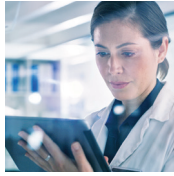




European Federation of Pharmaceutical
Industries and Associations

The Pharmaceutical Industry in Figures

Key Data * 2023



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

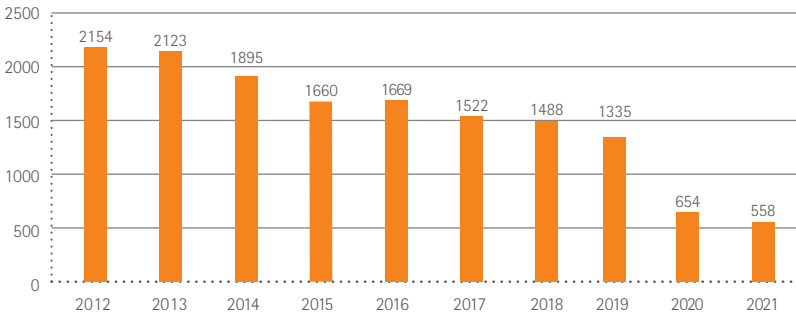
Thanks to advances in science and technology, the research-based pharmaceutical industry is entering an exciting new era in medicines development. Research methods are evolving and we have many promising prospects on the horizon, with groundbreaking cell and gene therapies being increasingly available*.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

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.

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, complemented by many smaller steps, have allowed for reductions in mortality, for instance from HIV/AIDS-related causes and several 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



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



Source: HIV/AIDS surveillance in Europe 2022 (2021 data), WHO Regional Office for Europe & European Centre for Disease Prevention and Control (ECDC), 30 November 2022

*https://www.efpia.eu/media/676661/iqvia_efpia-pipeline-review_final-report_public-final.pdf










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	2020	2021	2022
 Production	127,504	199,730	290,309	323,950	340,000 (e)
 Exports (1) (2)	90,935	276,357	509,828	567,009	670,000 (e)
 Imports	68,841	204,824	347,124	395,250	455,000 (e)
 Trade balance	22,094	71,533	162,704	171,759	215,000 (e)
 R&D expenditure	17,849	27,920	39,442	42,533	44,500 (e)
 Employment (units)	556,506	701,059	845,770	859,607	865,000 (e)
 R&D employment (units)	88,397	116,253	121,717	126,959	130,000 (e)
 Total pharmaceutical market value at ex-factory prices	89,449	153,685	236,459	254,267	275,000 (e)
 Payment for pharmaceuticals by statutory health insurance systems (ambulatory care only)	76,909	129,464	145,428	156,140	170,000 (e)

Values in € million unless otherwise stated

(1) Data relate to EU-27, Norway, Switzerland and United Kingdom 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-27 intra-trade (double counting in some cases)

Source: EFPIA member associations (official figures) - (e): EFPIA estimate; Eurostat (EU-27 trade data 2000-2022)

MAIN TRENDS

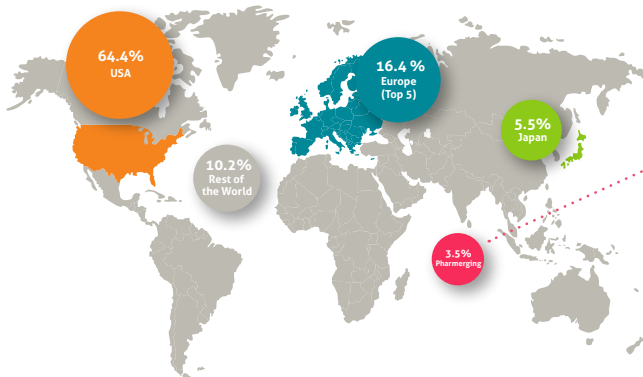
The research-based pharmaceutical industry can play a critical role in restoring economic growth in Europe and ensuring future competitiveness in an advancing global economy. In 2022 it invested an estimated €44,500 million in R&D in Europe. It directly employs some 865,000 people and generates about 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 2017-2022 the Brazilian, Chinese and Indian markets grew by 13.0%, 5.3% and 11.0% respectively compared to an average market growth of 6.6% for the top 5 European Union markets and 7.1% for the US market (source: IQVIA MIDAS, May 2023).

- * In 2022 North America accounted for 52.3% of world pharmaceutical sales compared with 22.4% for Europe. According to IQVIA (MIDAS May 2023), 64.4% of sales of new medicines launched during the period 2017-2022 were on the US market, compared with 16.4% 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 €6,280 million (value at ex-factory prices) in 2021.

GEOGRAPHICAL BREAKDOWN (BY MAIN MARKETS) OF SALES OF NEW MEDICINES LAUNCHED DURING THE PERIOD 2017-2022



Note:

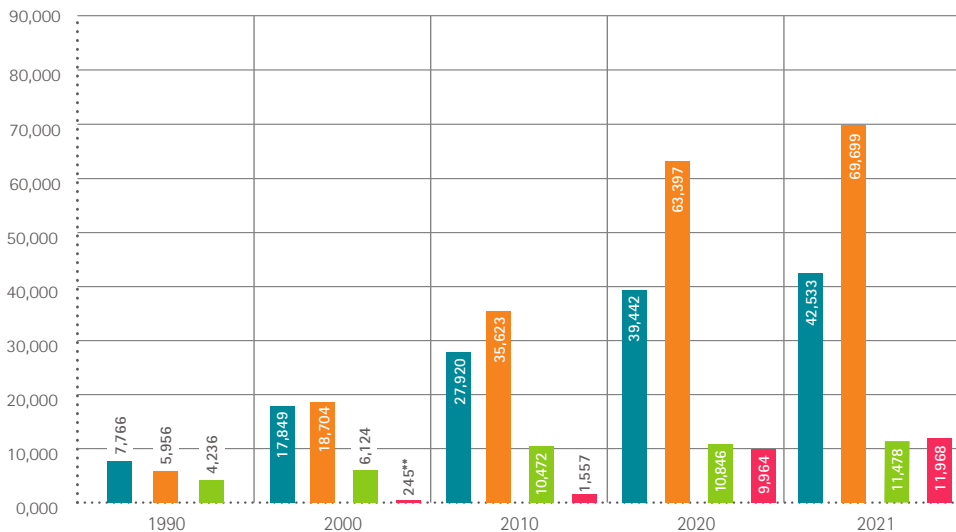
New medicines cover all new active ingredients marketed for the first time on the world market during the period 2017-2022

Europe (Top 5) comprises France, Germany, 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 May 2023)

PHARMACEUTICAL R&D EXPENDITURE IN EUROPE, USA, JAPAN AND CHINA
(€ MILLION, 2020 CONSTANT EXCHANGE RATE*), 1990-2021

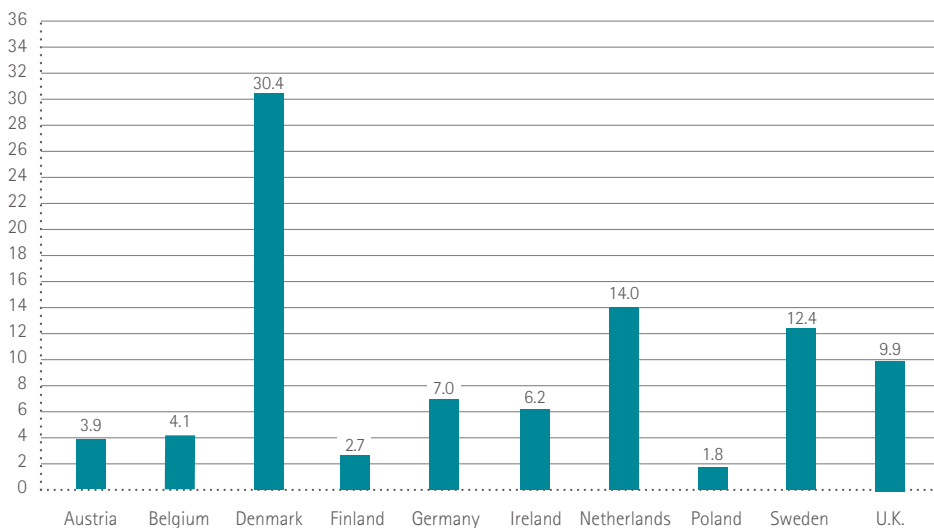


* Note: USA: 1€ = 1,1422 \$; Japan: 1€ = 121,85 ¥; China: 1€ = 7,8747 Yuan (**2001 year)

Source: EFPIA member associations, PhRMA, JPMA, China Statistical Yearbook



SHARE OF PARALLEL IMPORTS IN PHARMACY MARKET SALES (%) – 2021



Note: U.K.: in % of pharmacy market sales at reimbursement prices; Ireland: 2020 data

Source: EFPIA member associations (estimate)

PHARMACEUTICAL INDUSTRY RESEARCH AND DEVELOPMENT IN EUROPE

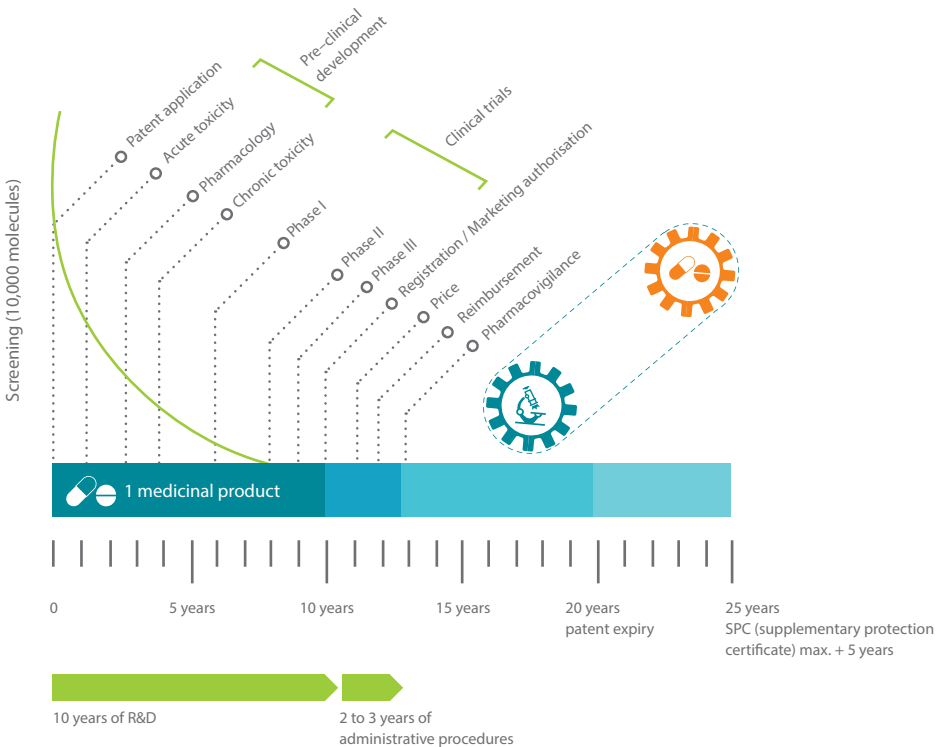
All new medicines introduced into the market are the result of lengthy, costly and risky research and development (R&D) conducted by pharmaceutical companies:

* 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 2021	€ million		€ million
Austria	283	Latvia	n.a
Belgium	5,196	Lithuania	n.a
Bulgaria	95	Malta	n.a
Croatia	40	Netherlands	900
Cyprus	85	Norway	126
Czech Rep.	75	Poland	321
Denmark	1,114	Portugal	121
Estonia	n.a	Romania	72
Finland	234	Russia	706
France	4,451	Slovakia	35
Germany	8,540	Slovenia	230
Greece	95	Spain	1,267
Hungary	298	Sweden	1,104
Iceland	n.a	Switzerland	8,232
Ireland	305	Turkey	71
Italy	1,680	U.K.	6,857
TOTAL			42,533

Note:

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

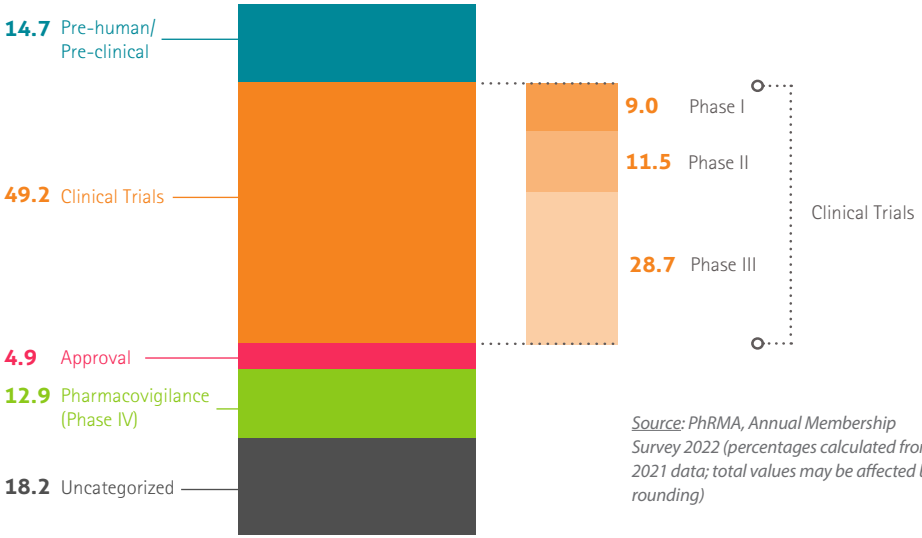
Hungary, Poland, Russia, Slovakia, Slovenia, Turkey: 2020 data; France: 2017 data; Norway, Sweden: 2015 data; Cyprus, Ireland: 2013 data; Croatia, Netherlands: 2011 data

Belgium, Croatia, Denmark, France, Greece, Ireland, Italy, Netherlands, Norway (LMI members), Poland, Romania, Slovenia, Sweden (LIF members), Switzerland (Interpharma members), Turkey: estimate

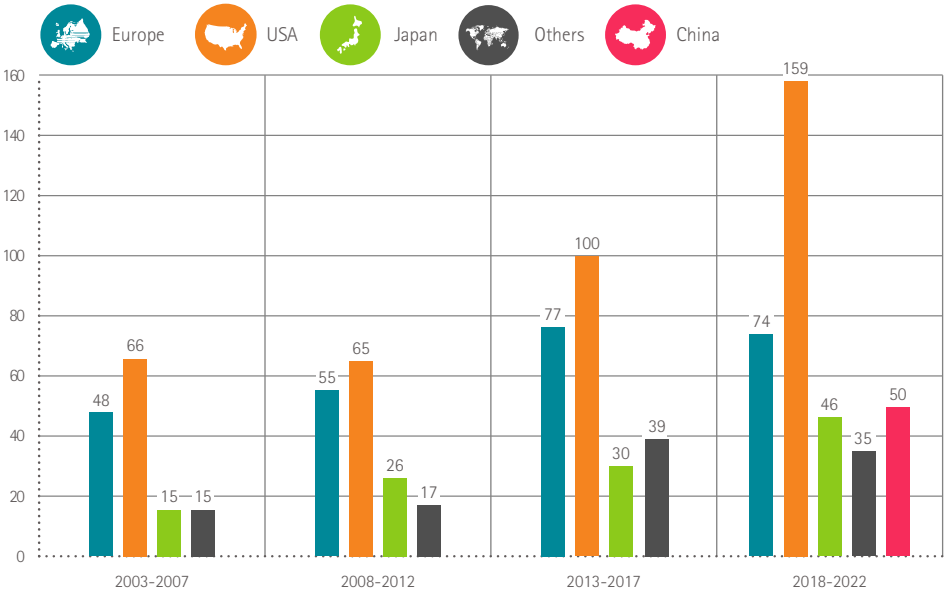
Source: EFPIA member associations (official figures)



ALLOCATION OF R&D INVESTMENTS BY FUNCTION (%)



NUMBER OF NEW CHEMICAL AND BIOLOGICAL ENTITIES (2003-2022)



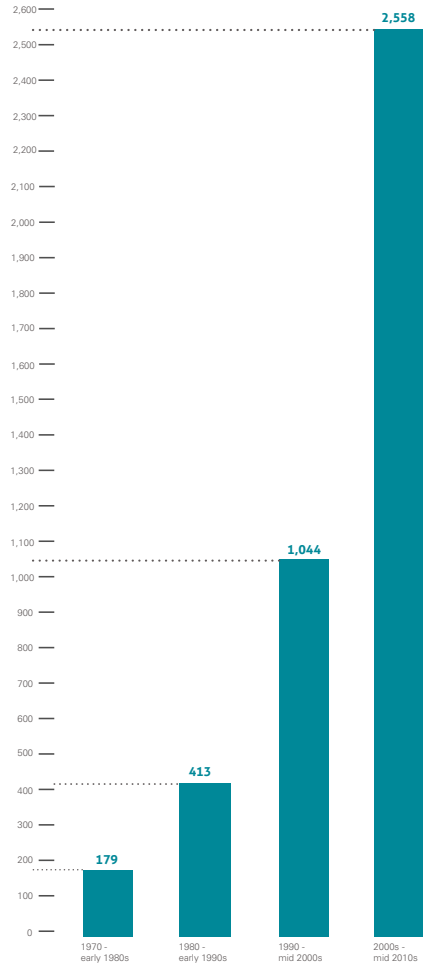
*Source: CITELINE May 2023 & SCRIP – EFPIA calculations (according to nationality of mother company)
 Note: Up to 2017 China is included under 'Others'*

IMPORTANCE OF PHARMACEUTICAL R&D

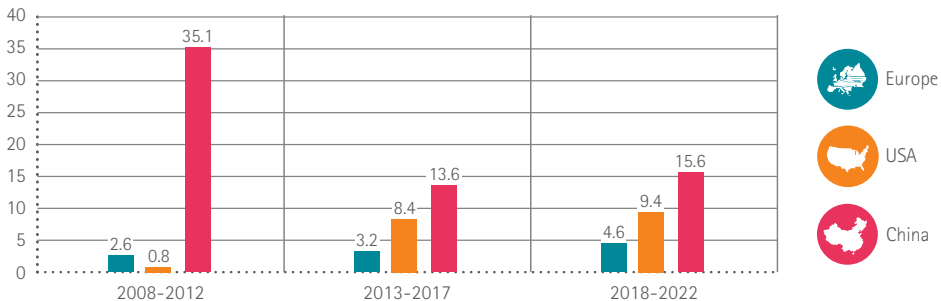
In 2021 the pharmaceutical industry invested more than €42,500 million in R&D in Europe. A decade of strong US market dominance led to a significant shift of economic and research activity towards the US during the period 1995-2005, a trend that has been exacerbating since 2015. Additionally, Europe is now facing increasing competition from emerging economies: rapid growth in the market and research environments in countries such as China and Korea are contributing to the move of economic and research activities to non-European markets. In 2022 China nearly equalled Europe as originator of new active substances launched for the first time on the world market, with respectively 16 and 17 new substances, far behind the US leading with 24 on a total of 73. After having lost its crown as the top innovation region in the world in 2000, Europe moved to the third place on the podium in 2020, being overtaken by China and others. The geographical balance of the pharmaceutical market – and ultimately the R&D base – is likely to shift gradually towards fast-growing 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



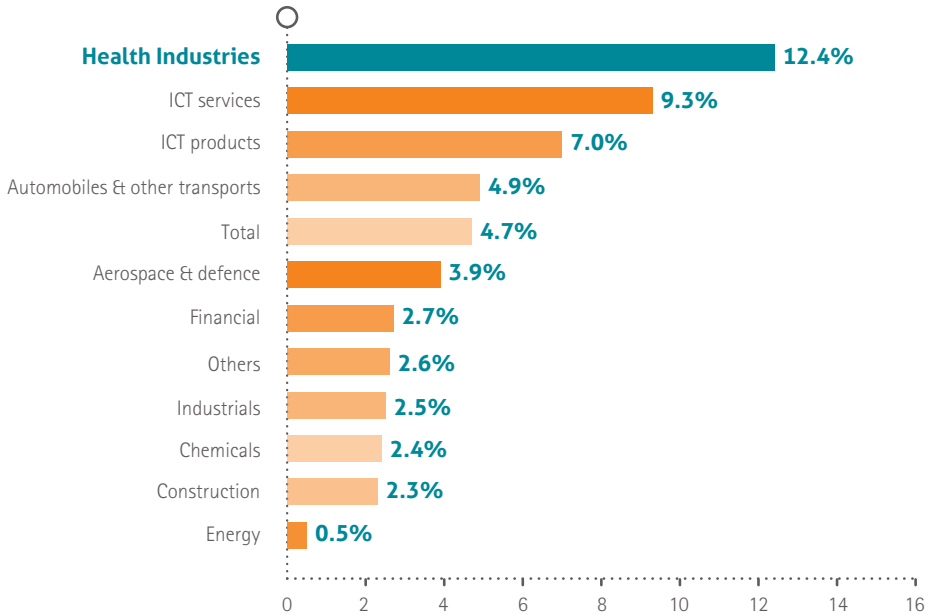
PHARMACEUTICAL R&D EXPENDITURE ANNUAL GROWTH RATE (%)



Note: USA, China: data relating to period 2018-2021

Source: EFPIA, PhRMA, China Statistical Yearbook 2002-2022

**RANKING OF INDUSTRIAL SECTORS BY OVERALL SECTOR R&D INTENSITY
(R&D AS PERCENTAGE OF NET SALES – 2021)**



Note:
 Data relate to the top 2,500 companies with registered offices in the EU-27 (361), Japan (233), the US (822), China (679) and the Rest of the World (405), ranked by total worldwide R&D investment (with investment in R&D above €48.5 million). Companies are distributed by main sector according to the International Classification Benchmark (ICB); health industries include biotechnology, health providers, medical equipment, medical supplies and pharmaceuticals.

Source: The 2022 EU Industrial R&D Investment Scoreboard, European Commission - Joint Research Centre

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 2022 EU Industrial R&D Investment Scoreboard, health industries invested about €235.3 billion in R&D in 2021, accounting for 21.5% of total business R&D expenditure worldwide.

PHARMACEUTICAL PRODUCTION

EFPIA 2021	€ million		€ million
Austria	1,387	Latvia	321
Belgium	43,300	Lithuania	n.a
Bulgaria	291	Malta	307
Croatia	451	Netherlands	6,180
Cyprus	253	Norway	1,432
Czech Rep.	950	Poland	2,515
Denmark	16,819	Portugal	1,734
Estonia	n.a	Romania	655
Finland	1,851	Russia	6,459
France	23,557	Slovakia	356
Germany	34,579	Slovenia	3,402
Greece	1,585	Spain	17,457
Hungary	3,607	Sweden	9,616
Iceland	89	Switzerland	59,823
Ireland	19,305	Turkey	3,497
Italy	34,400	U.K.	27,772
TOTAL			323,950

Note:

All data based on SITC 54

Austria, Croatia, France, Norway, Russia, Spain, Turkey, U.K.: 2020 data; Cyprus: 2018 data; Slovakia: 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: veterinary products excluded

Source: EFPIA member associations (official figures)



EMPLOYMENT IN THE PHARMACEUTICAL INDUSTRY

EFPIA 2021	Units		Units
Austria	16,381	Latvia	2,232
Belgium	42,062	Lithuania	1,220
Bulgaria	15,500	Malta	1,033
Croatia	6,041	Netherlands	20,000
Cyprus	1,755	Norway	4,500
Czech Rep.	18,000	Poland	25,868
Denmark	27,868	Portugal	9,000
Estonia	380	Romania	33,230
Finland	6,061	Russia	n.a
France	99,310	Slovakia	2,287
Germany	121,245	Slovenia	12,583
Greece	28,800	Spain	49,200
Hungary	34,800	Sweden	13,156
Iceland	500	Switzerland	46,800
Ireland	40,204	Turkey	42,291
Italy	67,300	U.K.	70,000
TOTAL			859,607

Note:

France, Netherlands, Romania, Spain, Sweden, Turkey: 2020 data; Cyprus, Latvia, Malta: 2018 data; Slovakia: 2017 data; Estonia: 2016 data; Lithuania: 2013 data

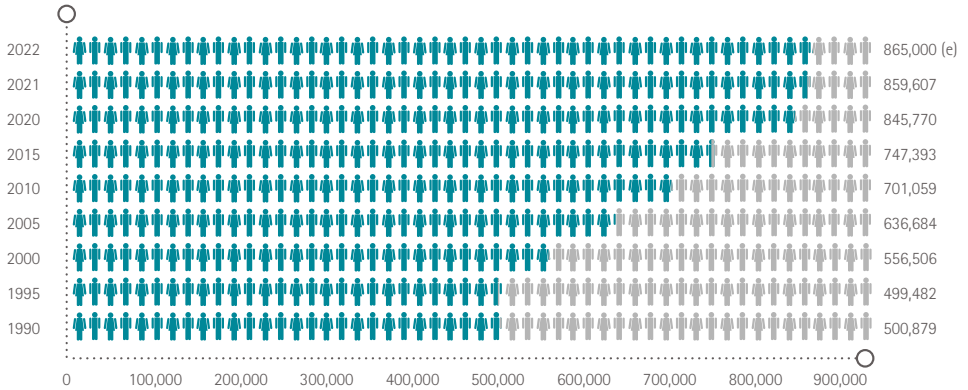
Belgium, Bulgaria, Croatia, Estonia, France, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Sweden, Switzerland, Turkey, United Kingdom: estimate

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 (1990-2022)

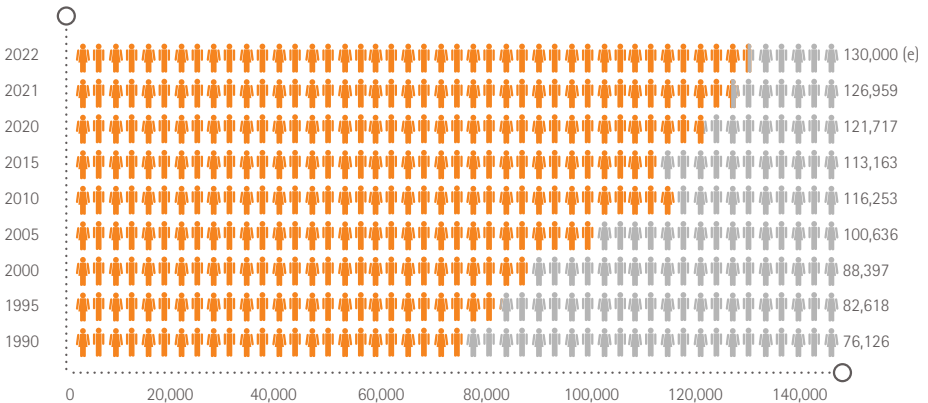


Note:

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 (1990-2022)



Note:

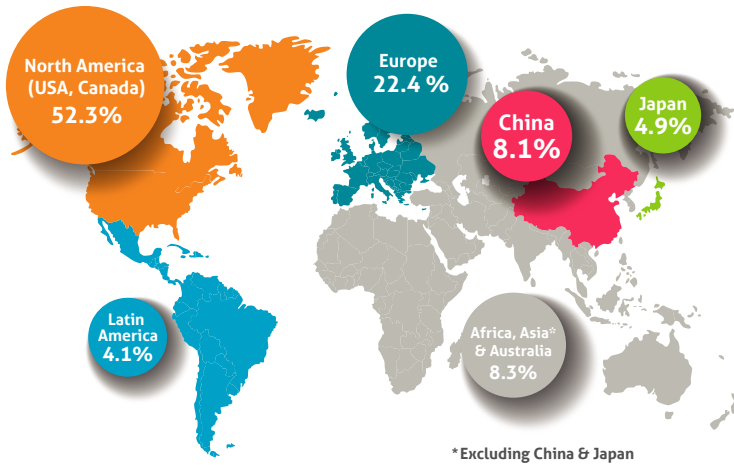
Data includes Iceland (since 2017), Greece & Lithuania (since 2013), Bulgaria and Turkey (since 2012), Poland (since 2010), Czech Republic, Estonia and Hungary (since 2009), Romania (since 2005) and Slovenia (since 2004)
Croatia, Cyprus, Latvia, Malta, Russia, Serbia, Slovakia: data not available

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

PHARMACEUTICAL SALES

The world pharmaceutical (prescription) market was worth an estimated €1,222,921 million (\$1,287,736 million) at ex-factory prices in 2022. The North American market (USA & Canada) remained the world's largest market with a 52.3% share, well ahead of Europe, China and Japan.

BREAKDOWN OF THE WORLD PHARMACEUTICAL MARKET – 2022 SALES



Note:
Europe includes Belarus, Turkey, Russia and Ukraine; percentages might not add up to 100% due to rounding
Source: IQVIA (MIDAS) Q4 2022 MAT, May 2023; data relate to the 2022 global retail and hospital pharmaceutical market (prescription only) 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, 2021 (%)



Note:
Non-weighted average for Europe (average estimate for 25 countries)
Source: EFPIA member associations

PHARMACEUTICAL MARKET VALUE (at ex-factory prices)

EFPIA 2021	€ million		€ million
Austria	5,247	Lithuania	586
Belgium	6,728	Luxembourg	322
Bulgaria	1,570	Malta	196
Croatia	1,231	Netherlands	7,073
Cyprus	177	Norway	3,055
Czech Rep.	3,474	Poland	7,817
Denmark	3,350	Portugal	3,783
Estonia	409	Romania	4,946
Finland	2,846	Russia	18,398
France	32,077	Serbia	867
Germany	47,588	Slovakia	1,669
Greece	5,468	Slovenia	792
Hungary	2,668	Spain	18,442
Iceland	215	Sweden	4,872
Ireland	2,553	Switzerland	6,127
Italy	24,143	Turkey	6,496
Latvia	271	U.K.	28,811
TOTAL			254,267

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, Greece, Ireland, Italy, Norway, Spain, United Kingdom: estimate

Source:

EFPIA member associations (official figures); Latvia, Lithuania, Serbia: IQVIA; Russia: 2020 data; Cyprus, Malta: 2019 data

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 2023.

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	16,0	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

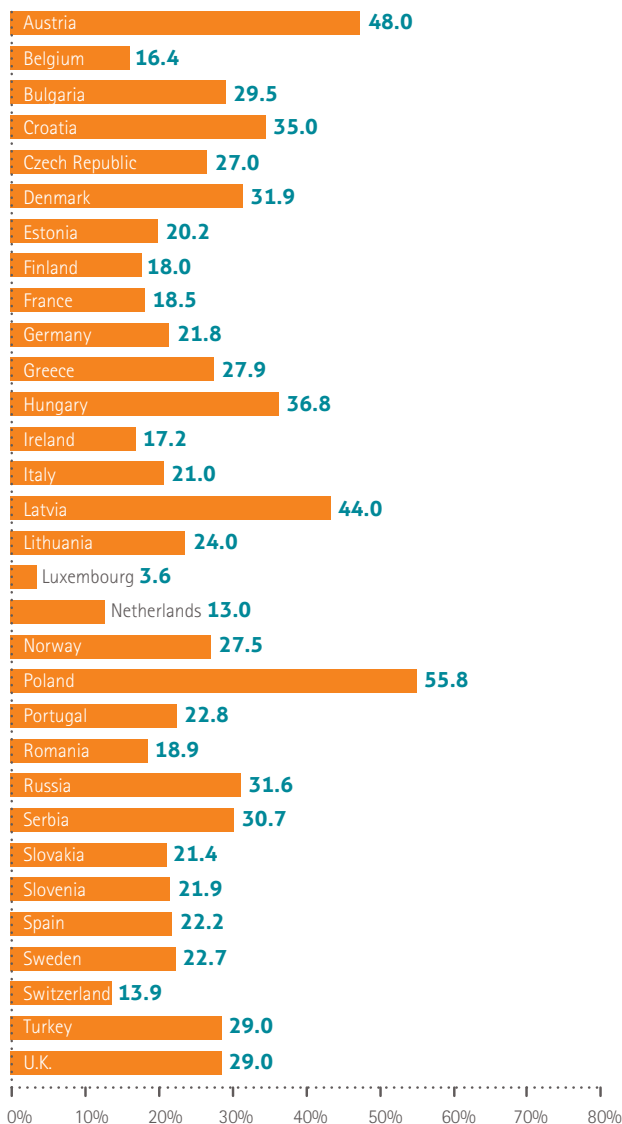
(1) France: reimbursable medicines 2.1%; non-reimbursable medicines 10.0% (2) Ireland: oral medication 0%; other medication 23%

(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 AND BIOSIMILARS

Generics and biosimilars are usually produced by a manufacturer who is not the inventor of the original chemical or biological substance. They can be marketed after expiry of the intellectual property

protection rights of the innovative product. Data might not be strictly comparable across countries due to differences in procurement and reimbursement practices.



SHARE (ESTIMATE IN %) ACCOUNTED FOR BY GENERICS AND BIOSIMILARS IN PHARMACEUTICAL MARKET SALES VALUE (AT EX-FACTORY PRICES), 2021

Note:
Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, Ireland, Hungary, Slovenia, U.K.: share of generics and biosimilars in pharmacy market sales

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

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

Ireland, Latvia, Lithuania, Russia: 2020 data; Cyprus, Iceland, Malta: data not available

France: data relate only to those active substances listed on the official list of medicines

Source: EFPIA member associations

PHARMACEUTICAL EXPORTS

EFPIA 2021	€ million		€ million
Austria	12,545	Latvia	591
Belgium	84,251	Lithuania	912
Bulgaria	1,024	Luxembourg	163
Croatia	1,008	Malta	434
Cyprus	354	Netherlands	45,090
Czech Republic	3,375	Norway	608
Denmark	18,472	Poland	4,682
Estonia	104	Portugal	1,382
Finland	1,045	Romania	983
France	33,899	Slovakia	536
Germany	101,152	Slovenia	8,214
Greece	2,888	Spain	18,244
Hungary	6,686	Sweden	9,873
Iceland	6	Switzerland	89,886
Ireland	62,632	Turkey	1,436
Italy	32,486	United Kingdom	22,048
TOTAL			567,009

Note: All data based on SITC 54

Source: Eurostat (COMEXT database – May 2023)

Iceland: OECD; Norway: LMI; Switzerland: Swiss Federal Customs Administration; Turkey: Turkish Statistical Institute



PHARMACEUTICAL IMPORTS

EFPIA 2021	€ million		€ million
Austria	11,995	Latvia	803
Belgium	62,138	Lithuania	1,362
Bulgaria	1,799	Luxembourg	603
Croatia	1,580	Malta	332
Cyprus	357	Netherlands	32,865
Czech Republic	6,278	Norway	2,505
Denmark	5,780	Poland	8,895
Estonia	669	Portugal	3,362
Finland	2,293	Romania	4,150
France	31,149	Slovakia	2,272
Germany	68,216	Slovenia	5,604
Greece	3,721	Spain	21,783
Hungary	5,636	Sweden	5,130
Iceland	202	Switzerland	36,189
Ireland	9,811	Turkey	5,994
Italy	28,985	United Kingdom	22,792
TOTAL			395,250

Note: All data based on SITC 54

Source: Eurostat (COMEXT database – May 2023)

Iceland: OECD; Norway: LMI; Switzerland: Swiss Federal Customs Administration; Turkey: Turkish Statistical Institute



PHARMACEUTICAL TRADE BALANCE

EFPIA 2021	€ million		€ million
Austria	550	Latvia	-212
Belgium	22,113	Lithuania	-450
Bulgaria	-775	Luxembourg	-440
Croatia	-572	Malta	102
Cyprus	-3	Netherlands	12,225
Czech Republic	-2,903	Norway	-1,897
Denmark	12,692	Poland	-4,213
Estonia	-565	Portugal	-1,980
Finland	-1,248	Romania	-3,167
France	2,750	Slovakia	-1,736
Germany	32,936	Slovenia	2,610
Greece	-833	Spain	-3,539
Hungary	1,050	Sweden	4,743
Iceland	-196	Switzerland	53,697
Ireland	52,821	Turkey	-4,558
Italy	3,501	United Kingdom	-744
TOTAL			171,759

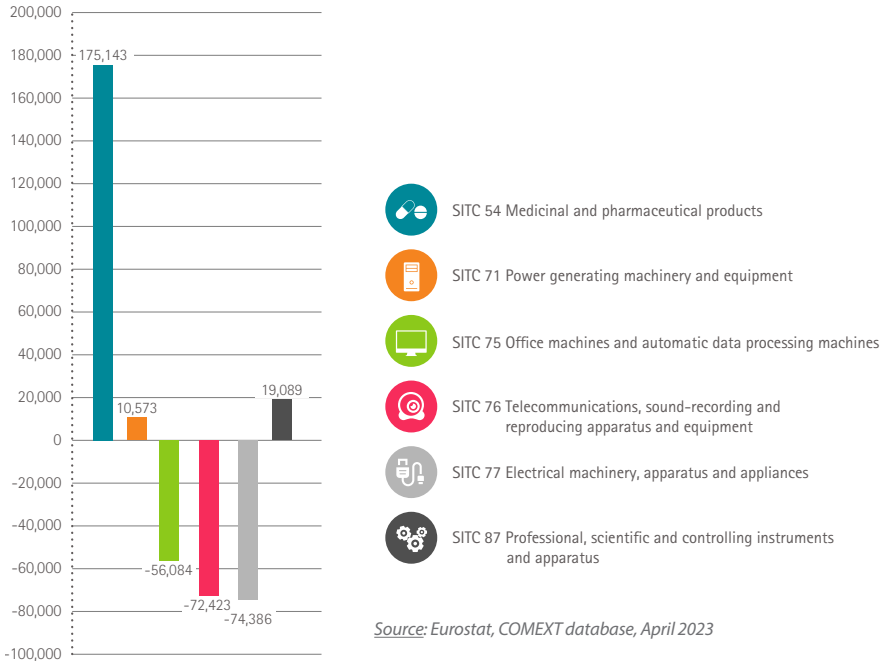
Note: All data based on SITC 54

Source: Eurostat (COMEXT database – May 2023)

Iceland: OECD; Norway: LMI; Switzerland: Swiss Federal Customs Administration; Turkey: Turkish Statistical Institute

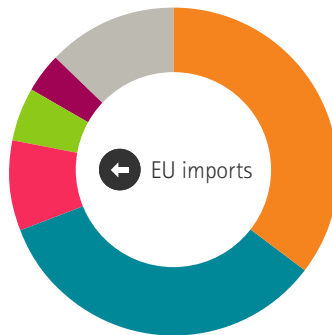
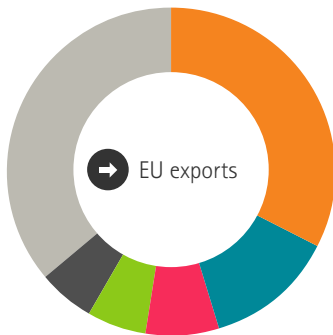


EU-27 TRADE BALANCE – HIGH TECHNOLOGY SECTORS (€ MILLION) – 2022



THE EUROPEAN UNION'S TOP 5 PHARMACEUTICAL TRADING PARTNERS – 2022

	USA	Switzerland	U.K.	China	Japan	Singapore	Others
EU exports	32.5%	12.9%	7.2%	5.9%	5.6%	-	35.9%
EU imports	35.3%	33.9%	9.1%	5.2%	-	3.9%	12.6%



Source: Eurostat, COMEXT database, April 2023

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

Country	1980	1990	2000	2010	2020	2021
Austria	7.0	7.7	9.2	10.2	11.5	12.2
Belgium	6.2	7.1	8.0	10.2	11.1	-
Czech Republic	-	3.7	5.7	6.9	9.2	-
Denmark	8.4	8.0	8.1	10.6	10.5	10.8
Estonia	-	-	5.2	6.3	7.8	7.5
Finland	5.9	7.3	7.1	9.1	9.6	-
France	6.8	8.0	9.6	11.2	12.2	12.4
Germany	8.1	8.0	9.9	11.1	12.8	12.8
Greece	-	6.1	7.2	9.6	9.5	-
Hungary	-	-	6.8	7.4	7.3	-
Iceland	5.9	7.4	8.9	8.4	9.5	9.7
Ireland	7.5	5.6	5.9	10.5	7.1	6.7
Italy	-	7.0	7.6	8.9	9.6	9.5
Latvia	-	-	5.4	6.1	7.4	-
Lithuania	-	-	6.2	6.8	7.5	7.9
Luxembourg	4.8	5.3	5.9	6.7	5.8	-
Netherlands	6.5	7.0	7.7	10.2	11.1	11.2
Norway	5.4	7.1	7.7	8.9	11.4	10.1
Poland	-	4.3	5.3	6.4	6.5	6.6
Portugal	4.8	5.5	8.6	10.0	10.5	11.2
Slovakia	-	-	5.3	7.7	7.2	-
Slovenia	-	-	7.8	8.6	9.5	9.2
Spain	5.0	6.1	6.8	9.1	10.7	-
Sweden	7.7	7.2	7.3	8.3	11.5	11.4
Switzerland	6.4	7.6	9.1	9.9	11.8	-
Turkey	2.4	2.4	4.6	5.0	4.6	-
United Kingdom	5.1	5.1	7.2	10.0	12.0	11.9
Europe	6.1	6.4	7.2	8.7	9.5	10.1
USA	8.2	11.2	12.5	16.2	18.8	17.8
Japan	6.2	5.8	7.0	9.1	11.1	-

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

Source: OECD Health Statistics 2022, May 2023

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

EFPIA 2021	€ million		€ million
Austria	3,350	Lithuania	406
Belgium	5,588	Luxembourg	276
Bulgaria	460	Malta	123
Croatia	507	Netherlands	3,315
Cyprus	108	Norway	1,358
Czech Rep.	1,543	Poland	2,099
Denmark	814	Portugal	1,430
Estonia	176	Romania	1,590
Finland	1,771	Russia	1,500
France	26,378	Serbia	317
Germany	48,648	Slovakia	1,308
Greece	2,001	Slovenia	405
Hungary	1,168	Spain	11,747
Iceland	99	Sweden	2,808
Ireland	2,076	Switzerland	6,090
Italy	7,505	Turkey	5,802
Latvia	170	U.K.	13,204
TOTAL			156,140

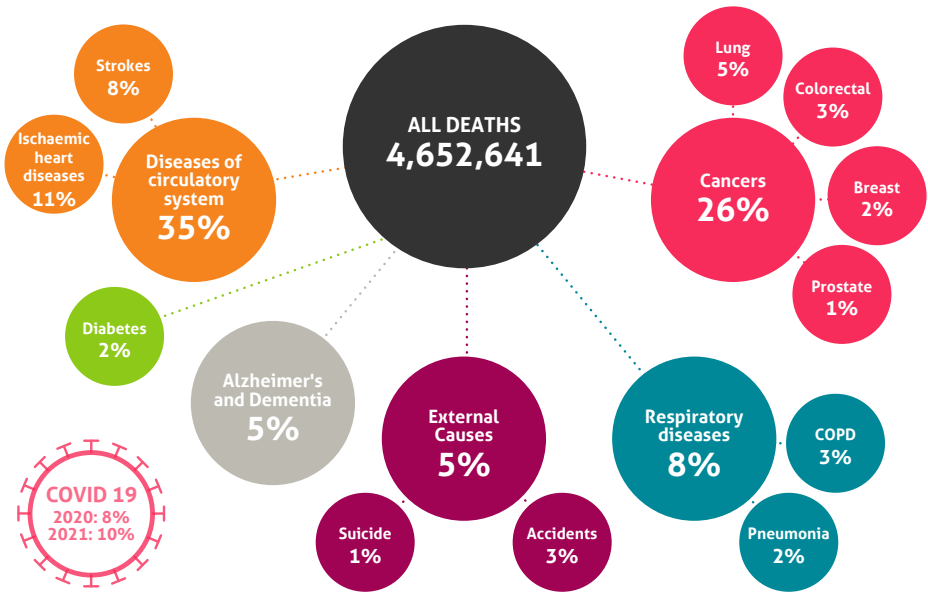
Note: Croatia, Netherlands, Russia: 2020 data; Latvia: 2019 data; Cyprus: 2018 data

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

Source: EFPIA member associations (official figures)



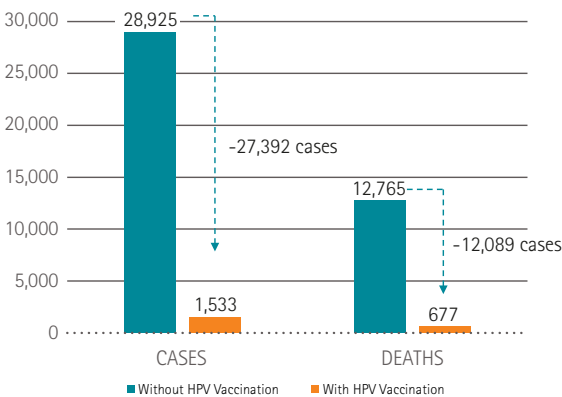
MAIN CAUSES OF MORTALITY IN EU COUNTRIES, 2019 (OR NEAREST YEAR)



Note: The other causes of death not shown in this figure represent 18% of all deaths. Data refer to 2017 for France

Source: Eurostat Database, complemented with OECD Health Statistics 2022 for COVID-19 mortality, Health at a Glance: Europe 2022, OECD & European Commission, page 95.

HPV VACCINES ARE AT LEAST 94.7% EFFECTIVE IN PREVENTING HPV INFECTIONS



THIS MEANS THAT, EVERY YEAR, OVER 27,000 CASES AND 12,000 CERVICAL CANCER-RELATED DEATHS CAN BE PREVENTED BY HPV VACCINES

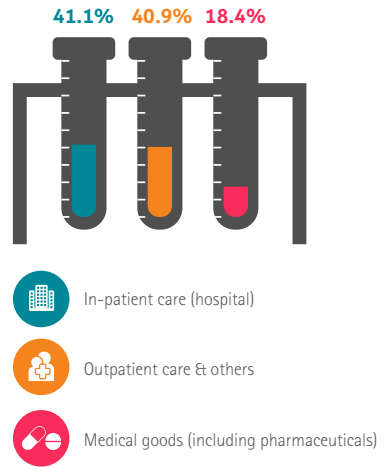
1. Kjaer SK, Nygård M, Sundström K, et al. Final analysis of a 14-year long-term follow-up study of the effectiveness and immunogenicity of the quadrivalent human papillomavirus vaccine in women from four Nordic countries. *EClinicalMedicine* 2020; 23:100401.
2. Fernandes A, Viveros-Carreño D, Hoegl J, et al. Human papillomavirus-independent cervical cancer. *International Journal of Gynecological Cancer* 2020; 32:1-7.

THE ADDED VALUE OF MEDICINES IN HEALTHCARE

BREAKDOWN OF TOTAL HEALTH EXPENDITURE IN EUROPE – 2020

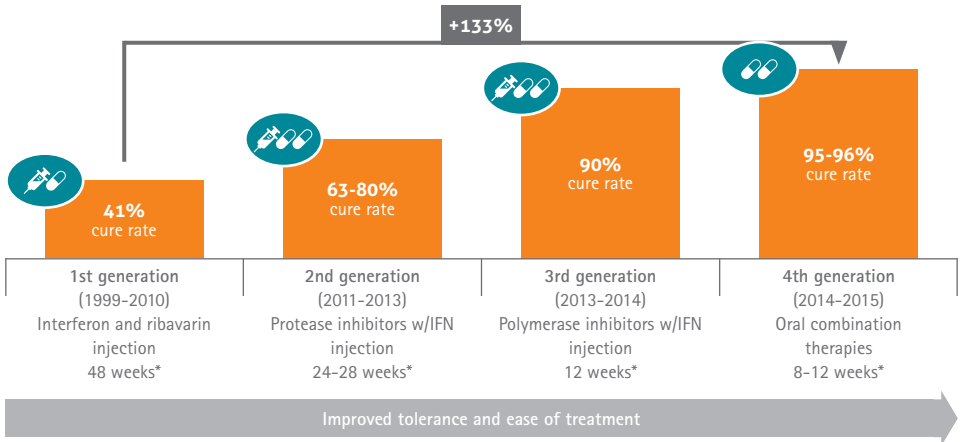
Medicines constitute the smallest part of healthcare costs with, on average, 18.4% of total health expenditure in Europe being spent on pharmaceuticals and other medical goods. In costly diseases such as cancer and rheumatoid arthritis, medicines account for less than 20% of the total disease costs. 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 2022, May 2023 – EFPIA calculations (non-weighted average for 26 EU & EFTA countries)



CHRONOLOGY OF HEPATITIS C TREATMENT (1999–2015)¹

* 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 Nederland

Norway

Legemiddelindustriforeningen

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

Läkemedelsindustriföreningen

The Swedish Association of the Pharmaceutical Industry (LIF)

Switzerland

Verband der forschenden pharmazeutischen Firmen der Schweiz (Interpharma)

Turkey

Araştırmacı İlaç Firmaları 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)

Luxembourg: Innovative Medicines for Luxembourg (IML)

Macedonia: Association of Foreign Innovative Pharmaceutical Manufacturers (HOBA)

Malta: Maltese Pharmaceutical Association (PRIMA)

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

CSL Behring

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

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Teva

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* Affiliate Members

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Rovi

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AM Pharma

Byondis

ENYO Pharma

Idorsia

Imcyse

Genfit

Kuste Biopharma

Lysogene

Minoryx

Polyphor

ProQR

Spero Therapeutics

Transgene



European Federation of Pharmaceutical
Industries and Associations

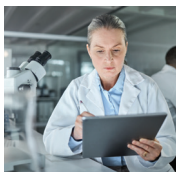
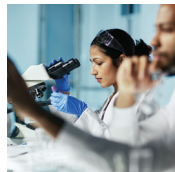
EFPIA (The European Federation of Pharmaceutical Industries and Associations) represents the research-based pharmaceutical industry operating in Europe.

Founded in 1978, its members comprise **37** national pharmaceutical industry associations, **40** leading pharmaceutical companies and **15** 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 2,000 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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