

# The Pharmaceutical Industry in Figures





# THE PHARMACEUTICAL INDUSTRY: A KEY ASSET TO SCIENTIFIC AND MEDICAL PROGRESS

Thanks to advances in science and technology, the researchbased pharmaceutical industry is entering an exciting new era in medicines development. Research methods are evolving and we have many promising prospects on the horizon – from the possibilities offered by personalised medicines, to the potential offered by harnessing the power of big data. The innovative pharmaceutical industry is driven by, and drives, medical progress. It aims to turn fundamental research into innovative treatments that are widely available and accessible to patients.

Already, the industry has contributed to significant improvements in patient well-being. Today's European citizens can expect to live up to 30 years longer than they did a century ago. Some major steps in biopharmaceutical research, complimented by many smaller steps, have allowed for reductions in mortality, for instance from HIV/AIDS-related causes and a number of cancers. High blood pressure and cardiovascular disease can be controlled with antihypertensive and cholesterol-lowering medicines; knee or hip replacements prevent patients from immobility; and some cancers can be controlled – or even cured – with the help of new targeted treatments. European citizens can expect not only to live longer, but to live better quality lives. Yet major hurdles remain, including Alzheimer's, Multiple Sclerosis, many cancers, and orphan diseases.



#### TOTAL NUMBER OF DEATHS AMONG AIDS CASES IN EUROPE (EU-28)

Source: CISID database, annual HIV/AIDS surveillance data collected from WHO Regional Office for Europe and the European Centre for Disease Prevention and Control (ECDC), April 2014

# THE PHARMACEUTICAL INDUSTRY: A KEY ASSET TO THE EUROPEAN ECONOMY

As well as driving medical progress by researching, developing and bringing new medicines that improve health and quality of life for patients around the world, the research-based pharmaceutical industry is a key asset of the European economy. It is one of Europe's top performing hightechnology sectors.

INDUSTRY (EFPIA total)	1990	2000	2012	2013
Production	63,010	125,301	213,003	217,500 (e)
Exports (1) (2)	23,180	90,935	312,377	316,500 (e)
Imports	16,113	68,841	224,811	226,500 (e)
Trade balance	7,067	22,094	87,566	90,000 (e)
R&D expenditure	7,766	17,849	30,035	30,630 (e)
Employment (units)	500,879	534,882	693,195	690,000 (e)
R&D employment (units)	76,126	88,397	115,196	115,000 (e)
Pharmaceutical market value at ex-factory prices	41,147	86,704	160,574	163,000 (e)
Pharmaceutical market value at retail prices	64,509	140,345	237,240	240,800 (e)
Payment for pharmaceuticals by statutory health insurance systems (3)	40,807	76,909	119,345	119,950 (e)

Values in € million unless otherwise stated

 Data relate to EU-27, Norway and Switzerland since 2005 (EU-15 before 2005); Croatia and Serbia included since 2010; Turkey included since 2011

(2) Data relating to total exports and total imports include EU-28 intra-trade (double counting in some cases)

(3) Since 1998 data relate to ambulatory care only

Source: EFPIA member associations (official figures) - (e): EFPIA estimate; Eurostat (EU-28 trade data 1995-2013)

## MAIN TRENDS

The research-based pharmaceutical industry can play a Critical role in restoring Europe to growth and ensuring future competitiveness in an advancing global economy. In 2013 it invested an estimated  $\in$  30,630 million in R&D in Europe. It directly employs more than 690,000 people and generates three to four times more employment indirectly – upstream and downstream – than it does directly. However, the sector faces real challenges. Besides the additional regulatory hurdles and escalating R&D costs, the sector has been severely hit by the impact of fiscal austerity measures introduced by governments across much of Europe since 2010.

- There is rapid growth in the market and research environment in emerging economies such as Brazil, China and India, leading to a gradual migration of economic and research activities from Europe to these fast-growing markets. In 2013 the Brazilian and Chinese markets grew by 17% and 14% respectively compared to an average market growth of 1% for the five major European markets and 3% for the US market (source: IMS Health, IMS Retail Drug Monitor, March 2014).
- In 2013 North America accounted for 41.0% of world pharmaceutical sales compared with 27.4% for Europe. According to IMS data, 55% of sales of new medicines launched during the period 2009-2013 were on the US market, compared with 23% on the European market.
- The fragmentation of the EU pharmaceutical market has resulted in a lucrative parallel trade. This benefits neither social security nor patients and deprives the industry of additional resources to fund R&D. Parallel trade was estimated to amount to  $\in$  5,465 million (value at ex-factory prices) in 2012.

# GEOGRAPHICAL BREAKDOWN (BY MAIN MARKETS) OF SALES OF NEW MEDICINES LAUNCHED DURING THE PERIOD 2009-2013



Note: New medicines cover all new active ingredients marketed for the first time on the world market during the period 2009-2013 Pharmerging comprises 21 countries ranked by IMS Health as high-growth pharmaceutical markets (Algeria, Argentina, Brazil, Colombia, China, Egypt, India, Indonesia, Mexico, Nigeria, Pakistan, Poland, Romania, Russia, Saudi Arabia, South Africa, Thailand, Turkey, Venezuela, Vietnam and The Ukraine)

Source: IMS Health (MIDAS April 2014)

## PHARMACEUTICAL R&D EXPENDITURE IN EUROPE, USA AND JAPAN (MILLION OF NATIONAL CURRENCY UNITS\*), 1990-2013



\* Note: Europe: € million; USA: \$ million; Japan: ¥ million x 100 (e): estimate Source: EFPIA member associations. PhRMA, JPMA



#### SHARE OF PARALLEL IMPORTS IN PHARMACY MARKET SALES (%) - 2012

Source: EFPIA member associations (estimate)

# PHARMACEUTICAL INDUSTRY RESEARCH AND DEVELOPMENT IN EUROPE

All new medicines introduced into the market are the result of lengthy, costly and risky research and development (R&D) conducted by pharmaceutical companies:

- By the time a medicinal product reaches the market, an average of 12-13 years will have elapsed since the first synthesis of the new active substance;
- The cost of researching and developing a new chemical or biological entity was estimated at € 1,172 million (\$ 1,506 million in year 2011 dollars) in 2012 (Mestre-Ferrandiz et al, Office of Health Economics, December 2012);
- On average, only one to two of every 10,000 substances synthesised in laboratories will successfully pass all stages of development required to become a marketable medicine.

#### PHASES OF THE RESEARCH AND DEVELOPMENT PROCESS



# PHARMACEUTICAL INDUSTRY RESEARCH AND DEVELOPMENT IN EUROPE

EFPIA 2012	€ million
Austria	453
Belgium	2,343
Bulgaria	n.a.
Croatia	40
Cyprus	14
Czech Republic	49
Denmark	1,411
Estonia	n.a.
Finland	264
France	4,392
Germany	5,767
Greece	84
Hungary	158
Ireland	194
Italy	1,230
Latvia	n.a.
Lithuania	n.a.
Malta	n.a.
Netherlands	642
Norway	141
Poland	227
Portugal	88
Romania	200
Serbia	n.a.
Slovakia	n.a.
Slovenia	164
Spain	997
Sweden	942
Switzerland	4,965
Turkey	83
United Kingdom	5,187
Total	30,035

Note: The figures relate to the R&D carried out in each country. Austria, Croatia, Finland, France, Greece, Ireland, Netherlands, Portugal, Slovenia: 2011; Czech Republic: 2009 data; Cyprus: 2007 data Belgium, Croatia, Denmark, France, Greece, Ireland, Italy, Netherlands, Norway (LMI members), Poland, Romania, Slovenia, Sweden (LIF members), Switzerland (Interpharma members), Turkey: estimate

Source: EFPIA member associations (official figures)

### ALLOCATION OF R&D INVESTMENTS BY FUNCTION (%)



Source: PhRMA, Annual Membership Survey 2014 (percentages calculated from 2012 data)  $% \left( {{\left( {{{{\rm{S}}}} \right)}_{\rm{cl}}} \right)_{\rm{cl}}} \right)$ 



#### NUMBER OF NEW CHEMICAL OR BIOLOGICAL ENTITIES (1994-2013)

Source: SCRIP - EFPIA calculations (according to nationality of mother company)

# IMPORTANCE OF PHARMACEUTICAL R&D

 $I \in 30,000$  million in R&D in Europe. A decade of strong US market dominance led to a shift of economic and research activity towards the US from 1995-2005. Additionally, Europe is now facing increasing competition from emerging economies: rapid growth in the market and research environments in countries such as Brazil and China are contributing to the move of economic and research activities to non-European markets. The geographical balance of the pharmaceutical market – and ultimately the R&D base – is likely to shift gradually towards emerging economies.

## ESTIMATED FULL COST OF BRINGING A NEW CHEMICAL OR BIOLOGICAL ENTITY TO MARKET (\$ MILLION - YEAR 2011 \$)



Source: J. Mestre-Ferrandiz, J. Sussex and A. Towse, The R&D cost of a new medicine, Office of Health Economics, December 2012 (Hansen, 1979; Wiggins, 1987; DiMasi et al, 1991; OTA, 1993; DiMasi et al, 2003; Mestre-Ferrandiz et al, 2012)





#### RANKING OF INDUSTRIAL SECTORS BY OVERALL SECTOR R&D INTENSITY (R&D AS PERCENTAGE OF NET SALES – 2012)



Note: Data relate to the top 2,000 companies with registered offices in the EU (527), Japan (353), The USA (658) and the Rest of the World (462), ranked by total worldwide R&D investment (with R&D investment above € 22.6 million)

Source: The 2013 EU Industrial R&D Investment Scoreboard, European Commission, JRC/DG Research & Innovation

According to EUROSTAT data, the pharmaceutical industry is the high technology sector with the highest added-value per person employed, significantly higher than the average value for high-tech and manufacturing industries. The pharmaceutical industry is also the sector with the highest ratio of R&D investment to net sales. According to the 2013 EU Industrial R&D Investment Scoreboard the pharmaceuticals and biotechnology sector amounts to 18.1% of total business R&D expenditure worldwide.

# PHARMACEUTICAL PRODUCTION

EFPIA 2012	€ million
Austria	2,753
Belgium	6,696
Bulgaria	n.a.
Croatia	455
Cyprus	180
Czech Republic	n.a.
Denmark	8,725
Estonia	n.a.
Finland	1,465
France	20,750
Germany	27,683
Greece	858
Hungary	2,629
Ireland	22,192
Italy	25,798
Latvia	124
Lithuania	n.a.
Malta	n.a.
Netherlands	6,180
Norway	745
Poland	2,574
Portugal	1,387
Romania	457
Serbia	n.a.
Slovakia	n.a.
Slovenia	1,761
Spain	14,069
Sweden	6,589
Switzerland	35,000
Turkey	3,937
United Kingdom	19,996
Total	213,003

Note: All data based on SITC 54 Cyprus, Netherlands: 2010 data Croatia, Denmark, France, Ireland, Italy, Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland: estimate Croatia, Cyprus, France, Germany, Hungary, Ireland, Latvia, Poland, Portugal, Romania, Switzerland: veterinary products excluded

Source: EFPIA member associations (official figures)

# EMPLOYMENT IN THE PHARMACEUTICAL INDUSTRY

EFPIA 2012	Units
Austria	11,195
Belgium	32,718
Bulgaria	9,500
Croatia	5,900
Cyprus	1,140
Czech Republic	2,300
Denmark	19,535
Estonia	400
Finland	5,308
France	95,692
Germany	110,006
Greece	14,586
Hungary	22,600
Ireland	24,000
Italy	63,500
Latvia	n.a.
Lithuania	1,370
Malta	445
Netherlands	13,000
Norway	3,800
Poland	28,500
Portugal	8,000
Romania	23,000
Serbia	n.a.
Slovakia	3,000
Slovenia	9,050
Spain	36,713
Sweden	12,867
Switzerland	40,070
Turkey	22,000
United Kingdom	73,000
Total	693,195

Note: Austria, Estonia, Ireland, Slovakia: 2011 data; Czech Republic: 2009 data; Cyprus: 2007 data; Malta: 2004 data Austria, Belgium, Bulgaria, Croatia, Estonia, France, Greece, Ireland, Italy, Malta, Netherlands, Norway, Poland, Romania, Slovenia, Sweden, Switzerland, United Kingdom: estimate

Source: EFPIA member associations (official figures)

#### EMPLOYMENT IN THE PHARMACEUTICAL INDUSTRY (1990-2013)



The research-based pharmaceutical industry is one of Europe's major high-technology industrial employers. Recent studies in some countries showed that the research-based pharmaceutical industry generates three to four times more employment indirectly - upstream and downstream - than it does directly. Further, a significant proportion of these are valuable skilled jobs, for instance in the fields of academia or clinical science, which can help maintain a high-level knowledge base and prevent a European "brain drain".



#### EMPLOYMENT IN PHARMACEUTICAL R&D (1990-2013)

Note:	Data includes Bulgaria and
	Turkey (since 2012), Poland
	(since 2010), Czech Republic,
	Estonia and Hungary (since
	2009), Romania (since 2005)
	and Slovenia (since 2004)
	Croatia, Cyprus, Greece,
	Latvia, Lithuania, Malta,
	Serbia, Slovakia: data not
	available
Source:	EFPIA member associations -
	(e): EFPIA estimate

# PHARMACEUTICAL SALES

The world pharmaceutical market was worth an estimated  $f \in 655,222$  million (\$ 870,200 million) at ex-factory prices in 2013. The North American market (USA & Canada) remained the world's largest market with a 41.0% share, well ahead of Europe and Japan.

BREAKDOWN OF THE WORLD PHARMACEUTICAL MARKET - 2013 SALES



Note: Europe includes Turkey and Russia

Source: IMS Health (MIDAS), 2013 (data relate to the 2013 audited global retail pharmaceutical market at ex-factory prices)

# PRICE STRUCTURE

Distribution margins, which are generally fixed by governments, and VAT rates differ significantly from country to country in Europe. On average, approximately 34% of the retail price of a medicine reverts not to the manufacturer, but rather to the distributors (pharmacists and wholesalers) and the State.

#### BREAKDOWN OF THE RETAIL PRICE OF A MEDICINE, 2012 (%)



Note: Non-weighted average for Europe (average estimate for 23 countries) Source: EFPIA member associations

# PHARMACEUTICAL MARKET VALUE (AT EX-FACTORY PRICES)

EFPIA 2012	€ million
Austria	3,142
Belgium	4,494
Bulgaria	795
Croatia	670
Cyprus	203
Czech Republic	2,335
Denmark	2,202
Estonia	222
Finland	2,068
France	27,201
Germany	26,184
Greece	4,153
Hungary	2,005
Iceland	109
Ireland	1,818
Italy	20,172
Latvia	301
Lithuania	482
Malta	77
Netherlands	4,545
Norway	1,676
Poland	5,080
Portugal	2,916
Romania	2,627
Serbia	564
Slovakia	1,102
Slovenia	495
Spain	13,181
Sweden	3,509
Switzerland	4,217
Turkey	6,994
United Kingdom	15,035
Total	160,574

Note: Medicinal products as defined by Directive 2001/83/EEC Cyprus, Denmark, Finland, Iceland, Latvia, Lithuania, Norway, Slovenia, Sweden: pharmaceutical market value at pharmacy purchasing prices Cyprus, Serbia: 2011 data; Malta: 2007 data

Belgium, France, Germany, Ireland, Italy, Malta, Norway, Spain, U.K.: estimate Source: EFPIA member associations (official figures) – Slovakia: IMS Health

The figures above are for pharmaceutical sales, at ex-factory prices, through all distribution channels (pharmacies, hospitals, dispensing doctors, supermarkets, etc.), whether dispensed on prescription or at the patient's request. Sales of veterinary medicines are excluded.

# VAT RATES APPLICABLE TO MEDICINES

The table below shows the VAT rates applied to medicines in European countries as of 1 January 2014.

Country	Chandend MAT nets (0)	VAT rates applied to medicines			
Country	Standard VAT rate (%)	Prescription (%)	OTC (%)		
Austria	20.0	10.0	10.0		
Belgium	21.0	6.0	6.0		
Bulgaria	20.0	20.0	20.0		
Croatia	25.0	5.0	25.0		
Cyprus	19.0	5.0	5.0		
Czech Republic	21.0	15.0	15.0		
Denmark	25.0	25.0	25.0		
Estonia	20.0	9.0	9.0		
Finland	24.0	10.0	10.0		
France (1)	20.0	2.1	10.0		
Germany	19.0	19.0	19.0		
Greece	23.0	6.5	6.5		
Hungary	27.0	5.0	5.0		
Iceland	25.5	25.5	25.5		
Ireland (2)	23.0	0.0 - 23.0	0.0 - 23.0		
Italy	22.0	10.0	10.0		
Latvia	21.0	12.0	12.0		
Lithuania (3)	21.0	5.0 - 21.0	5.0 - 21.0		
Luxembourg	15.0	3.0	3.0		
Malta	18.0	0.0	0.0		
Netherlands	21.0	6.0	6.0		
Norway	25.0	25.0	25.0		
Poland	23.0	8.0	8.0		
Portugal	23.0	6.0	6.0		
Romania	24.0	9.0	9.0		
Serbia	20.0	10.0	10.0		
Slovakia	20.0	10.0	10.0		
Slovenia	22.0	9.5	9.5		
Spain	21.0	4.0	4.0		
Sweden	25.0	0.0	25.0		
Switzerland	8.0	2.5	2.5		
Turkey	18.0	8.0	8.0		
United Kingdom	20.0	0.0	20.0		

(1) France: reimbursable medicines 2.1%; non-reimbursable medicines 10.0%

(2) Ireland: oral medication 0%; other medication 23%

(3) Lithuania: reimbursable medicines 5.0%; non-reimbursable medicines 21.0%

# GENERICS

The term 'generic' is widely used but its definition is not always consistent between countries. Generics are usually produced by a manufacturer who is not the inventor of the original product, and are marketed when intellectual property protection rights are exhausted. The market share of generics is significantly higher in newer EU Member States with historically low levels of intellectual property protection.

#### SHARE (ESTIMATE - IN %) ACCOUNTED FOR BY GENERICS IN PHARMA-CEUTICAL MARKET SALES VALUE (AT EX-FACTORY PRICES), 2012



Note:

Croatia, Denmark, Estonia, Finland, Greece, U.K.: share of generics in pharmacy market sales

Austria, Belgium, Bulgaria, France, Germany, Hungary, Ireland, Italy, Portugal, Slovenia, Spain: share of generics in reimbursable pharmacy market sales

Latvia, Lithuania, Netherlands, Norway, Poland, Romania, Sweden, Switzerland, Turkey: share of generics in total market sales

Cyprus, Czech Republic, Iceland, Malta, Serbia, Slovakia: 2012 data not available France: data relate only to those active substances listed on the official list of medicines

Definition: 'generic' means a medicine based on an active substance that is out of patent and which is marketed under a different name from that of the original branded medicine (generics data do not include those generics marketed by the originator).

Source: EFPIA member associations

# PHARMACEUTICAL EXPORTS

EFPIA 2012	€ million
Austria	7,302
Belgium	36,228
Bulgaria	608
Croatia	426
Cyprus	236
Czech Republic	1,324
Denmark	8,970
Estonia	54
Finland	1,063
France	27,814
Germany	56,012
Greece	960
Hungary	3,774
Ireland	24,530
Italy	16,566
Latvia	268
Lithuania	320
Luxembourg	247
Malta	256
Netherlands	19,319
Norway	586
Poland	1,918
Portugal	705
Romania	898
Slovakia	297
Slovenia	2,100
Spain	10,535
Sweden	6,584
Switzerland	53,320
Turkey	559
United Kingdom	28,598
Total	312,377

Note: All data based on SITC 54 Norway, Switzerland: veterinary products excluded Source: Eurostat (COMEXT database – December 2013) Norway: Statistics Norway; Switzerland: Swiss Federal Customs Administration

# PHARMACEUTICAL IMPORTS

EFPIA 2012	€ million
Austria	6,404
Belgium	29,787
Bulgaria	854
Croatia	641
Cyprus	241
Czech Republic	2,992
Denmark	3,118
Estonia	295
Finland	1,848
France	23,291
Germany	35,970
Greece	2,934
Hungary	2,824
Ireland	4,156
Italy	18,663
Latvia	404
Lithuania	659
Luxembourg	487
Malta	113
Netherlands	12,989
Norway	1,517
Poland	4,291
Portugal	2,195
Romania	2,492
Slovakia	1,408
Slovenia	834
Spain	11,818
Sweden	3,505
Switzerland	22,537
Turkey	3,386
United Kingdom	22,158
Total	224,811

Note: All data based on SITC 54

Norway, Switzerland: veterinary products excluded Source: Eurostat (COMEXT database – December 2013) Norway: Statistics Norway; Switzerland: Swiss Federal Customs Administration

# PHARMACEUTICAL TRADE BALANCE

EFPIA 2012	€ million
Austria	898
Belgium	6,441
Bulgaria	- 246
Croatia	- 215
Cyprus	- 5
Czech Republic	- 1,668
Denmark	5,852
Estonia	- 241
Finland	- 785
France	4,523
Germany	20,042
Greece	- 1,974
Hungary	950
Ireland	20,374
Italy	- 2,097
Latvia	- 136
Lithuania	- 339
Luxembourg	- 240
Malta	143
Netherlands	6,330
Norway	- 931
Poland	- 2,373
Portugal	- 1,490
Romania	- 1,594
Slovakia	- 1,111
Slovenia	1,266
Spain	- 1,283
Sweden	3,079
Switzerland	30,783
Turkey	- 2,827
United Kingdom	6,440
Total	87,566

Note: All data based on SITC 54 Norway, Switzerland: veterinary products excluded Source: Eurostat (COMEXT database – December 2013) Norway: Statistics Norway; Switzerland: Swiss Federal Customs Administration

#### EU-28 TRADE BALANCE - HIGH TECHNOLOGY SECTORS (€ MILLION) - 2013



- SITC 76 Telecommunication, sound, TV, video
- SITC 77 Electrical machinery
- SITC 87 Professional, scientific, controlling material

Source: Eurostat, COMEXT database, April 2014

#### THE EUROPEAN UNION'S TOP 5 PHARMACEUTICAL TRADING PARTNERS - 2013 EU exports EU imports



Source: Eurostat, COMEXT database, April 2014

# TOTAL SPENDING (PUBLIC AND PRIVATE) ON HEALTH-CARE AS A PERCENTAGE OF GDP AT MARKET PRICES

	1960	1970	1980	1990	2000	2011
Austria	4.3	5.2	7.5	8.4	10.0	10.8
Belgium	-	3.9	6.3	7.2	8.1	10.5
Czech Republic	-	-	-	4.4	6.3	7.5
Denmark	-	-	8.9	8.3	8.7	10.9
Estonia	-	-	-	-	5.3	5.9
Finland	3.8	5.5	6.3	7.7	7.2	9.0
France	3.8	5.4	7.0	8.4	10.1	11.6
Germany	-	6.0	8.4	8.3	10.4	11.3
Greece	-	5.5	5.9	6.7	8.0	9.1
Hungary	-	-	-	-	7.2	7.9
Iceland	3.0	4.7	6.3	7.8	9.5	9.0
Ireland	3.7	5.0	8.1	6.0	6.1	8.9
Italy	-	-	-	7.7	7.9	9.2
Luxembourg	-	3.1	5.2	5.4	7.5	6.6
Netherlands	-	-	7.4	8.0	8.0	11.9
Norway	2.9	4.4	7.0	7.6	8.4	9.3
Poland	-	-	-	4.8	5.5	6.9
Portugal	-	2.4	5.1	5.7	9.3	10.2
Slovakia	-	-	-	-	5.5	7.9
Slovenia	-	-	-	-	8.3	8.9
Spain	1.5	3.5	5.3	6.5	7.2	9.3
Sweden	-	6.8	8.9	8.2	8.2	9.5
Switzerland	4.9	5.5	7.2	8.0	9.9	11.0
Turkey	-	-	2.4	2.7	4.9	6.1
United Kingdom	3.9	4.5	5.6	5.8	7.0	9.4
Europe	3.5	4.7	6.6	6.8	7.8	9.2
USA	5.1	7.1	9.0	12.4	13.7	17.7
Japan	3.0	4.4	6.4	5.8	7.6	9.6

Note: Japan: 2010 data; Turkey: 2008 data

Europe: non-weighted average (25 countries) – EFPIA calculations Source: OECD Health Data 2013, November 2013

# PAYMENT FOR PHARMACEUTICALS BY COM-PULSORY HEALTH INSURANCE SYSTEMS AND NATIONAL HEALTH SERVICES (ambulatory care only)

EFPIA 2012	€ million
Austria	2,333
Belgium	3,652
Bulgaria	282
Croatia	429
Cyprus	90
Czech Republic	547
Denmark	817
Estonia	101
Finland	1,303
France	22,642
Germany	29,198
Greece	2,800
Hungary	1,095
Iceland	59
Ireland	1,511
Italy	8,986
Latvia	117
Lithuania	184
Malta	n.a.
Netherlands	4,606
Norway	1,245
Poland	1,640
Portugal	1,173
Romania	858
Serbia	286
Slovakia	894
Slovenia	280
Spain	9,491
Sweden	2,056
Switzerland	4,078
Turkey	6,236
United Kingdom	10,356
Total	119,345

Note: Cyprus, Slovakia: 2011 data; Iceland: 2010 data

France, Ireland, Netherlands, Norway, Spain, Sweden, United Kingdom: estimate

Source: EFPIA member associations (official figures)

# CAUSES OF DEATH BY MAJOR DISEASE AREAS IN EUROPE (EU-27)



25.9%

- Diseases of the circulatory system
- Malignant neoplasms
- Diseases of the respiratory system
- Diseases of the digestive system
- Diseases of the nervous system and the sense organs
- Endocrine, nutritional and metabolic diseases
- Mental and behavioural disorders
- Diseases of the genitourinary system
- Certain infectious and parasitic diseases
- Diseases of the musculoskeletal system and connective tissues
- Diseases of the blood(-forming organs) and immune mechanism disorders
- Diseases of the skin and subcutaneous tissue
- Others (Non-disease related causes of deaths)

Data source: Eurostat, data relate to year 2010 (non-disease directly related causes of deaths: EFPIA calculations – Percentages do not add due to rounding), April 2014

# THE ADDED VALUE OF MEDICINES IN HEALTHCARE

Medicines constitute only a small part of healthcare costs with, on average, 16.5% of total health expenditure in Europe being spent on pharmaceuticals and other medical non-durables. In costly diseases such as cancer and rheumatoid arthritis, medicines account for even less than 10% of the total disease costs. Medicines can also generate additional savings, for example by substantially reducing costs in other areas of healthcare, including hospital stays and long-term care costs.

#### BREAKDOWN OF TOTAL HEALTH EXPENDITURE IN EUROPE - 2011



Source: OECD Health Data 2013, November 2013 – EFPIA calculations (non-weighted average for 23 EU & EFTA countries)



# CONTRIBUTION OF INNOVATIVE MEDICINES TO INCREASE IN LIFE EXPECTANCY (2000-2009)

Source: Lichtenberg, F: Pharmaceutical innovation and longevity growth in 30 developing OECD and high-income countries, 2000-2009 (2012)

# EFPIA MEMBER ASSOCIATIONS

Austria Fachverband der Chemischen Industrie Österreichs (FCIO)

Denmark

Laegemiddelindustriforeningen The Danish Association of the Pharmaceutical Industry (Lif)

France Les Entreprises du Médicament (LEEM)

**Greece** Hellenic Association of Pharmaceutical Companies (SFEE)

**Italy** Associazione delle Imprese del Farmaco (Farmindustria)

Norway Legemiddelindustriforeningen / Norwegian Association of Pharmaceutical Manufacturers (LMI)

**Portugal** Associação Portuguesa da Indústria Farmacêutica (Apifarma)

Spain Asociación Nacional Empresarial de la Industria Farmacéutica (Farmaindustria)

Switzerland Scienceindustries Belgium

Association Générale de l'Industrie du Médicament (pharma.be)

**Finland** Lääketeollisuus ry Pharma Industry Finland (PIF)

**Germany** Verband Forschender Arzneimittelhersteller (VfA)

**Ireland** Irish Pharmaceutical Healthcare Association (IPHA)

Netherlands Vereniging Innovatieve Geneesmiddelen Nederland (Nefarma)

**Poland** Employers Union of Innovative Pharmaceutical Companies (Infarma)

#### Russia

Association of International Pharmaceutical Manufacturers (AIPM)

Sweden

Läkemedelsindustriföreningen The Swedish Association of the Pharmaceutical Industry (LIF)

Turkey

Arastirmaci Ilac Firmalari Dernegi (AIFD)

**United Kingdom** 

The Association of the British Pharmaceutical Industry (ABPI)

# ASSOCIATIONS WITH LIAISON STATUS

Bulgaria: Association of Research-based Pharmaceutical Manufacturers in Bulgaria (ARPharM) Croatia: Innovative Pharmaceutical Initiative (IF!) Cyprus: Cyprus Association of Pharmaceutical Companies (KEFEA) **Czech Republic:** Association of Innovative Pharmaceutical Industry (AIFP) Estonia: Association of Pharmaceutical Manufacturers in Estonia (APME) Hungary: Association of Innovative Pharmaceutical Manufacturers (AIPM) Latvia: Association of International Research-based Pharmaceutical Manufacturers (AFA) Lithuania: The Innovative Pharmaceutical Industry Association (IFPA) Malta: Maltese Pharmaceutical Association (PRIMA) Romania: Association of International Medicines Manufacturers (ARPIM) Serbia: Innovative Drug Manufacturers' Association (INOVIA) Slovakia: Association of Innovative Pharmaceutical Industry (AIFP) Slovenia: Forum of International Research and Development Pharmaceutical Industries (EIG) Ukraine: Association of Pharmaceutical Research and Development (APRaD)

# MEMBER COMPANIES

#### FULL MEMBERS

Abbott AbbVie Almirall Amgen Astellas Pharma Europe AstraZeneca (AZ) Baxter Baver HealthCare Biogen Idec Boehringer Ingelheim Bristol Myers Squibb Celaene Chiesi Farmaceutici (Chiesi) Daiichi-Sankyo Europe Eisai Eli Lilly (Lilly) Esteve Genzvme GlaxoSmithKline (GSK) Grünenthal Ipsen Johnson & Johnson Lundbeck Menarini Merck Merck, Sharp & Dohme (MSD) Novartis Novo Nordisk Orion Pharma (Orion) Otsuka Pfizer Roche Sanofi Servier Takeda UCB

#### AFFILIATE MEMBERS

Bial Cubist Shire Vifor Pharma

USA USA Spain USA United Kingdom United Kingdom / Sweden USA Germany USA Germany **LISA** USA Italv Germany Japan USA Spain USA United Kingdom Germany France USA Denmark Italv Germany LISA Switzerland Denmark Finland Japan USA Switzerland France France Japan Belgium

Portugal USA United Kingdom Switzerland



## EFPIA (The European Federation of Pharmaceutical Industries and Associations) represents the research-based pharmaceutical industry operating in Europe.

Founded in 1978, its members comprise 33 national pharmaceutical industry associations and 40 leading pharmaceutical companies undertaking research, development and manufacturing of medicinal products in Europe for human use.

Its mission is to promote pharmaceutical research and development and the best conditions in Europe for companies to bring to market medicines that improve human health and the quality of life around the world.

Through its membership, EFPIA represents the common views of 1,900 large, medium and small companies including the entire European research-based pharmaceutical sector whose interests also include an important part of the generics segment. Two specialised groups have been created within EFPIA to address specific issues relating to vaccines (Vaccines Europe, formerly EVM – European Vaccine Manufacturers) and the needs of biopharmaceutical companies (EBE - European Biopharmaceutical Enterprises).

Further details about the Federation and its activities can be obtained from:

### EFPIA

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