

The Pharmaceutical Industry in Figures

Key Data * 2021



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

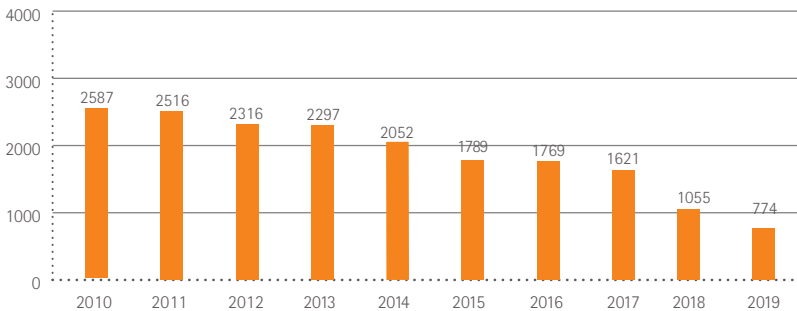
Thanks to advances in science and technology, the research-based pharmaceutical industry is entering an exciting new era in medicines development. Research methods are evolving and we have many promising prospects on the horizon, with ground-breaking cell and gene therapies being increasingly available*. 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 diseases 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 rare diseases.



TOTAL NUMBER OF DEATHS AMONG AIDS CASES IN EUROPE (TOTAL EU/EEA)



Source: HIV/AIDS surveillance in Europe 2020 (2019 data), WHO Regional Office for Europe & European Centre for Disease Prevention and Control (ECDC), 26 November 2020

*<https://www.efpia.eu/publications/downloads/efpia/iqviaefpia-pipeline-review-2021>

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 high-technology sectors.



INDUSTRY (EFPIA total)

	2000	2010	2019	2020
Production	127,504	199,730	293,213	310,000 (e)
Exports (1) (2)	90,935	276,357	473,753	515,000 (e)
Imports	68,841	204,824	333,626	360,000 (e)
Trade balance	22,094	71,533	140,127	155,000 (e)
R&D expenditure	17,849	27,920	37,754	39,000 (e)
Employment (units)	556,506	701,059	823,882	830,000 (e)
R&D employment (units)	88,397	116,253	121,594	125,000 (e)
Total pharmaceutical market value at ex-factory prices	89,449	153,684	227,404	240,500 (e)
Payment for pharmaceuticals by statutory health insurance systems (ambulatory care only)	76,909	129,464	140,374	149,500 (e)

Values in € million unless otherwise stated

(1) Data relate to EU-28, Norway and Switzerland since 2005 (EU-15 before 2005); Croatia and Serbia included since 2010; Turkey included since 2011; Russia included since 2013

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

Source: EFPIA member associations (official figures) - (e): EFPIA estimate; Eurostat (EU-28 trade data 2000-2020)

MAIN TRENDS

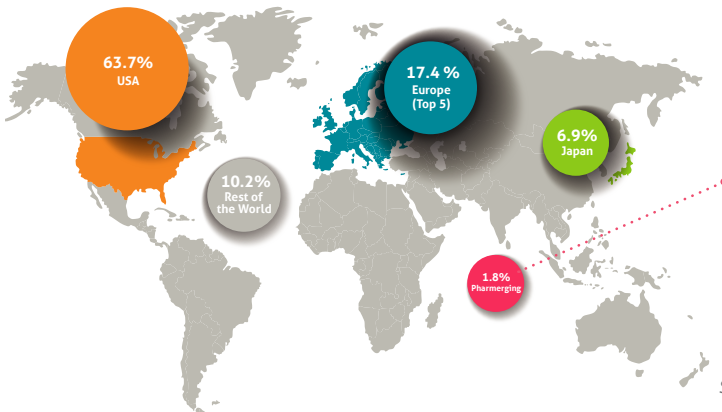
The research-based pharmaceutical industry can play a critical role in restoring Europe to growth and ensuring future competitiveness in an advancing global economy. In 2020 it invested an estimated € 39,000 million in R&D in Europe. It directly employs some 830,000 people and generates about three times more employment indirectly – upstream and downstream – than it does directly (PwC, Economic and societal footprint of the pharmaceutical industry in Europe, June 2019). 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. During

the period 2015-2020 the Brazilian, Chinese and Indian markets grew by 11.3%, 4.8% and 10.0% respectively compared to an average market growth of 5.0% for the top 5 European Union markets and 4.9% for the US market (source: IQVIA MIDAS, April 2021).

- * In 2020 North America accounted for 49.0% of world pharmaceutical sales compared with 23.9% for Europe. According to IQVIA (MIDAS April 2021), 63.7% of sales of new medicines launched during the period 2015-2020 were on the US market, compared with 17.4% on the European market (top 5 markets).
- * 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 € 5,758 million (value at ex-factory prices) in 2019.

GEOGRAPHICAL BREAKDOWN (BY MAIN MARKETS) OF SALES OF NEW MEDICINES LAUNCHED DURING THE PERIOD 2015-2020



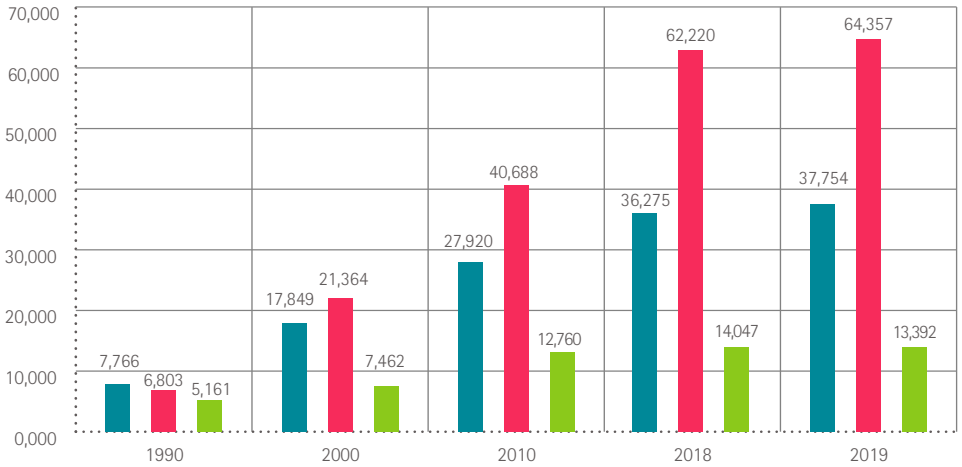
Note:
New medicines cover all new active ingredients marketed for the first time on the world market during the period 2015-2020

Europe (Top 5) comprises Germany, France, Italy, Spain and United Kingdom

Pharmerging comprises 21 countries ranked by IQVIA as high-growth pharmaceutical markets (Algeria, Argentina, Bangladesh, Brazil, Colombia, Chile, China, Egypt, India, Indonesia, Kazakhstan, Mexico, Nigeria, Pakistan, Philippines, Poland, Russia, Saudi Arabia, South Africa, Turkey and Vietnam)

Source: IQVIA (MIDAS April 2021)

**PHARMACEUTICAL R&D EXPENDITURE IN EUROPE, USA AND JAPAN
(MILLION OF NATIONAL CURRENCY UNITS*), 1990-2019**

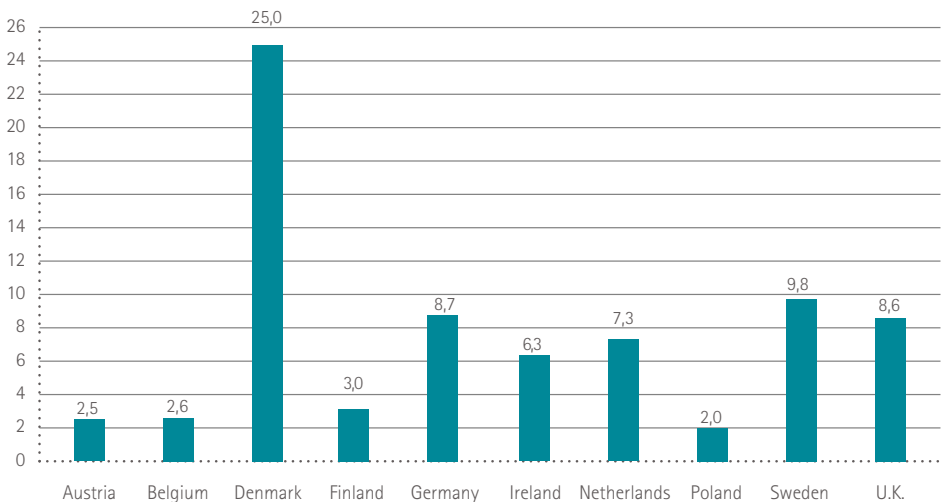


* Note: Europe: € million; USA: \$ million; Japan: ¥ million x 100

Source: EFPIA member associations, PhRMA, JPMA



SHARE OF PARALLEL IMPORTS IN PHARMACY MARKET SALES (%) – 2019



Note: U.K.: in % of pharmacy market sales at reimbursement prices

Source: EFPIA member associations (estimate)

PHARMACEUTICAL INDUSTRY RESEARCH AND DEVELOPMENT IN EUROPE

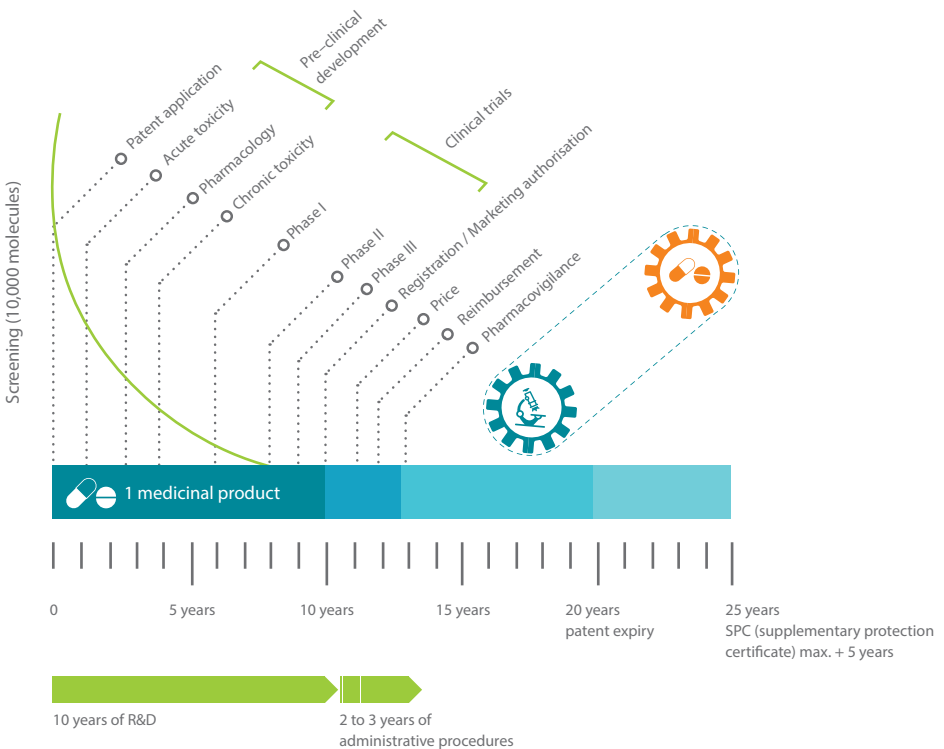
All new medicines introduced into the market are the result of lengthy, costly and risky research and development (R&D) conducted by pharmaceutical companies:

* 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 € 1,926 million (\$ 2,558 million in year 2013 dollars) in 2014 (DiMasi et al, Journal of Health Economics, January 2016);

* 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 2019	€ million		€ million
Austria	311	Latvia	n.a
Belgium	3,846	Lithuania	n.a
Bulgaria	91	Malta	n.a
Croatia	40	Netherlands	642
Cyprus	85	Norway	126
Czech Rep.	62	Poland	339
Denmark	1,543	Portugal	117
Estonia	n.a	Romania	75
Finland	182	Russia	727
France	4,451	Slovakia	n.a
Germany	8,466	Slovenia	180
Greece	51	Spain	1,212
Hungary	242	Sweden	1,104
Iceland	n.a	Switzerland	6,383
Ireland	305	Turkey	137
Italy	1,600	U.K.	5,437
TOTAL			37,754

Note:

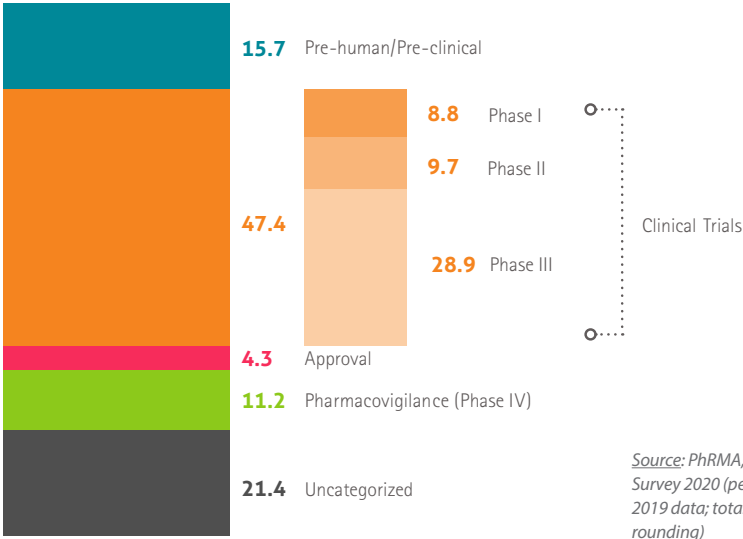
The figures relate to the R&D carried out in each country.

Hungary, Portugal: 2018 data; Bulgaria, France, Greece: 2017 data; Slovenia: 2016 data; Norway, Sweden: 2015 data; Cyprus, Ireland: 2013 data; Croatia, Netherlands: 2011 data
Belgium, Croatia, Denmark, France, Germany, Greece, Ireland, Italy, Netherlands, Norway (LMI members), Poland, Romania, Slovenia, Sweden (LIF members), Switzerland (Interpharma members), Turkey: estimate

Source: EFPIA member associations (official figures)

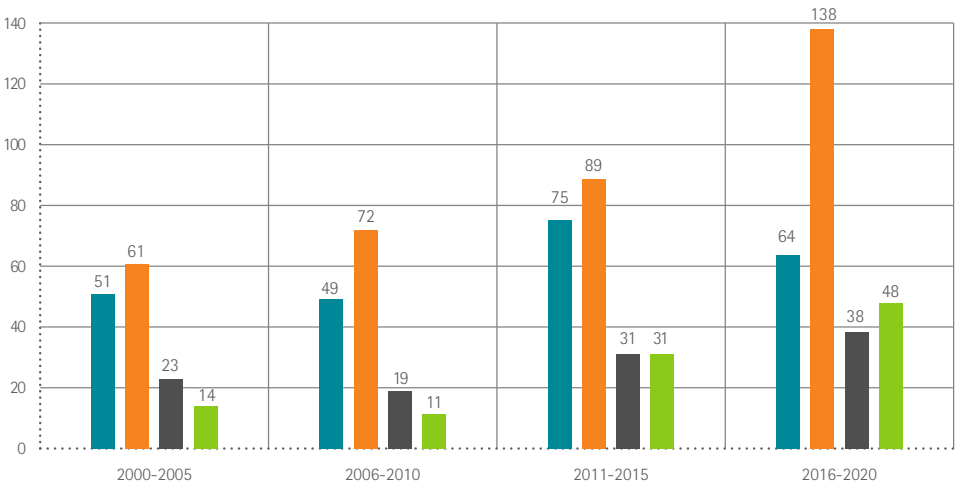


ALLOCATION OF R&D INVESTMENTS BY FUNCTION (%)



Source: PhRMA, Annual Membership Survey 2020 (percentages calculated from 2019 data; total values may be affected by rounding)

NUMBER OF NEW CHEMICAL AND BIOLOGICAL ENTITIES (2001–2020)



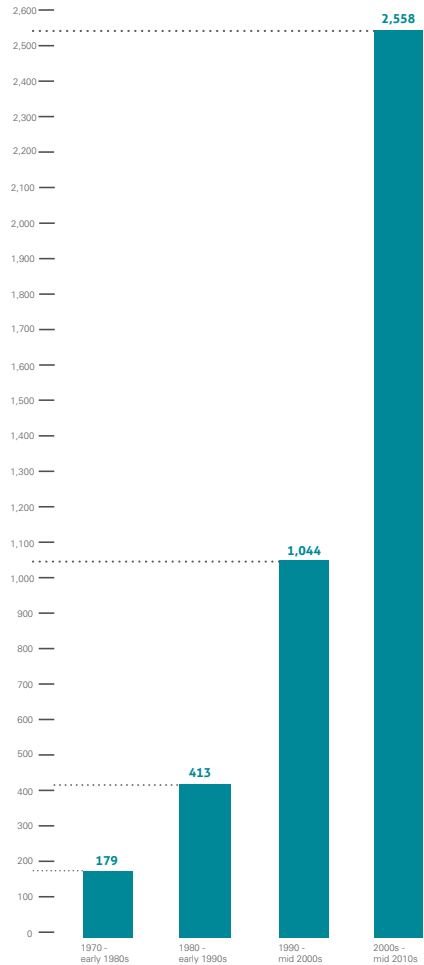
Source: SCRIP – EFPIA calculations (according to nationality of mother company)

IMPORTANCE OF PHARMACEUTICAL R&D

In 2019 the pharmaceutical industry invested more than € 37,700 million in R&D in Europe. A decade of strong US market dominance led to a significant shift of economic and research activity towards the US during the period 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.

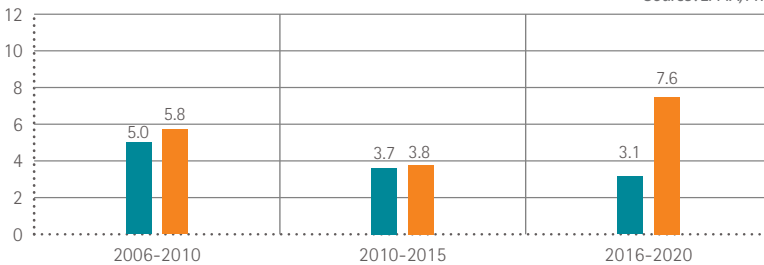
ESTIMATED FULL COST OF BRINGING A NEW CHEMICAL OR BIOLOGICAL ENTITY TO MARKET (\$ MILLION – YEAR 2013 \$)

Source: Joseph. A. DiMasi, Henry G. Grabowski, Ronald W.Hansen, *Innovation in the pharmaceutical industry: New estimates of R&D costs*, *Journal of Health Economics*, 47 (2016), 20-33



PHARMACEUTICAL R&D EXPENDITURE – ANNUAL GROWTH RATE (%)

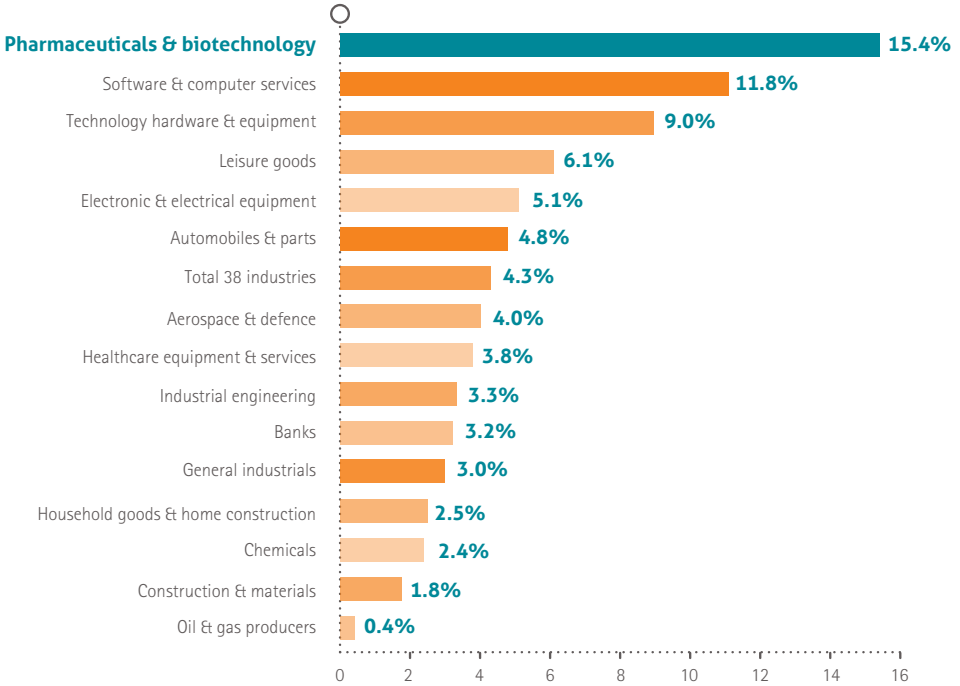
Note: USA: data relating to period 2016-2019
Source: EFPIA, PhRMA



Europe

USA

**RANKING OF INDUSTRIAL SECTORS BY OVERALL SECTOR R&D INTENSITY
(R&D AS PERCENTAGE OF NET SALES – 2019)**



Note:

Data relate to the top 2,500 companies with registered offices in the EU-27 (421), Japan (309), the US (775), China (536) and the Rest of the World (459), ranked by total worldwide R&D investment (with investment in R&D above € 34.7 million).

Source: The 2020 EU Industrial R&D Investment Scoreboard, European Commission, JRC/DG RTD

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 2020 EU Industrial R&D Investment Scoreboard the pharmaceutical and biotechnology sector amounts to 18.4% of total business R&D expenditure worldwide.

PHARMACEUTICAL PRODUCTION

EFPIA 2019	€ million		€ million
Austria	3,024	Latvia	255
Belgium	17,547	Lithuania	n.a
Bulgaria	121	Malta	n.a
Croatia	664	Netherlands	6,180
Cyprus	253	Norway	1,072
Czech Rep.	858	Poland	2,550
Denmark	14,391	Portugal	1,737
Estonia	n.a	Romania	655
Finland	1,877	Russia	5,881
France	35,848	Slovakia	356
Germany	33,158	Slovenia	1,659
Greece	1,376	Spain	15,832
Hungary	3,859	Sweden	9,840
Iceland	89	Switzerland	54,305
Ireland	19,305	Turkey	3,482
Italy	34,000	U.K.	23,039
TOTAL			293,213

Note:

All data based on SITC 54

Cyprus, Slovenia, Spain, U.K.: 2018 data; Czech Republic, Denmark, Slovakia, Norway: 2017 data; Iceland: 2016 data; Bulgaria: 2015 data; Ireland: 2014 data; Romania: 2013 data; Netherlands: 2010 data

Croatia, Denmark, France, Ireland, Italy, Netherlands, Norway, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland: estimate
Bulgaria, Croatia, Cyprus, France, Hungary, Ireland, Latvia, Norway, Poland, Portugal, Romania, Slovenia, Sweden: veterinary products excluded

Source: EFPIA member associations (official figures)



EMPLOYMENT IN THE PHARMACEUTICAL INDUSTRY

EFPIA 2019	Units		Units
Austria	16,094	Latvia	2,232
Belgium	38,489	Lithuania	1,220
Bulgaria	15,000	Malta	1,033
Croatia	5,763	Netherlands	20,000
Cyprus	1,755	Norway	4,000
Czech Rep.	18,000	Poland	24,736
Denmark	24,821	Portugal	9,000
Estonia	380	Romania	35,000
Finland	5,672	Russia	n.a
France	98,780	Slovakia	2,287
Germany	119,994	Slovenia	11,213
Greece	25,700	Spain	47,449
Hungary	23,300	Sweden	11,012
Iceland	500	Switzerland	46,652
Ireland	37,000	Turkey	39,000
Italy	65,800	U.K.	72,000
TOTAL			823,882

Note:

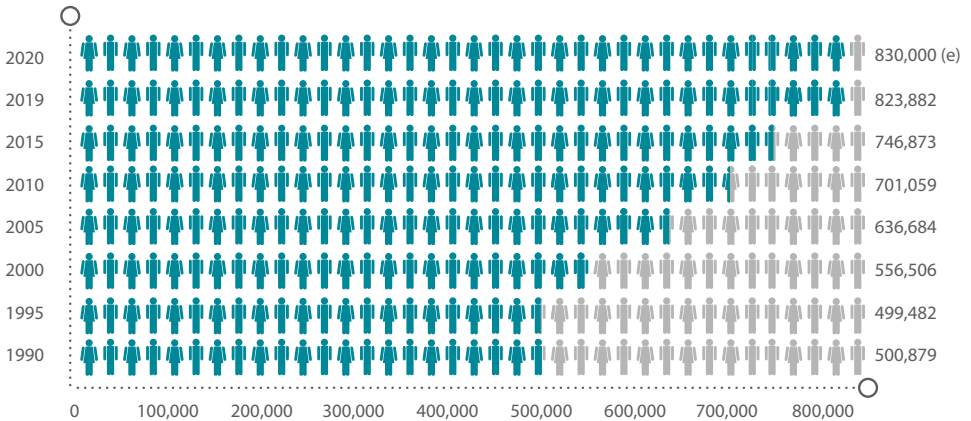
Cyprus, Latvia, Malta, Slovakia, Spain: 2018 data; Estonia: 2016 data; Sweden: 2014 data; Lithuania: 2013 data
Belgium, Bulgaria, Croatia, Estonia, France, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Sweden,
Switzerland, Turkey, United Kingdom: estimate

Source: EFPIA member associations (official figures)

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 about three times more employment indirectly – upstream and downstream – than it does directly (PwC, Economic and societal

footprint of the pharmaceutical industry in Europe, June 2019). Furthermore, 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 THE PHARMACEUTICAL INDUSTRY (1990-2020)

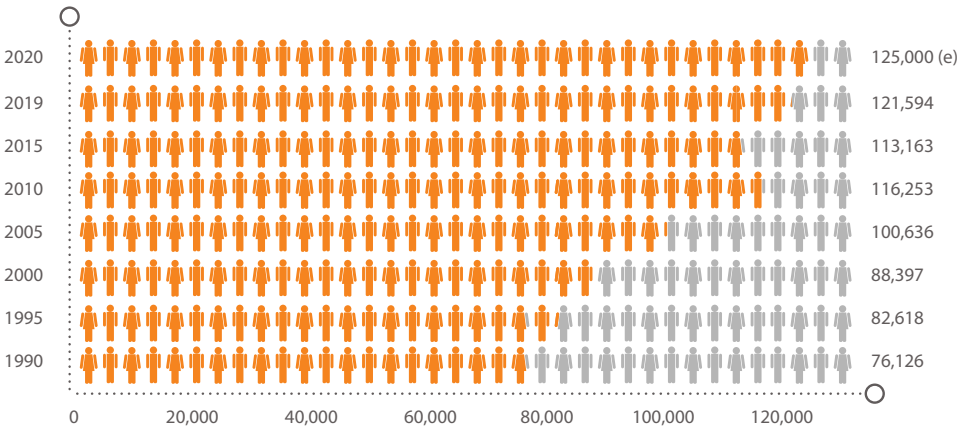


Note:

Data includes Iceland (since 2017), Croatia, Lithuania and Turkey (since 2010), Bulgaria, Estonia and Hungary (since 2009), Czech Republic (since 2008), Cyprus (since 2007), Latvia, Romania & Slovakia (since 2005), Malta, Poland and Slovenia (since 2004)

Source: EFPIA member associations (official figures) - (e): EFPIA estimate

EMPLOYMENT IN PHARMACEUTICAL R&D (1990-2020)



Note:

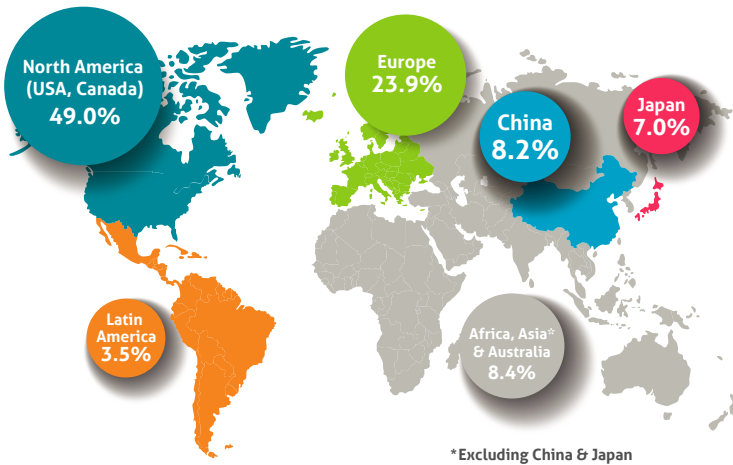
Data includes Iceland (since 2017), Greece & Lithuania (since 2013), Bulgaria and Turkey (since 2012), Poland (since 2010), Czech Republic, Estonia and Hungary (since 2009), Romania (since 2005) and Slovenia (since 2004)
Croatia, Cyprus, Latvia, Malta, Serbia, Slovakia: data not available

Source: EFPIA member associations - (e): EFPIA estimate

PHARMACEUTICAL SALES

The world pharmaceutical market was worth an estimated € 943,667 million (\$ 1,077,856 million) at ex-factory prices in 2020. The North American market (USA & Canada) remained the world's largest market with a 49.0% share, well ahead of Europe, China and Japan.

BREAKDOWN OF THE WORLD PHARMACEUTICAL MARKET – 2020 SALES



Note:
Europe includes Turkey and Russia; percentages might not add up due to rounding

Source: IQVIA (MIDAS) Q4 2020 MAT, April 2021 (data relate to the 2020 audited global retail and hospital 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 one third of the retail price of a medicine reverts to distributors (pharmacists and wholesalers) and the State.

BREAKDOWN OF THE RETAIL PRICE OF A MEDICINE, 2019 (%)



Note:
Non-weighted average for Europe (average estimate for 25 countries)

Source: EFPIA member associations

PHARMACEUTICAL MARKET VALUE (at ex-factory prices)

EFPIA 2019	€ million		€ million
Austria	4,583	Lithuania	793
Belgium	5,988	Malta	196
Bulgaria	1,210	Netherlands	5,770
Croatia	957	Norway	2,621
Cyprus	177	Poland	7,281
Czech Rep.	3,010	Portugal	3,409
Denmark	3,111	Romania	3,130
Estonia	344	Russia	17,678
Finland	2,712	Serbia	725
France	29,304	Slovakia	1,455
Germany	40,456	Slovenia	675
Greece	5,158	Spain	17,105
Hungary	2,631	Sweden	4,313
Iceland	147	Switzerland	5,533
Ireland	2,279	Turkey	6,891
Italy	24,099	U.K.	23,279
Latvia	384		
TOTAL			227,404

Note:

Medicinal products as defined by Directive 2001/83/EC

Cyprus, Denmark, Finland, Iceland, Latvia, Lithuania, Norway, Russia, Slovenia, Sweden: pharmaceutical market value at pharmacy purchasing prices

Belgium, France, Germany, Ireland, Italy, Norway, Spain, United Kingdom: estimate

Source:

EFPIA member associations (official figures) – Serbia: IQVIA

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 2021.

Country	Standard VAT rate (%)	VAT rates applied to medicines	
		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	5,0
Cyprus	19,0	5,0	5,0
Czech Rep.	21,0	10,0	10,0
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	24,0	6,0	6,0-13,0
Hungary	27,0	5,0	5,0
Iceland	24,0	24,0	24,0
Ireland (2)	23,0	0-23,0	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
Luxembourg	17,0	3,0	3,0
Malta	18,0	0,0	0,0
Netherlands	21,0	9,0	9,0
Norway	25,0	25,0	25,0
Poland	23,0	8,0	8,0
Portugal	23,0	6,0	6,0
Romania	19,0	9,0	19,0
Russia	20,0	10,0	10,0
Serbia	20,0	10,0	10,0
Slovakia	20,0	10,0	20,0
Slovenia	22,0	9,5	9,5
Spain	21,0	4,0	4,0
Sweden	25,0	0,0	25,0
Switzerland	7,7	2,5	2,5
Turkey	18,0	8,0	8,0
U.K. (4)	20,0	0-20,0	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% (4) U.K.: 0% for prescription medicines dispensed in the Community; 20% for prescription medicines consumed in the hospital setting

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.



SHARE (ESTIMATE - IN %) ACCOUNTED FOR BY GENERICS IN PHARMACEUTICAL MARKET SALES VALUE (AT EX-FACTORY PRICES), 2019

Note:

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

Austria, Belgium, France, Germany, Italy, Netherlands, Portugal, Spain: share of generics in reimbursable pharmacy market sales

Bulgaria, Czech Republic, Latvia, Lithuania, Norway, Poland, Romania, Russia, Serbia, Slovakia, Sweden, Switzerland, Turkey: share of generics in total market sales

Cyprus, Iceland, Malta: 2018 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.

Source: EFPIA member associations

PHARMACEUTICAL EXPORTS

EFPIA 2019	€ million		€ million
Austria	11,150	Lithuania	806
Belgium	49,732	Luxembourg	139
Bulgaria	1,038	Malta	294
Croatia	1,039	Netherlands	44,382
Cyprus	333	Norway	1,964
Czech Republic	2,852	Poland	3,688
Denmark	17,041	Portugal	1,229
Estonia	99	Romania	845
Finland	669	Russia	457
France	32,556	Slovakia	462
Germany	81,862	Slovenia	4,985
Greece	1,944	Spain	11,953
Hungary	5,916	Sweden	9,918
Ireland	49,521	Switzerland	77,809
Italy	31,666	Turkey	1,189
Latvia	498	United Kingdom	25,717
TOTAL			473,753

Note:

All data based on SITC 54

Source: Eurostat (COMEXT database – May 2021)

Norway: LMI; Russia: Clifar Import/Export, 2019; Switzerland: Swiss Federal Customs Administration; Turkey: Turkish Statistical Institute



PHARMACEUTICAL IMPORTS

EFPIA 2019	€ million		€ million
Austria	9,898	Lithuania	1,243
Belgium	42,332	Luxembourg	473
Bulgaria	1,471	Malta	236
Croatia	1,326	Netherlands	29,928
Cyprus	312	Norway	1,382
Czech Republic	4,960	Poland	6,906
Denmark	4,217	Portugal	2,803
Estonia	520	Romania	3,473
Finland	1,985	Russia	13,579
France	26,012	Slovakia	1,865
Germany	52,679	Slovenia	4,002
Greece	2,957	Spain	14,767
Hungary	4,688	Sweden	4,391
Ireland	7,686	Switzerland	29,036
Italy	27,867	Turkey	4,598
Latvia	665	United Kingdom	25,369
TOTAL			333,626

Note:

All data based on SITC 54

Source: Eurostat (COMEXT database – May 2021)

Norway: LMI; Russia: Clifar Import/Export, 2019; Switzerland: Swiss Federal Customs Administration; Turkey: Turkish Statistical Institute



PHARMACEUTICAL TRADE BALANCE

EFPIA 2019	€ million		€ million
Austria	1,252	Lithuania	-437
Belgium	7,400	Luxembourg	-334
Bulgaria	-433	Malta	58
Croatia	-287	Netherlands	14,454
Cyprus	21	Norway	582
Czech Republic	-2,108	Poland	-3,218
Denmark	12,824	Portugal	-1,574
Estonia	-421	Romania	-2,628
Finland	-1,316	Russia	-13,122
France	6,544	Slovakia	-1,403
Germany	29,183	Slovenia	983
Greece	-1,013	Spain	-2,814
Hungary	1,228	Sweden	5,527
Ireland	41,835	Switzerland	48,773
Italy	3,799	Turkey	-3,409
Latvia	-167	United Kingdom	348
TOTAL			140,127

Note:

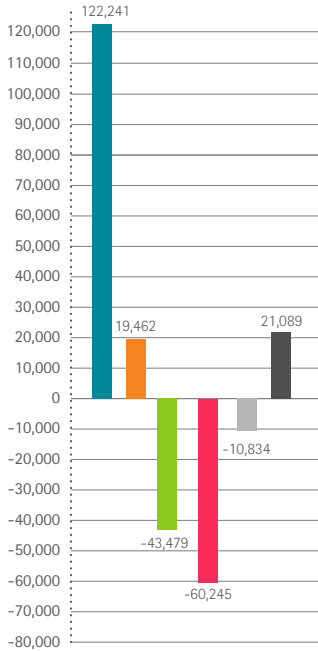
All data based on SITC 54

Source: Eurostat (COMEXT database – May 2021)

Norway: LMI; Russia: Clifar Import/Export, 2019; Switzerland: Swiss Federal Customs Administration; Turkey: Turkish Statistical Institute



EU-27 TRADE BALANCE – HIGH TECHNOLOGY SECTORS (€ MILLION) – 2020

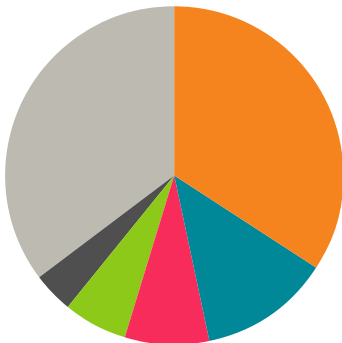


-  SITC 54 Pharmaceutical products
-  SITC 71 Power generating machinery and equipment
-  SITC 75 Office machines and computers
-  SITC 76 Telecommunication, sound, TV, video
-  SITC 77 Electrical machinery
-  SITC 87 Professional, scientific, controlling material

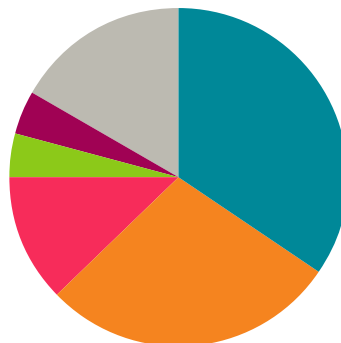
Source: Eurostat, COMEXT database, May 2021

THE EUROPEAN UNION'S TOP 5 PHARMACEUTICAL TRADING PARTNERS – 2020

	USA	Switzerland	U.K.	China	Japan	Singapore	Others
EU exports	34.4%	12.5%	8.0%	6.2%	3.7%	-	35.2%
EU imports	28.1%	34.7%	12.2%	4.2%	-	4.2%	16.6%



EU exports



EU imports

Source: Eurostat, COMEXT database, May 2021

TOTAL SPENDING (PUBLIC AND PRIVATE) ON HEALTHCARE AS A PERCENTAGE OF GDP AT MARKET PRICES

Country	1980	1990	2000	2010	2015	2019
Austria	7.0	7.7	9.2	10.2	10.4	10.4
Belgium	6.2	7.1	8.0	10.2	10.4	10.3
Czech Republic	-	3.7	5.7	6.9	7.2	7.8
Denmark	8.4	8.0	8.1	10.3	10.2	10.0
Estonia	-	-	5.2	6.3	6.3	6.8
Finland	5.9	7.3	7.1	9.1	9.6	9.1
France	6.8	8.0	9.6	11.2	11.5	11.2
Germany	8.1	8.0	9.9	11.1	11.2	11.7
Greece	-	6.1	7.2	9.5	8.0	7.8
Hungary	-	-	6.8	7.5	6.9	6.4
Iceland	5.9	7.4	9.0	8.5	8.1	8.8
Ireland	7.5	5.6	5.9	10.5	7.3	6.8
Italy	-	7.0	7.6	8.9	8.9	8.7
Latvia	-	-	5.5	6.1	5.7	6.3
Lithuania	-	-	6.2	6.8	6.5	6.8
Luxembourg	4.6	5.1	5.9	7.0	5.3	5.4
Netherlands	6.5	7.0	7.7	10.2	10.3	10.0
Norway	5.4	7.1	7.7	8.9	10.1	10.5
Poland	-	4.3	5.3	6.4	6.4	6.3
Portugal	4.8	5.5	8.4	9.8	9.0	9.6
Slovakia	-	-	5.3	7.7	6.8	6.9
Slovenia	-	-	7.8	8.6	8.5	8.3
Spain	5.0	6.1	6.8	9.1	9.1	9.0
Sweden	7.8	7.2	7.4	8.3	10.8	10.9
Switzerland	6.6	7.9	9.4	10.3	11.4	12.1
Turkey	2.4	2.5	4.6	5.1	4.1	4.4
United Kingdom	5.1	5.1	7.3	10.0	9.9	10.3
Europe	6.1	6.4	7.2	8.7	8.5	8.6
USA	8.2	11.3	12.5	16.3	16.7	17.0
Japan	6.2	5.8	7.2	9.2	10.9	11.1

Note: Europe: non-weighted average (27 countries) – EFPIA calculations

Source: OECD Health Statistics 2020, May 2021

PAYMENT FOR PHARMACEUTICALS BY COMPULSORY HEALTH INSURANCE SYSTEMS AND NATIONAL HEALTH SERVICES (ambulatory care only)

EFPIA 2019	€ million		€ million
Austria	2,973	Lithuania	339
Belgium	4,848	Malta	n.a.
Bulgaria	421	Netherlands	3,196
Croatia	382	Norway	1,157
Cyprus	108	Poland	2,092
Czech Rep.	2,142	Portugal	1,327
Denmark	803	Romania	1,422
Estonia	155	Russia	1,749
Finland	1,551	Serbia	299
France	24,220	Slovakia	1,301
Germany	39,892	Slovenia	342
Greece	1,945	Spain	10,794
Hungary	1,188	Sweden	2,426
Iceland	68	Switzerland	5,411
Ireland	1,636	Turkey	6,398
Italy	7,690	U.K.	11,929
Latvia	170		
TOTAL			140,374

Note:

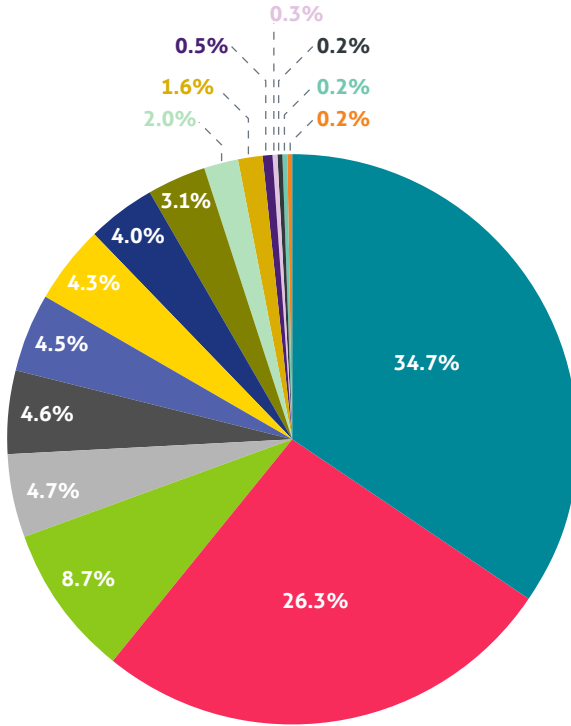
Cyprus: 2018 data; Croatia: 2016 data

France, Ireland, Netherlands, Norway, Sweden, U.K.: estimate

Source: EFPIA member associations (official figures)



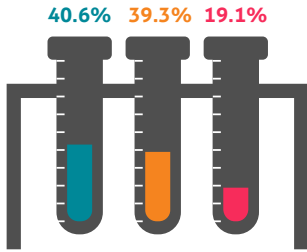
CAUSES OF DEATH BY MAJOR DISEASE AREAS IN EUROPE (EU-28)



- Diseases of the circulatory system
- Neoplasms
- Diseases of the respiratory system
- External causes of morbidity and mortality
- Mental and behavioural disorders
- Diseases of the nervous system and the sense organs
- Diseases of the digestive system
- Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified
- Endocrine, nutritional and metabolic diseases
- Diseases of the genitourinary system
- Certain infectious and parasitic diseases
- Diseases of the musculoskeletal system and connective tissue
- Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
- Diseases of the skin and subcutaneous tissue
- Certain conditions originating in the perinatal period
- Congenital malformations, deformations and chromosomal abnormalities
- Pregnancy, childbirth and the puerperium

Data Source: Eurostat, data relate to year 2018 except for France (2016 data), Non-disease directly related causes of deaths (EFPIA calculations), May 2021

**BREAKDOWN OF TOTAL HEALTH EXPENDITURE
IN EUROPE – 2018**



In-patient care (hospital)



Outpatient care & others



Medical goods (including pharmaceuticals)

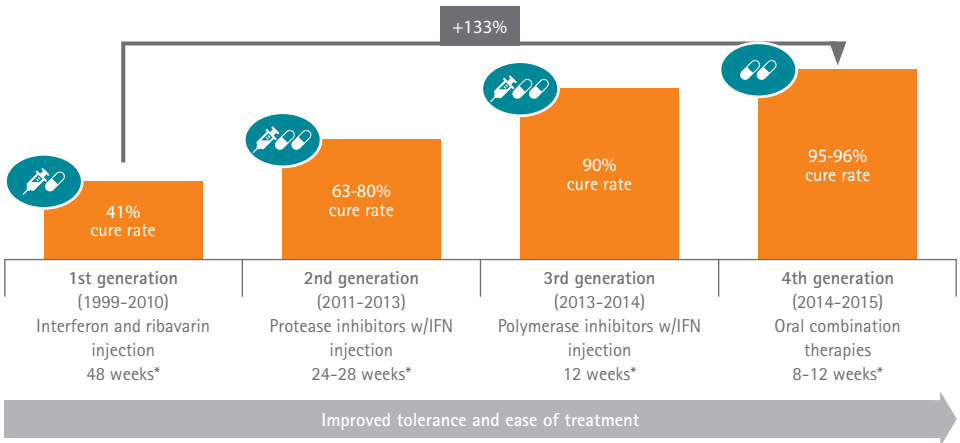
**THE ADDED VALUE OF
MEDICINES IN HEALTHCARE**

Medicines constitute the smallest part of healthcare costs with, on average, 19.1% of total health expenditure in Europe being spent on pharmaceuticals and other medical goods. 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.

Source: OECD Health Statistics 2020, May 2021 – EFPIA calculations (non-weighted average for 26 EU & EFTA countries and Turkey)

CHRONOLOGY OF HEPATITIS C TREATMENT (1999-2015)

* Hepatitis C is the leading cause of liver transplants and the reason liver cancer is on the rise



* Treatment duration, INF=interferon;

Source: PhRMA, 'Prescription Medicines: International Costs in Context' (2017)

EFPIA MEMBER ASSOCIATIONS

Austria

Fachverband der Chemischen Industrie Österreichs (FCIO)

Belgium

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

Denmark

Laegemiddelindustriforeningen

The Danish Association of the Pharmaceutical Industry (Lif)

Finland

Lääketeollisuus ry

Pharma Industry Finland (PIF)

France

Les Entreprises du Médicament (LEEM)

Germany

Verband Forschender Arzneimittelhersteller (VfA)

Greece

Hellenic Association of Pharmaceutical Companies (SFEE)

Ireland

Irish Pharmaceutical Healthcare Association (IPHA)

Italy

Associazione delle Imprese del Farmaco (Farmindustria)

Netherlands

Vereniging Innovatieve Geneesmiddelen

Norway

Legemiddelindustrien

Norwegian Association of Pharmaceutical Manufacturers (LMI)

Poland

Employers Union of Innovative Pharmaceutical Companies (Infarma)

Portugal

Associação Portuguesa da Indústria Farmacêutica (Apifarma)

Russia

Association of International Pharmaceutical Manufacturers (AIPM)

Spain

Asociación Nacional Empresarial de la Industria Farmacéutica (Farmaindustria)

Sweden

Läkemedelsindustriforeningen

The Swedish Association of the Pharmaceutical Industry (LIF)

Switzerland

Verband der forschenden pharmazeutischen Firmen der Schweiz (Interpharma)

Turkey

Araştırmacı İlaç Fimaları Derneği (AİFD)

United Kingdom

The Association of the British Pharmaceutical Industry (ABPI)

ASSOCIATIONS WITH LIAISON STATUS

Bosnia-Herzegovina: Association of Research-based Medicine Producers (UIPL)

Bulgaria: Association of Research-based Pharmaceutical Manufacturers in Bulgaria (ARPharM)

Croatia: Innovative Pharmaceutical Initiative (iFI)

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)

Iceland: Icelandic Association of the Pharmaceutical Industry (FRUMTÖK)

Latvia: Association of International Research-based Pharmaceutical Manufacturers (SIFFA)

Lithuania: The Innovative Pharmaceutical Industry Association (IFPA)

Malta: Maltese Pharmaceutical Association (PRIMA)

North Macedonia: Association of Foreign Innovative Pharmaceutical Manufacturers (HOBA)

Romania: Association of International Medicines Manufacturers (ARPIM)

Serbia: Innovative Drug Manufacturers' Association (INOVIA)

Slovakia: Slovak 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

AbbVie

Almirall

Amgen

Astellas

AstraZeneca

Bayer

Biogen

Boehringer Ingelheim

Bristol-Myers Squibb

Chiesi

Daiichi-Sankyo

Gilead

GlaxoSmithKline

Grünenthal

Ipsen

Johnson & Johnson

LEO Pharma

Lilly

Menarini

Merck

Merck Sharp & Dohme (MSD)

Novartis

Novo Nordisk

Pfizer

Pierre Fabre

Roche

Sanofi

Servier

Takeda

Teva

UCB

* Affiliate Members

Bial

Eisai

Esteve

Lundbeck

Otsuka

Rovi

Stallergenes

Vifor Pharma

* Small Et Medium-Sized Enterprises (SMEs)

AiCuris

AM Pharma

Byondis

Da Volterra

ENYO Pharma

Idorsia

Imcyse

Genfit

Lysogene

Minoryx

Polyphar

ProQR

Spero Therapeutics

Transgene



European Federation of Pharmaceutical
Industries and Associations

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

Founded in 1978, its members comprise **36** national pharmaceutical industry associations, **39** leading pharmaceutical companies and **14** small and medium sized enterprises undertaking research, development and manufacturing of medicinal products in Europe for human use.

EFPIA aims to create an environment that enables its members to innovate, discover, develop and deliver new therapies and vaccines for people across Europe, as well as contribute to the European economy. EFPIA's vision is for a healthier future for Europe. A future based on prevention, innovation, access to new treatments and better outcomes for patients.

Through its membership, EFPIA represents the common views of about 1,900 large, medium and small companies including the entire European research-based pharmaceutical sector whose interests also include a significant part of the generics and biosimilars segments. Vaccines Europe (VE) is the specialised vaccine industry group within EFPIA. It represents major innovative research-based global vaccine companies as well as small and medium sized enterprises operating in Europe.

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



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