

The Pharmaceutical Industry in Figures

Key Data * 2022





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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.

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 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

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)



surveillance in Europe 2021(2020 data), WHO Regional Office for Europe & European Centre for Disease Prevention and Control (ECDC), 30 November 2021

*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

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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
	Production	127,504	199,730	286,697	300,000 (e)
	Exports (1) (2)	90,935	276,357	509,828	565,000 (e)
	Imports	68,841	204,824	347,124	390,000 (e)
E \$	Trade balance	22,094	71,533	162,704	175,000 (e)
	R&D expenditure	17,849	27,920	39,656	41,500 (e)
223	Employment (units)	556,506	701,059	835,590	840,000 (e)
	R&D employment (units)	88,397	116,253	122,331	125,000 (e)
	Total pharmaceutical market value at ex-factory prices	89,449	153,685	236,090	255,000 (e)
	Payment for pharmaceuticals by statutory health insurance systems (ambulatory care only)	76,909	129,464	146,680	157,500 (e)

Values in € million unless otherwise stated

(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 2000-2021)

⁽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

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 2021 it invested an estimated € 41,500 million in R&D in Europe. It directly employs some 840,000 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 2016-2021 the Brazilian, Chinese and Indian markets grew by 11.7%, 6.7% and 11.8% respectively compared to an average market growth of 5.8% for the top 5 European Union markets and 5.6% for the US market (source: IQVIA MIDAS, May 2022).

- In 2021 North America accounted for 49.1% of world pharmaceutical sales compared with 23.4% for Europe. According to IQVIA (MIDAS May 2022), 64.4% of sales of new medicines launched during the period 2016-2021 were on the US market, compared with 16.8% 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 € 6,070 million (value at ex-factory prices) in 2020.

GEOGRAPHICAL BREAKDOWN (BY MAIN MARKETS) OF SALES OF NEW MEDICINES LAUNCHED DURING THE PERIOD 2016–2021



(MIDAS May 2022)



PHARMACEUTICAL R&D EXPENDITURE IN EUROPE, USA, JAPAN AND CHINA (MILLION OF NATIONAL CURRENCY UNITS*), 1990-2020

SHARE OF PARALLEL IMPORTS IN PHARMACY MARKET SALES (%) - 2020



Source: EFPIA member associations (estimate)

EFPIA 🜟 Key Data | 2022

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 2020	€ million		€ million
Austria	283	Latvia	n.a
Belgium	4,964	Lithuania	n.a
Bulgaria	91	Malta	n.a
Croatia	40	Netherlands	642
Cyprus	85	Norway	126
Czech Rep.	72	Poland	431
Denmark	1,486	Portugal	90
Estonia	n.a	Romania	69
Finland	258	Russia	706
France	4,451	Slovakia	35
Germany	7,813	Slovenia	334
Greece	102	Spain	1,161
Hungary	298	Sweden	1,104
Iceland	n.a	Switzerland	7,380
Ireland	305	Turkey	71
Italy	1,620	U.K.	5,639
TOTAL			39,656

<u>Note</u>:

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

Austria, Slovenia: 2019; Bulgaria, 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 (2002-2021)



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

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IMPORTANCE OF PHARMACEUTICAL R&D

In 2020 the pharmaceutical industry invested more than € 39,600 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 2021 China nearly equalled Europe as originator of new active substances launched for the first time on the world market, with respectively 18 and 19 new substances, far behind the US leading with 35 on a total of 95. 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



2.558

2 600 -



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

<u>Note</u>: USA, China: data relating to period 2017-2020 Source : EFPIA, PhRMA, China Statistical Yearbook 2002-2021



RANKING OF INDUSTRIAL SECTORS BY OVERALL SECTOR R&D INTENSITY (R&D AS PERCENTAGE OF NET SALES – 2020)

<u>Note</u>:

Data relate to the top 2,500 companies with registered offices in the EU-27 (401), Japan (293), the US (779), China (597) and the Rest of the World (430), ranked by total worldwide R&D investment (with investment in R&D above \in 36.5 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 2021 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 2021 EU Industrial R&D Investment Scoreboard, health industries invested about €188.7 billion in R&D in 2020, accounting for 20.8% of total business R&D expenditure worldwide.

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PHARMACEUTICAL PRODUCTION

EFPIA 2020	€ million		€ million
Austria	1,434	Latvia	255
Belgium	20,245	Lithuania	n.a
Bulgaria	121	Malta	n.a
Croatia	451	Netherlands	6,180
Cyprus	253	Norway	1,432
Czech Rep.	880	Poland	2,343
Denmark	15,727	Portugal	1,857
Estonia	n.a	Romania	655
Finland	1,895	Russia	6,459
France	23,558	Slovakia	356
Germany	32,350	Slovenia	2,546
Greece	1,653	Spain	16,246
Hungary	3,422	Sweden	10,670
Iceland	89	Switzerland	53,195
Ireland	19,305	Turkey	3,497
Italy	34,300	U.K.	25,323
TOTAL			286,697

<u>Note</u>:

All data based on SITC 54

Spain, U.K.: 2019 data; Cyprus: 2018 data; 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: veterinary products excluded

Source: EFPIA member associations (official figures)



EMPLOYMENT IN THE PHARMACEUTICAL INDUSTRY

EFPIA 2020	Units		Units
Austria	16,335	Latvia	2,232
Belgium	40,464	Lithuania	1,220
Bulgaria	15,500	Malta	1,033
Croatia	5,987	Netherlands	20,000
Cyprus	1,755	Norway	4,500
Czech Rep.	18,000	Poland	16,121
Denmark	25,686	Portugal	9,100
Estonia	380	Romania	35,000
Finland	6,178	Russia	n.a
France	99,310	Slovakia	2,287
Germany	115,519	Slovenia	11,969
Greece	26,500	Spain	48,867
Hungary	28,300	Sweden	13,156
Iceland	500	Switzerland	47,000
Ireland	42,000	Turkey	42,291
Italy	66,400	U.K.	72,000
TOTAL			835,590

<u>Note</u>:

Austria, Spain: 2019 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 (1990-2021)

<u>Note</u>:

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 (1990-2021)

<u>Note</u>:

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

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PHARMACEUTICAL SALES

The world pharmaceutical (prescription) market was worth an estimated € 1,062,707 million (\$ 1,256,863 million) at ex-factory prices in 2021. The North American market (USA & Canada) remained the world's largest market with a 49.1% share, well ahead of Europe, China and Japan.

BREAKDOWN OF THE WORLD PHARMACEUTICAL MARKET - 2021 SALES



<u>Note:</u> Europe includes Belarus, Turkey, Russia and Ukraine; percentages might not add up due to rounding

Source: IQVIA (MIDAS) Q4 2021 MAT, May 2022; data relate to the 2021 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, 2020 (%)



PHARMACEUTICAL MARKET VALUE (at ex-factory prices)

EFPIA 2020	€ million
Austria	4,827
Belgium	6,303
Bulgaria	1,414
Croatia	1,036
Cyprus	177
Czech Rep.	3,389
Denmark	3,243
Estonia	359
Finland	2,762
France	29,552
Germany	42,962
Greece	5,381
Hungary	2,558
Iceland	183
Ireland	2,354
Italy	23,446
Latvia	275

	€ million
Lithuania	866
Malta	196
Netherlands	6,185
Norway	2,597
Poland	7,239
Portugal	3,524
Romania	4,500
Russia	18,398
Serbia	871
Slovakia	1,461
Slovenia	743
Spain	17,604
Sweden	4,570
Switzerland	5,920
Turkey	6,626
U.K.	24,569

TOTAL

236,090

<u>Note</u>:

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); Latvia: IQVIA; 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 2022.

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 Frinand 24.0 10.0 10.0 Germany 19.0 19.0 19.0 Greece 24.0 6.0 6.0-13.0 Hungary 27.0 5.0 25.0 Iceland 24.0 24.0 24.0 Italy 22.0 10.0 10.0 Latvia 21.0 10.0 10.0 Latvia 21.0 5.0 21.0 Latvia 21.0 5.0 21.0 Latvia 21.0 5.0 25.0 Norway 25.0 25.0	Country	Standard VAT rate (%)	VAT rates applied Prescription (%)	to medicines OTC (%)
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Latvia21,012,012,0Lithuania (3)21,05,021,0Luxembourg17,03,03,0Malta18,00,00,0Netherlands21,09,09,0Norway25,025,025,0Poland23,08,08,0Portugal23,06,06,0Romania19,09,019,0Serbia20,010,010,0Slovakia20,010,020,0Slovenia22,09,59,5Spain21,04,04,0Sweden25,00,025,0Switzerland7,72,52,5Turkey18,08,08,0	Ireland (2)	23,0	0-23,0	0-23,0
Lithuania (3)21,05,021,0Luxembourg17,03,03,0Malta18,00,00,0Netherlands21,09,09,0Norway25,025,025,0Poland23,08,08,0Portugal23,06,06,0Romania19,09,019,0Serbia20,010,010,0Slovakia20,010,020,0Slovenia22,09,59,5Spain21,04,04,0Sweden25,00,025,0Switzerland7,72,52,5Turkey18,08,08,0	Italy	22,0	10,0	10,0
Luxembourg17,03,03,0Malta18,00,00,0Nalta18,00,00,0Netherlands21,09,09,0Norway25,025,025,0Poland23,08,08,0Portugal23,06,06,0Romania19,09,019,0Russia20,010,010,0Serbia20,010,010,0Slovakia20,010,020,0Slovenia22,09,59,5Spain21,04,04,0Sweden25,00,025,0Switzerland7,72,52,5Turkey18,08,08,0	Latvia	21,0	12,0	12,0
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 20,0 Slovakia 20,0 10,0 20,0 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	Lithuania (3)	21,0	5,0	21,0
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 20,0 Slovakia 20,0 10,0 20,0 Slovakia 20,0 10,0 20,0 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	Luxembourg	17,0	3,0	3,0
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 20,0 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	Malta	18,0	0,0	0,0
Poland 23,0 8,0 8,0 8,0 Portugal 23,0 6,0 6,0 6,0 Romania 19,0 9,0 19,0 19,0 Russia 20,0 10,0 10,0 10,0 Serbia 20,0 10,0 10,0 20,0 Slovakia 20,0 10,0 20,0 20,0 Slovenia 22,0 9,5 9,5 5,5 Spain 21,0 4,0 4,0 4,0 Sweden 25,0 0,0 25,0 25,0 Switzerland 7,7 2,5 2,5 1,5 Turkey 18,0 8,0 8,0 8,0	Netherlands	21,0	9,0	9,0
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	Norway	25,0	25,0	25,0
Romania19,09,019,0Russia20,010,010,0Serbia20,010,010,0Slovakia20,010,020,0Slovenia22,09,59,5Spain21,04,04,0Sweden25,00,025,0Switzerland7,72,52,5Turkey18,08,08,0	Poland	23,0	8,0	8,0
Russia 20,0 10,0 10,0 Serbia 20,0 10,0 10,0 Slovakia 20,0 10,0 20,0 Slovakia 20,0 10,0 20,0 Slovakia 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	Portugal	23,0	6,0	6,0
Serbia 20,0 10,0 10,0 Slovakia 20,0 10,0 20,0 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	Romania	19,0	9,0	19,0
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	Russia	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 7,7 2,5 2,5 Turkey 18,0 8,0 8,0	Serbia	20,0	10,0	10,0
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	Slovakia	20,0	10,0	20,0
Sweden 25,0 0,0 25,0 Switzerland 7,7 2,5 2,5 Turkey 18,0 8,0 8,0	Slovenia	22,0	9,5	9,5
Switzerland 7,7 2,5 2,5 Turkey 18,0 8,0 8,0	Spain	21,0	4,0	4,0
Turkey 18,0 8,0 8,0	Sweden	25,0	0,0	25,0
***************************************	Switzerland	7,7	2,5	2,5
U.K. (4) 20,0 0-20,0 20,0	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

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6

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), 2020

Note:

Croatia, Czech Republic, Denmark, Estonia, Finland, Ireland, Hungary, Slovenia, U.K.: share of generics in pharmacy market sales Austria, Belgium, France, Germany, Greece, Italy, Netherlands, Portugal, Spain: share of generics in reimbursable pharmacy market sales

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

Latvia: 2019 data; Cyprus, Iceland, Malta: 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 2020	€ million		€ million
Austria	11,941	Latvia	456
Belgium	56,210	Lithuania	874
Bulgaria	1,054	Luxembourg	132
Croatia	1,052	Malta	367
Cyprus	381	Netherlands	45,000
Czech Republic	2,965	Norway	680
Denmark	18,529	Poland	4,377
Estonia	95	Portugal	1,378
Finland	833	Romania	895
France	34,065	Slovakia	541
Germany	87,203	Slovenia	7,062
Greece	2,883	Spain	12,709
Hungary	6,739	Sweden	10,897
Iceland	12	Switzerland	81,899
Ireland	62,092	Turkey	1,497
Italy	33,112	United Kingdom	21,898
TOTAL			509,828

<u>Note</u>:

All data based on SITC 54

Source: Eurostat (COMEXT database – May 2022)

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





PHARMACEUTICAL IMPORTS

EFPIA 2020	€ million		€ million
Austria	9,561	Latvia	681
Belgium	46,261	Lithuania	1,292
Bulgaria	1,532	Luxembourg	500
Croatia	1,637	Malta	288
Cyprus	356	Netherlands	30,650
Czech Republic	5,314	Norway	2,112
Denmark	4,940	Poland	7,818
Estonia	565	Portugal	3,039
Finland	2,112	Romania	3,803
France	28,974	Slovakia	2,172
Germany	58,817	Slovenia	5,259
Greece	3,227	Spain	15,938
Hungary	5,875	Sweden	4,805
Iceland	163	Switzerland	34,624
Ireland	9,223	Turkey	4,626
Italy	28,051	United Kingdom	22,909
TOTAL			347,124

<u>Note</u>:

All data based on SITC 54

Source: Eurostat (COMEXT database – May 2022)

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



PHARMACEUTICAL TRADE BALANCE

EFPIA 2020	€ million		€ million
Austria	2,380	Latvia	-225
Belgium	9,949	Lithuania	-418
Bulgaria	-478	Luxembourg	-368
Croatia	-585	Malta	79
Cyprus	25	Netherlands	14,350
Czech Republic	-2,349	Norway	-1,432
Denmark	13,589	Poland	-3,441
Estonia	-470	Portugal	-1,661
Finland	-1,279	Romania	-2,908
France	5,091	Slovakia	-1,631
Germany	28,386	Slovenia	1,803
Greece	-344	Spain	-3,229
Hungary	864	Sweden	6,092
Iceland	-151	Switzerland	47,275
Ireland	52,869	Turkey	-3,129
Italy	5,061	United Kingdom	-1,011
TOTAL			162,704

<u>Note</u>:

All data based on SITC 54

Source: Eurostat (COMEXT database – May 2022)

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



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EU-27 TRADE BALANCE - HIGH TECHNOLOGY SECTORS (€ MILLION) - 2021

THE EUROPEAN UNION'S TOP 5 PHARMACEUTICAL TRADING PARTNERS - 2021



Source: Eurostat, COMEXT database, May 2022

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

Country	1980	1990	2000	2010	2015	2020
Austria	7.0	7.7	9.2	10.2	10.4	11.5
Belgium	6.2	7.1	8.0	10.2	10.4	10.7
Czech Republic	-	3.7	5.7	6.9	7.2	9.1
Denmark	8.4	8.0	8.1	10.3	10.2	10.6
Estonia	-	-	5.2	6.3	6.3	8.1
Finland	5.9	7.3	7.1	9.1	9.6	9.6
France	6.8	8.0	9.6	11.2	11.4	12.4
Germany	8.1	8.0	9.9	11.1	11.2	12.5
Greece	-	6.1	7.2	9.6	8.1	7.8
Hungary	-	-	6.8	7.5	6.9	6.4
Iceland	5.9	7.4	8.9	8.4	8.1	9.8
Ireland	7.5	5.6	5.9	10.5	7.3	7.2
Italy	-	7.0	7.6	8.9	8.9	9.7
Latvia	-	-	5.4	6.1	5.7	6.6
Lithuania	-	-	6.2	6.8	6.5	7.6
Luxembourg	4.6	5.1	5.9	7.0	5.3	5.4
Netherlands	6.5	7.0	7.7	10.2	10.3	11.2
Norway	5.4	7.1	7.7	8.9	10.1	11.3
Poland	-	4.3	5.3	6.4	6.4	7.2
Portugal	4.8	5.5	8.6	10.0	9.3	10.1
Slovakia	-	-	5.3	7.7	6.8	7.7
Slovenia	-	-	7.8	8.6	8.5	9.7
Spain	5.0	6.1	6.8	9.1	9.1	9.1
Sweden	7.7	7.2	7.3	8.3	10.8	11.4
Switzerland	6.4	7.6	9.1	9.9	11.0	11.3
Turkey	2.4	2.4	4.6	5.1	4.1	4.3
United Kingdom	5.1	5.1	7.2	9.8	9.9	12.8
Europe	6.1	6.4	7.2	8.7	8.5	9.3
USA	8.2	11.2	12.5	16.3	16.5	16.8
Japan	6.2	5.8	7.2	9.2	10.9	11.0

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

Source: OECD Health Statistics 2020, May 2022

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

EFPIA 2020	€ million
Austria	3,144
Belgium	5,201
Bulgaria	430
Croatia	382
Cyprus	108
Czech Rep.	1,314
Denmark	886
Estonia	165
Finland	1,635
France	24,725
Germany	43,294
Greece	2,001
Hungary	1,046
Iceland	82
Ireland	1,931
Italy	7,530
Latvia	170

	€ million
Lithuania	362
Malta	138
Netherlands	3,315
Norway	1,138
Poland	2,112
Portugal	1,359
Romania	3,110
Russia	1,500
Serbia	280
Slovakia	1,354
Slovenia	368
Spain	11,077
Sweden	2,654
Switzerland	5,809
Turkey	5,969
U.K.	12,091

TOTAL

146,680

<u>Note</u>:

Latvia: 2019 data; Cyprus: 2018 data; Croatia: 2016 data France, Ireland, Netherlands, Norway, Sweden, U.K.: estimate

Source: EFPIA member associations (official figures)



MAIN CAUSES OF CANCER MORTALITY ACROSS OECD, BY SEX, 2019



MAIN CAUSES OF AVOIDABLE MORTALITY ACROSS OECD COUNTRIES, 2019



Source: Health at a Glance 2021, OECD Indicators, OECD, pages 89 & 93

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BREAKDOWN OF TOTAL HEALTH EXPENDITURE IN EUROPE – 2019



THE ADDED VALUE OF MEDICINES IN HEALTHCARE

Medicines constitute the smallest part of healthcare costs with, on average, 18.6% 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 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 2021, May 2022 – EFPIA calculations (non-weighted average for 26 EU & EFTA countries)

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 **‡** Key Data | 2022

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)

Foland Employers Union of Innovative Pharmaceutical Companies (Infarma)

Portugal Associação Portuguesa da Indústria Farmacêutica (Apifarma)

Russia

Association of International Pharmaceutical Manufacturers (AIPM)

Spair

Asociación Nacional Empresarial de la Industria Farmacéutica (Farmaindustria)

Swede

Läkemedelsindustriföreningen

The Swedish Association of the Pharmaceutical Industry (LIF)

Switzerland

Verband der forschenden pharmazeutischen Firmen der Schweiz (Interpharma)

Turke

Arastirmaci Ilac Firmalari Dernegi (AIFD)

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 (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) 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) 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

Lilly	
Menarini	
Merck	
Merck Sharp & Dohme (MSD)	
Novartis	
Novo Nordisk	
Pfizer	
Pierre Fabre	
Roche	
Sanofi	
Servier	
Takeda	
Teva	
UCB	

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Bial	
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AiCuris	
AM Pharma	
Byondis	
Da Volterra	
ENYO Pharma	
Idorsia	
Imcyse	

Genfit		
Kuste Biopharma	 	
Lysogene	 	
Minoryx	 	
Oasmia	 	
Polyphor	 	
ProQR	 	
Spero Therapeutics	 	
Transgene		



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, **38** leading pharmaceutical companies and **17** 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.







EFPIA Leopold Plaza Building ***** Rue du Trône 108 B–1050 Brussels ***** Belgium Tel.: +32 (0)2 626 25 55 www.efpia.eu ***** info@efpia.eu



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