a generic version and therefore it is owed damages to account for the lower price that the government would have otherwise paid for the generic. The potential precedent set by this policy jeopardizes well-accepted principles of due process and severely discourages innovators from exercising their IP rights. Moreover, this policy contravenes Australia's obligations under the

¹⁴⁷ The Department of Health and Ageing existed between November 2001 and September 2013, and was superseded by the Department of Health (DOH).

¹⁴⁸ The PBS is a government program that provides subsidized prescription medicines to Australian residents.

World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

- **Weak patent enforcement:** Contrary to its obligations under the AUSFTA, Australia does not provide patent holders with advance notice of potentially patent-infringing products applying for marketing approval and coming to market before loss of exclusivity (LOE). As explained above, the Australian Government has persisted with a policy to seek recovery of damages from innovators in cases where challenges to patents on PBS-listed medicines have been upheld following an initial granting of a temporary injunction. This is exacerbated by the inability to seek injunctions and resolve patent challenges prior to market entry (due to lack of adequate patent notification). This policy change was made without consultation with relevant stakeholders and with retrospective application. It continues to create significant uncertainty for pharmaceutical patent owners in Australia and undermines the rights of patent holders by introducing a strong disincentive to defend their IP.
- **Regulatory data protection failures:** Strengthening regulatory data protection (RDP) in Australia could, among other benefits, improve the country's attractiveness as a destination for foreign investment by global pharmaceutical companies and encourage companies to bring new medicines to Australia sooner. The Australian Government has strongly resisted any attempts to align RDP with comparable jurisdictions (such as the United States or European Union). Additionally, the Australian Government has requested a further review of IP in Australia which is now being led by the Productivity Commission. This is despite two relatively recent reviews (the Harris Review 2013¹⁴⁹ and the McKeon Review 2013¹⁵⁰).
- **Policy changes which are either *ad hoc* or undermine agreed innovation principles:** The Australian Government continues to make significant policy changes, particularly in relation to the PBS, often without adequate consultation with the industry. Policy and/or legislative reforms have been introduced every year, regardless of the presence or absence of industry/government agreements. For example, in 2013, the Australian Government elected to unilaterally alter its existing policy on the scope, mechanism and timing of price disclosure for off-patent medicines, effectively bringing forward price reductions. In 2014, the Pharmaceutical Benefits Pricing Authority (PBPA) was disbanded, which essentially removed an opportunity for consideration of all factors critical to the pricing process, reduced transparency and allowed the DOH full control of the process. In 2015, new and broader reforms were legislated introducing mandatory statutory price reductions to patented medicines after 5 years of listing on the PBS formulary, plus additional changes to price disclosure amongst

¹⁴⁹ The Pharmaceutical Patents Review, 2013, available at http://www.ipaustralia.gov.au/pdfs/2013-05-27_PPR_Final_Report.pdf (last visited Feb. 5, 2016).

¹⁵⁰ Strategic Review of Health and Medical Research, 2013.

other reforms to the pharmacy and pharmaceutical sector. These changes seriously undermine incentives for pharmaceutical companies to bring new, innovative medicines to Australia. The changes also threaten the ongoing supply of many medicines (on- and off-patent). Some companies have elected to delist products from the PBS in the face of significant price drops, citing that they are no longer commercially viable at current PBS prices.¹⁵¹ In addition to the PBS, the Australian government continues to put forward proposals or commission inquiries to review the current IP system. The latest being the 2015 Productivity Commission's (Commission) Issues Paper on "Intellectual Property Arrangements."¹⁵² These efforts add to the policy uncertainty and it is unclear what impact the outcomes of these inquiries will be on the IP system.

For these reasons, PhRMA requests that Australia be placed on the **Watch List** for the 2016 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

Market Size Damages

Australia's preliminary injunction policy effectively circumvents the due process afforded to inventors through the patent and court systems by penalizing inventors who have sought to defend their legitimate patent rights in court, which ultimately proved to be unsuccessful. The precedent set by this policy jeopardizes well-accepted principles of due process and severely discourages innovators from exercising their IP rights. Moreover, this policy contravenes Australia's obligations under TRIPS.

The Australian Patent Office (APO) requires substantive patent examination; the patentee must show it is entitled to a patent. Because of this burden placed on the patentee, one essential component of a granted patent is the presumption of validity – thus providing inventors with a reasonable expectation that they will be able to exclude others from making, using, or selling the relevant technology. This presumption provides the legal and practical certainty required by inventors to carry out costly R&D activities, and to enjoin others from infringing relevant IP rights. The ability to quickly and efficiently enforce IP is especially critical for pharmaceutical innovators. For this reason, courts often employ provisional enforcement measures, e.g. preliminary injunctions, to ensure that patentees do not encounter irreparable harm during the course of a judicial proceeding.

Similarly, biopharmaceutical innovators are severely disadvantaged if they do not seek preliminary injunctive relief in Australia. If a generic product launches, PBS price

¹⁵¹ See "More delistings inevitable" PharmaDispatch (July 17, 2014), available at <https://pharmadispatch.com/news/more-delistings-inevitable> (last visited Feb. 5, 2016).

¹⁵² See <http://www.pc.gov.au/inquiries/current/intellectual-property#issues> (last visited Feb. 5, 2016).

reduction mechanisms are triggered, thus significantly lowering the PBS price. However, if a court later determines that the generic company infringed the originator's patent, restoring PBS prices to levels prior to generic market entry is at the discretion of the DOH. In other words, there is no legal mechanism or policy that automatically readjusts the PBS price index after a generic product is introduced and subsequently removed from the market.

Since announcing its market size damages policy in 2012, innovative pharmaceutical companies engaged in enforcement proceeding began receiving DOH notices of intent to seek damages caused by delayed PBS price reductions. A significant number of those companies received DOH notices *after* the relevant preliminary injunctions were sought *and granted by the court* to enjoin generic companies from launching their products. In addition, these companies could not have foreseen that Australia would take such action because the Government did not previously claim to be a party to those proceedings.

Weak Patent Enforcement

Mechanisms that provide for the early resolution of patent disputes before an infringing product is allowed to enter the market are critical to ensuring adequate and effective protection of IP rights for the research-based biopharmaceutical sector. Such mechanisms prevent marketing of a product known by regulatory entities to be covered by a patent until expiration of the patent. An effective early resolution mechanism provides a procedural gate or safeguard. It ensures drug regulatory entities do not inadvertently contribute to infringement of patent rights granted by another government entity by providing marketing authorization to an infringing competitor of the innovative firm.

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, it "shall provide for the patent owner to be notified of such request and the identity of any such other person."

However, originator pharmaceutical companies in Australia currently 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 Australian Register of Therapeutic Goods (ARTG). Originator companies are only able to access this information once the generic has already been registered on the ARTG, and even then the originator company itself has to actively go and find that information on the ARTG website – originators are not notified by the generic company or the TGA. As a result, originator pharmaceutical companies in Australia are routinely unaware of a potential infringement until after the generic product has received marketing approval (and has

been listed on the ARTG) or has been considered for PBS listing. While in recent years the Australian Government has been quicker to identify and publish newly approved generics on the ARTG website, this is still not what was envisaged in the AUSFTA.

There is a serious impact on originator companies from generic medicines entering 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 whether the product is listed on the PBS or available through private prescription. Notification through the intended listing of a generic on the PBS is not sufficient notification of a generic *requesting* marketing approval as required by the AUSFTA because the PBS is not concerned with approval for sale in the Australian market; this is the role of the TGA. Moreover, there is a subset of medicines on the Australian market that will not be listed on the PBS and therefore patent holders of these medicines will not receive the marketing approval notification envisaged in the AUSFTA.

The lack of notification and the unduly prejudicial penalties that can be imposed on patent holders for seeking to defend their IP (including liability for damages as discussed in detail above) significantly weakens an otherwise equitable IP system in Australia. The Australian Government should implement an effective notification system so that patent holders are able to defend their IP in a timely manner and without causing unnecessary delays to generic market entry.

Regulatory Data Protection Failures

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.

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 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 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 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.

Strengthening RDP protections in Australia so they are 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 also extend the term of RDP for new formulations, new combinations, new indications, new populations (e.g., pediatrics) and new dosage forms.

Market Access Barriers

Prescription medicines accessed via the PBS constitute the vast majority of prescription medicines dispensed in Australia.¹⁵³ Accordingly, the conditions for listing on the PBS effectively dictate the conditions of access to the Australian pharmaceutical market. The outcomes and processes involved in PBS listings are, therefore, critical to securing market access.

Policy changes which are either *ad hoc*, or undermine the agreed innovation principles

The Australian Government continues to make significant policy changes, particularly in relation to the PBS, with inadequate or ineffective consultation with the industry. Most notably, and illustrative of ongoing concerns with the implementation of ad hoc measures is the Government's 2015 *PBS Access and Sustainability Package* (PASP) following the expiry of the Memorandum of Understanding with the industry in July 2014.¹⁵⁴ The consultation process for the development of the package of reforms, which effectively reduced the PBS budget by A\$6.6 billion dollars over 5 years, of which A\$4.2 billion was directly from innovative medicines companies, was a difficult and ineffective process with inadequate transparency and rushed timeframes.

Previous examples of poor consultation include; in 2011 the Government of the day deferred the listing of medicines recommended by the PBAC (the deferrals issue) resulting in a widespread outrage from consumers, clinicians and the industry. In 2013, the Australian Government unilaterally amended the scope, mechanism, and timing of price disclosure, bringing forward price reductions from every 12 months to every 6 months. This change was legislated in 2014 with the first price reductions in October 2014. Consultation should be improved to build trust, enhance collaboration and avoid policies and reform measures that undermine incentives for innovation and threaten access to new medicines in Australia.

Recent reform

In 2014, the PBPA was disbanded. The PBPA membership included representatives from government, consumer groups and industry. The PBPA was a

¹⁵³ See *Australian Statistics on Medicines 2014*, available at <http://www.pbs.gov.au/statistics/asm/2014/australian-statistics-on-medicines-2014.pdf> (last visited Feb. 5, 2016).

¹⁵⁴ See <http://www.pbs.gov.au/info/general/pbs-access-sustainability-package> (last visited Feb. 5, 2016).

crucial and near final step in the listing process. The disbandment of the PBPA effectively removed an opportunity for consideration of the full range of factors that are critical to the pricing process. It has reduced transparency and has resulted in a less predictable PBAC process for industry. As more time passes the intended benefits proposed by the disbandment, including a faster listing process, have yet to be fully realized. Potential unintended consequences of the disbandment (such as delisting's and supply chain issues) have not been evaluated.

As mentioned above, during the first six months of 2015 the Australian Government developed a number of structural reforms to the PBS, including budget savings measures that will have a lasting effect on the entire pharmaceutical supply chain.

While the innovative pharmaceutical industry was included in a multi-stakeholder consultation process around the changes, the process was conflated with the Government's negotiation with the pharmacy sector for a renewed Community Pharmacy Agreement. Medicines Australia was unable to reach a strategic agreement with Government to succeed the MOU and did not support the package of reforms as they were proposed. Measures within the package that directly affect the innovative sector include: (i) a 5 percent statutory price reduction to patented and single brand medicines once they have been listed on the F1 formulary for five years; (ii) the application of discounts on component ingredient drugs to the price of combination items containing those component drugs; and (iii) removal of originator medicines from the price disclosure calculations, among others.¹⁵⁵ The generic medicines industry, in contrast, formally agreed to support the broader reforms on the condition that no further price-related changes will be made to the F2 formulary (market formulary) and that any unintended consequences of budget savings (particularly related to the reliable supply of affordable medicines) will be identified and quickly resolved. Their agreement also included measures to support the uptake and substitution of biosimilar medicines. It is notable for the innovative sector that, written and agreed assurances have been lost from the expiry of the MOU that would have continued under a new agreement and are, therefore, no longer assured, such as *inter alia*; the introduction of new Therapeutic Groups; initiation of new cost effectiveness/post market reviews; commitment to the architecture of the F1 and F2 formularies with value based pricing in the F1 formulary; and a commitment to Cabinet decision making within 6 months from pricing agreement.

Expenditure on the PBS is predicted to decline in future years (not including the cost of new listings). Most recently, the Government's Mid-Year Economic and Fiscal Outcome (MYEFO) released on December 15, 2015, reported a major reduction in PBS expenditure for 2015-16 with A\$549 million in reduced payments due to higher than expected savings, largely from existing pricing policies. This reduction is expected to be up to A\$1.6 billion over 4 years to 2018-19. While there is little detail on what policies these savings relate to, they highlight the range of existing saving mechanisms that are already at the government's disposal and the need for future stability for the sector.

¹⁵⁵ Id.

Potential changes to regulatory process and policy

The *Expert Review of Medicines and Medical Devices Regulation* delivered its second of two reports to the Government in November 2015. The Review examined Australia's medicines and medical devices and complementary medicines regulatory framework and processes with a view to identifying:

- areas of unnecessary, duplicative, or ineffective regulation that could be removed or streamlined without undermining the safety or quality of therapeutic goods available in Australia; and
- opportunities to enhance the regulatory framework so that Australia continues to be well positioned to respond effectively to global trends in the development, manufacture, marketing and regulation of therapeutic goods.

The Panel made 32 recommendations in its first report which primarily relates to regulation of prescription medicines. In summary, the first report recommended:

- expanding the pathways by which sponsors can seek marketing approval for a medicine or medical device, including making provision for utilisation of assessments conducted by comparable overseas regulators, and for expedited assessments in defined circumstances;
- identifying comparable overseas regulators using transparent criteria;
- enhancing post-market monitoring of medicines and medical devices and streamlining post-market requirements for products in the Australian Register of Therapeutic Goods; and
- Improving transparency and predictability of processes and decisions, to ensure Australians have timely access to high quality, safe and efficacious products.

The government is yet to formally respond to the report's findings and announce which recommendations it will adopt; however, it has signaled an intention to do so in early 2016.

Lack of transparency and procedural deficiencies in government-initiated post-market reviews of PBS listed medicines

PhRMA has concerns with the conduct of post-market reviews of medicines listed on the PBS. While the stated intent of these reviews has been to improve or ensure Quality Use of Medicine, in reality most reviews have had a cost focus and have resulted in price reductions being imposed on, most often, patented medicines. Price reductions to medicines have most commonly been in the order of 40 percent. In addition, reviews have not been transparent, nor followed a predictable format, nor had sufficient opportunity for input from stakeholders.

In an attempt to address this issue, industry, through Medicines Australia, has worked with the Australian Government to develop a new PBS Post-Market Review

Framework. The new framework provides industry and stakeholders with more clarity and certainty around processes, timelines and opportunity for input.

PhRMA acknowledges that important steps have been taken between the local Australian industry and the Australian Government to improve the process for post-market reviews; however, the cost focus of post-market reviews continues to be a concern for industry locally and globally. In late 2015 two further post-market reviews were announced, the post-market review of Chronic Obstructive Pulmonary Disease (COPD) Medicines and Ezetimibe.¹⁵⁶

Decline in the number of new medicine listings

There has been a significant decline in the number of new innovative medicines listed on the PBS since 2009-10. In fact, access to innovative new medicines hit a historic low in 2011-12, with the lowest number of new medicines listed on the PBS in 20 years. For the first time in recent years, we are seeing comparable countries gain access to new medicines well before Australia, and, in some cases, new medicines have not been available to Australian patients at all. A report commissioned by Medicines Australia showed that Australia is currently ranked 18th out of 20 comparable OECD countries in terms of access to new medicines over the period 2009-2014.¹⁵⁷ Much of this is related to the current administration of the PBS.

The purpose of the PBS is to provide timely, reliable and affordable access to medicines for Australian patients. It is important that, moving forward, the PBS remains fit for purpose as new health technologies become available. There is also a need to ensure a high level of industry confidence in the independence and integrity of the Pharmaceutical Benefits Advisory Committee (PBAC) process so that Australian patients can receive access to the newest treatments as soon as possible. While PBAC recommendation rates have improved somewhat over recent years, many of these “positive” recommendations are accompanied by onerous conditions that the sponsor is ultimately unable to meet or that require the sponsor to reapply for PBAC consideration, causing further delay.

Disincentives to Improvement of Products

Interpretations of sections of Australia’s National Health Act by the Government, which are inconsistent with the intent of the original policy, have recently led to instances of Australian patients being unable to access improvements in the delivery of medicines.

Sections 99ACB and 99ACD of the *National Health Act* allow for statutory price reductions when generic medicines are made available on the PBS. These provisions

¹⁵⁶ See <http://www.pbs.gov.au/info/news/2015/10/post-market-reviews-medicines-copd-and-ezetimibe-news> (last visited. Feb. 5, 2016).

¹⁵⁷ COMPARE: A Report benchmarking Australia’s access to new medicines, (Mar. 2015), available at <https://medicinesaustralia.com.au/policy/publications/compare/> (last visited Feb. 5, 2016).

were established to create the savings/headroom for new and innovative medicines in the F1 formulary. However, the Australian Government is currently interpreting Sections 99ACB/D in a way that erodes the fundamental basis of the F1 formulary by treating new presentations of single brand medicines as generic competitors even when such products remain under patent exclusivity. This is an issue for numerous pharmaceutical companies across a range of disease areas.

New presentations of currently available medicines are brought to market for various reasons, including to: introduce an improvement in medication delivery which enhances patient outcomes; reflect a global technology change; or address safety concerns related to the existing presentation. In the current environment, pharmaceutical companies are discouraged from bringing improved presentations to the Australian market because their listing could trigger a 16 percent statutory price reduction for both the old and new presentations of the medicine despite the product still being on patent.

Interpreting Sections 99ACB/D in this way will have additional adverse impact on the industry by impacting the timing and magnitude of price disclosure price reductions. From October 2016, originator pricing data will be removed from the price disclosure calculations for products that have been on the F2 formulary for 3 years or more. The three years is calculated from entry of the first new brand entering the market, which under current interpretation of the act could be new presentations of the single brand medicine, rather than a true generic competitor. These changes distort the calculations to determine the market price to be paid, and could result in the market derived subsidy falling below the cost of supply resulting in market failure and denying patient access.

Biosimilars

There have been significant recent developments regarding the introduction of biosimilar medicines into the Australian market which are cause for concern:

- suggestions that TGA may pull back from a policy of unique naming for biosimilars;
- recent revisions to the Evaluation of Biosimilars Guidelines, which limit the TGA's role to determining "biosimilarity" with no reference to "interchangeability" (*i.e.*, effectively shifting responsibility for assessing evidence related to pharmacy level substitution to the PBAC); and
- PBAC's approach to pharmacy-level substitution, which effectively diverges from all comparable international regulators who caution against allowing pharmacists to dispense a biosimilar in place of its reference originator biologic without explicit direction from the prescriber or suitable evidence.

The current TGA naming policy presents significant pharmacovigilance concerns, and there remains selective and limited consultation on further uptake drivers for biosimilars. Furthermore there remain several outstanding issues associated with pharmacy level substitution including agreed standards of evidence to enable

substitution, data collection and pharmacist notification of dispensing decisions to the prescribing clinician to enable traceability and pharmacovigilance.

These issues further reinforce the need for Australia to develop a considered, consistent and comprehensive biosimilars policy to support their safe introduction, appropriate uptake and quality use and to build public and global confidence in the emerging biosimilars market.

KOREA

PhRMA and its member companies remain concerned with numerous intellectual property and market access issues in Korea. As one of the largest and fastest growing pharmaceutical markets in the world, Korea's efforts to reform its healthcare system are ongoing.

Key Issues of Concern:

- **Weak patent enforcement:** While Korea has implemented a patent enforcement 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; the lack of clarity regarding how the criteria for seeking and being granted a stay will be applied; and the limited period of only nine months for a sales stay. Furthermore, it should be clear that the patent enforcement mechanism is based on the patents as granted by the Korean Intellectual Property Office (KIPO) and uncertainties (including the MFDS's redrafting of claims) should be removed from the patent enforcement system.
- **Discriminatory market access policies:** The current government pricing mechanism sets prices for new medicines considering the weighted average price for pharmaceuticals – including generics – within the same therapeutic class. This policy, combined with significant *ad hoc* price cuts, means that the government pricing system significantly undervalues innovative medicines. Consistent with the South Korea-U.S. Free Trade Agreement (KORUS), the MOHW should reform its government pricing policies, for example, by not using off-patent or generic prices in the calculation of prices for new, patented products, so that prices for new medicines appropriately reward innovation and encourage investment in the new medicines needed by the people of Korea.

For these reasons, PhRMA requests that Korea be placed on the **Watch List** for the 2016 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 Protections

Weak Patent Enforcement

Consistent with its IP obligations under KORUS,¹⁵⁸ effective March 15, 2015, Korea has implemented the framework of an effective patent enforcement system. Key issues that PhRMA continues to monitor include:

¹⁵⁸ See U.S.-Korea Free Trade Agreement, Art. 18.9, para. 5.

- The discretion afforded to MFDS to determine whether to list a patent in the Green List or to permit a change to the patent listing.
- MFDS continues to rewrite or amend the patent claims in a manner inconsistent with the patent claims granted by the KIPO. This practice is likely to create legal confusion and increase uncertainty for innovators and generics alike.
- The sales stay of the potentially infringing product is not automatic; rather the patent holder must seek a stay. It is not clear how MFDS will apply the criteria set forth in the new regulation to determine whether to grant a stay.
- Korean law only provides for a nine-month sales stay. It is unclear whether this will be 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 or whether injunctive relief will remain available through Korea's courts.

Market Access Barriers

Transparency and Predictability in Government Policy-making

Since 2010, MOHW has repeatedly changed its pharmaceutical pricing and reimbursement policies without considering the long-term implications for innovation and market predictability, and in some cases disproportionately targeting innovative pharmaceutical companies. In spite of significant input from the pharmaceutical industry regarding the need to appropriately value innovative medicines following the 2012 global price cut, little progress has been made and subsequent consultation processes have proven perfunctory in most cases. This lack of predictability and transparency results in an uncertain business environment for the innovative pharmaceutical industry.

In addition to the substantial price cuts in 2012, MOHW announced in September 2013 that it would impose additional price constraints through its price-volume agreement (PVA) regime. Under the new rules, the PVA goes into effect if the reimbursement amount exceeds ten percent of the amount reimbursed in the prior year and KRW 5 billion for the year. Pharmaceutical companies are concerned that the revised PVA, contrary to Korea's obligations under KORUS FTA, will not appropriately value innovative medicines during the patent period and will disproportionately harm innovative companies.

Effective May 29, 2015, locally developed medicines that (1) are produced by "innovative pharmaceutical companies" as designated by MOHW; (2) are first approved in Korea; and (3) are in at least Phase III clinical trials in multiple other countries, can negotiate confidential rebates with the MOHW instead of being subject to public price volume agreements resulting in prices that can inappropriately be referenced in other

countries.¹⁵⁹ As written, these criteria would discriminate against multinational biopharmaceutical companies.

PVA should be applied in a flexible manner that ensures drug prices are predictable even when estimated volume fluctuates and that provides for the option of confidential rebate negotiations regardless of where the medicines are developed and/or manufactured.

Separately, the Risk Sharing Agreement (RSA) system should be expanded to provide an alternative pathway for reimbursement listing to enhance patient access to innovative medicines regardless of disease area and without the need to submit unrealistic pharmaco-economic or statistical data. Currently the RSA is limited to rare or cancer disease areas only and dependent on submission of pharmaco-economic data with no exception.

Government price reductions have dramatically reduced revenues for both the domestic and multinational pharmaceutical industry operating in Korea, decreasing incentives for further investments in innovation. Government price cuts along these lines continue to create an unpredictable operating environment for innovative pharmaceutical companies that rely on long-term planning to make the vital investments necessary for the development of new medicines. These measures have significant impacts in other markets around the world given the number of countries that directly or indirectly reference Korean prices. Large, unpredictable and arbitrary government price reductions may discourage the investments required for the research-based pharmaceutical industry to grow and thrive.

Recent Reform Measures

In Korea, prices of new drugs are based on the weighted average price within the therapeutic class, which includes prices of off-patent and generic drugs. As a result, government measures that lower existing drug prices impact new drug pricing. In other words, by instituting drastic price reductions on the off-patent and generic market, and then basing new drug prices on the prices of these now heavily-discounted medicines, the government inappropriately depresses the prices of innovative medicines.

The reimbursement prices of new drugs under the previous Drug Expenditure Rationalization Program has been far too low, less than half of the average OECD price for new drugs.¹⁶⁰ The further reductions of existing drug prices will therefore likely lead to significantly lower prices of new drugs in Korea.

¹⁵⁹ MOHW Notification No.2015-327 (2015.5.29).

¹⁶⁰ EK Lee, "Price comparison among OECD countries" (2013).

In addition to very low prices, during 2007-2012 only 64 percent of rare disease drugs and 56 percent of oncology drugs applied for reimbursement listing have passed,¹⁶¹ raising a significant patient access problem in the country.

Moreover, the annual price re-adjustment reactivated by the Actual Transaction Price (ATP) system would expedite the downward spiral in prices for all drugs. Specifically, the ATP system has been reactivated despite the numerous price cuts that were instituted while the ATP system was suspended. Instead of layering the old ATP-system onto new price cuts, the Korean Government should evaluate the need for the ATP-based price reduction scheme in light of the new pricing environment.

Effective May 29, 2015, MOHW implemented new listing processes that exempts certain new drugs from completing a pharmaco-economic (PE) evaluation and provides for fast-track pricing decisions. However, the PE exemption criteria are too narrow to be applicable for most new medicines. An effective dialogue with stakeholders, including the research-based biopharmaceutical industry, on valuing innovation will support MOHW's intention to promote greater pharmaceutical R&D in Korea and improve the global competitiveness of the Korean biopharmaceutical industry in the future.

Independent Review Mechanism (IRM)

Under Article 5.3(5)(e) of the U.S.-Korea Free Trade Agreement 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.” The Korean Government has taken the position, however, that reimbursed prices negotiated with pharmaceutical companies should not be subject to the IRM because the National Health Insurance Service (NHIS) does not make “determinations” and merely negotiates the final price at which a company will be reimbursed. However, this interpretation totally negates the original purpose of the IRM, which we believe should apply to the negotiation process for prices of all reimbursed drugs, particularly patented medicines.

In a normal market situation it would be appropriate for negotiations not to be subject to an IRM. However, NHIS is the sole “negotiator” for reimbursements in Korea, and as such is making “determinations.” Local data indicates that from 2007 through 2012, NHIS determined not to reimburse 59 (20.3 percent) of the 291 new medicines for which it was tasked to negotiate the reimbursed price. For anti-cancer drugs, the rejection rate (37.9 percent) was even higher – NHIS decided to reimburse only 18 of the 29 anti-cancer drugs that Korea's Health Insurance Review and Service Agency had determined should be reimbursed.

Further, the reimbursement process with the NHIS cannot be considered as “regular negotiations.” Companies are required to submit data and rationale for their proposed price in advance; however, NHIS is not required to provide any explanation or

¹⁶¹ HIRA report (2012).

supporting data for its proposed price. For these reasons, contrary to the position taken by the Korean Government, NHIS's determination of whether a product should be reimbursed at a given ceiling price must be subject to an IRM.

Ethical Business Practices (EBP) Reform

Since the passage of several pieces of legislation in the National Assembly regarding “dual punishment” and revisions of the Medical Service Act, the Pharmaceutical Affairs Act and the Medical Device Act, MOHW has taken the lead in setting EBP standards through enforcement regulations under these laws. MOHW worked with industry to come to a consensus on the scope of allowable benefits (whether financial, educational or otherwise) from industry to health care professionals, including specified activities such as providing samples, product presentation meetings, clinical trials, post-marketing surveillance, special discounts based on speed of payment, sponsorship of participants at academic conferences. The laws became effective as of November 28, 2010, and the enforcement regulations were finalized on December 13, 2010. Although it had seemed that there was consensus between industry and the Korean Government, there are still some ambiguities in the final enforcement regulations, particularly in relation to lecture fees and consultation fees. Industry associations continue to reach out to the Government to resolve the remaining issues, but the Government does not appear to be receptive to addressing these issues. In light of the strict penalties for unethical business practices – including price reductions and since July 2, 2014, suspension or revocation of listing of medicines on the reimbursement list – it is critical that there is a clear understanding of how the EBP standards will be enforced.

VIETNAM

PhRMA's member companies face significant intellectual property (IP) and market access concerns in Vietnam. Furthermore, many of the reforms proposed by the Government of Vietnam are out of step with international or regional best practices.

Key Issues of Concern:

- **Generally weak IP environment:** The adoption of IP protections that conform to international obligations and standards, including meaningful regulatory data protection (RDP), clarification of the scope of patentable subject matter, and implementation of effective patent enforcement mechanisms, could greatly assist Vietnam in creating a more predictable environment for investment in innovation and enhance transparency and predictability.
- **Discriminatory government procurement policies:** Current Ministry of Health (MOH) initiatives aim to increase the share of locally procured pharmaceuticals to 80 percent of market volume and value by 2030, which could significantly impact U.S. exports to Vietnam. In addition, proposed revisions to the tendering system are still not fully clarified and may limit participation of foreign companies.
- **Burdensome clinical trial and quality testing requirements:** Domestic clinical trial requirements in Vietnam are mandated for marketing approval of pharmaceuticals that have not been made available in their country of origin for more than five years. These studies are unnecessary and burdensome, lead to an escalation in costs, and reduce the number of innovative medicines available to Vietnam's patients. The current draft amendments to the Pharma Law 2005 propose some solutions for this issue, but it remains to be seen whether this proposal will be implemented in the final ratified law.
- **Trading rights and distribution restrictions:** Vietnam's MOH should provide clear guidelines for effective implementation of full import rights in all pharmaceutical products. The MOH should also permit PhRMA's member companies to contract with foreign-owned storage and logistical service companies who have obtained suitable certifications according to international standards for their facilities and practices.
- **Discriminatory market access policies:** Vietnam's decision to use cost, insurance, and freight (CIF) prices as a benchmark to set pricing for pharmaceuticals relative to neighboring countries creates unequal opportunities and restrictions for imported and locally produced pharmaceuticals, which are exempt from associated costs and restrictions. Given the country's costly import regime, the reference pricing system should be based on Price to Trade (PTT).

For these reasons, PhRMA requests that Vietnam remain on the **Watch List** for the 2016 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

The Vietnamese National Office for Intellectual Protection (NOIP) has misconstrued Article 4.12 of the Law on Intellectual Property (2005) to omit “second use” inventions from the definition of “invention.” Article 4.12 provides that an “invention means a technical solution in [the] form of a product or a process which is intended to solve a problem by application of laws of nature.” The Ministry of Science and Technology expounded that definition in 2007 in Circular No. 01/2007/TT-BKHCN, providing that patent protection will only be offered to an invention if it is a “technical solution,” including a product or “a process (technological process; diagnosing, forecasting, checking or treating method).”

Notwithstanding the clear scope of a patentable invention as set forth in Vietnam’s Law on Intellectual Property and Circular No. 01/2007/TT-BKHCN, NOIP began to systematically reject any claims for “second uses” of existing pharmaceutical products in 2005. The rationale for many of these rejections purports to be grounded in the definition of “invention” found in Article 4.12 of the Law on Intellectual Property and in Article 25 of Circular No. 01/2007/TT-BKHCN even though the result contravenes these cited sources. In all, NOIP has made “second use” inventions *de facto* ineligible patent subject matter. Yet, NOIP is obligated to examine these inventions because “second use” inventions fall within the meaning of invention in Article 27.1 of the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and Vietnam’s own definition of “invention” in Article 4.12 of the Law on Intellectual Property.

Patent Backlogs

PhRMA’s member companies continue to face burdensome delays in the granting of patents. Vietnam lacks a means for adjusting the patent term to compensate for these delays, thus eroding the effective term of patent protection available for innovative medicines. There are various reasons for these delays, including insufficient personnel capacity.

Weak Patent Enforcement

Vietnam fails to provide an effective patent enforcement mechanism that allows for resolution of patent disputes prior to the marketing of follow-on products. PhRMA’s member companies strongly encourage Vietnam to adopt such mechanisms. Such a patent enforcement mechanism could greatly enhance the business environment by: (1) providing process transparency and predictability for both the innovative and the generic

firm; (2) creating a more predictable environment for investment decisions; and (3) ensuring timely redress of genuine disputes.

Regulatory Data Protection Failures

Vietnam continues to engage with PhRMA's member companies on the adoption of meaningful RDP measures through the Drug Administration Vietnam (DAV). However, the implementation guidelines of the current Data Protection Circular fall short of making the necessary improvements.

As part of the implementation of Vietnam's obligations under TRIPS, the Data Protection Circular provides, on paper, for five years of RDP. In practice, however, this protection has proved illusory. First, the Circular is not clear on whether the five-year term of RDP applies in cases that involve a generic manufacturer relying on or referencing innovator data in support of its marketing approval application. Furthermore, the Circular conditions RDP on requirements that: (1) member companies submit a separate application for data protection, rather than receive automatic protection upon marketing approval as international standards and TRIPS require; (2) data be classified as a "trade secret" under Vietnamese law, which as defined may not cover undisclosed confidential business information; and (3) the innovator prove "ownership" of the data in cases of dispute rather than the third party or government challenger. Finally, RDP is granted at the sole discretion of DAV; to our knowledge, no PhRMA member company has received RDP in Vietnam to date.

Market Access Barriers

Burdensome Clinical Trial and Quality Testing Requirements

PhRMA's member companies continue to express concern with domestic clinical trial requirements in Vietnam for the marketing approval of all pharmaceuticals that have not been made available in their country of origin for more than five years. Not only is this practice unnecessary, given the stringent standards of regulatory authorities such as the United States Food and Drug Administration and European Medicines Agency, but Vietnam does not possess the resources or infrastructure to acquire reliable clinical trial results from domestic sources. These requirements also apply to new variations of pharmaceutical products already registered in Vietnam. PhRMA's member companies urge Vietnam to permit regulatory officials to accept reliable clinical trial data collected from appropriate clinical trial sites located outside of Vietnam when domestic capabilities are not in place. Such an amendment could quickly improve patient access to new, life-saving medicines. While PhRMA's members applaud efforts by the Ministry of Health to eliminate the requirement to conduct clinical trials in Vietnam in order to attain regulatory approval, they remain concerned that legislative reform to eliminate this requirement has stalled and encourage the Vietnamese Government to eliminate this barrier to patient access immediately.

Further, Vietnam's requirement that all new batches of vaccines undergo quality testing is scientifically unnecessary and time consuming. These tests must be conducted by the National Institute for Control of Vaccine and Biologicals (NICVB), which does not have the capacity to effectively conduct such tests.

Burdensome and Unnecessary Product Registration Renewals

Vietnam currently requires pharmaceutical firms to reapply for product renewal or "visas" every five years. This requirement has become a significant administrative burden since the process for renewal or to obtain a product visa can take from 18-24 months. Furthermore, it is not possible to submit a dossier for renewal until twelve months before the expiry of the existing registration, leading to "off-visa" periods, during which importation and promotion of the product is not permitted, and medical education activities are significantly restricted. In addition, during such an off-visa period, the participation in hospital tenders is in practice very difficult because most hospitals will not accept MOH documents stipulating that a product is in the process of being renewed. Nonetheless, companies face sanctions as stipulated in hospital tender contracts for failure to fulfill the tender contract obligations.

Onerous Government Procurement Tenders

The procedure for the selection of innovative medicines for tender includes onerous and impractical requirements for submitting documents, which have caused delays for companies applying for tender. For example, in August 2012, the Ministry of Health issued Decision 2962 "Decision on Promulgating Temporary Regulation on Documents Needed In Order To Announce Lists of Original Proprietary Medicines, Medicines Used for Treatment Similar with Original Proprietary Medicines, Medicines with Documents Proving Bioequivalence." This Temporary Decision 2962 specified the documents, including patents, and additional parameters for qualifying as an innovator pharmaceutical product for the bidding process (see Article I, paragraph 2).

Temporary Decision 2962 proscribes which patents will be accepted in two ways. First, it only recognizes patents from selected countries. Under the Temporary Decision 2962, patents will only be accepted from 14 National Patent Offices (since expanded to 16 offices under decision 1545/QD-BYT). Second, Temporary Decision 2962 limits the innovative products eligible for tenders to those with "molecular patents" (since expanded to also include "dosage form patents" by Decision 1545). This serves to exclude from the tendering process those pharmaceuticals with process patents or patents for second uses and combinations, thereby disregarding the benefits these medicines could bring to Vietnamese patients.

In addition, a new tendering regime is being implemented that will include a price negotiation and a centralized tendering system, the parameters and application of which are unclear and may limit participation of foreign companies where it is determined that there are domestically manufactured drugs meeting the therapeutic, price and supply

capacity requirements. Greater clarity and transparency is needed as to both the technical requirements and price negotiation criteria.

Certificate of Pharmaceutical Product (CPP) Requirements

Currently manufacturers seeking to register new products in Vietnam are required to submit a CPP from the country of origin or certain reference countries with the technical dossier. In turn, this delays Vietnamese patient access to innovative medicines by approximately 26-36 months. To avoid these unnecessary delays, Vietnam should allow manufacturers to submit their technical dossiers without the CPP, and then supplement their applications once the CPP is issued.¹⁶²

Trading Rights and Distribution Restrictions

As part of Vietnam's WTO accession commitments, the country agreed to extend full import rights to pharmaceutical products in January 2009. Despite this commitment, international pharmaceutical companies must still establish foreign representative offices and rely on a complex set of arrangements for their foreign parent companies to export pharmaceuticals to Vietnam. Further, foreign representative offices are prohibited from "conducting sales/trading activities" and, as such, are not allowed to issue invoices to business partners, collect receivables, or provide educational information on their medicines. PhRMA's member companies urge the MOH to issue clear guidelines that embrace full trading rights for the export and import of finished pharmaceutical products in Vietnam.

Research-based pharmaceutical firms also face limited control over the distribution of their products. Therefore, foreign investors and their parent companies turn to local distributors to import and sell their products on the Vietnamese market and are forced to rely on those partners to ensure the quality and safety of product delivery to patients. This is particularly challenging as the foreign pharmaceutical company (as the product registration license holder) remains liable for adverse events caused by their pharmaceutical drugs and vaccines, yet is unable to control the quality and safety of product delivery to patients. In addition, the lack of control over distribution poses a barrier to trade due to the complexity it adds to operations and it poses a potential compliance risk in terms of not being able to own, train and discipline field-force personnel in a timely manner.

The pharmaceutical supply chain requires careful monitoring to ensure product safety, reliable maintenance (*i.e.*, an unbroken cold chain for vaccines), and timely delivery, as well as the protection of sensitive proprietary technology. The MOH should permit PhRMA's member companies to contract with foreign-owned storage and logistical services companies who certify that their methods meet international standards.

¹⁶² To the extent that Vietnam also uses the CPP as a proxy to demonstrate that the product is safe, the industry stands ready to work with Vietnam to determine other methods to demonstrate safety and efficacy.

Discriminatory Market Access Policies

Vietnam uses cost, insurance, and freight (CIF) prices as a benchmark to compare pricing for pharmaceuticals with neighboring countries. This creates unequal opportunities and restrictions for imported versus locally produced pharmaceuticals. First, Vietnam's unique import regime (described above) results in inflated CIF prices within Vietnam relative to other regional markets that do not impose similar import and distribution restrictions. Second, the adopted pricing circular only applies to imported products as no similar restrictions or requirements are imposed on locally manufactured goods. The price monitoring system should be based on Price to Trade (PTT), which covers both locally manufactured and imported products.

Ban on Imports of Products with "Old" Packaging

Currently, all approval letters related to any variations in imported drugs (except vaccines), including variation related to artwork (e.g. packaging insert update, changing information on carton, blister, label etc.) stipulate that: *"After 3 months since the signed date of this letter, your company is not allowed to import drugs with old artwork/packaging insert"*. In practice, however, due to global supply chains, it can take PhRMA members six to nine months to ship products using the new approved artwork to Vietnam, resulting in product shortages or stock-outs. To ensure that patients have continued access to their medicines and that manufacturers are able to meet their active tender contracts with hospitals and the Services of Health, Vietnam should provide greater flexibility to use the former packaging.

Counterfeit Medicines

PhRMA's member companies applaud efforts by the National Institute for Drug Quality Control (NIDQC) to partner with the U.S. Government to raise awareness of the dangers posed by unsafe medicines and strongly support enhanced coordination on anti-counterfeit initiatives, including training for regulatory and security officials. NIDQC has also consulted with PhRMA's member companies on best practices to promote the use of safe medicines. Increasing the penalties for criminals manufacturing, supplying, or selling counterfeit medicines will help improve enforcement efforts.

EUROPE

ROMANIA

PhRMA's member companies face several market access barriers in Romania, including reference pricing, inadequate healthcare funding mechanisms and significant delays in the reimbursement process.

Key Issues of Concern:

- **Weak patent enforcement:** There is no opportunity for innovator companies to resolve patent disputes in advance of the generic or biosimilar launch. Patent infringement proceedings may not be initiated until just before or just after launch of the third party product, which often makes resolution of disputes before actual launch impossible. Interim injunctions to prevent accused products from remaining on the market until trial are granted in less than half the relevant cases. This failure to provide effective remedies fundamentally undermines the exclusive rights conferred by a patent.
- **Clawback taxes:** Since 2009, the innovative pharmaceutical industry has been the target of numerous misguided "clawback" tax regimes intended to increase revenue or control expenditure. The latest version of the clawback was implemented on October 1, 2011 and requires medicine producers to cover the entire reimbursed medicine budget deficit (the difference between the medicines budget allocated by the government and the real market consumption), including wholesale and retail margins. In 2015, the deficit in the reimbursement budget was equal to \$440 million and is expected to rise to \$460 million in 2016.
- **Unpredictable, non-transparent, and delayed reimbursement processes:** The Romanian reimbursement list is updated infrequently, such that only 60 new medicines out of over approximately 220 new medicines approved over the last eight years are available to Romanian patients. Such a reimbursement system leads to reduced patient access to medicines in Romania. In some instances, significant delays have resulted in generic medicines entering the reimbursed market prior to the original molecule. In addition, while supportive of the Romanian Government's recent limited update to the reimbursement list (the last update occurred in 2008), PhRMA's member companies are concerned that updates are negated by the Health Technology Assessment (HTA) process in Romania, which lacks transparency, misinterprets data, relies on poor assessments, and does not consider the efficacy of the drug when producing its assessments, instead relying almost exclusively on cost. PhRMA and its members operating in Romania support a transparent and predictable reimbursement process that rewards innovation and encourages development of tomorrow's new treatments.

For these reasons, PhRMA requests that Romania remain on the **Watch List** for the 2016 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

There is no opportunity for innovator companies to resolve patent disputes in advance of the generic or biosimilar launch. Patent infringement proceedings may not be initiated until just before or just after launch of the third party product, which often makes resolution of disputes before actual launch impossible. In addition, resolving these disputes in this manner is often lengthy, expensive, and can result in significant market loss, even if the end ruling favors the company that produced the original molecule.

When a generic product is launched and remains on the market until infringement is proved in patent litigation, harm may be caused to the patent owner which cannot be compensated through damage awards. Overall, however, interim injunctions to prevent accused products from remaining on the market until trial are granted in less than half the relevant cases. This failure to provide effective remedies fundamentally undermines the exclusive rights conferred by a patent.

Market Access Barriers

Clawback Tax

In September 2009, the Romanian Government implemented a “Clawback Tax”, as a temporary measure in response to the global recession. Since then, the Romanian economy has grown and the country has recovered, but this “temporary” measure remains in effect. The clawback tax mechanism acts as an “expropriatory tax”, whereby annual deficits (equal to \$440 million in 2015) in the medicines budget are allocated among pharmaceutical companies. Unfortunately the medicine budget is set by the Government in a non-transparent and unpredictable manner and has ultimately resulted in more than 200 lawsuits between the affected companies and the government.

Based on recent proposals, PhRMA’s members are concerned that the Ministry of Health together with the Parliament plans to further reform its clawback tax regime in a way that would shift the burden of refunding spending beyond the Government’s reimbursed medicine budget entirely to the innovative sector. For example, Romanian authorities are calling for higher taxes on innovative medicines than generic medicines, which would disadvantage R&D-based companies and could have anti-competitive effects.

The innovative biopharmaceutical industry in Romania is ready to be a strong partner with the Romanian Government in order to find a viable solution to remedy its inadequate health spending and inefficient allocation of healthcare resources.

Unpredictable, Non-Transparent and Delayed Reimbursement System

The Romanian reimbursement system imposes myriad administrative barriers on the reimbursement of innovative medicines. The drug reimbursement list is rarely updated, and only when the Government decides to issue a special decision. The last complete updates to the reimbursement list were made in 2005 and 2008, followed by a partial update in 2015. No exceptions are made for life-saving drugs, even for those approved under a fast-track process in other countries within the European Union.

In 2014, Romania introduced a health technology assessment (HTA) system that lacks timelines and transparency and has imposed further barriers and delays to reimbursement. Medicines denied reimbursement under Romania's HTA system are subject to lengthy appeals processes. Even products that meet the reimbursement criteria are subject to lengthy listing delays.

The lengthy process to approve reimbursement (demonstrated to be the longest in the European Union)¹⁶³ shortens the period dramatically before the first generic/biosimilar entry. This results in delays in getting medicines to Romanian patients.

To sustain innovation, the government should seek to improve the reimbursement system by making it more transparent, more predictable, and more regular in its timing, in accordance with the EU Transparency Directive, which sets specific deadlines for reimbursement decisions (90 days).

¹⁶³ European Federation of Pharmaceutical Industries and Associations (EFPIA) *Patients' W.A.I.T. Indicator Report*, available at <http://efpia.eu/documents/33/64/Market-Access-Delays> (last visited Feb. 5, 2016).

LATIN AMERICA

MEXICO

PhRMA and its member companies operating in Mexico remain concerned over significant intellectual property (IP) and market access barriers, including weak patent enforcement and challenges in accessing Mexico's different formularies.

Key Issues of Concern:

- **Weak patent enforcement and regulatory data protection failures:** Mexico's health regulatory agency (COFEPRIS) and the Mexican Patent Office (IMPI) have committed to improve the application of Mexico's 2003 Linkage Decree and to provide protection for data generated to obtain marketing approval for pharmaceutical products. Despite these commitments, implementation of substantive regulatory data protection (RDP) reform is still pending, and use patents continue not to be listed in the Official Gazette, and thereby are denied protection under the patent linkage decree.
- **Inadequate biosimilars regulation:** Recent additions and updates to the regulations covering approval of non-innovative biologics (biosimilars) lack clarity.
- **Market access delays:** Despite recent improvements to the marketing approval process for pharmaceutical products, significant barriers to the public market for medicines remain due to the lengthy, non-transparent and unpredictable reimbursement process.

For these reasons, PhRMA requests that Mexico remain on the **Watch List** for the 2016 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

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's Linkage Decree of 2003 constituted important progress toward an early resolution mechanism and the full recognition of pharmaceutical patent rights in Mexico. However, the decree is not being implemented in a comprehensive and consistent manner. For example, the publication in the Official Gazette of formulation 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, it is unclear whether and how COFEPRIS consults the Official Gazette and

with the Patent Office to verify that there is no patent infringement, including for formulation patents, before issuing marketing authorizations.

Both of Mexico's NAFTA partners provide patent enforcement systems for product, formulation and use patents. It is therefore inappropriate for Mexico to not provide effective patent enforcement for use patents. Furthermore, effective patent enforcement mechanisms inherently prevent the marketing of follow-on products when such marketing would infringe valid patent rights.

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.

Unfortunately, PhRMA member companies generally are unable to remove patent infringing products from the Mexican marketplace. 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 rare exception rather than the norm. Although injunctions may be initially granted subject to the payment of a bond, such injunctions may be lifted by the alleged infringer simply by paying a counter-bond. The failure to provide effective patent enforcement mechanisms is inconsistent with Mexico's commitments under the North America Free Trade Agreement (NAFTA) and the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

PhRMA's members encourage Mexican authorities to establish uniform criteria consistent with court precedents ordering the listing of use patents in the Official Gazette. In addition, 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.

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.

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. 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 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 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.

The leaders of COFEPRIS and the Mexican Patent Office (IMPI) have committed to provide protection for data generated to obtain marketing approval for pharmaceutical products. Despite this commitment, implementation of substantive RDP reform is still pending.

In June 2012, COFEPRIS issued guidelines to implement RDP for a maximum period of five years – an important step toward fulfilling Mexico's obligations under TRIPS and NAFTA. PhRMA members initially welcomed this decision as an important confirmation of Mexico's obligations and its intention to fully implement the NAFTA provisions.

As guidelines, however, their validity may be questioned when applied to a concrete case. Further, they could be hard to enforce or revoked at any time. Therefore, PhRMA members strongly urge the passage of regulations on RDP to provide greater certainty regarding the extent and durability of Mexico's commitment to strong IP protection.

In addition, PhRMA members remain concerned with the apparent distinction made by the regulatory authorities between the provision of RDP to chemically synthesized (small molecule) and biologic drugs. It is the view of the innovative biopharmaceutical industry that, consistent with TRIPS, RDP should be provided regardless of the manner in which the medicine is synthesized.

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 "experimental use" during the last three years of the patent term, per a *Roche v. Bolar* exemption. Mexico fails, however, 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 Barriers

Market Access Delays

Key market access issues in Mexico concern the excessive times taken for formulary inclusion and the 5-year registration renewal process. Both significantly exceed stated time frames. COFEPRIS, under the leadership of Mikel Arriola, has made important improvements in the approval process despite limited resources and cost-containment pressures. Industry applauds Commissioner Arriola's efforts to improve the efficiency and technical capability of COFEPRIS.

Following COFEPRIS approval, there remain significant barriers for patients, primarily those covered by public institutions, in accessing life-saving and enhancing interventions. This additional delay is caused by the lengthy, uncertain and non-transparent reimbursement system used in Mexico.

After COFEPRIS grants marketing authorization to a new medicine, the Inter-institutional Commission of the Basic Formulary of Inputs of the Health Sector decides which drugs should be included in the national formulary. Recommended prices for patented drugs (or those with exclusive distributors) for all public institutions are negotiated with the Coordinating Commission for the Negotiation of Prices of Medicines and Other Medical Supplies. 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), Petroleos Mexicanos (PEMEX), etc.) engage in additional reviews. At each step, clinical and pharmaco-economic dossiers, which take manufacturers significant time and expense to create, are required. On average, over the last three years fewer than 10 percent of innovative medicines submitted for institutional approval (IMSS, ISSSTE, Seguro Popular) have been listed on the key formularies. Further, the institutional approval process is an inefficient and non-transparent process, during which, for example, products with regulatory approval and wide reimbursement throughout the world are denied listing based on alleged inadequate efficacy or safety.

Accordingly, reimbursement delays add, on average, over two years to the access process, if made available at all in the public sector. On average, it takes 1,500 days for Mexican patients to access innovative medicines compared to 230 days in other countries.¹⁶⁴

Finally, Mexico's consolidated procurement processes lack transparency and are not consistently applied. For example, a number of the tenders, contrary to Mexico's procurement rules, identify products beyond those listed in the National Formulary.

¹⁶⁴ EFPIA Patients WAIT Indicator 2010 and AMIIF "Access 2015" report.

PERU

PhRMA and its member companies operating in Peru are concerned about the weakness of certain intellectual property (IP) protections and the state of several discriminatory regulatory requirements that favor local producers in Peru.

The U.S.-Peru Trade Promotion Agreement (USPTPA), which was signed in 2006 and amended in 2007, obligates Peru to protect pharmaceutical products' safety and efficacy data, provide a pre-launch legal system that will provide patent holders with sufficient time and opportunity to resolve patent disputes prior to the marketing of an infringing product, and establish a stronger IP framework. Peru has failed to adequately comply with these obligations. Although PhRMA and its member companies do not consider the USPTPA a model for future trade agreements, PhRMA has monitored implementation of the USPTPA, and has been closely monitoring the enforcement of the implementation regulations since its entry into force in February 2009.

Key Issues of Concern:

- **Weak patent enforcement:** Peru does not provide patent holders with sufficient time and opportunity to seek injunctive relief prior to the marketing of an infringing product. This is contrary to Peru's trade agreement obligations and creates significant uncertainty for innovators, their competitors and patients alike.
- **Restrictive patentability criteria:** The Andean Court of Justice (ACJ) has issued several legal opinions (89-AI-2000, 01-AI-2001 and 34-AI-2001) holding that Andean Community members should not recognize patents for second uses. These decisions are contrary to long-standing precedents and inconsistent with Article 27.1 of the World Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).
- **Compulsory licensing:** In January 2014, the Ministry of Health (MOH) received a petition to issue a compulsory license on a patented medicine. The MOH did not permit the manufacturer or the local innovative industry association to participate in the petition review process.
- **Regulatory data protection failures:** Peru does not sufficiently support and value the rigorous testing and evaluation biopharmaceutical innovators and their partners around the world undertake to demonstrate potential new medicines are safe and effective for patients who need them. Contrary to Peru's commitments in bilateral and global trade negotiations, the Peruvian Health Authority (PHA) has failed to provide regulatory data protection (RDP) for several biologic products.
- **Regulatory barriers:** Peru has introduced a number of measures to help ensure the quality, safety and efficacy of pharmaceuticals. However, implementation of these measures has been delayed and a number of these regulations are

impractical in that they request documents that may not be issued in the country of manufacture, or impose excessive administrative burdens that serve no purpose other than delaying the marketing approval process and patient access to medicines. In general, capabilities of the Peruvian Health Authority (PHA) need to be increased as a way to reduce current uncertainty and unpredictability.

- **Delays in implementing regulations on biopharmaceutical products:** The MOH has been delaying implementation of the Pharmaceutical Product's Law and its regulations with regards to biopharmaceutical products for more than five years. The regulations proposed by the MOH on November 2015 are below World Health Organization (WHO) guidelines, and would allow for marketing approval of biologic products without demonstrating that those products are safe and effective.

For these reasons, PhRMA requests that Peru remain on the **Watch List** for the 2016 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

To ensure adequate and effective protection of IP 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. An effective early resolution mechanism provides a procedural gate or safeguard. It ensures drug regulatory entities do not inadvertently contribute to infringement of patent rights granted by another government entity by providing marketing authorization to a competitor of the innovative firm.

Another critical tool to protect against irreparable harm from the loss of IP is the ability to seek injunctive relief (or equivalent procedural measures) to prevent the sale of an infringing product during expeditious adjudication of patent disputes.

Article 16.10.3 of the USPTPA requires Peru to provide patent holders with sufficient time and opportunity to resolve patent disputes prior to the marketing of an allegedly infringing product, if a sanitary registration is requested by an unauthorized manufacturer of a patented product. However, the only measure implemented by the Peruvian Government refers to the publication of the sanitary registration applications on the web page of the PHA, which provides the patent holder notice of an intention to commercialize a potentially infringing product. In addition to the fact that the web page of the PHA is never updated and for that reason, unreliable, this notice alone is not adequate to provide the ability to seek and obtain a remedy before the marketing of the infringing product.

Further, the Peruvian patent enforcement system is ineffective in that it does not provide for timely resolution of patent disputes. The Peruvian system for enforcing patents is a two-step, sequential process: (1) an administrative process for determining infringement by the Institute for Defense of Competition and Intellectual Property (INDECOPI) that takes two years on average; and (2) a judicial action in a civil court to recover damages, which can commence only after the administrative process is exhausted. This judicial action takes four years on average, a duration which discourages patent owners from enforcing their patents.

Restrictive Patentability Criteria

The Andean Court of Justice (ACJ) has issued several legal opinions (89-AI-2000, 01-AI-2001 and 34-AI-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 Peru, have chosen to honor their Andean Community obligations, while ignoring their TRIPS obligations.

The failure to provide patents for second uses adversely affects PhRMA members who dedicate many of their research investments to evaluating additional therapeutic benefits of known molecules in order to 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.

Compulsory Licensing

In January 2014, the MOH received a petition to issue a compulsory license on a patented medicine. Although MOH has initiated a process to review the petition, to date neither the manufacturer nor the local innovative pharmaceutical industry association have been permitted to participate in that review. Any technical analysis being undertaken is being done without consulting the manufacturer, raising significant due process concerns. Moreover, neither MOH nor the Ministry of Commerce have responded to correspondence from the manufacturer or local innovative pharmaceutical industry association.

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.

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 such data submitted for regulatory approval from unfair commercial use for a period of time. TRIPS Article 39.3 requires each WTO member to protect

undisclosed test and other data submitted for marketing approval in that country against both disclosure and unfair commercial use.

A sufficient period of RDP is essential for all medicines, and particularly critical for biologic therapies. Made 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 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.

Since 2009, Peru has granted RDP to many new pharmaceutical products, but only for a very limited period of time (40 months, on average). Further, PHA has failed to provide RDP for several biologic products. This action is inconsistent with Peru's obligations under TRIPS, the USPTA, and national law.

Legislation pending before the Peruvian Congress would further undermine protection of undisclosed information. Bill 995 would require public disclosure of confidential data as a precondition of obtaining a sanitary registration (by virtue of the obligation to use internationally recognized bibliographic sources freely accessible to the public), in apparent violation of Peru's trade agreement obligations.

To appropriately support and value the rigorous testing and evaluation of potential new medicines, the Government of Peru should refrain from granting sanitary registrations to third party follow-on versions of any kind of innovative pharmaceutical products, regardless if they are synthesized or biotechnologically derived pharmaceutical products, for a sufficient period of time, unless the applicants for such versions base their applications on their own clinical data.

Market Access Barriers

Regulatory Barriers

Although a revised Pharmaceutical Products Law was enacted in 2009 to improve the regulatory process for seeking marketing approval of biopharmaceuticals in Peru, the MOH has repeatedly delayed issuing regulations to implement this Law. When implemented, the new regulations are expected to significantly improve the currently subpar safety and efficacy standards in Peru.

Processing Delays

To date, the PHA's implementation of the new regulations still unduly focuses on administrative details and formatting, with less emphasis on the substance of the application, *i.e.*, whether science supports granting a product marketing approval. For

example, failure to provide documentation in the exact format required by the PHA is a basis for delaying or even refusing marketing approval. These regulatory measures and delays present unnecessary trade barriers and may have a negative impact on individual companies' plans to bring products to market in Peru. In general, the capabilities of the PHA need to be increased in order to reduce current uncertainty and unpredictability.

Duplicative Testing

The PHA's regulations include numerous provisions that create unnecessary confusion and market access barriers. Article 45 of Law 29459 provides that: (1) the first batch of any pharmaceutical product after registration or renewal must undergo complete quality testing in Peru (even if quality testing has already been performed at the manufacturing facility overseas); and (2) subsequent quality testing on further batches may be performed outside of Peru as long as the laboratory conducting that testing has been certified by the PHA. However, these certifications have been delayed and at the current rate, the processing time and backlog are expected to grow.

In addition, regulations provide that the PHA will accept quality testing of manufacturers certified by health authorities of high sanitary vigilance countries, such as the United States, in Good Laboratory Practices (GLP) or Good Manufacturing Practices (GMP), provided the GMP covers GLP and the authority so states. However, the new regulations do not adequately specify how a laboratory may be certified by the PHA or which documents are necessary to prove that the foreign authority certification covers GLP.

Unfortunately, local generic manufacturers are trying to capitalize on this uncertainty by pressing authorities to request local duplicative testing of all batches of all pharmaceutical products. The former Peruvian Minister of Commerce has supported this pressure through a letter to the Minister of Health.

Bill 995/2011-CR ("Bill 995"), which was approved by the Health Committee of the Congress in June 2012, would make it mandatory for a pharmaceutical products' importer to conduct duplicative testing in Peru of every batch of imported pharmaceutical products. Further, Article 5 of Bill 995 would require all technical information relied upon in a sanitary registration application to "be extracted from internationally recognized bibliographical sources, freely accessible to the public...." Public disclosure of these data as a precondition of obtaining a sanitary registration would be an inappropriate circumvention of Article 16.10.2 of the USPTA, and violate Peru's broader international obligations under Article 39 of TRIPS and the WTO Technical Barriers to Trade Agreement.

In short, the bill, if approved, would impose a disproportionate burden on U.S. and international pharmaceutical companies, thereby creating a significant trade barrier for imported medicines and a profitable but artificial industry for local laboratories. Currently, the Plenary Session of the Congress has submitted the bill back to the Health

Committee for further analysis. After two years, the bill is still pending and remains a threat.

Clinical Investigation Standards

The National Health Institute (INS) is working on measures to increase sanctions and impose clinical authorization requirements that are not in line with international standards. This has created significant uncertainty regarding ongoing clinical studies and could discourage future investment and clinical trials in Peru.

Regulations on Biopharmaceutical Products

In 2014, a Constitutional judge issued a preliminary injunction ordering the Peruvian Government to cease registering follow-on biosimilar products based on the former law, until implementation guidelines are issued. Although the appeals court upheld the preliminary injunction and the Constitutional judge issued a final decision affirming the need for the Peruvian Government to issue new guidelines before approving new biosimilars, the MOH has still not implemented the regulations. On the contrary, the MOH has published draft regulations that include a transition mechanism that would further delay implementation of the Pharmaceutical Products Law on biosimilars for five more years. Moreover, the regulations proposed by the MOH on November 2015 are below WHO standards, and would allow for the marketing approval of biosimilars without demonstrating adequate safety and efficacy.

MIDDLE EAST / AFRICA

EGYPT

PhRMA and its member companies operating in Egypt are concerned about the intellectual property (IP) and market access environment in Egypt. Egypt is one of the most populous countries in the Middle East-Africa region. There is tremendous unmet medical need in the country.

During the past several tumultuous years, PhRMA and its member companies have tried to work in good faith with Egyptian officials to address health and industrial issues. While serious challenges remain, PhRMA notes that, for the most part, Egyptian officials have shown a willingness to meet and discuss issues of concern, and have expressed interest in supporting the innovative biopharmaceutical industry and encouraging investment in the country. PhRMA and its member companies appreciate the government's openness and eagerness in 2015, particularly the Ministry of Health (MOH), to collaborate and engage with our industry on policies and regulations related to regulatory approval, government pricing and reimbursement, patient access to new innovative medicines and IP protections.

Key Issues of Concern:

- **Weak patent enforcement and regulatory data protection failures:** Egypt lacks regulatory data protection (RDP) and effective patent enforcement, enabling manufacturers to obtain marketing licenses for follow-on products prior to the expiration of the patent on the original product.
- **Discriminatory market access policies:** Although Egypt has not fully implemented Decree 499, which discriminates against foreign manufacturers, industry remains concerned that the discriminatory margins established by that Decree could be restored absent the establishment of a new pricing decree that is transparent and equitable.

For these reasons, PhRMA requests that Egypt remain on the **Watch List** for the 2016 Special 301 Report, and that the U.S. Government continue to seek assurances that the problems described herein are quickly and effectively resolved. If the current pace of reforms continues, and the following issues are addressed, there would be grounds to consider whether Egypt should be included in the Special 301 Report moving forward.

Intellectual Property Protections

Weak Patent Enforcement

Egypt does not provide an effective mechanism to ensure that marketing licenses are not granted to companies making products that infringe an originator's patent.

Some officials have opposed putting in place an effective patent enforcement system similar to the process used by the United States or, more recently, the regulation enacted in neighboring Saudi Arabia. In those countries, health officials receiving applications from generics companies are required to check for the existence of a valid patent. If the originator can demonstrate a valid patent, there should be a procedure in place whereby the MOH can either defer the file to a date for examination period closer to the date of the patent expiration and/or specify that the license is valid only after the expiration of the innovator's patent.

In 2013, PhRMA and its member companies became aware of local generics companies obtaining marketing licenses from the MOH and then proceeding to engage in patent infringing acts in the marketplace. However, in 2014, and after engagement by the U.S. Government and the industry, the MOH stopped issuing marketing authorizations for copies of patented products, and the Minister of Health created a committee to examine the possibility of implementing an effective patent enforcement mechanism.

As Egypt is a WTO member, has enacted patent laws, and issues patents through the Patent Bureau, it follows that the MOH should have in place a system whereby it can defer market entry of newly licensed medicines until after the expiration of any applicable patents.

Regulatory Data Protection Failures

Egypt does not provide RDP, and some officials have consistently opposed enacting regulations that would offer a minimum period of data protection to innovators. This would ensure that manufacturers of follow-on products are not obtaining an unfair commercial advantage by relying on data developed at great risk and expense by the innovator company. PhRMA and its member companies have proposed that the Egyptian Government adopt a minimum RDP period calculated from the date of registration.

Market Access Barriers

Regulatory Approval Delays

We are encouraged that in 2015, under challenging circumstances, Egyptian officials recognized that the government and industry should partner to streamline and modernize the existing system for reviewing and approving new medicines. In part, officials realized that unnecessary delays in reviewing and licensing new medicines do not serve the best interests of patients who can benefit from advances in new medical technology. Officials seem sensitive, too, to the fact that outdated, sluggish regulatory systems are disincentives for investment in the sector.

To this end, officials issued a new regulatory decree in June 2015 that would streamline the review process and reduce licensing times to less than 12 months versus

the two to three years that this process can take at present. PhRMA believes that once harmonized to global best practices, it is possible to reduce the total time for this process to less than 12 months; in the meantime, a transparent process that would reduce times to 12 months would constitute a very clear improvement.

PhRMA and its member companies appreciate the positive approach and collaboration on the new proposal.

Discriminatory Market Access Policies

In 2012, the MOH issued Decree 499, which discriminates against foreign-made products by offering differential treatment of those products in the supply chain. Specifically, Decree 499 imposed higher distributor and pharmacy margins on imported products as compared with locally produced products (which in turn were deducted from the ex-factory price), thereby discriminating against foreign manufacturers contrary to Egypt's WTO obligations.

PhRMA commends the MOH for not fully implementing that decree, and engaging in new negotiations. It is important that trading partners communicate the need for the new pricing regulations to avoid discrimination between local and foreign manufacturers and their products.