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Pharmaceutical Research and Manufacturers of America
Washington, DC

www.phrma.org

2007

Key Facts

Research and Development

- Time to develop a drug = 10–15 years¹

Development Costs

- Cost to develop a drug
2001 = \$802 million²
1987 = \$318 million
1975 = \$138 million
- Cost to develop a biologic
2006 = \$1.2 billion³

R&D Spending

Year	PhRMA members ⁴	Total industry
2006	\$43.0 billion (est.)	\$55.2 billion (est.) ⁵
2005	\$39.9 billion	\$51.8 billion ⁶
2004	\$37.0 billion	\$47.6 billion ⁷
2000	\$26.0 billion	not available
1990	\$8.4 billion	not available
1980	\$2.0 billion	not available

Percentage of Sales That Went to R&D in 2006

Domestic R&D as a percentage of domestic sales = 19.4%

Total R&D as a percentage of total sales = 17.5%

Total National Institutes of Health Funding⁸

(Part of this budget is allotted for developing drugs.)

- 2007 = \$28.6 billion
- 2006 = \$28.5 billion
- 2005 = \$28.7 billion

Approvals

- Drugs approved in 2006 = 29^{9,10}
- Only 3 of 10 marketed drugs ever produce revenues that match or exceed R&D costs.¹¹
- Between 1995 and 2005, over 160 orphan drugs were approved.¹²
- Average effective patent life for pharmaceuticals = 11.5 years¹³

Value of Medicines

- New medicines generated 40 percent of the two-year gain in life expectancy achieved in 52 countries between 1986 and 2000.¹⁴
- A recent study found that the return on investment (ROI) for a 20 percent increase in adherence was substantial for disease-related costs: for every \$1 spent on diabetes medicines, there were \$7.10 in savings; the savings for \$1 spent on cholesterol medicines was \$5.10; and, for every \$1 spent on blood pressure drugs, \$4 in savings resulted.¹⁵
- Every additional dollar spent on health care in the United States over the past 20 years has produced health gains worth \$2.40 to \$3.¹⁶

Sales

- Total number of U.S. prescriptions October 2004 through September 2005 = 3.6 billion¹⁷
- Generic share of market by volume (generic/brand, weighted average)
July 2005 = 54/46
2006 = 58/42 (estimated)¹⁸

Endnotes

See inside back cover.

Chapter 4

Helping Those in Need



Pharmaceutical companies are working together to address health emergencies, including natural and man-made disasters.

In Brief

The research-based pharmaceutical industry plays a key role in fighting disease and improving public health through the medicines it develops. Likewise, it has had a long-standing commitment to helping those in need at home and around the world. Examples include providing billions of dollars in philanthropic donations, and taking a leadership role in disaster preparation and response.

PhRMA Member Philanthropy Continues to Grow

America's pharmaceutical research companies contributed more than **\$8 billion** in cash and products to philanthropic causes in 2005, according to PhRMA's first comprehensive survey of member companies' charitable efforts. Of that amount, \$5 billion went toward patient assistance programs (see Chapter 2), and the other \$3 billion went to other philanthropic programs in the U.S. and around the world.

According to the Committee to Encourage Corporate Philanthropy, companies from various industries donated a median of \$38.2 million in 2005. The median amount of total giving by the 21 pharmaceutical companies that participated in PhRMA's survey was **\$300 million** in 2005.¹

A few specific examples of PhRMA member projects include:

Diabetes: For the last six years, one company has been the lead sponsor of the American Diabetes Association's (ADA's) "Americans Walk for Diabetes" in the Northern Illinois

area. In 2005, they were also the sole corporate sponsor of the ADA's School Walk for Diabetes, an educational event that teaches elementary students the importance of exercise and a healthful diet in preventing diabetes.

Leukemia: In China, nearly 40,000 people die from leukemia each year. Bone marrow transplants provide an important treatment option, but matching donors with patients is a challenge. One company partnered with the Red Cross Society of China to build awareness for their Hematopoietic Stem Cell Donor Program, expanding its databank of potential bone marrow donors from 6,000 in 2002 to more than 300,000 currently. Company employees have also embraced this cause, with more than 1,900 registering as donors.

Asthma: One pharmaceutical company made a grant to the University of Medicine and Dentistry of New Jersey to fund a Pediatric Asthma Program in Newark, NJ. The population that benefits most from this donation is poor and underserved urban children. The grant provides education for patients and their families, school nurse asthma training, and expanded medical



Photo courtesy of FEMA



Photo courtesy of FEMA

instruction for physicians and nurses. The program contributed to a 19 percent decline in hospital admissions for pediatric asthma.

HIV/AIDS: One company has committed \$150 million since 1999 to provide care and support for women and children affected by HIV/AIDS in sub-Saharan Africa. The effort now includes about 200 individual programs in 10 nations: South Africa, Swaziland, Lesotho, Botswana, Namibia, Senegal, Burkina Faso, Mali, Côte d'Ivoire, and Uganda.

Partnering for Disaster Relief

Disasters such as Hurricane Katrina and the Asian Tsunami, as well as the potential for epidemics or terrorist acts, reinforce the importance of being well prepared for major public events. Pharmaceutical companies are working together to prepare for and respond to health emergencies, including natural and man-made disasters. The main goal of this work is to facilitate the continued availability of medicines to patients whose health is threatened by a public health emergency.

The pharmaceutical industry is working to determine when and how to respond collectively, how to prevent disruption of the supply chain, and how to coordinate communications. The preparations involve extensive collaboration with government agencies and other groups. Many companies have individual emergency preparedness plans, and the pharmaceutical industry's efforts will support but not replace those existing programs.

Emergency response capabilities will include (1) an information center, with a website that will include up-to-date information concerning

the industry's activities; (2) a dedicated command center to serve as a central point of contact for biopharmaceutical companies; and, (3) dedicated telecommunications capabilities, including automated disaster notification.

Outreach with wholesalers, shippers, and retailers is under way to develop plans for addressing risks in supply, distribution, and dispensing of medicines that may occur in an emergency.

¹ Committee to Encourage Corporate Giving, *Corporate Giving Standard*, June 2006.



APPENDIX

Member Companies

Abbott

Abbott Park, IL

Amgen Inc.

Thousand Oaks, CA

Amylin Pharmaceuticals, Inc.

San Diego, CA

Astellas US LLC

Deerfield, IL

AstraZeneca LP

Wilmington, DE

Bayer HealthCare – Pharmaceutical Division

West Haven, CT

Berlex Laboratories, Inc.

Montville, NJ

Boehringer Ingelheim Pharmaceuticals, Inc.

Ridgefield, CT

Bristol-Myers Squibb Company

New York, NY

Bristol-Myers Squibb Company
Worldwide Medicines Group

Celgene Corporation

Summit, NJ

Cephalon, Inc.

West Chester, PA

Daiichi Sankyo, Inc.

Montvale, NJ

EMD Serono

Rockland, MA

Genzyme Corporation

Cambridge, MA

GlaxoSmithKline

Research Triangle Park, NC

Hoffmann-La Roche Inc.

Nutley, NJ

Johnson & Johnson

New Brunswick, NJ

Advanced Sterilization Products

ALZA Corporation

Centocor, Inc.

Cordis Corporation

DePuy Inc.

Ethicon Endo-Surgery, Inc.

Ethicon, Inc.

- Ethicon Products

- Gynecare

- Johnson & Johnson Wound Management

Janssen Pharmaceutica Inc.

Janssen Research Foundation and

The R.W. Johnson Pharmaceutical
Research Institute

Johnson & Johnson Health Care
Systems, Inc.

Mitek

Ortho Biotech Products, L.P.

Ortho-Clinical Diagnostics

Ortho-McNeil Pharmaceutical, Inc.

OrthoNeutrogena

Scios Inc.

Therakos, Inc.

Vistakon

Eli Lilly and Company

Indianapolis, IN

MedPointe Pharmaceuticals

Somerset, NJ

Merck & Co., Inc.

Whitehouse Station, NJ

Merck Human Health Division

Merck Research Laboratories

Merck Vaccine Division

Millennium Pharmaceuticals, Inc.

Cambridge, MA

Novartis Pharmaceuticals Corporation

E. Hanover, NJ

Organon USA Inc.

Roseland, NJ

Otsuka America, Inc. (OAI)

San Francisco, CA

Otsuka America Pharmaceutical, Inc.
(OAPI)

Otsuka Maryland Research Institute
(OMRI)

Pfizer Inc

New York, NY

The Procter & Gamble Company

Procter & Gamble Pharmaceuticals, Inc.

Mason, OH

Purdue Pharma L.P.

Stamford, CT

The P.F. Laboratories, Inc.

The Purdue Frederick Company

sanofi-aventis U.S.

New York, NY

sanofi pasteur

sanofi-aventis

Schering-Plough Corporation

Kenilworth, NJ

Sepracor Inc.

Marlborough, MA

Solvay Pharmaceuticals, Inc.

Marietta, GA

Unimed Pharmaceuticals, Inc.

Valeant Pharmaceuticals International

Costa Mesa, CA

Wyeth

Madison, NJ

Wyeth Pharmaceuticals

Wyeth Research

International Affiliates

ALTANA Pharma U.S.

Florham Park, NJ

Eisai Inc.

Teaneck, NJ

Novo Nordisk, Inc.

Princeton, NJ

Sigma-Tau Pharmaceuticals, Inc.

Gaithersburg, MD

Takeda Pharmaceuticals North America, Inc.

Lincolnshire, IL

Associates: Researchers

Alkermes, Inc

Cambridge, MA

Enzon, Inc.

Piscataway, NJ

Idenix Pharmaceuticals, Inc.

Cambridge, MA

Ovation Pharmaceuticals, Inc.

Deerfield, IL

Reckitt Benckiser Pharmaceuticals, Inc.

Richmond, VA

Theravance, Inc.

South San Francisco, CA

Associates: Contract Research Organizations

Quintiles Transnational Corp.

Research Triangle Park, NC

Associates: Advertising & Communication Services

CommonHealth, L.P.

Parsippany, NJ

Harte-Hanks, Inc.

Shawnee, KS

HealthSTAR Communications, Inc.

Woodbridge, NJ

HealthStar Advertising

HealthSTAR Public Relations

Photosound Communications

IMS Health

Plymouth Meeting, PA

PDI, Inc.

Upper Saddle River, NJ

Publicis Healthcare Communications Group

New York, NY

Thomson Healthcare

Montvale, NJ

**Associates: Consultants & Drug
Discovery Software Firms**

Accenture LLP

Philadelphia, PA

The Boston Consulting Group, Inc.

Boston, MA

Cytel Inc.

Cambridge, MA

Dendrite International, Inc.

Morristown, NJ

Ernst & Young

New York, NY

KPMG LLP

Short Hills, NJ

The Mattson Jack Group

St. Louis, MO

TargetRx, Inc.

Horsham, PA

PhRMA Annual Membership Survey

Definitions of Terms

Research and Development Expenditure Definitions

R&D Expenditures: Expenditures within PhRMA member companies' U.S. and/or foreign research laboratories plus research and development (R&D) funds contracted or granted to commercial laboratories, private practitioners, consultants, educational and nonprofit research institutions, manufacturing and other companies, or other research-performing organizations. Includes basic and applied research, as well as developmental activities carried on or supported in the pharmaceutical, biological, chemical, medical, and related sciences, including psychology and psychiatry, if the purpose of such activities is concerned ultimately with the utilization of scientific principles in understanding diseases or in improving health. Includes the total cost incurred for all pharmaceutical R&D activities, including salaries, materials, supplies used, and a fair share of overhead, as well as the cost of developing quality control. However, it does not include the cost of routine quality control activities, capital expenditures, or any costs incurred for drug or medical R&D conducted under a grant or contract for other companies or organizations.

Domestic R&D: Expenditures within the United States by all PhRMA member companies.

- **Licensed-In:** Products for which a license is held for a compound.
- **Self-Originated:** Products for which the company originates the compound.

R&D Abroad: Expenditures outside the United States by U.S.-owned PhRMA member companies and R&D conducted abroad by the U.S. divisions of foreign-owned

PhRMA member companies. R&D performed abroad by the foreign divisions of foreign-owned PhRMA member companies is excluded.

Prehuman/Preclinical Testing: From synthesis to first testing in humans.

Phase I/II/III Clinical Testing: From first testing in designated phase to first testing in subsequent phase.

Approval Phase: From New Drug Application (NDA) submission to NDA approval.

Phase IV Clinical Testing: Any post-marketing testing performed.

Uncategorized: Represents data for which detailed classifications were unavailable.

Sales Definitions

Sales: Product sales calculated as billed, free on board (FOB) plant or warehouse less cash discounts, Medicaid rebates, returns, and allowances. These include all marketing expenses except transportation costs. Also included is the sales value of products bought and resold without further processing or repackaging, as well as the dollar value of products made from the firm's own materials for other manufacturers' resale. Excluded are all royalty payments, interest, and other income.

Domestic Sales: Sales generated within the United States by all PhRMA member companies.

- **Private Sector:** Sales through regular marketing channels for end-use other than by government agency administration or distribution.

- **Public Sector:** Sales or shipments made directly to federal, state, or local government agencies, hospitals, and clinics.

Sales Abroad: Sales generated outside the United States by U.S.-owned PhRMA member companies and sales generated abroad by the U.S. divisions of foreign-owned PhRMA member companies. Sales generated abroad by the foreign divisions of foreign-owned PhRMA member companies are excluded.

- **Exports to Other Customers:** Sales to third parties only, FOB U.S. port. Excludes all intrafirm transactions, such as sales or shipments to subsidiaries or affiliates.
- **Foreign Sales:** Sales consummated in foreign countries.

R&D Employment Definitions

Scientific, Professional, and Technical Staff:

Full-time employees, as well as full-time equivalents for part-time employees, whose work requires the application of R&D knowledge,

skills, and scientific techniques in the life, physical, engineering, mathematical, or statistical sciences, as well as persons engaged in technical work at a level that requires knowledge in one of the above-mentioned fields. Does not include persons who have formal training in the sciences but who are not actively engaged in R&D.

Supported Scientific, Professional, and Technical Nonstaff:

Persons whose work requires the application of R&D knowledge, skills, and scientific techniques in the life, physical, engineering, mathematical, or statistical sciences, as well as persons engaged in technical work at a level that requires knowledge in one of the above-mentioned fields who are supported through contracts or grants to commercial laboratories, private practitioners, consultants, educational and nonprofit research institutions, manufacturing and other companies, or other research-performing organizations located in the United States. Does not include persons who have formal training in the sciences but who are not actively engaged in R&D.

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Table 1
Domestic R&D and R&D Abroad, PhRMA Member Companies: 1970–2006**

(dollar figures in millions)

Year	Domestic R&D	Annual Percentage Change	R&D Abroad**	Annual Percentage Change	Total R&D	Annual Percentage Change
2006*	\$33,967.9	9.7%	\$9,005.6	1.3%	\$42,973.5	7.8%
2005	30,969.0	4.8	8,888.9	19.1	39,857.9	7.7
2004	29,555.5	9.2	7,462.6	1.0	37,018.1	7.4
2003	27,064.9	5.5	7,388.4	37.9	34,453.3	11.1
2002	25,655.1	9.2	5,357.2	-13.9	31,012.2	4.2
2001	23,502.0	10.0	6,220.6	33.3	29,772.7	14.4
2000	21,363.7	15.7	4,667.1	10.6	26,030.8	14.7
1999	18,471.1	7.4	4,219.6	9.9	22,690.7	8.2
1998	17,127.9	11.0	3,839.0	9.9	20,966.9	10.8
1997	15,466.0	13.9	3,492.1	6.5	18,958.1	12.4
1996	13,627.1	14.8	3,278.5	-1.6	16,905.6	11.2
1995	11,874.0	7.0	3,333.5	***	15,207.4	***
1994	11,101.6	6.0	2,347.8	3.8	13,449.4	5.6
1993	10,477.1	12.5	2,262.9	5.0	12,740.0	11.1
1992	9,312.1	17.4	2,155.8	21.3	11,467.9	18.2
1991	7,928.6	16.5	1,776.8	9.9	9,705.4	15.3
1990	6,802.9	13.0	1,617.4	23.6	8,420.3	14.9
1989	6,021.4	15.0	1,308.6	0.4	7,330.0	12.1
1988	5,233.9	16.2	1,303.6	30.6	6,537.5	18.8
1987	4,504.1	16.2	998.1	15.4	5,502.2	16.1
1986	3,875.0	14.7	865.1	23.8	4,740.1	16.2
1985	3,378.7	13.3	698.9	17.2	4,077.6	13.9
1984	2,982.4	11.6	596.4	9.2	3,578.8	11.2
1983	2,671.3	17.7	546.3	8.2	3,217.6	16.0
1982	2,268.7	21.3	505.0	7.7	2,773.7	18.6
1981	1,870.4	20.7	469.1	9.7	2,339.5	18.4
1980	1,549.2	16.7	427.5	42.8	1,976.7	21.5
1979	1,327.4	13.8	299.4	25.9	1,626.8	15.9
1978	1,166.1	9.7	237.9	11.6	1,404.0	10.0
1977	1,063.0	8.1	213.1	18.2	1,276.1	9.7
1976	983.4	8.8	180.3	14.1	1,163.7	9.6
1975	903.5	13.9	158.0	7.0	1,061.5	12.8
1974	793.1	12.0	147.7	26.3	940.8	14.0
1973	708.1	8.1	116.9	64.0	825.0	13.6
1972	654.8	4.5	71.3	24.9	726.1	6.2
1971	626.7	10.7	57.1	9.2	683.8	10.6
1970	566.2	-----	52.3	-----	618.5	-----
Average		12.2%		16.0%		12.7%

*Estimated

**R&D Abroad includes expenditures outside the United States by U.S.-owned PhRMA member companies and R&D conducted abroad by the U.S. divisions of foreign-owned PhRMA member companies. R&D performed abroad by the foreign divisions of foreign-owned PhRMA member companies is excluded. Domestic R&D, however, includes R&D expenditures within the United States by all PhRMA member companies.

***R&D Abroad affected by merger and acquisition activity.

Note: All figures include company-financed R&D only. Total values may be affected by rounding.

Source: Pharmaceutical Research and Manufacturers of America, PhRMA Annual Membership Survey, 2007.

Table 2
R&D as a Percentage of Sales,
PhRMA Member Companies: 1970–2006

Year	Domestic R&D as a % of Domestic Sales	Total R&D as a % of Total Sales
2006*	19.4%	17.5%
2005	18.6	16.9
2004	18.4	16.1**
2003	18.3	16.5**
2002	18.4	16.1
2001	18.0	16.7
2000	18.4	16.2
1999	18.2	15.5
1998	21.1	16.8
1997	21.6	17.1
1996	21.0	16.6
1995	20.8	16.7
1994	21.9	17.3
1993	21.6	17.0
1992	19.4	15.5
1991	17.9	14.6
1990	17.7	14.4
1989	18.4	14.8
1988	18.3	14.1
1987	17.4	13.4
1986	16.4	12.9
1985	16.3	12.9
1984	15.7	12.1
1983	15.9	11.8
1982	15.4	10.9
1981	14.8	10.0
1980	13.1	8.9
1979	12.5	8.6
1978	12.2	8.5
1977	12.4	9.0
1976	12.4	8.9
1975	12.7	9.0
1974	11.8	9.1
1973	12.5	9.3
1972	12.6	9.2
1971	12.2	9.0
1970	12.4	9.3

*Estimated

**Recalculated for updated data.

Source: *Pharmaceutical Research and Manufacturers of America, PhRMA Annual Membership Survey, 2007.*

Table 3
Domestic R&D and R&D Abroad,* PhRMA Member Companies: 2005

(dollar figures in millions)

	2005
R&D Expenditures for Human-Use Pharmaceuticals	
Domestic	\$30,651.0
Share	76.9%
Abroad*	\$ 8,757.4
Share	22.0%
Total Human-Use R&D	\$39,408.4
Share	98.9%
R&D Expenditures for Veterinary-Use Pharmaceuticals	
Domestic	\$ 318.0
Share	0.8%
Abroad*	\$ 131.5
Share	0.3%
Total Vet-Use R&D	\$ 449.5
Share	1.1%
TOTAL R&D	\$39,857.9
	100.0%

* R&D Abroad includes expenditures outside the United States by U.S.-owned PhRMA member companies and R&D conducted abroad by the U.S. divisions of foreign-owned PhRMA member companies. R&D performed abroad by the foreign divisions of foreign-owned PhRMA member companies is excluded. Domestic R&D, however, includes R&D expenditures within the United States by all PhRMA member companies.

Note: All figures include company-financed R&D only. Total values may be affected by rounding.

Source: Pharmaceutical Research and Manufacturers of America, PhRMA Annual Membership Survey, 2007.

Table 4
Domestic R&D By Source, PhRMA Member Companies: 2005

(dollar figures in millions)

Source	Dollars	Share
Licensed-In	\$ 4,954.8	16.0%
Self-Originated	22,349.3	72.2
Uncategorized	3,664.9	11.8
TOTAL R&D	\$30,969.0	100.0%

Note: All figures include company-financed R&D only. Total values may be affected by rounding.

Source: Pharmaceutical Research and Manufacturers of America, PhRMA Annual Membership Survey, 2007.

Table 5
R&D By Function, PhRMA Member Companies: 2005

(dollar figures in millions)

Function	Dollars	Share
Prehuman/Preclinical	\$10,258.1	25.7%
Phase I	2,318.9	5.8
Phase II	4,670.9	11.7
Phase III	10,176.4	25.5
Approval	2,750.0	6.9
Phase IV	5,284.2	13.3
Uncategorized	4,399.4	11.0
TOTAL R&D	\$39,857.9	100.0%

Note: All figures include company-financed R&D only. Total values may be affected by rounding.

Source: Pharmaceutical Research and Manufacturers of America, PhRMA Annual Membership Survey, 2007.

Table 6
R&D By Geographic Area,* PhRMA Member Companies: 2005

(dollar figures in millions)

Geographic Area*	Dollars	Share
Africa		
Africa	\$ 28.0	0.1%
Americas		
United States	\$30,969.0	77.7%
Canada	479.3	1.2
Latin America (South and Central America, Mexico, and all Caribbean nations)	174.9	0.4%
Asia-Pacific		
Asia-Pacific (except Japan)	\$ 117.5	0.3%
India and Pakistan	10.9	0.0
Japan	1,025.4	2.6
Australia		
Australia and New Zealand	\$ 144.6	0.4%
Europe		
France	\$ 498.8	1.3%
Germany	548.2	1.4
Italy	342.1	0.9
Spain	208.8	0.5
United Kingdom	2,090.9	5.2
Other Western European nations	2,835.9	7.1
Central and Eastern European nations (Cyprus, Czech Republic, Estonia, Hungary, Poland, Slovenia, Bulgaria, Lithuania, Latvia, Romania, Slovakia, and Malta)	131.2	0.3
Other Eastern European nations (including Russia and the Newly Independent States)	113.4	0.3
Middle East		
Middle East (Saudi Arabia, Yemen, United Arab Emirates, Iraq, Iran, Kuwait, Israel, Jordan, Syria, Afghanistan, Turkey, and Qatar)	\$ 37.7	0.1%
Uncategorized	\$ 101.3	0.3%
TOTAL R&D	\$39,857.9	100.0%

*R&D Abroad includes expenditures outside the United States by U.S.-owned PhRMA member companies and R&D conducted abroad by the U.S. divisions of foreign-owned PhRMA member companies. R&D performed abroad by the foreign divisions of foreign-owned PhRMA member companies is excluded. Domestic R&D, however, includes R&D expenditures within the United States by all PhRMA member companies.

Note: All figures include company-financed R&D only. Total values may be affected by rounding.

Source: Pharmaceutical Research and Manufacturers of America, PhRMA Annual Membership Survey, 2007.

Table 7
Domestic Sales and Sales Abroad, PhRMA Member Companies: 1970–2006**

(dollar figures in millions)

Year	Domestic Sales	Annual Percentage Change	Sales Abroad**	Annual Percentage Change	Total Sales	Annual Percentage Change
*2006	\$174,667.4	5.1%	\$71,133.6	1.8%	\$245,801.0	4.1%
2005	166,155.5	3.4	69,881.0	0.1	236,036.5	2.4
***2004	160,751.0	8.6	69,806.9	14.6	230,557.9	10.3
***2003	148,038.6	6.4	60,914.4	13.4	208,953.0	8.4
2002	139,136.4	6.4	53,697.4	12.1	192,833.8	8.0
2001	130,715.9	12.8	47,886.9	5.9	178,602.8	10.9
2000	115,881.8	14.2	45,199.5	1.6	161,081.3	10.4
1999	101,461.8	24.8	44,496.6	2.7	145,958.4	17.1
1998	81,289.2	13.3	43,320.1	10.8	124,609.4	12.4
1997	71,761.9	10.8	39,086.2	6.1	110,848.1	9.1
1996	64,741.4	13.3	36,838.7	8.7	101,580.1	11.6
1995	57,145.5	12.6	33,893.5	****	91,039.0	****
1994	50,740.4	4.4	26,870.7	1.5	77,611.1	3.4
1993	48,590.9	1.0	26,467.3	2.8	75,058.2	1.7
1992	48,095.5	8.6	25,744.2	15.8	73,839.7	11.0
1991	44,304.5	15.1	22,231.1	12.1	66,535.6	14.1
1990	38,486.7	17.7	19,838.3	18.0	58,325.0	17.8
1989	32,706.6	14.4	16,817.9	-4.7	49,524.5	7.1
1988	28,582.6	10.4	17,649.3	17.1	46,231.9	12.9
1987	25,879.1	9.4	15,068.4	15.6	40,947.5	11.6
1986	23,658.8	14.1	13,030.5	19.9	36,689.3	16.1
1985	20,742.5	9.0	10,872.3	4.0	31,614.8	7.3
1984	19,026.1	13.2	10,450.9	0.4	29,477.0	8.3
1983	16,805.0	14.0	10,411.2	-2.4	27,216.2	7.1
1982	14,743.9	16.4	10,667.4	0.1	25,411.3	9.0
1981	12,665.0	7.4	10,658.3	1.4	23,323.3	4.6
1980	11,788.6	10.7	10,515.4	26.9	22,304.0	17.8
1979	10,651.3	11.2	8,287.8	21.0	18,939.1	15.3
1978	9,580.5	12.0	6,850.4	22.2	16,430.9	16.1
1977	8,550.4	7.5	5,605.0	10.2	14,155.4	8.6
1976	7,951.0	11.4	5,084.3	9.7	13,035.3	10.8
1975	7,135.7	5.9	4,633.3	19.1	11,769.0	13.6
1974	6,740.4	18.5	3,891.0	23.4	10,361.4	17.2
1973	5,686.5	9.1	3,152.5	15.9	8,839.0	11.5
1972	5,210.1	1.3	2,720.2	10.6	7,930.3	4.3
1971	5,144.9	13.0	2,459.7	18.0	7,604.6	14.6
1970	4,552.5	-----	2,084.0	-----	6,636.5	-----
Average		10.8%		10.2%		10.5%

*Estimated

**Sales Abroad includes sales generated outside the United States by U.S.-owned PhRMA member companies and sales generated abroad by the U.S. divisions of foreign-owned PhRMA member companies. Sales generated abroad by the foreign divisions of foreign-owned PhRMA member companies are excluded. Domestic sales, however, includes sales generated within the United States by all PhRMA member companies.

***Recalculated for updated data.

****Sales Abroad affected by merger and acquisition activity.

Note: Total values may be affected by rounding.

Source: Pharmaceutical Research and Manufacturers of America, PhRMA Annual Membership Survey, 2007.

Table 8
Sales By Geographic Area,* PhRMA Member Companies: 2005

(dollar figures in millions)

Geographic Area*	Dollars	Share
Africa		
Africa	\$ 1,177.2	0.5%
Americas		
United States	\$166,155.5	70.4%
Canada	5,401.4	2.3
Latin America (South and Central America, Mexico, and all Caribbean nations)	5,703.3	2.4
Asia-Pacific		
Asia-Pacific (except Japan)	\$ 3,916.9	1.7%
India and Pakistan	628.3	0.3
Japan	8,407.2	3.6
Australia		
Australia and New Zealand	\$ 2,682.3	1.1%
Europe		
France	\$ 7,196.8	3.0%
Germany	5,530.1	2.3
Italy	5,290.0	2.2
Spain	4,268.7	1.8
United Kingdom	4,816.8	2.0
Other Western European nations	8,655.6	3.7
Central and Eastern European nations (Cyprus, Czech Republic, Estonia, Hungary, Poland, Slovenia, Bulgaria, Lithuania, Latvia, Romania, Slovakia, and Malta)	2,366.6	1.0
Other Eastern European nations (including Russia and the Newly Independent States)	786.8	0.3
Middle East		
Middle East (Saudi Arabia, Yemen, United Arab Emirates, Iraq, Iran, Kuwait, Israel, Jordan, Syria, Afghanistan, Turkey, and Qatar)	\$ 2,027.9	0.9%
Uncategorized	\$ 1,025.1	0.4%
TOTAL SALES	\$236,036.5	100.0%

*Sales Abroad includes sales generated outside the United States by U.S.-owned PhRMA member companies and sales generated abroad by the U.S. divisions of foreign-owned PhRMA member companies. Sales generated abroad by the foreign divisions of foreign-owned PhRMA member companies are excluded. Domestic sales, however, includes sales generated within the United States by all PhRMA member companies.

Note: Total values may be affected by rounding.

Source: Pharmaceutical Research and Manufacturers of America, PhRMA Annual Membership Survey, 2007.

Table 9
Domestic Sales and Sales Abroad* By End Use and Customer,
PhRMA Member Companies: 2005

(dollar figures in millions)

	Human Use	Vet Use	Total
To Private Sector	\$123,592.3	\$ 2,113.1	\$125,705.4
To Public Sector	30,984.9	0.5	30,985.4
Uncategorized	9,464.7	–	9,464.7
Total Domestic Sales	\$164,041.9	\$ 2,113.6	\$166,155.5
Exports	\$ 1,181.5	\$ 38.6	\$ 1,220.1
Foreign Sales	65,486.6	2,331.9	67,818.5
Uncategorized	842.4	–	842.4
Total Sales Abroad*	\$ 67,510.5	\$ 2,370.5	\$ 69,881.0
TOTAL SALES	\$231,552.4	\$ 4,484.1	\$236,036.5

*Sales Abroad includes sales generated outside the United States by U.S.-owned PhRMA member companies and sales generated abroad by the U.S. divisions of foreign-owned PhRMA member companies. Sales generated abroad by the foreign divisions of foreign-owned PhRMA member companies are excluded. Domestic sales, however, includes sales generated within the United States by all PhRMA member companies.

Note: Total values may be affected by rounding.

Source: Pharmaceutical Research and Manufacturers of America, PhRMA Annual Membership Survey, 2007.

Table 10
Domestic R&D Scientific, Professional, and Technical
Personnel By Function, PhRMA Member Companies: 2005

Function	Personnel	Share
Prehuman/Preclinical	25,940	31.2%
Phase I	4,738	5.7
Phase II	8,491	10.2
Phase III	17,225	20.7
Approval	4,442	5.3
Phase IV	9,746	11.7
Uncategorized	4,075	4.9
Total R&D Staff	74,657	89.9
Supported R&D Nonstaff	8,420	10.1
TOTAL R&D PERSONNEL	83,077	100.0%

Source: Pharmaceutical Research and Manufacturers of America, PhRMA Annual Membership Survey, 2007.

Endnotes (continued from inside front cover)

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Pharmaceutical Research and Manufacturers of America

950 F Street, NW • Washington, DC 20004

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