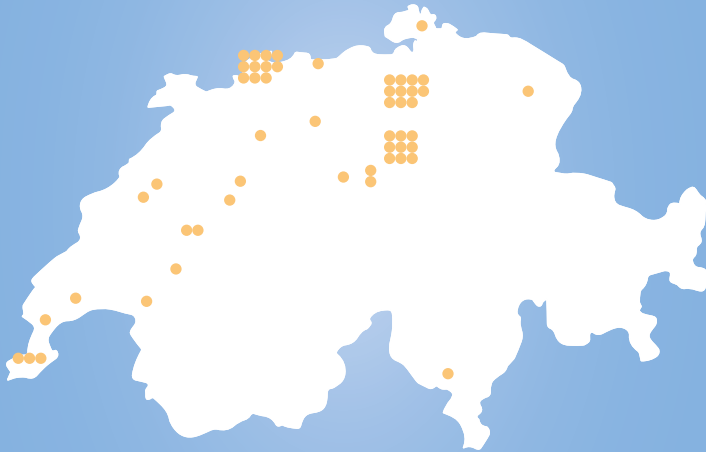




HEALTH PANORAMA 2022

The most important facts and figures
on Switzerland's healthcare and
pharma landscape

The research-based pharmaceutical industry in Switzerland



The member companies of Interpharma employ **39'600 people at 53 sites** throughout Switzerland.

Keep researching – with us

Dear Reader

The research scientists of pharmaceutical companies in Switzerland are working tirelessly on innovations and medical breakthroughs to provide effective help for patients. This makes the pharmaceutical companies in Switzerland the innovation driver for our economy and a key player in the healthcare system.

But we will only overcome the challenges of the future together with you and in dialogue with the whole of society. As in previous years, we are contributing to the discussion around Switzerland's position as a business location and the healthcare system in 2022 with our Health Panorama. We invite you to take part in this dialogue.

In 75 charts, this statistics publication from Interpharma provides you with a compact overview of the most important facts and figures on the healthcare system, the pharmaceutical market and Switzerland's position as a pharma hub.

You can find important facts and figures also online in our data centre: www.datacenter.interpharma.ch. At www.interpharma.ch under "Publications" you can order this brochure and other interesting publications or download them as PDFs.

We wish you an interesting and informative read.

Dr. René Buholzer

CEO and Delegate of the Board

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Swiss healthcare system



4



In 2020, **life expectancy fell** more sharply than it has done in decades.

The cost of **medicines** as a proportion of **health care costs** has remained **stable** at around 12 percent for for more than ten years.

5

Cancer mortality in both sexes has fallen sharply in the last 30 years.

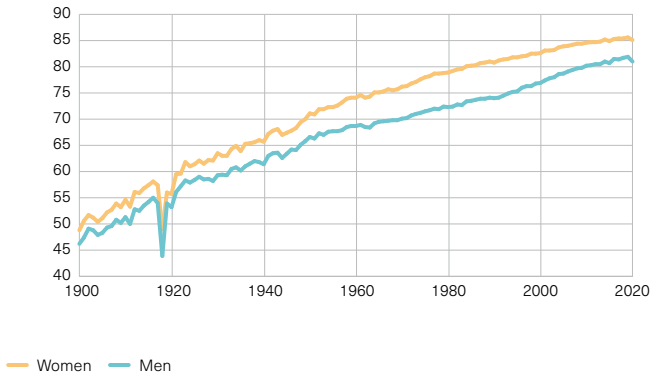
Life expectancy in Switzerland has fallen as a result of COVID-19

Life expectancy in Switzerland has almost doubled in the last 100 years.

Thanks to better healthcare, new and innovative medicines, improved hygiene and a high quality of life, we live not only longer but also more healthily.

In 2020, there was a fall in life expectancy among women (-0.5 years) and men (-0.9 years) as a result of COVID-19. A reduction on this scale has not been seen in Switzerland for decades.

Mean life expectancy at birth In years, 1900–2020



Source: Federal Statistical Office (2021), Statistisches Lexikon der Schweiz.



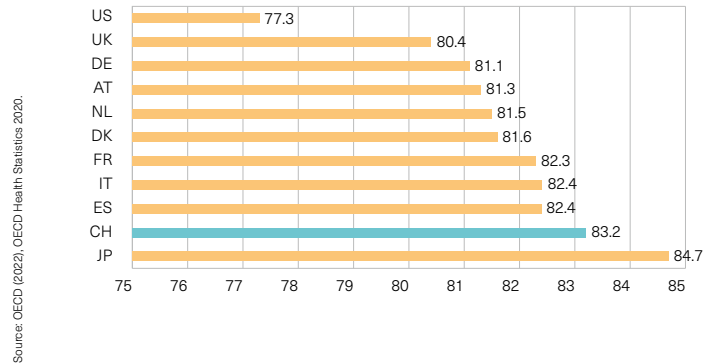
Switzerland has one of the highest life expectancies in the world

At an average of 83.2 years for the general population, Switzerland had the second highest life expectancy in the world in 2020.

According to the OECD, only in Japan people live longer. Mean life expectancy there is 84.7 years.

Switzerland owes its leading position, among other things, to the high-quality healthcare system that is accessible to the whole population and the high quality of life.

Mean life expectancy at birth in international comparison In years, 2020



Source: OECD (2022), OECD Health Statistics 2020.

Switzerland's expenditure on healthcare is comparatively high

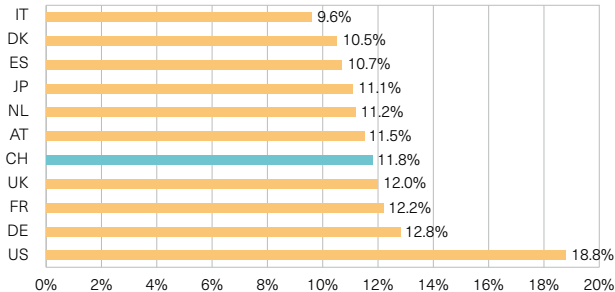
Health spending as a percentage of gross domestic product (GDP) reflects how much of its entire economic output a country spends on health goods and services and also invests in healthcare infrastructure.

In 2020, there was a marked increase in the average expenditure of OECD countries on healthcare to 9.7% of GDP (2019: 8.8%).

An international comparison puts Switzerland in 5th place behind the USA, Germany, France and the UK with a percentage of 11.8%.

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International comparison of healthcare expenditure as a percentage of GDP, in percent, 2020



Source: OECD (2022), OECD Health Statistics 2020.



Switzerland has a high-quality healthcare system

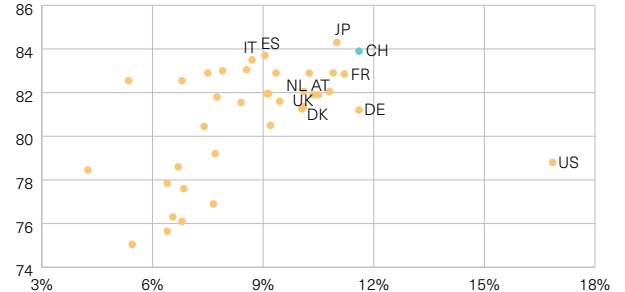
Countries with high healthcare expenditure as a percentage of GDP tend to show higher life expectancy.

Compared with other countries, Switzerland has both a high level of health spending and a particularly high life expectancy.

Countries that already enjoy a high life expectancy, however, achieve little extra improvement in life expectancy with additional spending.

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Life expectancy in relation to the share of health expenditure in gross domestic product, 2019



Source: OECD (2022), OECD Health Statistics 2019.

Diseases of the cardiovascular system and cancer are the most common cause of death

In Switzerland, 67'780 deaths were registered in 2019. For women, cardiovascular diseases were the most common cause of death (30.8%). For men, 28.5% of deaths were attributable to the cardiovascular system.

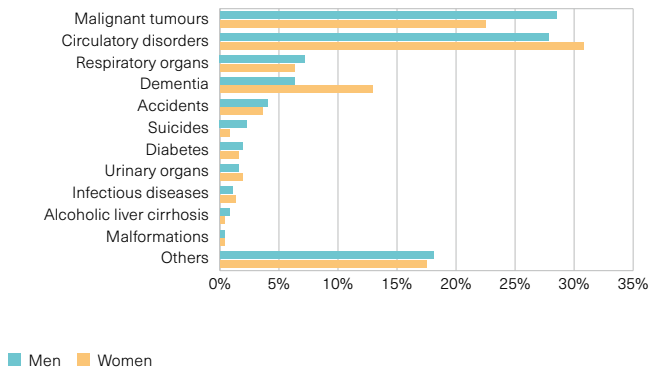
Women were significantly more likely to die of dementia (12.9%) than men (6.3%). Men more commonly died from respiratory diseases.

Compared to the previous year, in 2019 tumours as cause of death decreased by 2 percent in men and 1 percent in women.

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Most common causes of death by gender

Deaths 2019: 67'780



Source: Federal Statistical Office (2021), Cause of Death Statistics.



As life expectancy increases, growing numbers of people are suffering from dementia

In 2021, there were 146'500 people living with Alzheimer's or another form of dementia in Switzerland. With around 97'000 cases, women are much more affected than men (around 49'000).

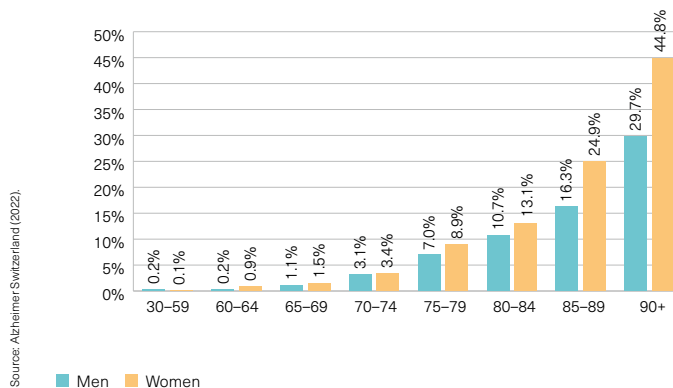
Around 45% of women aged over 90 suffer from dementia. In men, around 30% of those aged over 90 suffer from dementia.

Between 1998 and 2021 there were 198 unsuccessful attempts to develop an Alzheimer's drug. Pharmaceutical companies worldwide remain engaged in research to find effective therapies.

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Number of dementia patients

Per age, 2021



Source: Alzheimer Switzerland (2022).

Gender-specific differences in cancer mortality

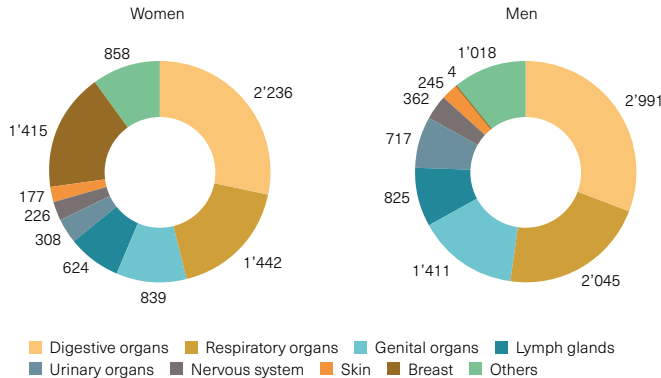
In 2019, a total of 17'785 people died of cancer. More men (9'618) died of cancer than women (8'167).

Most deaths attributable to cancer, both in men and in women, involve the digestive tract; the second-most common cause of death from cancer involves the respiratory organs.

The third most frequent cause of death attributable to cancer is breast cancer in women and cancer of the genital organs in men.

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Deaths by type of tumour 2019



Source: Federal Statistical Office (2021), Cause of Death Statistics.



Cancer mortality rates are falling thanks also to medical advances

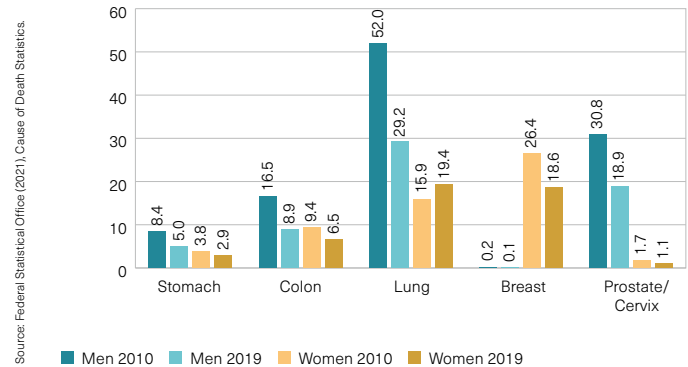
The cancer mortality rate fell in both men (-19%) and women (-10%) between 2010 and 2019, which is also due to medical advances and pharmaceutical-industry-based research in oncology.

Between 2010 and 2019, colon cancer mortality fell by around 46% in men and by 31% in women. Lung cancer mortality in men likewise fell sharply between 2010 and 2019, whereas it increased by more than 20% in women.

Prevention, early diagnosis and access to modern treatment play a crucial role in cancer.

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Development of cancer mortality rate per 100'000 inhabitants 2010 and 2019



Source: Federal Statistical Office (2021), Cause of Death Statistics.

Medicines account for just under 12 percent of healthcare costs

In 2020, healthcare expenditure in Switzerland amounted to a total of CHF 83.3bn. This corresponds to a growth of 1%, putting it below the trend of previous years.

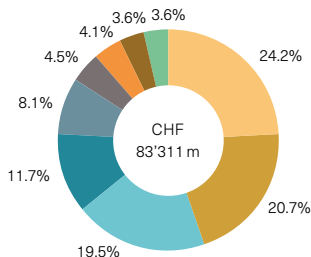
Outpatient and inpatient curative treatment, together with long-term care, accounted for two-thirds of total healthcare costs.

At CHF 9.7bn, medicines account for 11.7% of healthcare expenditure. In other words, for every 100 francs spent on healthcare, just under 12 francs go towards medicines.

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Breakdown of healthcare costs by services provided

Total costs in 2020



- Outpatient curative treatment
- Chronic care
- Inpatient curative treatment
- Medicines
- Support services
- Rehabilitation
- Administration
- Other healthcare goods
- Prevention

Source: Federal Statistical Office (2022), Kosten und Finanzierung des Gesundheitswesens.



In the last 10 years healthcare costs have grown on average by 2.9 percent per year

In the period from 2010 to 2020, total healthcare costs increased by 2.9% per year. The largest growth was observed in the cost of support services (e.g. public services, laboratory analysis) with an increase of 7.4% per year.

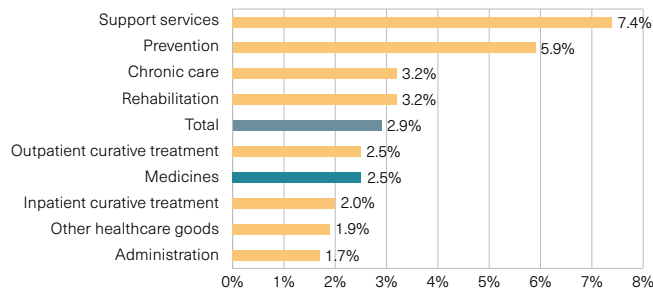
With a growth of 2.5%, the increase in spending on medicines was below the average compared with the overall healthcare costs.

The assessment of growth shows a shift away from inpatient (+2%) to outpatient (+2.5%) curative treatment.

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Cost development according to services provided

2010–2020, average annual growth



Source: Federal Statistical Office (2022), Kosten und Finanzierung des Gesundheitswesens.

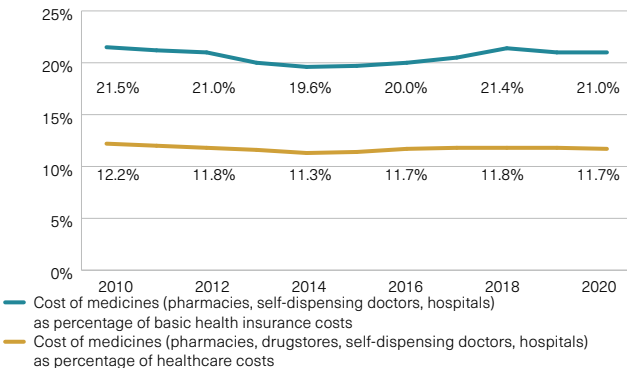
The cost of medicines as a proportion of healthcare costs is stable

In 2020, the cost of medicines as a percentage of healthcare costs remained stable at 11.7%. As a proportion of the costs incurred under the compulsory basic health insurance, it stood at 21%. So both values remain constant.

While many innovative medicines are coming onto the market, the cost of medicines is growing at a slower rate than the overall healthcare costs compared to the previous year.

Unlike other service categories (e.g. inpatient curative treatment) around three-quarters of medicines are financed through the health insurance, therefore, they account for a higher proportion of health insurance costs than they do of total healthcare costs.

Cost of medicines as a proportion of healthcare and basic health insurance costs, 2010–2020



Source: Federal Statistical Office (2022), Kosten und Finanzierung des Gesundheitswesens.



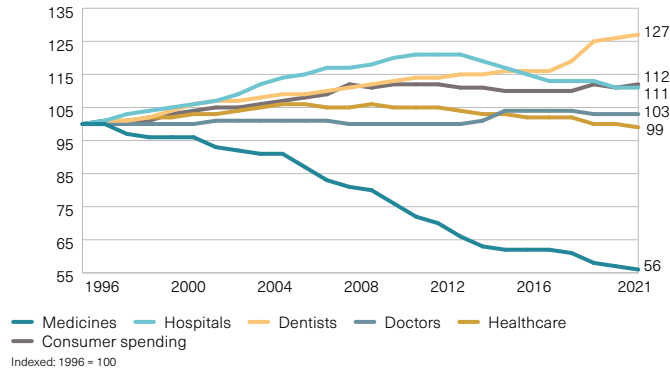
Since the introduction of the Health Insurance Act the price index for medicines has fallen by 44 percent

The price index for medicines is the only price index in the healthcare system that has continually fallen since the enactment of the Federal Health Insurance Act (KVG) in 1996.

At 56 points, the price index in 2021 was 44% lower than in 1996, whereas the hospital price index was around 11% higher in 2021 than in 1996.

The prices of reimbursed medicines are reviewed every three years and reduced where necessary, resulting in major savings in the healthcare system.

Price indexes in Switzerland's healthcare system 1996–2021



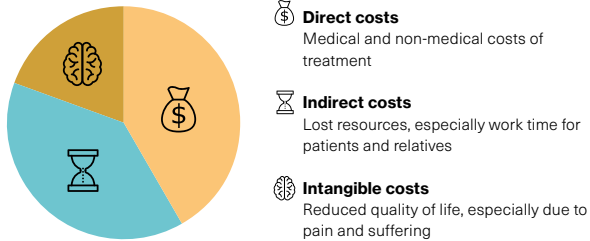
Source: Federal Statistical Office (2022), National Consumer Price Index.

Diseases generate a variety of costs

Diseases are primarily a burden on the sick. However, others are often also affected: for the health insurer, medical treatment costs are covered by health insurers, productivity losses are felt by employers and the social environment of the patient also carries the consequences of an illness.

A distinction can be drawn between direct costs (medical and non-medical treatment costs), indirect costs (lost resources) and intangible costs (reduced quality of life), the sum of which corresponds to the cost of a disease to society.

Composition of overall costs of a disease Illustration



Source: Polynomics (2020), Gesellschaftliche Betrachtung der Krankheitskosten.

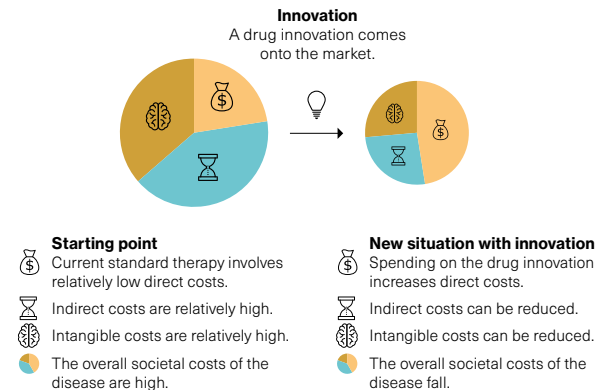


Impact of therapeutic innovations on healthcare costs

Innovative medicines are a form of treatment innovation and can have an impact on all three cost categories.

In general, direct treatment costs increase with an innovation, whereas indirect and intangible costs decrease. From an overall economic perspective, it is particularly interesting to know whether the innovative treatment leads to a reduction of the total cost of disease, i.e. the sum of the direct, indirect and intangible costs. The development of the composition of the total costs is of secondary importance.

Disease costs from a societal perspective Impact of innovation; illustration



Source: Polynomics (2020), Gesellschaftliche Betrachtung der Krankheitskosten.

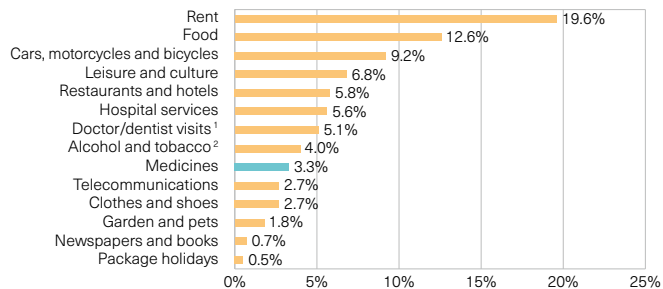
Swiss households spend comparatively little on medicines

One-fifth of household spending goes towards rent, making rent by far the biggest expenditure item of private households.

Swiss households spend 12.6% of their budget on food, 5.8% on restaurant meals and hotel stays and 9.2% on cars, motor-cycles and bicycles.

Overall, people in Switzerland spend more of their disposable income on alcohol and tobacco (4%) than on medicines (3.3%).

Expenditure structure of Swiss households Basket of goods in national consumer price index, 2022



¹ Outpatient services (excluding hospital outpatients), excluding medicines
² Incl. alcohol in restaurants and hotels

Source: Federal Statistical Office (2022), National Consumer Price Index.



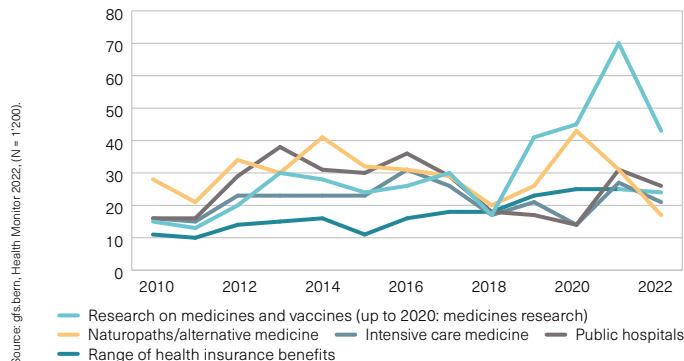
Great importance of medicines and vaccine research

On behalf of Interpharma, gfs.bern conducts a representative survey, the “Health Monitor” each year. In the 2021 survey, 1’200 voters were asked for their views on the Swiss healthcare system.

Following a sharp increase (70%) in the previous year, a clear relative majority (43%) remains in favour of investing more in drug and vaccine research. The coronavirus crisis showed the relevance of these activities.

At a lower level of importance come naturopaths and alternative medicine, intensive care medicine and the health insurance benefits.

Trend: distribution of finances In percent of respondents, 2010–2022



Source: gfs.bern, Health Monitor 2022, (N = 1'200).

Pharmaceutical market



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Patent-protected medicines make up the largest proportion of Switzerland's pharmaceutical market at **49 percent**.

The price reviews of medicines result in annually recurring **savings** of more than **one billion francs**.

23

In the last 15 years, the **generics market** has almost **tripled**.

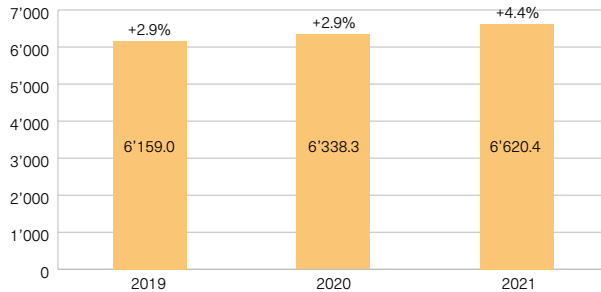
The cost of medicines is not a major driver of costs

In 2021, the pharmaceutical market in Switzerland achieved a value-based volume of CHF 6.6 bn at ex-factory prices (+4.4% year-on-year). The value-based market thus showed stronger growth than in the previous two years.

The total market is made up of prescription-only and non-prescription (OTC) medicines, as well as reimbursable (SL) and non-reimbursable medicines.

Market value

2021: CHF 6'620.4m at ex-factory prices



Source: Interpharma calculations based on IQVIA AG data (2022).



Price cuts dampen growth of the pharma market

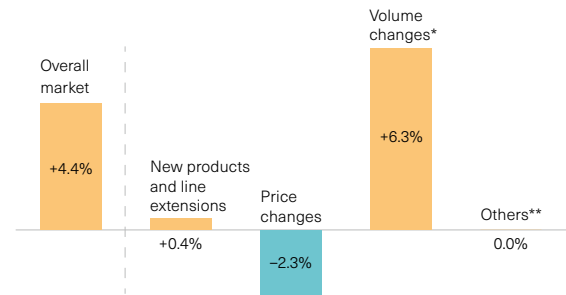
Switzerland's pharmaceutical market grew by 4.4% in 2021. This growth was driven mainly by the volume of medicines sold (growth contribution +6.3%).

New products – e.g. for cancer or autoimmune diseases – have likewise contributed to this growth. There are ever more medicines for previously untreatable diseases.

With cost savings amounting to 2.3% of the overall market, pharmaceutical companies are making a major contribution to help contain the growth of costs in the healthcare system.

Development of individual components at ex-factory prices

Growth 2021



* Volume changes: percentage of revenue growth resulting from increased sales of products launched on the market before 2021. ** Interactive effects: caused by simultaneous interactions of price and volume changes. Residual effects: change in existing strengths from smaller to larger packs or vice versa. Residual effects: change in existing strengths from smaller to larger packs or vice versa.

The price of a medicine is made up of various components

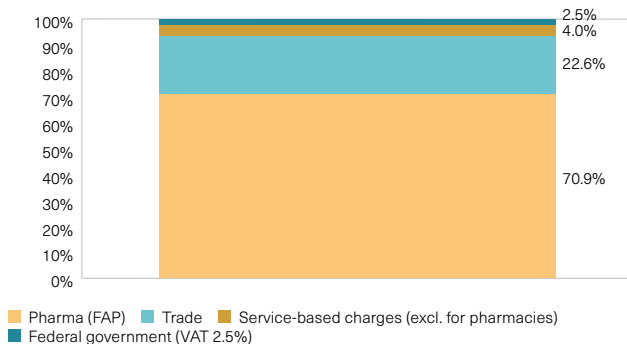
At 70.9%, the largest component in the price of a medicine is the ex-factory price, which the pharmaceutical company receives for research, development and production.

Along with the ex-factory price, there is the trade price to be considered. This consists of a price-related and a pack-related surcharge. Additional price components are the service-based charge for pharmacies and value-added tax.

For a medicine priced at 100 francs, around 71 francs go to the producer and 29 francs to the trade, doctors, pharmacists and, through value-added tax, to the federal government.

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Composition of drug prices 2020



Source: santésuisse and Interpharma (2022), gemeinsamer Auslandpreisvergleich.



Major savings in the healthcare system thanks to price reviews of medicines

In the price reviews by the FOPH, the medicines are divided into three groups, one of which is assessed every three years for the efficacy, suitability and cost-effectiveness of the medicines in that group.

In 2021, the prices of more than 300 medicines in group C were reduced by an average of 10%.

The reviews lead to annually recurring savings of more than 1.2 billion francs. The pharmaceutical industry is the only actor in the Swiss healthcare sector that makes a significant contribution to cost containment through institutionalized price reviews.

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Savings through price reductions

Group A	Group B	Group C
Gastroenterology	Nervous system	Cardiovascular
Metabolism	Kidneys and water balance	Pulmonary and respiratory
Antidotes	Blood	Infectious diseases
Cation exchangers	Dermatology	Gynaecology
	Odontostomatology	Ophthalmology
	Diagnostics	Otorhinolaryngology

Source: Federal Office of Public Health (2022), Letters of information from 13.12.2017, 6.12.2018, 2.12.2019, 4.12.2020 and 10.12.2021, press release from 5.11.2021.

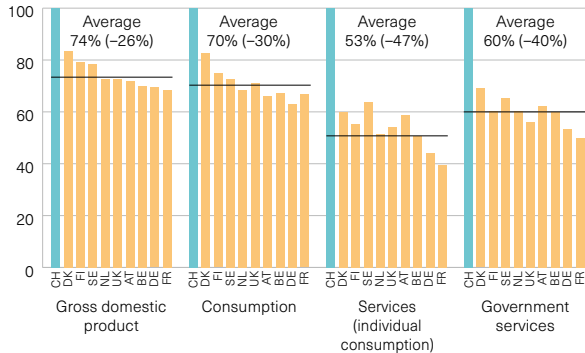
The price level in Switzerland is generally above average

Compared to the price level indices of the 27 EU member states in 2020, the level of prices in Switzerland is generally above average.

The aggregate of all goods classes, or gross domestic product (GDP), shows in particular the difference in disposable income. Based on GDP, Switzerland is about 30% above the average of the nine IRP reference countries.

Both public services and services for individual consumption are almost twice as expensive in Switzerland compared with other countries in Europe.

Comparative price level indices Switzerland = 100, 2020



Source: Eurostat (2022), comparative price level indices and real expenditures for ESA 2010 aggregates.



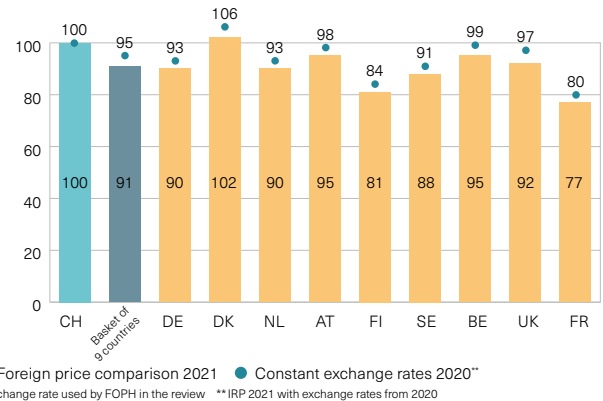
Original medicines in other countries are 9 percent cheaper than in Switzerland

In 2022, the 250 top-selling patent-protected original products were on average 9% cheaper in other comparable countries than in Switzerland. The price difference grew by 4 percentage points compared to the previous year as a result of the stronger Swiss franc (currency effect). At constant exchange rates the difference would actually have decreased.

As a result of the effective price reviews of the FOPH, prices in Switzerland are minimally higher than abroad.

With these regular price reviews, the pharma industry contributes annually recurring savings in the healthcare sector of more than 1.2 billion francs, according to Federal Councillor Berset.

Top 250 original products, basket of 9 countries Exchange rate CHF/EUR: 1:07*, prices of April 2022



Source: santésuisse and Interpharma (May 2022), Gemeinsamer Auslandspreisvergleich.

Pharmacies remain the most important sales outlet for medicines

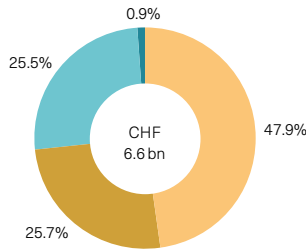
Pharmacies are still the most important sales outlet for pharmaceuticals: 65% of all packs are sold through pharmacies. In terms of value, these sales account for almost 48% of total sales.

Self-dispensing doctors and hospitals each account for around a quarter of pharmaceutical sales in terms of value.

Chemists or drugstores account for only a small percentage of pharma sales at 1% in terms of value.

Pharmaceutical outlets by sales

In CHF millions, at ex-factory prices, 2021



Pharmacies SD doctors¹ Hospitals Chemists/drugstores

¹ Doctors with own in-practice pharmacy are defined as self-dispensing doctors (SD doctors).

Source: Interpharma calculations based on IQVIA AG data (2022).



Patent-protected products continue to make up the bulk of the pharmaceutical market

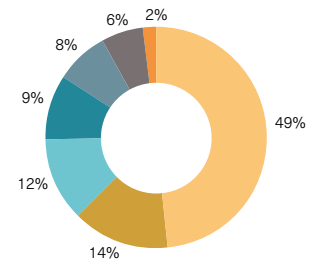
Patent-protected medicines account for the largest share of Switzerland's pharmaceutical market at 49%.

The generics-eligible market, comprising off-patent original products with generic competition and generics, has a market share of around 26%.

In 2021, generics accounted for a greater share of the reimbursable drugs market than off-patent original products.

Composition of the pharmaceutical market

By sales at ex-factory prices, 2021



Patent-protected products Generics Original (chemical products of which patent is expired and at least 1 generic) Products whose patent protection has expired and without generics/biosimilars substitution Out of market Reference products (biologics with expired patent protection and at least 1 biosimilar) Biosimilars

Source: Interpharma calculations based on IQVIA AG data (2022).

The generics market has more than tripled in value since 2005

Generics are identical copies of off-patent original products based on synthetic active substances.

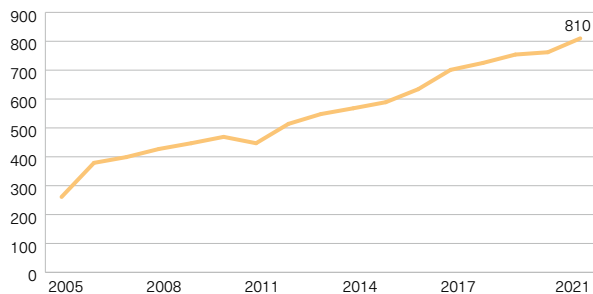
Reimbursable generics achieved a value of around 810 million francs in 2021.

The value of the reimbursable generics market has more than tripled in the last 15 years.

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Generics market

Reimbursable, in CHF millions, at ex-factory prices, 2005–2021



Source: Interpharma calculations based on IQVIA AG data (2022).



Rising level of substitution in the off-patent market

The level of substitution with generics in the off-patent market reflects the proportion of generics that are sold in place of original products.

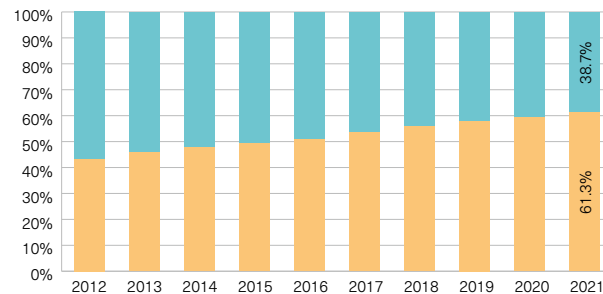
Measured by the number of tablets, generics in Switzerland were dispensed in more than 61 of 100 cases in which generics were available in 2021.

The level of substitution with generics in the off-patent market has steadily increased since 2012.

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Generics substitution rate

Total, 2012–2021



Generics Off-patent original products with generic competition

Source: Berechnungen Interpharma mit Datengrundlage IQVIA AG (2022).

Biosimilars compared with generics

Generics consist of simple molecules. Biosimilars on the other hand are manufactured from living cells that cannot be copied exactly. A biosimilar is therefore never identical to the original product, but is similar at most.

The complexity of developing and manufacturing biosimilars is significantly greater than that of generics. The development costs alone for a biosimilar are 100 times that of a generic.

For the regulatory approval of biosimilars in Switzerland, high standards of patient safety are required, along with extensive clinical studies and proof of safety.

Difference between generics and biosimilars

	Generics	Biosimilars
Complexity	Minimal	Very high, clinical trials required
Comparability	Identical copy of the original product	Similarity must be proven through clinical trials
Development costs	At least CHF 1 m	At least CHF 100 m
Number of producers	Many	Few

Source: Interpharma (2020).



Biosimilars are becoming increasingly important

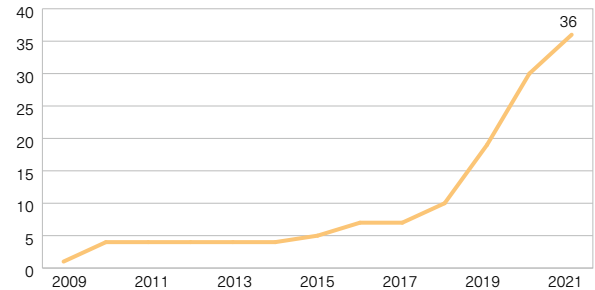
Modern biotechnology has made enormous medical breakthroughs in the past decades in the treatment of mostly life-threatening diseases, such as cancer.

Following patent expiry, the first copies of these innovative technologies, known as biosimilars, have now entered the market.

Biosimilars are not yet frequently used in Switzerland – in 2021 they accounted for barely 2% of the pharmaceutical market. The number of reimbursable biosimilars available in Switzerland has increased fivefold since 2017 from 7 to 36 products.

Biosimilars market

Number of biosimilars in the SL, 2009–2021



Source: Federal Office of Public Health (2022), Specialities List.

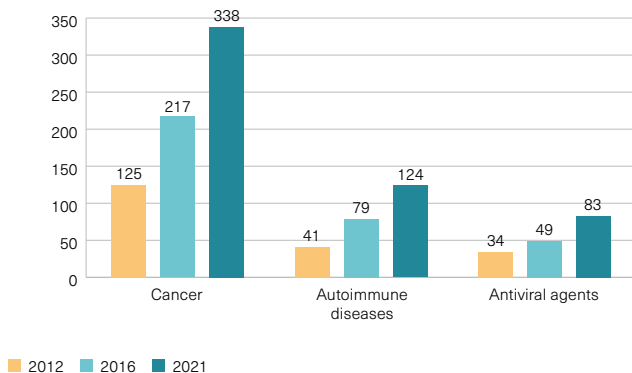
Growing number of new therapies for cancer, autoimmune and viral diseases

Ever more treatments for cancer, autoimmune and viral diseases increase the chances of a cure for patients.

A total of 338 medicines were available for cancer therapy in 2021. Since 2010, a further 213 new and innovative medicines have been added. The number of available treatments for autoimmune diseases and viral diseases are three times and twice as high respectively, as in 2010.

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Reimbursable drugs market. Number of available therapies 2012, 2016, 2021



Source: Federal Office of Public Health (2022), Specialities List.



Imports of active ingredients, antibiotics and vaccines

Switzerland depends on global trade for the supply of active ingredients, vaccines and antibiotics.

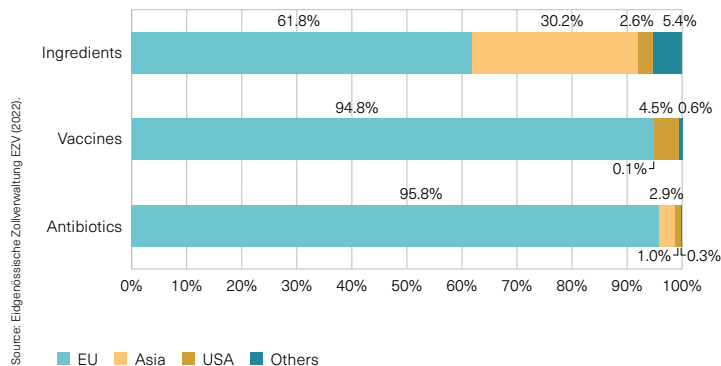
The EU is our most important trading partner: 62% of active ingredients, 96% of antibiotics and 95% of vaccines come from the EU.

The USA is the second-most important trading partner for active ingredients. Around a quarter of active ingredients come directly from Asia.

37

Imports of active ingredients

Share by value (CHF), 2021



Focus on the patient



38



In 2021, only **10 percent** of medicines were included in the Specialities List within the stipulated **60 days**.

People in Switzerland want **access to medicines** from the day of marketing authorization.

Thanks to successful therapies, the number of **AIDS deaths** in the last 20 years **have more than halved**.

39

The benefit of innovative therapies accrues at several levels

The direct benefit of innovative therapies can be seen on three levels: patients benefit from the chance of a cure, a more rapid recovery or a better quality of life.

Society benefits from innovations. Shorter and improved healing processes reduce treatment and nursing costs and enable patients to return to work sooner.

And lastly, the economy also benefits because new medicines allow reinvestment in research and development. This leads to the creation of jobs, generates added value and brings higher tax revenues for the state.

40

Overall consideration of the benefits



Overall consideration of the benefits

- Higher life expectancy
- Faster recovery
- Chance of a cure
- Better quality of life
- Reduced emotional burden



Benefits to society

- Lower costs through shorter healing process
- Quicker return to work
- Reduced nursing costs
- Effects on other social institutions (unemployment insurance, disability insurance)



Benefits to the economy

- Jobs
- R&D investments
- Contribution to gross value added
- Taxes

Source: Interpharma (2020).



Innovations lead to a higher life expectancy and ease the burden on the healthcare system

From an economic perspective, pharmaceutical innovations can reduce the overall cost of a disease, even if the price of a new medicine results in an increase in the direct treatment costs.

Based on data for Switzerland, the effect of pharmaceutical innovations introduced in the period 1990–2011 or 1994–2010 can be demonstrated at various levels.

The innovations reduced mortality by almost one-third among those aged under 85 and led to 2 million fewer days in hospital in 2019, which results in savings of 3 billion francs for the healthcare system.

41

Pharmaceutical innovations lead to...



Overall consideration of the benefits
...a reduction in premature mortality in under 85s by 32% (2018).



Benefits to society
...a reduction in the number of treatment days in hospital by 2 million days (-17.3%) in 2019.



Benefits to the economy
...savings for the healthcare system of 3 billion francs (2019).

Source: Lichtenberg, Frank (2022): The association between pharmaceutical innovation and both premature mortality and hospital utilization in Switzerland, 1996–2019. Swiss Journal of Economics and Statistics (2022), 11887.

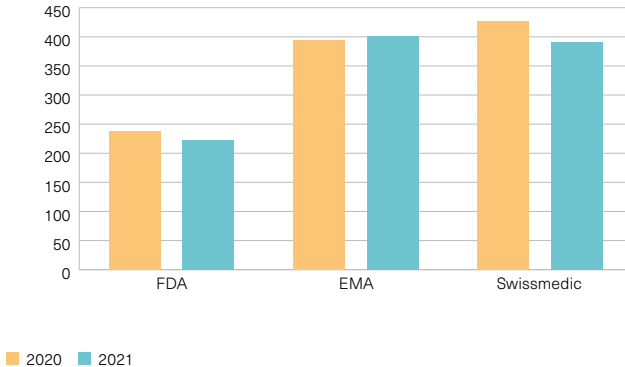
Comparison of regulatory approval times for medicines

A strong and independent drug regulatory authority is in the interest of patient safety and Switzerland's position as a pharma hub.

In 2021, an acceleration of lead times is discernible when viewed across all procedures for new approvals. This positive trend is attributable to the increased use of approval procedures in international collaboration (Orbis, ACCESS) among other factors.

Approval by the regulatory authority, however, does not mean the medicine is immediately available to patients. Before this can happen, reimbursement under the basic health insurance must be established.

Comparison of regulatory approval times for medicines In days; all procedures 2020–2021; comparison between the USA (FDA), the EU (EMA) and Switzerland (Swissmedic)



Source: Swissmedic, Benchmarking Study 2021.

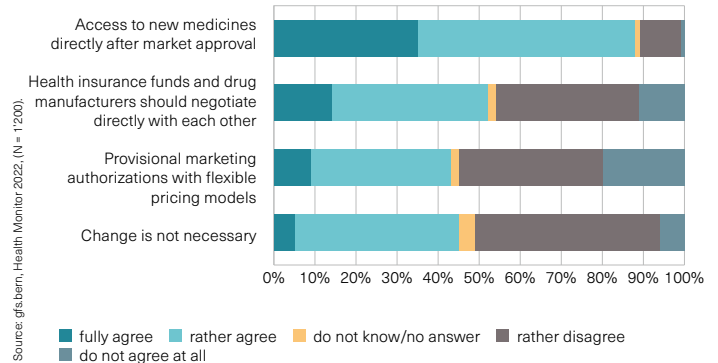


Access to medicines from the day of marketing authorization

According to the Health Monitor 2022, almost 90% of respondents want access to new medicines from the day marketing authorization is granted by Swissmedic.

More than half of respondents believe there is a need for change. This reflects the dissatisfaction of the population with today's reimbursement processes for new medicines.

Acceleration of access to medicines Health Monitor, 2022



Source: gfa.bern, Health Monitor 2022, (N = 1200).

Access to innovations in Switzerland comes with a delay

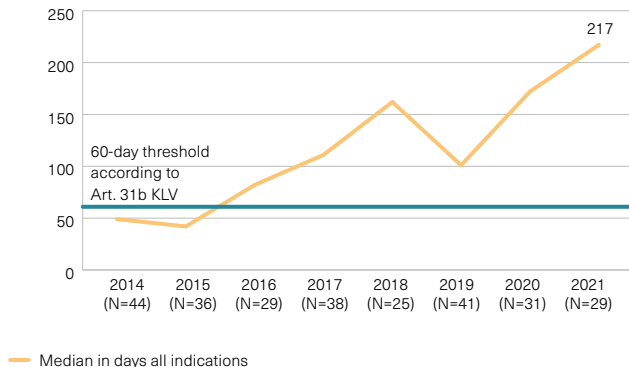
Patients in Switzerland are waiting longer and longer for access to highly innovative medicines.

The median time from marketing authorization to inclusion in the Specialities List was 217 days in 2021 instead of the 60 days provided for under Art. 31b of the Health Insurance Benefits Ordinance (HIBO).*

Around 31% of all inclusions in the Specialities List in 2021 occurred after more than 365 days (9 of 29).

* If the requirements for agreeing to the application as defined under Art. 69 Para. 4 HIBO are met before the definitive approval by Swissmedic, the FOPH usually decides within 60 days of the definitive approval.

Interval between Swissmedic approval and inclusion in SL In days, 2014–2021



Source: SL, Swissmedic. Calculations by Interpharma. New active substances and new indications 2014–2021, with preliminary approval by Swissmedic (N = 273).



Delays lead to congestion in applications

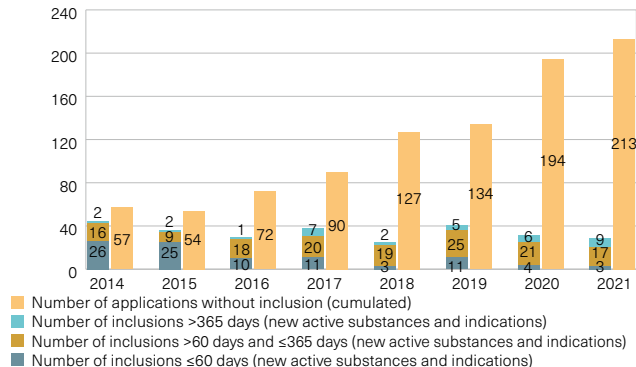
There is a structural problem in Switzerland when it comes to the question of rapid and equitable access to new and highly innovative medicines for patients.

The reason for this is that the time-proven standard system of reimbursement for medicines is increasingly reaching its limits with the emergence of novel therapeutic approaches and groundbreaking advances.

Since 2014, there has been a sharp increase in the number of medicines not yet reimbursable. In 2021, only 3 of 29 products (10%) were included in the Specialities List within 60 days as stipulated in the ordinance.

Interval between Swissmedic approval and inclusion in SL, along with cumulated non-inclusions, in days, 2014–2021

Source: SL, Swissmedic. Calculations by Interpharma. New active substances and new indications 2014–2021, with preliminary approval by Swissmedic (N = 273).



The cure rate for hepatitis C has more than doubled

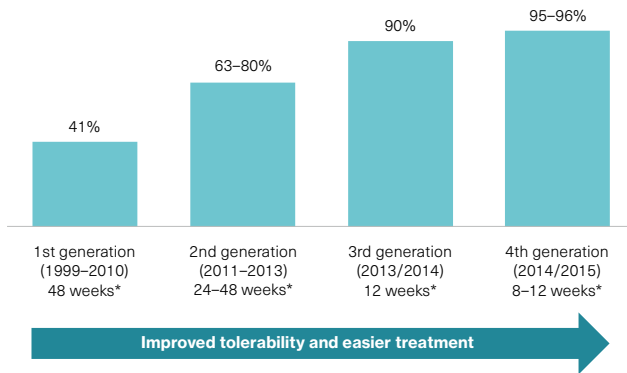
The cure rate for hepatitis C has more than doubled from about 40% with the 1st generation of medicines to more than 95% with the 4th generation.

With the new oral combination therapy, the duration of treatment is 8 to 12 weeks, which is less than a quarter of the original treatment duration.

Medical progress has led not only to a simpler treatment for patients but also to a better tolerability of the medications.

46

Chronology of hepatitis C treatment 1999–2015, cure rate



* Treatment duration

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



More and more people have access to AIDS medicines

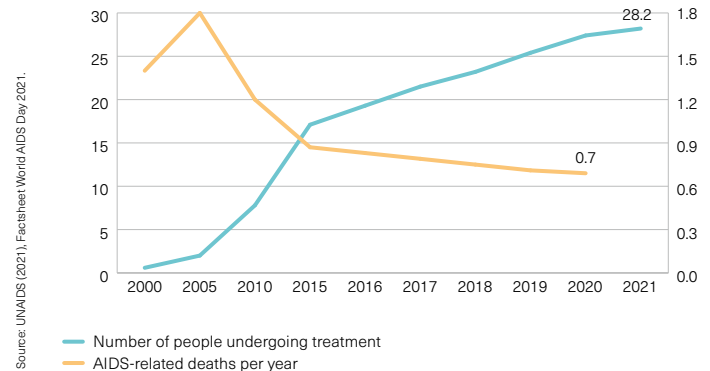
In 1983, the AIDS virus was discovered for the first time under the electron microscope. At the height of the epidemic, almost 2 million people were dying of the virus each year.

Since 2000, more and more people have had access to AIDS therapies. According to UNAIDS, the number of patients undergoing treatment worldwide has risen from 0.6 million to more than 28 million.

As a result of these successful therapies, the number of AIDS deaths worldwide has more than halved in the last 20 years. Today, antiretroviral therapies enable people infected with HIV to lead a normal life.

47

Access to HIV/AIDS drugs increased sharply In million people, 2000–2020/2021



Source: UNAIDS (2021), Factsheet World AIDS Day 2021.

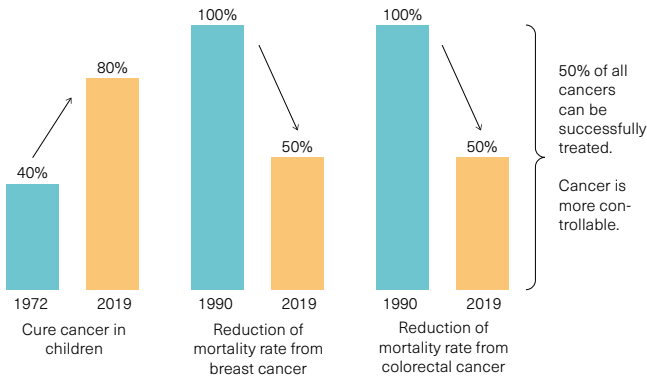
Huge improvements in the treatment of cancer

Owing to new, innovative treatment methods, the past decades have seen a huge improvement in the treatment of cancer. As many as 50% of all cancers can now be treated.

Since 1972, the chances of a cure for cancers in children have doubled from 40% to 80%. Both in breast cancer and in colon cancer, the mortality rate has fallen by around 50% in the last three decades.

Continued and intense research is needed to ensure that cancer treatment can be further improved in the future.

Chances of a cure in cancer 1972, 1990, 2019



Source: Childhood cancer research Switzerland (2021); OFS. Statistics for causes of death (2021).



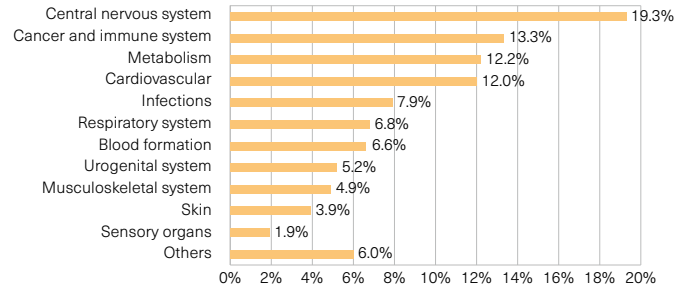
Many new active substances

Patients are benefiting from many new active substances: based on the number of approved therapies, medicines for nervous system disorders account for around 19% of these therapies, making them the largest group of new treatments. They include analgesics, antiepileptics and treatments of mental illness.

Cancer treatments and immunotherapies account for around 13% of available therapies in Switzerland.

Further major indication areas in 2021 were therapies for metabolic and cardiovascular diseases, each accounting for around 12% of the new therapies.

Percentage of approved products by indication area 2021



Source: Swissmedic (2022), Authorised human medicinal products, extended list of medicines.

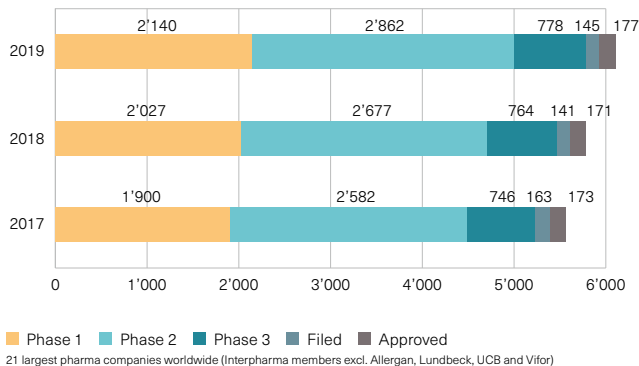
6'100 new active substances give hope to patients

In 2019, a total of 6'100 active substances were in various stages of development, which amounts to a growth of 5.6%.

The steady growth of the portfolio reflects not only medical progress but also the fact that pharmaceutical companies reinvest a lot in research and development.

New medicines are a particular focus of research for cancer therapy. But also for infectious diseases, diseases of the central nervous system and respiratory disorders.

Number of active agents in development stages close to marketing authorization, 2017–2019



Source: Ernst & Young (2020). Die größten Pharmafirmen weltweit. Analyse der wichtigsten Finanzkennzahlen der Geschäftsjahre 2017, 2018 und 2019.



Respondents are in favour of treatment for rare diseases

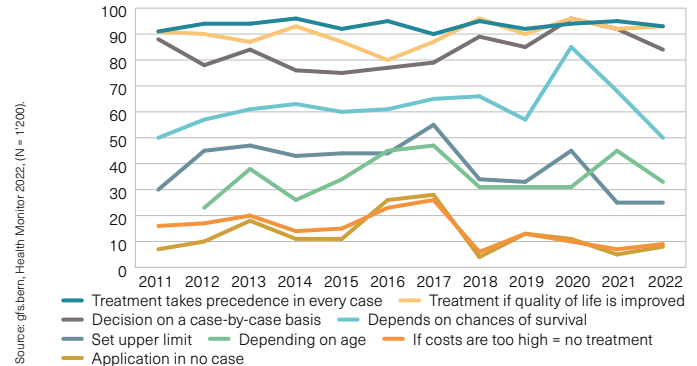
When it comes to rare diseases, most respondents want the treatment of such diseases to be covered by the basic health insurance, according to the Health Monitor.

93% believe health insurers have a duty to provide reimbursement. This percentage has remained consistently high over the years and shows the importance that Swiss people attach to therapies for rare diseases.

In 2022, only 8% of voters surveyed take the view that rare diseases should not be treated.

Trend statements on the treatment of rare diseases

In percent of respondents, percentage very much/quite agree, multiple responses possible, 2022



Increasing medicines for rare diseases

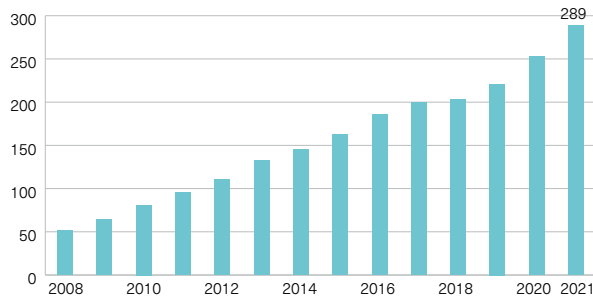
A disease is considered rare when it affects fewer than 5 out of 10'000 people. Since there are known to be 6'000 to 8'000 such diseases, the totality of all rare diseases can be compared to a widespread disease.

The number of indications with orphan drug status is continuously rising, because many pharmaceutical companies are engaged in research of rare diseases.

In 2021, there were 209 approved medicines with orphan drug status. These are used in 289 indications, e.g. to treat rare diseases of the immune or nervous system, rare metabolic disorders and also rare forms of cancer.

Number of indications with orphan drug status

Total: 209 medicines with orphan drug status, 2021



Source: Swissmedic (2022), Human medicines with orphan drug status.



More than 700 medicines for rare diseases in development

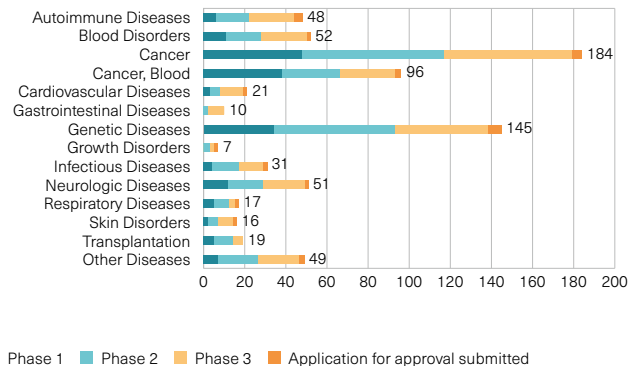
Pharmaceutical companies throughout the world continue to be engaged in intensive research on new medicines and therapies for rare diseases. Despite huge advances in recent years, many rare diseases are still not treatable.

In 2021, there were more than 700 medicines for rare diseases worldwide that were either in development or on the way to regulatory approval.

On average, the process for rare diseases – from clinical trial to approval – takes four years longer than the process for non-rare diseases. This is due, among other things, to the complex biology, the heterogeneity and the progressive nature of these diseases.

Number of medicines for rare diseases

According to development phase, 2021



Source: PhRMA (2021), 2021 Medicines in Development: Rare Diseases.

Leading in research and development



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On average, the **development of a new medicine** takes 12 years and costs 2.5 billion dollars.

42 percent of **basic research** in Switzerland is financed by the **private sector**.

Patent protection allows **reinvestments** in new drug research.

55

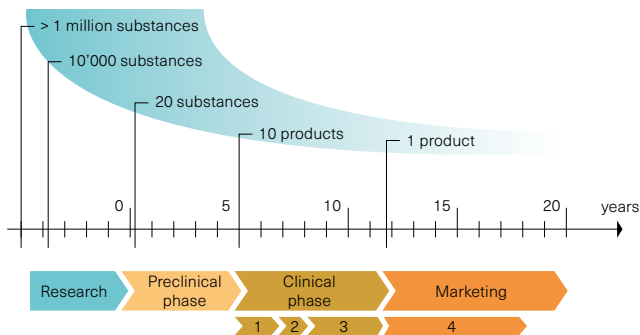
The long path from laboratory to patient

Pharmaceutical research is a high-risk undertaking: the development of a medicine takes 12 years on average, and the risk of failure is 90%.

Often unsatisfactory results or serious side effects are only identified during expensive clinical trials.

Out of 10'000 substances, 20 make it into the preclinical phase. Of these 20 substances, 10 make it into the clinical phase. Of these 10, only 1 eventually reaches the market as a finished product.

Steps in the development of a medicine



Source: Interpharma (2021).



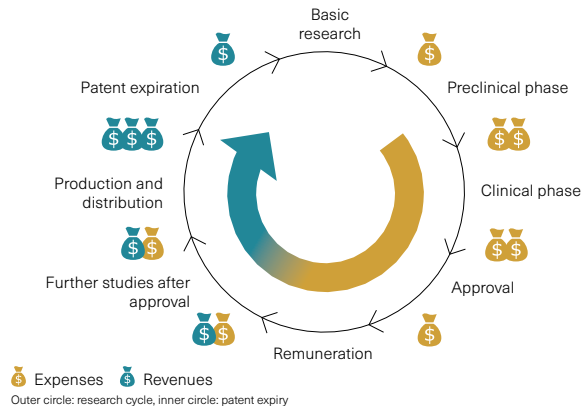
Patent protection allows reinvestments in new medicines

Many development stages and administrative hurdles have to be overcome before a medicine is ready for the market. This process is associated with high costs.

Patent protection frequently begins in the early phases of development. So the validity of a patent is often well advanced by the time the medicine reaches the market.

It is only with the reimbursement decision that medicines begin to generate income for the companies. This income must be high enough to ensure that the companies have the venture capital for research into new medicines.

Research cycle Illustration



Source: Interpharma (2021).

A new medication requires billions in investment

An average of 12 years passes before a new medicine is ready for the market.

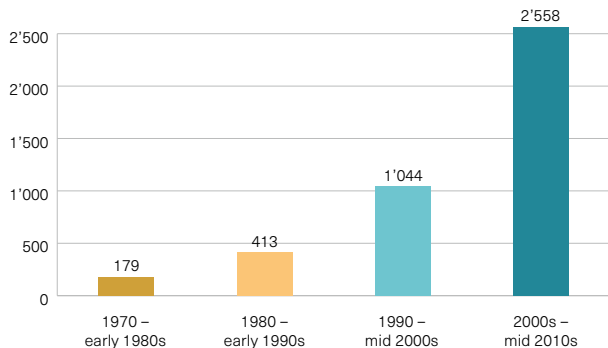
The process from research and development to market readiness costs an average of 2.5 billion dollars, making the development of a new medicine almost 15 times more expensive today than it was in the 1970s.

Investments in research and development are a high-risk business in view of the very high probability of failure.

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.

Cost of development up to market readiness

In million dollars



The pharmaceutical industry invests above-average sums in research and development

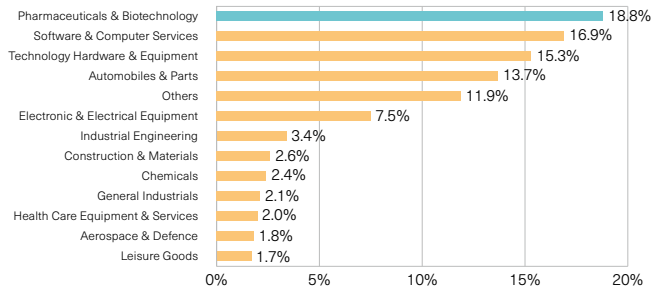
Research intensity indicates what percentage of sales flows back into research and development.

The pharmaceutical and biotech sector invests 18.8% of sales directly back into research and development of new products. This is an absolute peak value compared with other sectors.

Further innovative sectors are software/computer services (16.9%) and the automotive industry (13.7%).

Source: European Commission, The 2021 EU Industrial R&D Investment Scoreboard (2021).

Average research and development intensity 2020



Development of vaccine capacity for COVID-19

To help combat the COVID pandemic, the pharmaceutical industry managed to develop and launch a safe and highly effective COVID vaccine within just one year – thanks also to an intense collaborative effort.

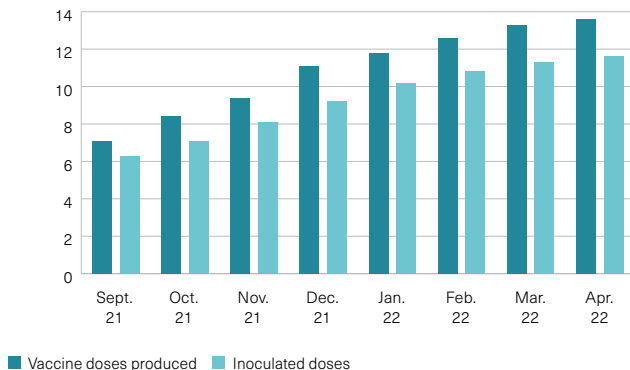
In January 2021, the volume of vaccine produced already exceeded the volume of vaccine administered. By April 2022, the number of vaccine doses produced worldwide stood at 13.6 billion.

A robust system for the protection of intellectual property was and remains the basis for the transfer of knowledge to and cooperation with selected partners, making it indispensable for the expansion of production capacity.

60

Development of vaccine capacity for COVID-19

COVID-19 vaccine doses (in bn)



Source: Aifinity (May 6, 2022), Our World in Data (May 19, 2022).



Low success rate makes the development of medicines cost-intensive

Only a few medicines or therapies make it to market. Pharmaceutical companies run a high risk of loss in the development of a new medicine.

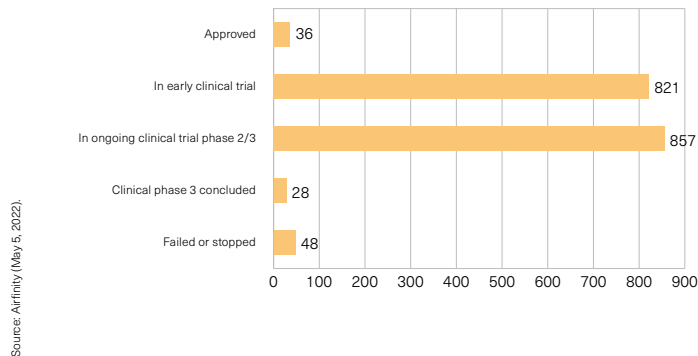
The development of COVID-19 therapeutics also showed that a large part of the efforts fail. As of May 2022, only 36 of 1'800 products (2%) worldwide had been approved.

With the success of a medicine, a company must also be able to finance research into medicines that prove unsuccessful. If this cross-subsidization is no longer possible, research into new medicines will come to an end.

61

Pipeline of treatments for COVID-19

By development phase, 2022



The private sector finances most of the research and development carried out in Switzerland

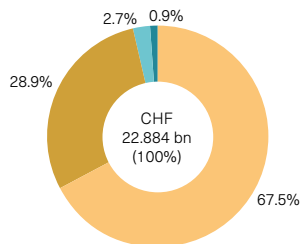
In 2019, a total of CHF 22.9bn was invested in research in Switzerland.

Of these investments, 67.5% came from the private sector. The pharmaceutical sector was the most important investor, accounting for one-third of private-sector research expenditure.

The universities are the second-largest investor in research and development in Switzerland accounting for 28.9% of research expenditure.

62

Total research and development expenditure 2019



■ Private sector
 ■ Universities
 ■ Private non-profit organization
 ■ Federal government

Source: Federal Statistical Office (2021), Research and Development (R&D) in Switzerland, 2019.



Most research and development in the private sector is financed by pharmaceutical industry

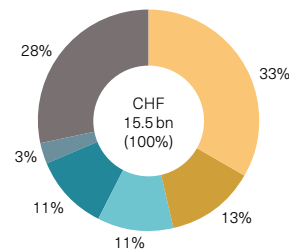
Each year, the private sector invests CHF 15.5bn in Switzerland's position as a research hub. The pharmaceutical industry is the largest private investor, accounting for 33% of investments.

The importance of pharma warrants even greater acknowledgement, because a large proportion of the labs and research institutions are also financed through external research contracts that fall under "research and development" in the sector.

Further important research industries are the ICT and machine engineering sectors. By contrast, the chemicals sector plays little role any longer, accounting for only 3% of investments in Switzerland.

63

Research and development expenditure in the private sector 2019



■ Pharma
 ■ Research and Development
 ■ ICT
 ■ Machinery
 ■ Chemicals
 ■ Rest

Source: Federal Statistical Office (2021), Research and Development (R&D) in Switzerland, 2019.

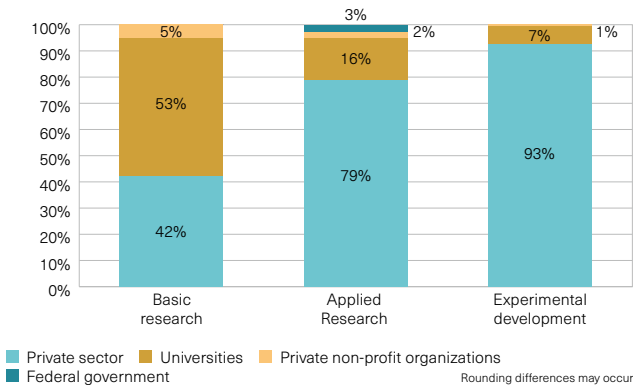
The private sector finances 42 per cent of basic research in Switzerland

Research expenditure (CHF 22.9bn) is divided between basic research, applied research and experimental development.

The private sector finances 42% of basic research in Switzerland, while 53% is funded by the universities.

In the case of applied research, the private sector is responsible for 79% of the funding. When it comes to experimental research, as much as 93% of the finance comes from the private sector.

Research expenditure in Switzerland by sector and type of research, 2019



Switzerland as a strong research hub thanks to globally successful pharmaceutical industry

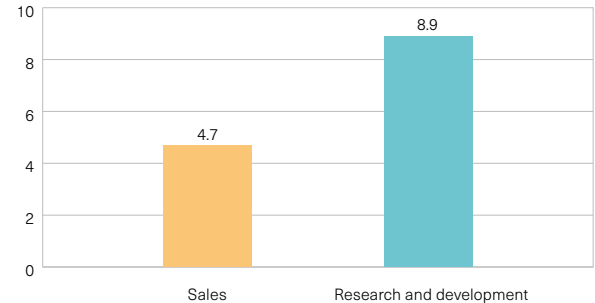
In 2021, Interpharma companies throughout Switzerland generated sales of around CHF 4.7bn and invested CHF 8.9bn in research and development in Switzerland.

The pharmaceutical sector in Switzerland thus invests twice as much in research alone as it earns in Switzerland.

These high levels of investment in Switzerland's position as a research hub are only possible because of the successful international operations of Swiss pharmaceutical companies.

Interpharma companies in Switzerland: sales and research

In CHF billions, 2021



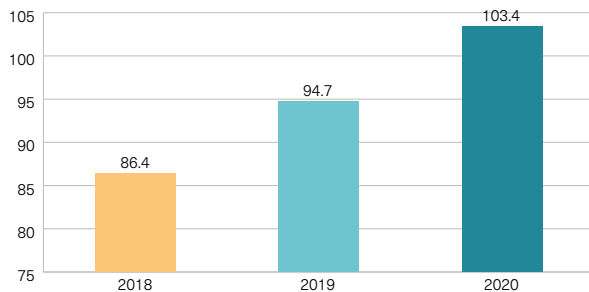
The pharmaceutical industry invests more than 100 billion euro worldwide into new medicines

In 2020, the world's 21 largest pharmaceutical companies invested around 103 billion euro in research and development.

This is a 9.2% increase in research expenditure compared to the previous year.

Along with the US, Switzerland is one of the countries with the highest research and development expenditure in the pharmaceutical sector worldwide.

Expenditure on research and development In EUR billions, 2018–2020



Source: Ernst & Young (2021). Die größten Pharmafirmen weltweit. Analyse der wichtigsten Finanzkennzahlen der Geschäftsjahre 2018, 2019 und 2020.



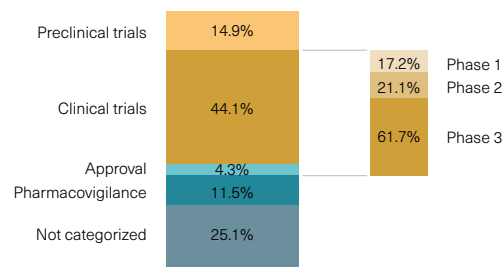
Almost half of research expenditure goes towards clinical trials

44% of pharmaceutical research spending goes towards clinical trials. In clinical trial phases 1 to 3, the efficacy and safety of the medicines for humans are tested.

Before medicines can be tested in humans, they undergo pre-clinical testing for efficacy and safety in animals. These tests are required by law to protect humans from undesirable side effects.

The aim of pharmacovigilance is to identify, assess and understand adverse effects following market launch so that appropriate action can be taken to minimize risks.

Distribution of research expenditure by operations 2020



Source: PhRMA (2021). Annual Membership survey 2021.

Challenges of pharmaceutical research are increasing

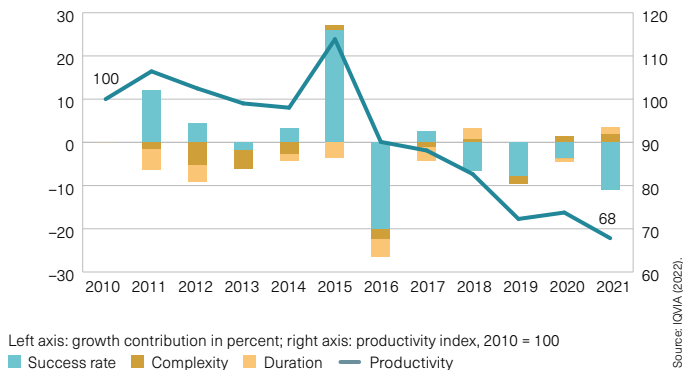
There are more than 6'000 drug candidates in clinical development worldwide. That is an increase of almost 70% compared with 2016, despite numerous challenges.

Although the complexity and duration of clinical trials have decreased somewhat, productivity in clinical development has continued to fall. This is due to the declining success rate.

Productivity in clinical development has shown an overall decline over the past 10 years, partly because research scientists are investigating ever more complex areas of rare diseases.

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Productivity index for clinical development 2010–2021



Clinical trials allow patients to gain early access to innovative medicines

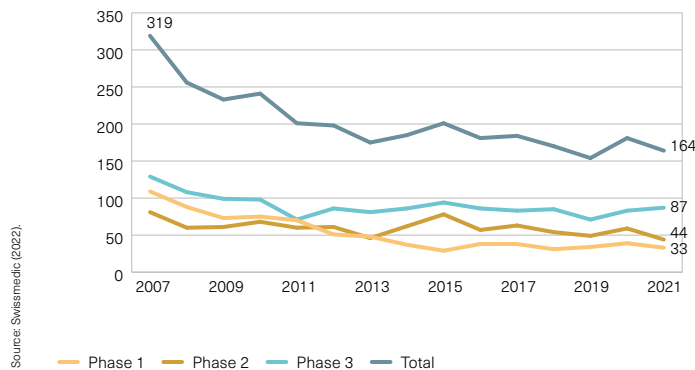
Switzerland has a long tradition in clinical research. In 2021, 164 clinical trials were approved in Switzerland by Swissmedic.

But the framework conditions in Switzerland are not ideal for clinical research. This is reflected in a declining number of clinical trials.

An international comparison shows that there has been an increase in the proportion of Asian countries involved in global clinical trials over recent years, while there has been a slight decline in the proportion of European countries.

69

Clinical drug trials definitively approved by Swissmedic 2007–2021



Number of laboratory animals in the industry has been declining for years

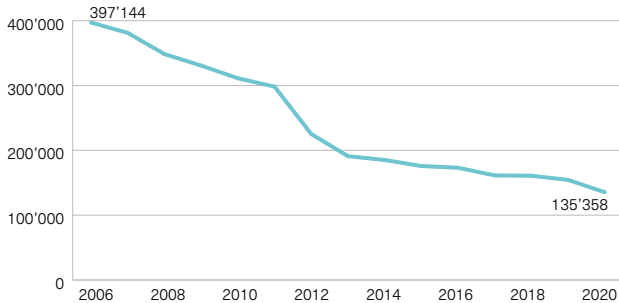
With the 3Rs principles, as many animal experiments as possible should be replaced, the number of laboratory animals reduced and stresses and constraints kept to a minimum (refined).

The number of laboratory animals in the industry has been reduced from almost 400'000 (2006) to around 135'000 (2020) thanks to the consistent application of the 3Rs.

To ensure that medicines are effective and safe in humans, research with animals is essential for the development of new medicines. Animal experiments may only be carried out in Switzerland if no alternatives are available.

70

Number of laboratory animals in the industry in Switzerland 2006–2020



Source: Federal Food Safety and Veterinary Office (FSVO) (2021), Animal experiment statistics.



Switzerland is a leader in the filing of patent applications

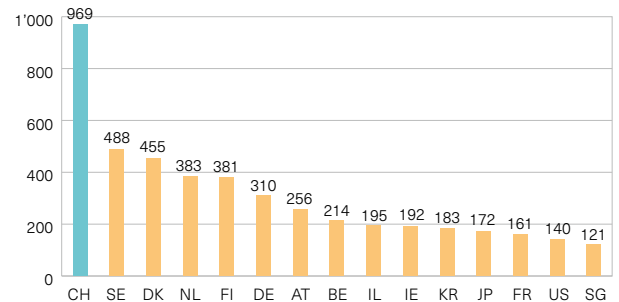
In 2020, Swiss companies filed 8'112 patent applications. In relation to the size of the population, that is an absolute top figure at almost 1'000 patent applications per million inhabitants.

In the international ranking, second-placed Sweden reaches 488 patent applications per million inhabitants, followed by Denmark in third place with 455.

For the pharmaceutical industry, patents are an essential prerequisite to ensure that money can continue to be reinvested in research and development.

71

Patent applications Per million inhabitants, 2020



Source: European Patent Office (EPO), Patent Index 2020.

Switzerland lags behind when it comes to digitalization

The Open Data Institute analyses current policy and implementation for the secondary use of health data in 29 countries.

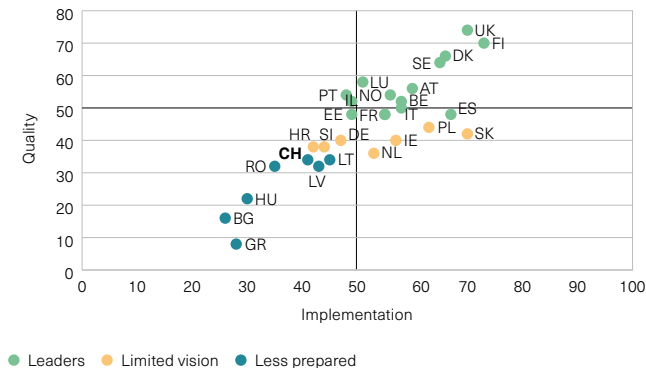
The leading group of countries include, for example, the United Kingdom, Finland, Denmark and Sweden. Included in the weakest group, along with Bulgaria, Greece, Hungary and Romania, is also Switzerland.

The secondary use of health data has great potential, including possibilities for the optimization of services, the reduction of health inequalities and personalized healthcare. It is an important driver of innovation.

72

Secondary use of health data in Europe

Ranking of countries on policy, 2021



Source: Open Data Institute 2021, Secondary Use of Health Data in Europe: Policy Landscape, Insights and Opportunities.



Great potential with research in the digital domain

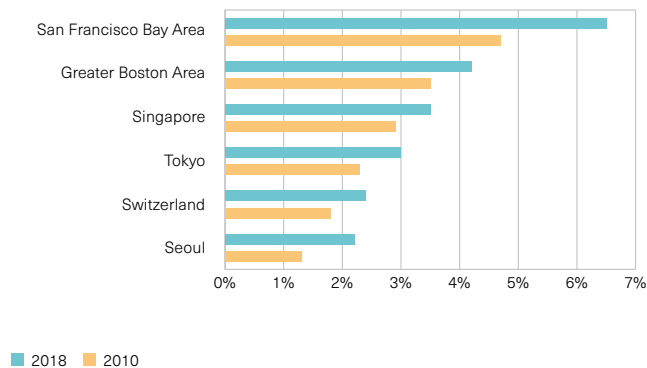
An analysis of global pharmaceutical patents with digitalization elements conducted by BAK Economics shows that the research location of Switzerland is dependent on other sites when it comes to digitalization.

The development of digital pharmaceutical research is particularly dynamic in the San Francisco region. The proportion of patents with digitalization elements is almost three times as high there as in Switzerland.

To ensure that Switzerland remains attractive as a research hub for pharmaceutical companies in the future, better framework conditions are needed for the use of digital technologies within research and development.

73

International comparison of patents with digitalization elements, proportion of biotech/pharmaceutical patents with digitalization elements



Source: BAK Economics, Digitalization in the pharma sector (2021).

Swiss universities benefit from patent agreements

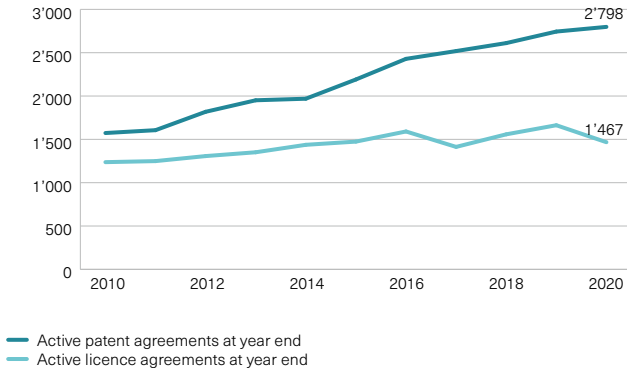
Research cooperation between private and public sector institutions is the key element for innovation. Both academia and the private sector benefit from the sharing of knowledge, the use of synergies and access to talents.

According to the swiTTreport 2020, there were as many as 3'877 such research cooperation projects in Switzerland. Almost two-thirds relate to patent agreements.

When companies fall back on existing patents in research and development, they pay licence fees. Because the holders of patents or licences are often universities, invested money flows back into the public purse through such agreements.

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Aggregated data on research at Swiss universities and research institutes, 2020



Source: swiTTreport 2021 (2021).



How the innovation cycle of pharma works

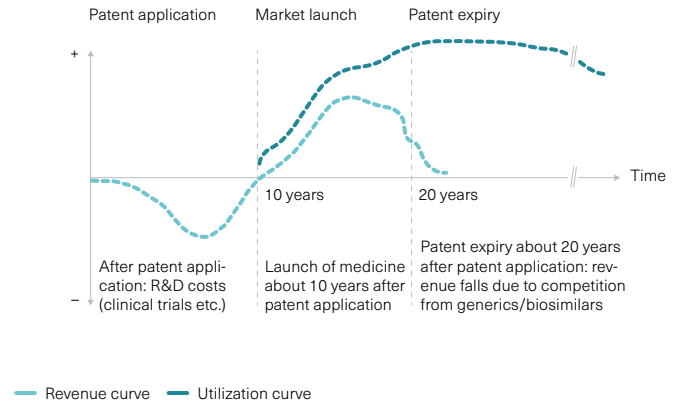
The development of a new medicine comes at a high cost, not least as a result of clinical trials when the patent is already registered. On average, a medicine is not launched onto the market until 10 years after the patent is registered. Only then can the company begin to recoup its costs.

But when patent protection expires after a further 10 years, the price falls massively particularly as a result of generics. Nevertheless patients continue to benefit from former groundbreaking therapies for years after the patent has expired.

This price erosion after patent expiration contributes to further savings for the healthcare system.

75

Life cycle innovation model



Source: Interpharma (2022).

A concrete example of the innovation cycle

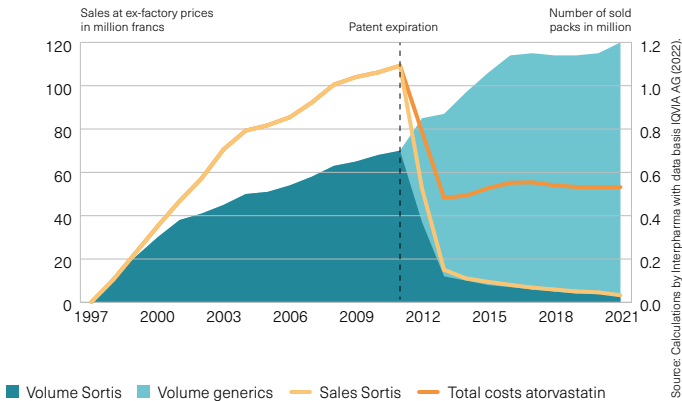
The cholesterol-lowering agent Sortis was an innovative blockbuster in 2011 and generated sales of more than 100 million francs per year (ex-factory price), the top-selling product in Switzerland.

The patent for Sortis expired in 2012, and prices have since fallen sharply. To date, the costs for atorvastatin have fallen by half.

Still today, more patients are benefiting from this previous innovation in the form of numerous generics with the active ingredient atorvastatin.

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Volumes and sales of Sortis (atorvastatin) and generics after patent expiry, 1997–2021



Correlation between patent expiration and sales

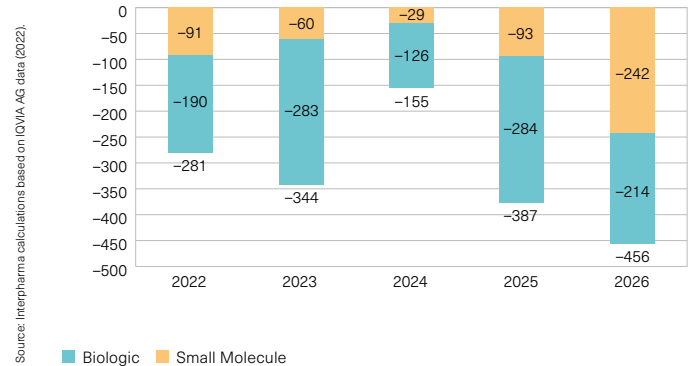
Pharmaceutical research is associated with high risks and costs. Up to 98% of research projects fail. In the event of success, however, these risks and costs are rewarded with patent protection.

Rewarding the use of a new and groundbreaking therapy during patent protection is thus a central element in the basic health-care of tomorrow.

Patent expirations alone will reduce the sales revenues of chemical-pharmaceutical and biological products by more than 1.6 billion francs overall in the coming 5 years. Chemical-pharmaceutical products will account for 68% of these sales losses.

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Impact of patent expiration on sales 2022–2026



Strong economic policy framework



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In 2021, the pharmaceutical sector exported goods worth **CHF 109 bn.** Of these exports, **48 percent** went to the **EU.**

61 percent of employees in the pharmaceutical industry have a **university degree.**

The proportion of female **managers** in the pharmaceutical sector is **above average.**

79

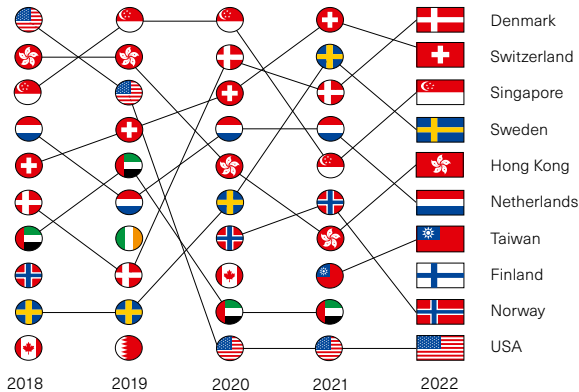
Competition between locations is constantly growing

Switzerland was ranked at the top of the IMD World Competitiveness Ranking in 2021. However, in 2022, Switzerland has to give way to Denmark and is closely followed by Singapore.

Optimal framework conditions are essential for a successful and competitive business location.

The attractiveness of Switzerland is under pressure from many sides: political moves and initiatives hostile to business, the looming erosion of the bilateral agreements with the EU and rising costs of bureaucracy and regulation are putting the competitiveness of the country at risk.

World Competitiveness Ranking 2018–2022



Source: IMD World Competitiveness Ranking (2022).



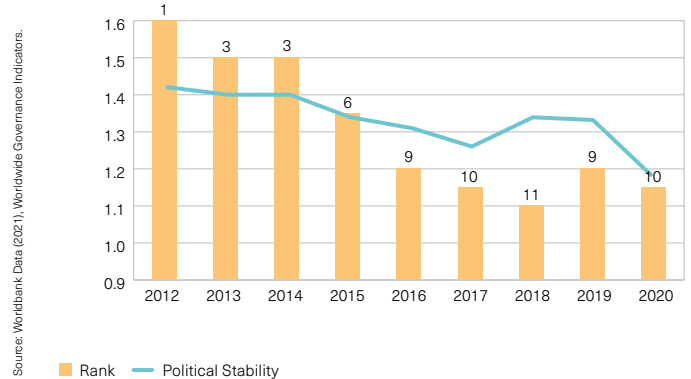
Investments in research and development require planning and legal certainty

Political stability and legal certainty are traditionally important strengths of Switzerland as a business location. In recent years, however, Switzerland has lost ground to other countries, falling to 10th place in 2020, according to World Bank data.

Innovative sectors with a long investment horizon are particularly dependent on planning and legal certainty.

For new companies settling in a country or investments in a location, political stability is an important factor for the choice of a location.

Political Stability Index 2012–2020



Source: Worldbank Data (2021), Worldwide Governance Indicators.

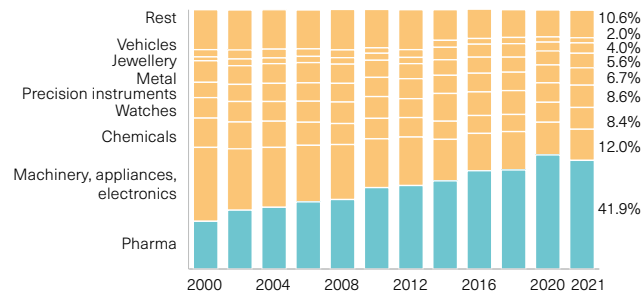
The pharmaceutical sector is Switzerland's most important export industry

With exports worth CHF 109bn, accounting for 42% of all exports, the pharmaceutical sector is Switzerland's most important export industry.

In the last 20 years the pharmaceutical sector has more than doubled its share of the country's exports.

The pharmaceutical industry thus exports as much as the strong MEM sector, the watchmaking industry and the chemicals sector together.

Nominal exports in selected industries as percentage of total exports, 2000–2021



Source: Federal Customs Administration (2022).



Europe is the most important market for Switzerland's pharmaceutical industry's

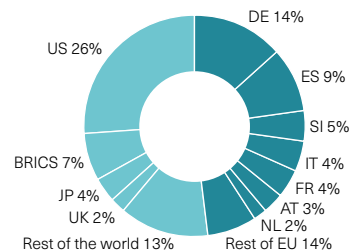
In 2021, around 48% of Switzerland's pharmaceutical exports went to the European Union. This makes the EU the most important market for pharmaceutical products.

The US accounts for 26% of exports, making it the single most important country. In the last 20 years, exports to the US have more than doubled from 12.8% to 26%.

After the US, Germany is the second-most important country, accounting for around 14% of Switzerland's pharma exports.

Growth of pharma exports

By destination, in percent; 2021



■ EU Member States (48%) ■ States or markets outside the EU (52%)

Source: Federal Customs Administration (2022).

Pharmaceutical sector is dependent on highly qualified personnel

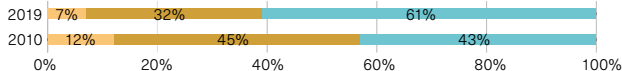
In 2019, the proportion of employees in Switzerland with a university degree was 40% overall. The demand for highly qualified personnel has been steadily increasing since 2010.

The pharmaceutical industry is distinguished by a very high and markedly above-average research intensity. In the pharmaceutical industry, 61% of employees have a university degree.

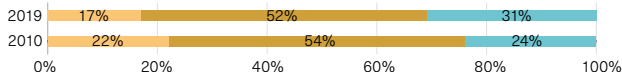
The Swiss job market is too small in relation to the demand for highly qualified employees. For this reason, access to qualified specialists from third countries and the EU is of utmost importance.

Qualification structure 2010, 2019

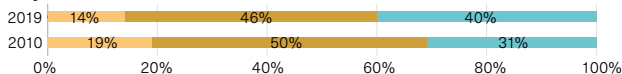
Pharmaceutical industry



Rest of industry



Economy as a whole



Low Medium High

The qualification level is measured on the basis of educational attainment (low = secondary level 1, medium = secondary level 2, high = tertiary level).

Source: Bak Economics (2021), The Importance of the Pharmaceutical Industry for Switzerland.



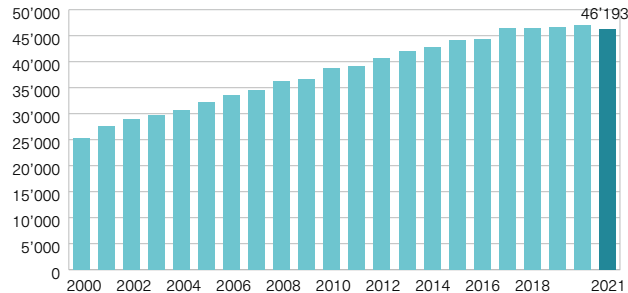
Steady increase in the number of employees in the pharmaceutical sector over 20 years

Since 2000, the number of employees in the pharmaceutical industry overall has increased by around 21'000 to more than 46'000.

With the growth of employment over the last two decades, the relevance of pharmaceutical companies for the job market has also increased. Almost one out of every fifteen jobs in industry is provided by the pharmaceutical sector.

In 2021, employment in the pharmaceutical industry declined slightly for the first time in more than 20 years.

Number of people employed in the pharmaceutical industry In persons, 2000–2021



Source: Federal Statistical Office (2022).

The proportion of female managers in the pharmaceutical sector is above the average

Research-based pharmaceutical companies in Switzerland have been committed to diversity and gender equality for many years.

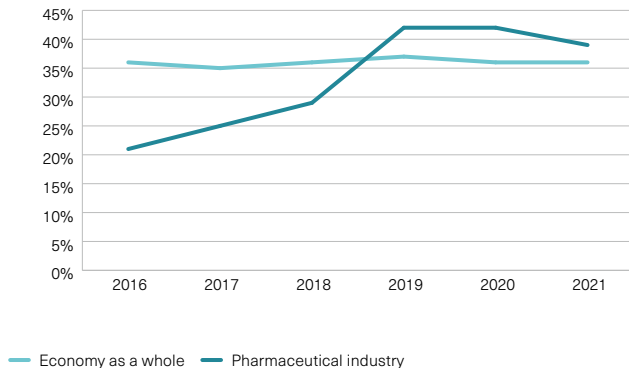
When it comes to the proportion of female managers or the proportion of women overall, the pharmaceutical sector sets an example for Swiss industry.

While the proportion of female managers in the economy as a whole stood at about 36% in 2020, it was much higher in the pharmaceutical industry at 42%.

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Percentage of female managers in the pharma sector vs economy as a whole

Annual average values, in percent; 2016–2020



Source: Federal Statistical Office (2021), Swiss Labour Force Survey (SLFS).



Switzerland is dependent on the free movement of persons

Each day, more than 350'000 people commute across the border from neighbouring countries to work in Switzerland. Without the agreement with the EU on the free movement of persons, Switzerland's economy would no longer run smoothly.

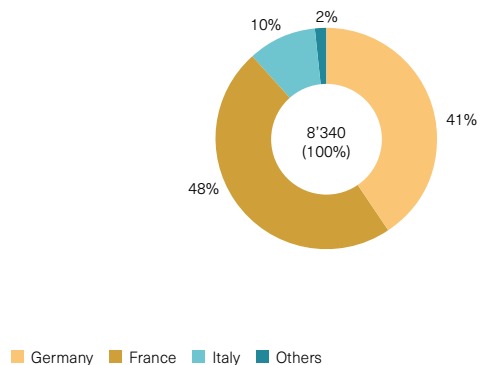
The pharmaceutical industry is particularly dependent on cross-border commuters. Around 8'300 cross-border commuters are employed in the industry, which means that one in five employees in the pharmaceutical sector is a cross-border commuter.

Regions such as Basel are especially reliant on a functioning movement of persons across borders in view of its geographic location and historic links with the border regions.

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Cross-border commuters in the pharmaceutical sector

By country of origin, 2021



Source: Federal Statistical Office (2022).

The pharmaceutical sector is the engine of Switzerland's economy

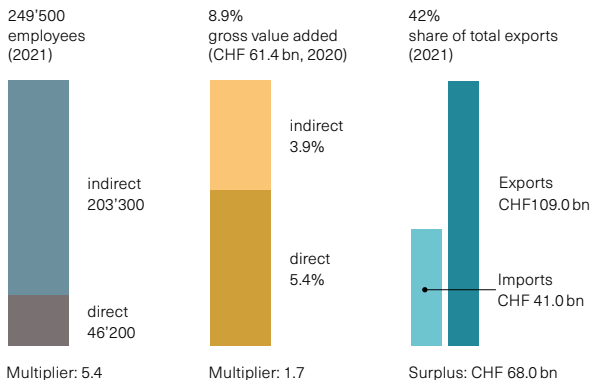
In 2020, the pharmaceutical sector employed around 46'200 people in Switzerland. Within its activities, the industry also procures services and products such as machinery, chemical substances, cleaning and security personnel, insurance services and energy, thereby providing for an additional 203'000 jobs in other sectors.

5.4% of Switzerland's gross value added is generated by the pharmaceutical sector. This rises to 8.9% when indirect effects are taken into account.

The trade surplus of the pharmaceutical sector amounts to CHF 68 bn, making the pharmaceutical industry the driving force behind Switzerland's position as an industry hub.

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Employees, gross value added and share of total exports of the pharmaceutical industry



Source: BAK Economics (2021), The Importance of the Pharmaceutical Industry for Switzerland; Federal Statistical Office (2022); Federal Customs Administration (2022).

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