

### HEALTH PANORAMA 2023

The most important facts and figures relating to Switzerland's healthcare and pharmaceutical landscape

# The research-based pharmaceutical industry in Switzerland



The member companies of Interpharma employ nearly **40'000 staff members at 51 sites** throughout Switzerland.

Interactive map



### Here's to another 90 years of innovation

### Dear Reader,

Innovation and research are in our blood. We are convinced that the success story of Switzerland as a pharmaceutical hub will continue, provided that innovation and progress remain possible. Even in view of increasing challenges, Switzerland's answer should be. We need innovation-friendly framework conditions to lay the foundations for further research successes, attractive jobs and a sustainably funded healthcare system that offers patients reliable, superb-quality care.

Interpharma has been committed to this undertaking for 90 years now. Our member companies work tirelessly to make a lasting improvement in patients' lives. You will find quite a few impressive examples in this collection.

In 75 charts, Health Panorama gives you a compact overview of the **key facts and figures relating to the healthcare system, the pharmaceutical market and Switzerland as a pharmaceutical hub.** You will also find key facts and figures online at www.datacenter.interpharma.ch, and can order this and other exciting publications or download them in PDF form at www.interpharma.ch.

We hope that we can offer you some exciting food for thought and look forward to any feedback we receive from you.

Dr. René Buholzer

CEO and Delegate of the Board

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# The Swiss healthcare system



Following the decline caused by COVID-19, **life expectancy** increased again in 2021.

Drugs account for 10.6 percent of healthcare costs – which is lower than previously thought.

Since the HIA was introduced, the drugs price index has **fallen** by **45 percent.** 

### Life expectancy in Switzerland recovers after COVID-19

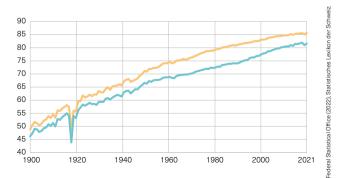
Life expectancy in Switzerland has almost doubled in the last 100 years.

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

Following the decline caused by COVID-19, life expectancy increased again in 2021. For men (81.6 years), it almost returned to the pre-pandemic level, while it reached a new high for women (85.7 years).

Mean life expectancy at birth

In years, 1900-2021



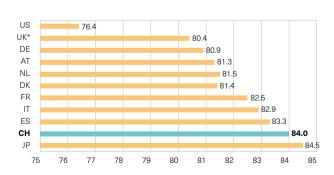
### Switzerland has one of the highest life expectancies in the world

At an average of 84 years for the general population, Switzerland had the second highest life expectancy in the world in 2021.

According to the OECD, only the Japanese live longer. The (estimated) mean life expectancy in Japan is 84.5 years.

Switzerland owes its leading position to the high-quality healthcare system that is accessible to the entire population and a high quality of life.

### **Mean life expectancy at birth in international comparison** In years, 2021



\* Data from 2020.

(2023), OECD Health Statistics 20

Women - Men

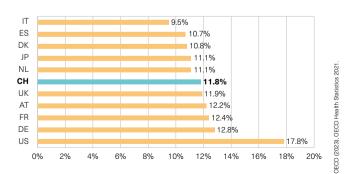
# Swiss healthcare expenditure is within the range of neighbouring countries

Healthcare spending as a percentage of gross domestic product (GDP) is a reflection of how much of its overall economic output a country spends on health goods and services and invests in healthcare infrastructure.

In 2021, there was a marked increase in OECD countries' average healthcare spending to 10.4% of GDP (2020: 9.7%).

An international comparison puts Switzerland in sixth place behind the USA, Germany, France, Canada and the United Kingdom with a percentage of 11.8%.

International comparison of healthcare expenditure as a percentage of GDP, in percent, 2021



## Switzerland has a high-quality healthcare system

Countries with a high healthcare spending to GDP ratio tend to show higher life expectancy.

When compared internationally, Switzerland has both a high level of healthcare spending as a percentage of GDP and a particularly high life expectancy.

By investing in their health, people in Switzerland live significantly longer and better lives.

Life expectancy in relation to the share of health expenditure in gross domestic product, 2021



8

9

(2023), OECD

# Diseases of the cardiovascular system and cancer are the most common causes of death

In 2021, 71'192 deaths were registered in Switzerland. For women, cardiovascular diseases were the most common cause of death (29.2%). The leading cause of death in men was tumors (26.4%).

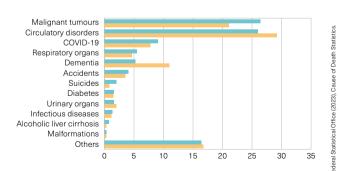
The second most common cause of death in women was tumours (21.1%), whereas in men it was cardiovascular disease (26%).

COVID-19 was the third most common cause of death in men in 2021 (women: 7.8%, men: 9%). Women were twice as likely to die of dementia (11%) than men (5.2%).

### Most common causes of death by gender

Deaths 2021: 71'192

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

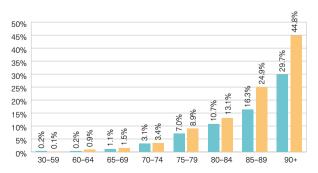
In 2022, estimates suggested that around 150'000 people were living with Alzheimer's or another form of dementia in Switzerland. Approximately 32'200 new cases are recorded each year.

Around 45% of women over the age of 90 suffer from dementia. In men, dementia affects roughly 30% of those 90 and above.

Between 1998 and 2021, there were 198 unsuccessful attempts to develop an Alzheimer's drug. Pharmaceutical companies around the world are still researching effective treatments.

### **Number of dementia patients**

Per age, 2022



Men Women

Men Women

### Cancers of the digestive tract are the most common cause of death

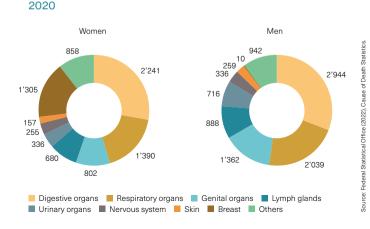
In 2020, 17'507 people in total died of cancer. More men (9'496) died of cancer than women (8'011).

Most deaths from cancer are due to cancers of the digestive tract in both men and women. Cancer of the respiratory organs comes in at second place.

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

### Deaths by type of tumour

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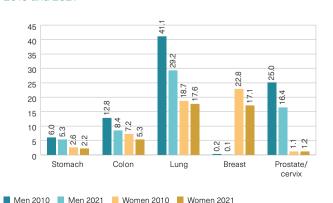
### Cancer mortality rates are also falling thanks to medical advances

The cancer mortality rate fell in both men (–30%) and women (–17%) from 2010 to 2021 – not least due to medical advances and the pharmaceutical industry's research into oncology.

Between 2010 and 2021, colon cancer mortality dropped by around 34% in men and by 26% in women. Lung cancer mortality in men likewise saw a sharp decline, but only fell slightly in women.

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

### **Development of cancer mortality rate per 100'000 inhabitants** 2010 and 2021



e: Federal Statistical Office (2023), Cause of Death Statistics.

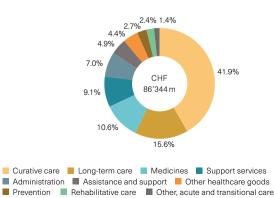
### Drugs account for less than 11 out of every CHF 100 spent on healthcare

Healthcare spending in Switzerland totalled CHF 86.3 billion in 2021. This corresponds to 5.9% growth, putting it above the trend encountered in previous years.

Curative care and long-term care account for more than half of total healthcare costs.

Due to the data revision carried out by the Federal Statistical Office (FSO) and refined methodology, drugs' cost block is now around one percentage point lower than previously thought. At CHF 9.1 billion, drugs account for 10.6% of healthcare spending. In other words, for every CHF 100 spent on healthcare, less than CHF 11 are spent on drugs.

### Breakdown of healthcare costs by services provided Total costs in 2021



al Office (2023), Kosten und Finanzierung des Gesundheitswesens.

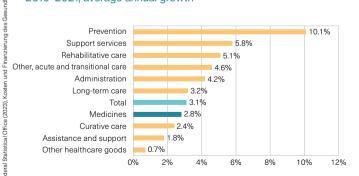
# The cost of drugs has increased at a below-average rate over the past 12 years

In the period from 2010 to 2021, total healthcare costs increased by 3.1% per year. The greatest growth was recorded in prevention (including preventing communicable diseases and educating the population), which rose by 10.1% on average each year.

At 2.8%, the rise in spending on drugs is below average compared to the overall healthcare costs.

The largest contribution to growth in absolute terms comes from curative and long-term care.

### Cost development according to services provided 2010–2021, average annual growth



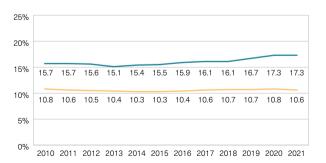
### Drugs as a percentage of healthcare costs are lower than previously thought

According to a data revision carried out by the FSO, total drug expenditure (share 10.6%) is approximately CHF 1 billion lower than previously assumed, while OKP drug expenditure (share 17.3%) is even CHF 1.5 billion lower.

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

The share of medicines as a proportion of healthcare costs has remained stable for more than 10 years.

### Cost of medicines as a proportion of healthcare and basic health insurance costs, 2010–2021



 Medicines (pharmacies, self-dispensing doctors, hospitals) as a percentage of basic health insurance costs
 Medicines (pharmacies, drugstores, self-dispensing doctors, hospitals) as a percentage of healthcare costs

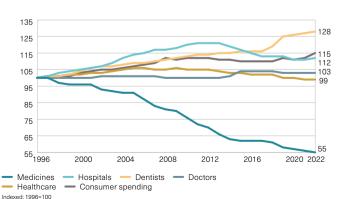
### Since the HIA was introduced, the drugs price index has fallen by 45 percent

The drugs price index is the only price index in the healthcare system that has been falling continuously since the Health Insurance Act (HIA) was introduced in 1996.

At 55 points, the price index in 2022 was 45% lower than it was in 1996, whereas the likes of the hospital price index was around 12% higher in 2022 than it was in 1996.

The prices of reimbursable medicinal products are reviewed every three years and reduced where necessary, generating recurring annual savings of more than CHF 1.2 billion in the healthcare system.

### **Price indexes in Switzerland's healthcare system** 1996–2022



Statistical Office (2023), National Consumer Price Inde

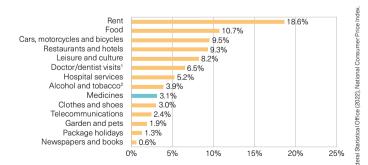
### Swiss households spend comparatively little on drugs

Around one fifth of household spending goes towards rent, making it one of private households' largest expenditure items by far.

Furthermore, Swiss households spend just under 11% of their budget on food, 9.3% on eating out and staying in hotels, and 9.5% on cars, motorcycles and bicycles.

People in Switzerland spend more of their income on alcohol and tobacco (3.9% in total) than they do on drugs (3.1%).

### **Expenditure structure of Swiss households, 2023**



<sup>&</sup>lt;sup>1</sup> Outpatient services (excluding hospital outpatients), excluding medicines

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### Social insurances bear 45 percent of healthcare costs

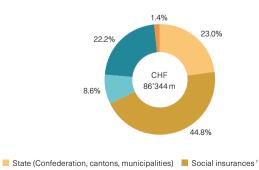
Of the healthcare costs incurred in 2021, amounting to CHF 86.3 billion 44.8% were paid by social insurance schemes. Social insurances include the OKP, accounting for 35.7% (CHF 30.1 billion).

In the present system, outpatient care is covered by health insurers, while inpatient care is covered by the cantons (55%) and the health insurers (45%).

EFAS (the proposed bill for unified financing of outpatient and inpatient services) calls for this system to be abolished and funding to be unified in order to reduce disincentives in the system.

### Financing of the healthcare system

Total costs 2021: CHF 86'344 million



■ State (Confederation, cantons, municipalities) ■ Social insurances
■ Private funding ■ Self-payments² ■ Funding regime unknown
¹ Including compulsory basic health insurance. AHV IV.

<sup>2</sup> Cost sharing via social and private insurance or pure self-payment without cost sharing.

<sup>&</sup>lt;sup>2</sup> Incl. alcohol in restaurants and hotels

### **Medication market**



The prices of patent-protected original drugs are at European levels. The **price difference** is only **5 percent.** 

The drug price reviews result in recurring annual **savings** of more than **CHF 1.2 billion**.

The **generics market** has more than **tripled** in value since 2005.

Growth 2022

### **Increasing demand for medical care**

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

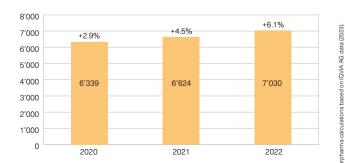
In 2022, the medicines market in Switzerland achieved a volume of CHF 7 billion in terms of value at ex-factory prices, +6.1% compared to the previous year.

Market growth is driven in particular by the increasing need for medical care and by demographic developments. New and innovative therapies made a below-average contribution to growth in 2022.

### Development of market value at factory gate prices

In CHF million

22



# irce: Interpharma calculations based on IQVIA AG data (2023).

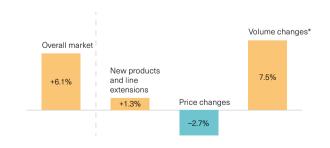
### Price cuts dampen growth in demand

The Swiss pharmaceutical market grew by 6.1% in 2022. Due to demographic development, the demand for drugs is shooting up significantly (contribution to growth: +7.5%).

Regular drug price reviews result in recurring annual savings of more than CHF 1.2 billion and dampened the overall market by -2.7% in 2022. The pharmaceutical industry is thus making a major contribution to containing the increase in healthcare costs.

New products – designed to treat the likes of cancer or autoimmune diseases – made only a weak contribution to growth (+1,3%).

### Development of individual components at ex-factory prices



<sup>\*</sup> Volume changes: percentage of revenue growth resulting from increased sales of products launched on the market before 2021.

### One quarter of drug prices go to distribution

For a drug priced at CHF 100, around CHF 72.5 go to the manufacturers and CHF 27.5 to retailers, doctors, pharmacists value-added tax – to the Federal Government.

At 72.5%, the largest component of the drug price is the ex-factory price – i.e., the price that pharmaceutical companies receive for research, development and production.

Alongside the ex-factory price, the trade price – consisting of a price-related and a pack-related surcharge – needs to be taken into account. Additional price components include the service-based charge for pharmacies and value-added tax.

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### Composition of drug prices

2022



Pharma (FAP)
 ■ Trade
 ■ Service-based charges (excl. for pharmacies)
 ■ Federal government (VAT 2.5%)

The trade includes both a price-related surcharge in percent of the ex-factory price (FAP) and a pack-related surcharge in CHF depending on the level of the FAP.

### Cost savings of CHF 1.2 billion through price reductions

In the FOPH's (Federal Office of Public Health) price reviews, medicinal products are split into three groups, one of which is reviewed every year with respect to the efficacy, suitability and cost-effectiveness of the products in that group.

Between 2017 and 2022, the prices of around 2'400 medicinal products were reduced by 14% on average.

The reviews result in recurring annual savings of more than CHF 1.2 billion. The pharmaceutical industry is the only player in the Swiss healthcare sector that makes a significant contribution to cost containment through institutionalized price reviews.

### Savings through triennial price reductions by the FOPH

	Number of products with price reduction	Average price reduction
2017	436	-17.8%
2018	477	-16.4%
2019	435	-16.3%
2020	375	-11.1%
2021	378	-10.3%
2022*	300	-10.0%

\* Expected values.

### The price level in Switzerland is generally above average

Compared to the price level indices of other economically comparable countries, Swiss prices (as of 2021) are generally above average.

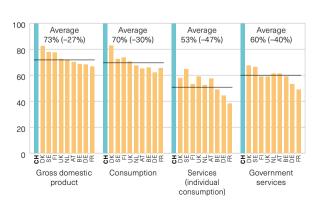
The gross domestic product (GDP) highlights the difference in disposable income in particular. Measured in terms of GDP, Switzerland is 27% above the average of the nine IRP reference countries.

Both public services and services for individual consumption are, on average, almost twice as expensive in Switzerland compared to other countries in Europe.

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### Comparative price level indices

Switzerland=100, 2021



# Original drugs: international price difference only 5 percent and still decreasing

In 2022, the 250 top-selling patent-protected original preparations were on average 5% cheaper in other comparable countries than in Switzerland. The price difference decreased yet again compared to the previous year.

Due to the FOPH's price reviews, prices for original drugs in Switzerland are minimally higher than they are abroad. Patentprotected drugs are cheaper in Switzerland than they are in Denmark or the United Kingdom.

Consumer spending in Switzerland is on average 30% more expensive than in the APV comparison countries.

### **Top 250 original products, basket of 9 countries** Exchange rate CHF/EUR: 1:08\*, prices of April 2023



<sup>\*</sup>Exchange rate applied by the FOPH when reviewing

# Patent-protected products still make up the bulk of the medication market

Patent-protected drugs make up the largest proportion of Switzerland's pharmaceutical market at 50%.

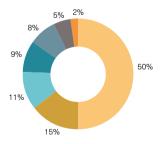
The generics-eligible market – consisting of off-patent original preparations with generic competition and generics – has a market share of around 26%.

In 2022, generics accounted for a greater share of the reimbursable drugs market than off-patent original products.

### Composition of the market for covered medicines

By sales at ex-factory prices, 2022

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■ Patent-protected products ■ Generics ■ Original (chemical products 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

### Pharmacies remain most important distribution channel for medicines

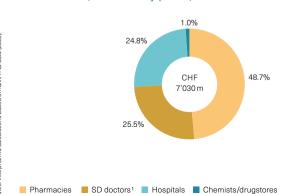
Pharmacies continue to be the most important distribution channel for pharmaceuticals, with 66% of all drug packages crossing the counter there. In terms of value, pharmacy sales account for just under 49% of total sales.

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

Drugstores account for only a small proportion of drug sales, with a value share of 1%.

### Pharmaceutical outlets by sales

In CHF million, at ex-factory prices, MAT March 2023



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

### The generics market has more than tripled in value since 2005

Generics are identical copies of off-patent original preparations based on synthetic active ingredients.

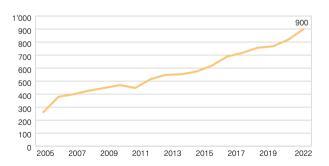
Reimbursable generics achieved a value-based volume of CHF 900 million in 2022. This represents an increase of around 10% compared with the previous year.

The value of the reimbursable generics market has more than tripled in the last 17 years.

### Generics market

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Reimbursable, in CHF million, at ex-factory prices, 2005–2022



### Rising level of substitution in the off-patent market

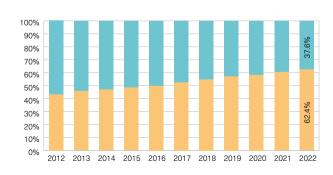
The level of substitution with generics in the off-patent market reflects the proportion of generics that are sold in place of original products.

Measured by the number of tablets, generics in Switzerland were dispensed in more than 62 out of 100 cases in which generics were available in 2022.

The level of substitution with generics in the off-patent market has steadily increased since 2012. Compared to the previous year, the substitution rate increased by 3.4%.

### **Generics substitution rate**

Total, 2012-2022



Source: Interpharma calculations based on IQVIA AG

■ Generics ■ Off-patent original products with generic competition

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Generics are made up 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. Rather, it is similar at most.

The process of developing and manufacturing biosimilars is far more complex than that of generics. That is why a biosimilar's development costs alone are 100 times those of a generic. In simplified terms, generics can therefore be compared to a bicycle and biosimilars to an airplane.

For biosimilars to receive regulatory approval in Switzerland, they must meet high patient safety standards, undergo extensive clinical trials and have proof of safety.

### Difference between generics and biosimilars

	Generics	Biosimilars 500
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 million	At least CHF 100 million
Number of producers	Many	Few

### Strong growth in biosimilars

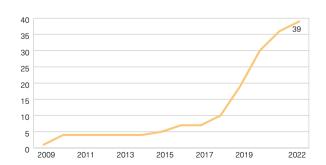
Modern biotechnology has made enormous medical breakthroughs in the last few decades in the treatment of mostly life-threatening diseases such as cancer.

Due to patents expiring, the first me-too products that imitate these innovative technologies (known as "biosimilars") have come onto the market.

At present, biosimilars are not yet widely used in Switzerland – but usage numbers are on the rise. In 2022, they accounted for around 2% of the medication market. However, the number of reimbursable biosimilars available in Switzerland has increased almost eightfold since 2015 (from 5 to 39 products).

### **Biosimilars market**

Number of biosimilars in the SL, 2009-2022



2010 2016 2022

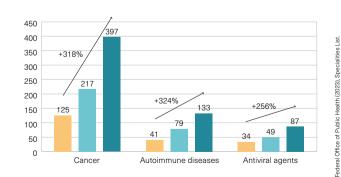
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# Growing number of new drugs for cancer, autoimmune diseases and viral diseases

As there are more and more treatments for cancer, autoimmune diseases and viral diseases, patients' chances of recovery are increasing.

A total of 397 cancer treatment drugs were available in 2022, while 272 new and innovative medicinal products have been added since 2010. The number of available treatments for autoimmune diseases and viral diseases is more than three times as high as in 2010 and twice as high as in 2010 respectively.

### Reimbursable drugs market. Number of available therapies 2010, 2016, 2022



### EU most important supplier of active ingredients, antibiotics and vaccines

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

The EU is its most important trading partner, since around 41% of active ingredients, 93% of antibiotics and 95% of vaccines come from the EU.

The USA is the second most important trading partner for active ingredients. Around one third of active ingredients come directly from Asia.

### Imports of active ingredients

FU UK Asia USA Others

Share by value (CHF), 2022



Source: FOCBS (2022).

### Focus on the patient



Despite consistently high numbers of new cases, the number of cancer deaths declined by 24 percent between 1995 and 2019.

In 2022, there were 8'629 active ingredients at a development stage close to marketing authorization. This represents an increase of 5 percent.

In 2022, only **26 percent** of drugs were added to the Specialities List within the deadline of **60 days.** 

### **Diseases generate a variety of costs**

Diseases are primarily a burden on the sick. But others are often affected too. Health insurers cover the costs of medical treatment, employers suffer from work absences and the patient's social circle also has to deal with the consequences of disease (e.g. care costs).

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

### Impact of treatment innovation on healthcare costs

Innovative medicines are capable of revolutionizing disease treatment. As a result, they can also have an impact on different types of healthcare costs.

Generally speaking, when an innovation is created direct treatment costs increase, whereas indirect and intangible costs decrease. From a macroeconomic perspective, it is particularly interesting to know whether the novel treatment leads to a reduction in the total costs of the disease. How the composition of the total costs develops is of secondary importance.

### Composition of overall costs of a disease Illustration



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### Direct costs

Medical and non-medical costs of treatment

### Indirect costs

Lost resources, especially work time for patients and relatives

### Intangible costs

Reduced quality of life, especially due to pain and suffering

### Disease costs from a societal perspective Impact of innovation; illustration





Starting point

disease are high.

Current standard therapy involves relatively low direct costs.

Indirect costs are relatively high.

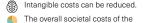
Intangible costs are relatively high. The overall societal costs of the

disease fall.

New situation with innovation Spending on the drug innovation

increases direct costs.

Indirect costs can be reduced.



Polynomics (2020), Ge-

### The benefit of innovative treatments is felt at multiple levels

The direct benefit of innovative treatments is apparent at three levels: patients benefit from the chance of a cure, faster recovery or a better quality of life.

Society benefits from innovations. Shortened and improved healing processes cut treatment and nursing costs, enabling patients to return to work more quickly.

Lastly, the national economy benefits too, since new drugs enable reinvestment in research and development. This creates jobs, generates added value and brings in higher tax revenues.

### 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



### Benefits to the economy

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

### **Innovations lead to higher life** expectancy and relieve the strain on the healthcare system

From a macroeconomic perspective, pharmaceutical innovations can cut the total cost of a disease even if the price of a new drug causes direct treatment costs to rise.

Using data for Switzerland, the effect of pharmaceutical innovations introduced between 1990 and 2011, or 1994 and 2010 can be demonstrated at various levels.

The innovations reduced mortality among the under 85-year-olds by almost one third and resulted in two million fewer hospital days in 2019, saving the healthcare system CHF 3 billion.

### Pharmaceutical innovations ...



ooth premature mortality (2022), 158:7.

### Overall consideration of the benefits

... reduced premature mortality in under 85-year-olds by one third in 2018.



### Benefits to society

... reduced hospital days by 17.3% in 2019.



### Benefits to the economy

...led to savings for the healthcare system of around CHF 3 billion in 2019.

Source: Lichtenberg, Frank (2022): The and hospital utilization in Switzerland, 1

### Comparison of regulatory approval times for medicinal products

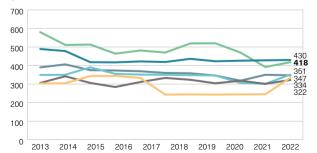
Having a strong and independent regulatory authority for medicinal products is in the interest of both patient safety and Switzerland as a pharmaceutical hub.

An international comparison with other authorities reveals that a substantial acceleration has been made to the Swiss marketing authorization over the last few years. Processing time in Switzerland has converged with that of the EU.

However, approval by the regulatory authority does not mean that a medicinal product will be made available to patients immediately. Reimbursement under basic health insurance must be established before this can happen.

### Comparison of regulatory approval times for medicines

In days; new active substances (NAS) 2013–2022; international comparison



### Access to drugs from the marketing authorization date

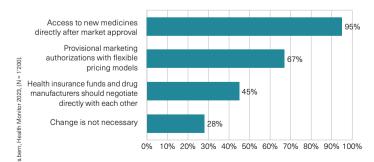
gfs.bern conducts the "Health Monitor" – an annual representative survey – on Interpharma's behalf each year. In the 2023 survey, 1'200 eligible voters were asked for their views on the Swiss healthcare system.

According to the Health Monitor 2023, 95% of respondents would like access to new drugs from the day that Swissmedic approves them for marketing authorization.

Additionally, 67% of respondents were open to flexible pricing models with a view to obtaining provisional and thus immediate reimbursement from health insurers.

### **Acceleration of access to medicines**

Health Monitor 2023, percentage "fully agree" or "tend to agree"



EU — USA — JP — CAN — CH — AUS

### **Delayed access to innovations in Switzerland**

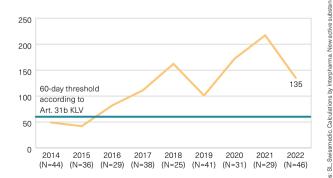
Patients in Switzerland have been experiencing long delays in their wait for access to highly innovative drugs since 2016.

The median time from marketing authorization to inclusion in the Specialities List was 211 days in 2021 and 135 days in 2022, as opposed to 60 days - which is the politically defined deadline (Art. 31B of the Health Insurance Benefits Ordinance).\*

Only 26% of all products included in the Specialities List in 2022 were added within 60 days (12 out of 46).

\* If the conditions for accepting the application as defined under Art. 69 (4) of the Health Insurance Benefits Ordinance are met before definitive approval by Swissmedic, the FOPH will normally come to a decision within 60 days of the definitive approval.

### Interval between Swissmedic approval and inclusion in SL In days, 2014–2022



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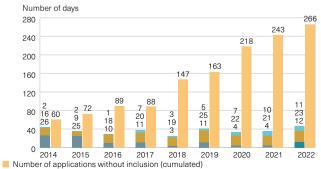
### Delays are leading to a backlog of applications

There is a structural problem in Switzerland with respect to rapid and equitable patient access to new, highly innovative drugs.

The reason for this is the fact that the tried-and-tested standard drug reimbursement system is increasingly reaching its limits with the emergence of novel treatments and groundbreaking advances.

Since 2014, there has been a sharp increase in the number of drugs with marketing authorization but that are not vet reimbursable. In 2022, 34 out of 46 products (74%) took longer to be added to the Specialities List than the 60 days stipulated in the Ordinance.

### Interval between Swissmedic approval and inclusion in SL. along with cumulated non-inclusions, in days, 2014-2022



Number of inclusions > 365 days (new active substances and indications)

Number of inclusions > 60 days and ≤ 365 days (new active substances and indications)

Number of inclusions ≤ 60 days (new active substances and indications)

Median in days all indications

### 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 first generation of drugs to over 95% with the fourth generation.

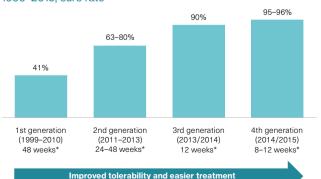
With the new oral combination therapy, the treatment (8 to 12 weeks) lasts less than a quarter of the original duration of treatment.

Medical advances have led not only to simpler patient treatment but also to better tolerability to the drugs.

### Chronology of hepatitis C treatment

1999–2015, cure rate

46



\* Treatment duration.

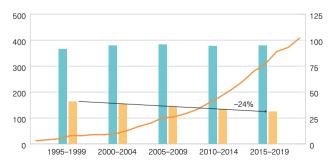
# Fewer people are dying of cancer despite new case numbers being consistently high

Thanks to new, innovative treatment methods, the treatment of cancer has vastly improved in recent decades.

Although the number of new cases remains constant, the number of deaths from cancer is falling steadily – due in particular to newly approved, innovative medicinal products and treatments.

While there were only 3 approved cancer drugs in Switzerland in 1996, there were 95 in 2019. At the same time, deaths from cancer decreased by 24% from 1995 to 2019.

### Cancer: number of new cases, deaths and approved drugs in Switzerland, in five-year periods, 1995–2019



Number of new cases (left axis, per 100'000 population)

Number of deaths (left axis, per 100'000 population)

Source: PhRMA (2017), Pr

Number of approved cancer drugs in Switzerland (right axis)

### Great importance of drugs and vaccines research

The important role of the pharmaceutical industry became clear in the COVID-19 pandemic. The "Health Monitor" clearly reflects this.

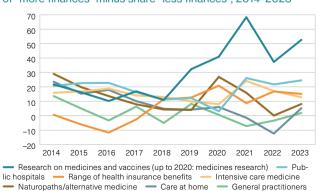
When respondents were asked which areas they would invest more or less in if funds remained the same, 53% opted for more funding to be allocated to drugs and vaccines research in 2023.

Naturopaths and alternative medicine, intensive care medicine and the range of health insurance benefits were ranked less important.

48

### Trend: distribution of finances

Health Monitor 2023; voters, in percent of respondents, share of "more finances" minus share "less finances", 2014–2023



### The population is keen to bolster measurement of quality data

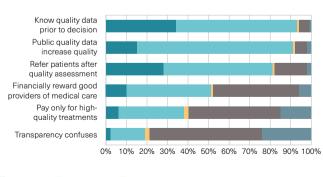
According to the gfs Health Monitor, around three quarters of respondents rate the quality of the Swiss healthcare system as good or very good. But it is difficult to make an objective assessment nowadays due to a lack of data and transparency.

Respondents would like to see greater transparency in the presentation of relevant quality data and expect that doing so would to improve the quality of the healthcare system as a whole (91%).

In concrete terms, specific quality data should be accessible to patients (93%) and should be a criterion in decision-making for referrals (81%).

### Statements on quality data

Health Monitor 2023, in percent of respondents



■ Fully agree ■ Rather agree ■ Do not know/no answer ■ Rather disagree ■ Do not agree at all

51

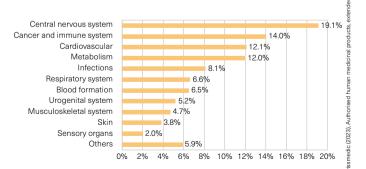
### High number of new active ingredients helps patients

Patients are benefiting from a high number of new active ingredients. Based on the number of approved treatments, drugs designed to treat diseases of the nervous system account for around 19% of these treatments, making them the largest category of new treatments. They include analgesics, anti-epileptics and treatments for mental illness.

Cancer treatments and immunotherapies account for around 14% of available treatments in Switzerland.

Other major indication areas in 2022 were treatments for metabolic and cardiovascular diseases, each accounting for around 12% of new treatments.

### **Percentage of approved products by indication area** Switzerland, 2022



v. Citeline Pharma Intelligence (2022), Pharma R&D Annual Review 2022, Pharma Projects, January 2022.

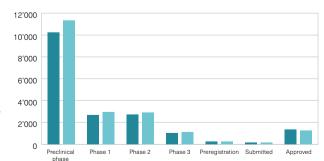
### The 8'629 new active ingredients in development offer hope

In 2022, 8'629 active ingredients in total were at development stages close to marketing authorization (excluding the preclinical stage). Compared to the previous year, this marks an increase of around 5%.

The portfolio's steady growth reflects both medical advances and the fact that pharmaceutical companies are making large investments in research and development.

New drugs – particularly to treat cancer – are a focus of research activities. But pharmaceutical companies are also continuously looking into new ways of potentially treating infectious diseases, diseases of the central nervous system or respiratory diseases.

### Number of active agents in development stages close to marketing authorization, global, 2021/2022



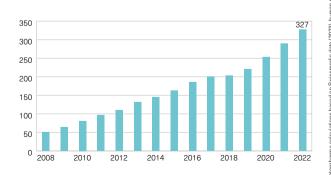
### The number of drugs for rare diseases is on the rise

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

The number of indications with orphan drug status is continuously increasing, because many pharmaceutical companies are committed to researching rare diseases.

In 2022, there were 237 approved drugs with orphan drug status. They are used in 327 indications – including rare diseases of the immune or nervous systems, rare metabolic disorders and rare forms of cancer.

### **Number of indications with orphan drug status in Switzerland** Total: 237 medicines with orphan drug status, 2022



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

### Over 700 drugs for rare diseases in development

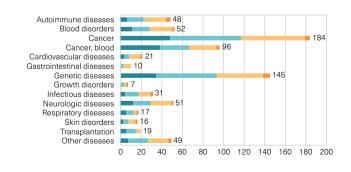
Pharmaceutical companies around the world are still extensively researching new drugs and treatments for rare diseases. Despite the huge advances made in recent years, many rare diseases are still not treatable.

In 2021, there were 746 drugs 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 regulatory approval – takes four years longer than for common conditions. This is due in part to the complex biology, the heterogeneity and the progressive nature of these diseases.

### Number of medicines for rare diseases

Global, according to development phase, 2021



Phase 1 Phase 2 Phase 3 Application for approval submitted

# Leading the way in research and development



On average, the development of a new drug takes 12 years and costs USD 2.5 billion.

Interpharma members invest about twice as much in research as they earn in Switzerland.

Swiss companies filed **9'008 patents** in 2022.

### The long road from the laboratory to the patient

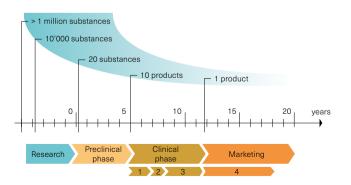
Pharmaceutical research is a risky undertaking. On average. the development of a new drug takes 12 years, and there is a 90% risk of failure

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

Out of more than one million potential substances, approximately 10'000 are investigated in basic research. Only approximately 20 of them reach the preclinical stage. Of these 20 substances, 10 make it to the clinical stage. Finally, only 1 preparation is put on sale.

### Steps in the development of a medicine

56



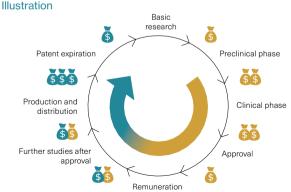
### **Patent protection enables reinvest**ment in new drugs

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

Patent protection often starts in the early stages of development. So, by the time the drug is sold on the market, the patent has already been valid for a good, long while.

Drugs only begin to generate income for companies once the reimbursement decision is made. This income must be high enough so that companies again have the venture capital they need to conduct research into new drugs.

Research cycle



Expenses Revenues Outer circle: research cycle: inner circle: patent expiry

### How the pharmaceutical industry's innovation cycle works

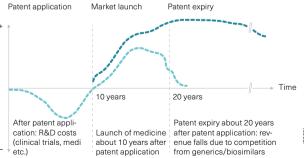
The development of a new drug incurs high costs – not least due to clinical trials when the patent has already been applied for. A drug is not launched on the market until 10 years after the patent application on average. Only then can a company begin to recoup its costs.

But when patent protection expires after about 10 years, the price drops massively – due to me-too products in particular. But patients still benefit from once groundbreaking treatments even years after the patent has expired.

This decline in price after patent expiration contributes to a sustainable financing of the healthcare system.

### Life cycle innovation model

58



Interpharma with data basis IQVIA AG (2022).

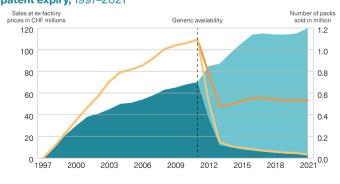
### Today's innovations are tomorrow's generics/biosimilars

Sortis – a cholesterol-lowering drug – was an innovative blockbuster in 2011 and the top-selling product in Switzerland, generating sales of more than CHF 100 million per year (EFP).

The patent for Sortis expired in 2012, and prices have fallen sharply since then. The cost of the active substance atorvastatin contained in the medicine has halved to date.

Today, more patients are benefiting from this former innovation in the form of numerous generics containing atorvastatin as the active ingredient. At the same time, overall costs have fallen significantly.

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



■ Volume Sortis ■ Volume generics — Sales Sortis — Sales atorvastatin

Common last common or

Revenue curve - Utilization curve

### Antibiotic resistance: research in the fight against a major threat

In 2019 alone, more than 1.2 million people worldwide died of infections caused by antibiotic-resistant bacteria.

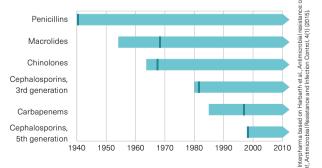
In most cases, initial resistance is identified only a few years after new antibiotics are introduced. Research is therefore a race against time – with antibiotics taking about 12 years to develop.

Developing a new antibiotic requires billions of dollars of investment – partly because of the around 97% failure rate. Existing antibiotics must be used in a targeted way, basic research bolstered and new market incentives created for manufacturers.

### The short lifetime of antibiotics

60

Market launch and first detection of antibiotic resistance By antibiotic class\*



First detection of antibiotic resistance

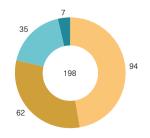
### A low success rate makes drug development costly

Only a few drugs make it to market. Pharmaceutical companies run a high risk of loss when developing a new drug.

Between 1998 and 2021, there were 198 unsuccessful attempts to develop an Alzheimer's drug. The failure rate is 98%.

When a drug is successful, companies must be able to fund research into unsuccessful drugs too. Without this cross-subsidization, there would not be enough funds to conduct research into new drugs.

### **Unsuccessful investigational Alzheimer's drug** By phase, 1998–2021



Phase 0, 1/2 ■ Phase 2, 2/3 ■ Phase 3, Reg Review ■ Phase unknown

<sup>\*</sup> Remark: This is a selection of antibiotic classes (non-exhaustive)

### A new drug requires billions in investment

It takes around 12 years on average for a new drug to be ready for the market

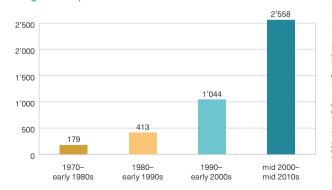
The process – from research and development to market readiness – costs an average of USD 2.5 billion, so it is now almost 15 times more expensive to develop a new drug than it was in the 1970s.

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

### Cost of development up to market readiness

62

Average development costs in USD million



Source, Joseph, A. DiMasi, Henry G. Gravowski, Ronald W. Harsen, Innovation in the pharmaceutical New estimates of R&D costs, Journal of Health Economics, 47 (2016), 20–33.

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

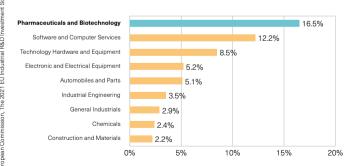
Research intensity is an indication of what percentage of sales generated flows back into research and development.

The pharmaceutical and biotech industries invest 16.5% of sales straight back into researching and developing new products. This is a record when compared to other industries.

The pharmaceutical industry therefore invests more than the construction/construction materials, chemicals, general industry, industrial technology and electrical sectors combined.

### Average research and development intensity

As a percentage of sales, 2021



### Slump in return on research investment

The Deloitte Pharma Study analyzes 20 of the world's largest pharmaceutical companies each year. It reveals that the return on investment (ROI) in research and development at a global level has declined in recent years.

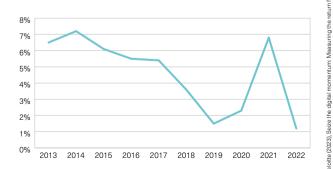
After an outlier in 2021 (6.8%) due to the COVID-19 pandemic, the forecast average return fell to 1.2% in 2022 – the lowest since the survey began in 2010.

Because developing new treatments is becoming increasingly complex and costly at the same time, pharmaceutical companies need to redesign their research processes by incorporating digital technologies and using health data, for example.

### **Return on research investment**

Global, 2013-2022

64



Source: Federal Statistical Office (2022), Research and Development (R&D) 202 and Research and Development (R&D) in the Private Sector 2021.

### Pharmaceutical companies incur the lion's share of research and development expenses

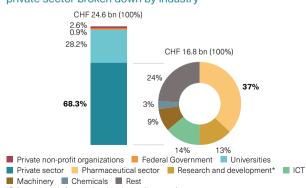
In 2021, CHF 24.6 billion in total was invested in research and development (R&D) in Switzerland.

Around 70% of these investments came from the private sector. The pharmaceutical industry is the most important investor, accounting for 37% of private-sector research spending. Other important research industries include the ICT and the mechanical engineering sectors.

The importance of the pharmaceutical industry is highly underrated, because external research contracts also fund a large percentage of laboratories and research institutions that fall under "research and development".

### Total research and development expenditure

Overall investment of public and private sector; private sector broken down by industry



\*Refers to private labs for research and development (contractors).

# The private sector conducts 85 percent of applied research in Switzerland

Research spending (CHF 24.6 billion) is split into basic research, applied research and experimental development.

The private sector carries out 19% of basic research in Switzerland, while 74% is conducted by universities.

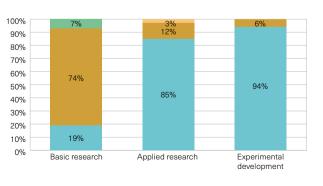
85% of applied research and 94% of experimental development is conducted by the private sector.

### Breakdown of research activities by field

Private sector Universities Confederation NGO

2021

66



Federal Statistical Office (2022), Research and Development (R&D) 2021.

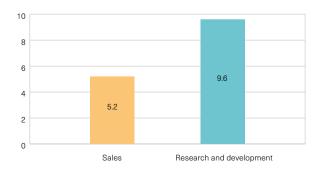
# Switzerland as a research hub: investments almost double the amount of sales

In 2022, Interpharma companies generated sales of around CHF 5.2 billion throughout Switzerland and invested CHF 9.6 billion in research and development in Switzerland.

Thus, Interpharma members in Switzerland invest almost twice as much in research as they earn in Switzerland.

The only way it can make these large investments in Switzerland as a research hub in the first place is because of Swiss pharmaceutical companies' successful international operations.

### Interpharma companies in Switzerland: sales and research In CHF billion, 2022



### The pharmaceutical industry invests around USD 140 billion worldwide into new drugs

In 2022, the world's 20 largest pharmaceutical companies invested around USD 139 billion in research and development.

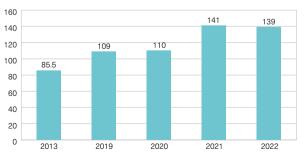
This is a 60% increase in research spending compared to 2013.

Along with the USA. Switzerland is one of the countries with the highest per capita spending on research and development in the pharmaceutical industry worldwide.

### Expenditure on research and development\*

In USD billion, 2013-2022

68



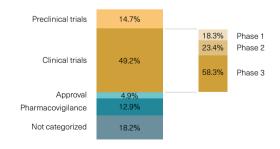
### Almost half of all research spending goes towards clinical trials

49% of pharmaceutical research spending goes towards clinical trials. In clinical trial stages 1 to 3, the efficacy and safety of the drugs for humans are tested.

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

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

### Distribution of research expenditure by operations 2021



\*Twenty largest pharma companies worldwide.

### Clinical trials enable early access to innovative drugs

Switzerland has a long tradition of conducting clinical research. In 2022, Swissmedic gave the green light for 147 clinical trials in Switzerland.

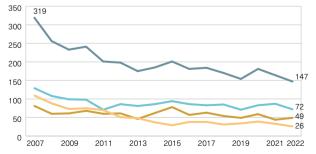
However, the framework conditions in Switzerland are not ideal for clinical research, which is reflected in a stagnating number of clinical trials.

Knowledge about advanced therapies in Switzerland promotes the attractiveness for researchers and healthcare professionals. This directly benefits patients.

**70** 

### Clinical drug trials definitively approved by Swissmedic 2007–2021

Phase 1 — Phase 2 — Phase 3 — Total



Source: Swissmedic (2)

Early Phase 1, 1, 2, 3 | Industry | Start Date 3 - ClinicalTrials.gov.

Search of: Interventional Studies | Phase: E /01/2021 to 12/31/2021 – Results on Map

Source:

### Switzerland is at risk of falling behind in clinical trials

Nowadays, clinical research for treatments is usually conducted in several countries at the same time. On the one hand, this is done to minimize the influence that local factors might have on the trial results, and on the other it is done to find enough participants.

Clinical trials are important for a competitive research hub. Active research and innovation attracts researchers and specialists and ensures that know-how is available. Research in Switzerland is an important economic factor.

Countries such as Belgium, the United Kingdom and Spain in particular have been more dynamic in clinical trials compared to Switzerland in recent years.

### Number of clinical trials in Europe 2021\*



\* Remark: In total, 1'589 clinical trials took place throughout Europe in 2021. Of them, 125 took place (exclusively or partially) in Switzerland. The list is not exhaustive. Only countries are shown in which at least 100 clinical trials took place.

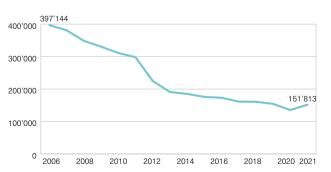
### **Number of laboratory animals in the** industry has been declining for years

The 3R principles aim to **replace** as many animal experiments as possible, to **reduce** the number of laboratory animals, and to keep their stress levels to a minimum (Refine).

The number of laboratory animals in the industry has been reduced from almost 400'000 (in 2006) to around 152'000 (in 2021) thanks to consistent implementation of the 3R principles. The increase in 2021 is due to a catch-up effect after the COVID-19 pandemic.

Research with animals is essential in the development of new drugs to ensure that medicine is safe and effective in humans. Animal experiments may only be carried out in Switzerland if there are no alternatives available

### Number of laboratory animals in the industry in Switzerland 2006-2021



### Switzerland is a leader when it comes to filing patents

Swiss companies filed 9'008 patents in 2022 – a record relative to the population. Switzerland has over 1'000 applications per million inhabitants

Sweden (in second place) recorded 482 applications per million inhabitants. Submitting 453 patent applications, Denmark ranks third in the international comparison.

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

### **Patent applications**

Per million inhabitants, 2022



75

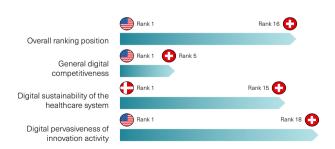
### **Switzerland is not ready yet for** digitalization

In terms of competitiveness. Switzerland can regularly be found in one of the top spots in international comparisons. But the picture is very different when it comes to digital readiness.

In the overall ranking, the USA leads the way, ahead of Japan and Israel. Switzerland is trailing behind in 16th place. It needs to catch up - particularly with regard to the availability of health data and the political framework conditions.

Better framework conditions are needed for the use of digital technologies to ensure that Switzerland remains attractive as a research hub for pharmaceutical companies in the future.

### Digital Readiness Index for chemical/pharmaceutical research, position of Switzerland, 2021



### Use of health data: Switzerland is lagging behind

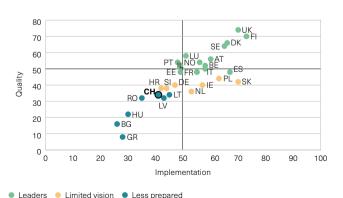
The Open Data Institute analyzes current policies and the implementation of secondary use of health data in 29 states.

The leading group of countries includes the likes of the United Kingdom, Finland, Denmark and Sweden, Switzerland is included in the weakest group, along with Bulgaria, Greece, Hungary and Romania.

There is tremendous potential in the secondary use of health data, including possible ways to optimize services and reduce health inequalities, not to mention personalized healthcare. It is an important driver of innovation.

### Secondary use of health data in Europe

Ranking of countries on policy, 2021



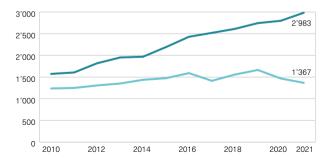
### Swiss universities benefit from patent agreements

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

According to the swiTTreport survey, there were as many as 4'265 such research cooperation projects in Switzerland in 2022. Of these, 2'983 relate to patent agreements.

When companies fall back on existing patents in research and development activities, they pay license fees. Because patent or license holders are often universities, the funds invested flow back into the public purse through such agreements.

### Aggregated data on research at Swiss universities and research institutes, 2021



Active patent agreements at year end
 Active licence agreements at year end

Source: swiTT (2022), swiTTreport 2021.

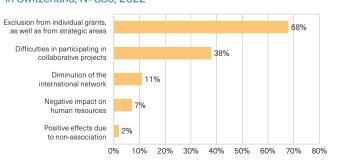
### Collaborative research through Horizon Europe is indispensable

Switzerland is treated only as a non-associated third country in the new Horizon Europe programme until further notice.

In a survey conducted by the State Secretariat for Education, Research and Innovation (SERI) in February 2022, researchers, companies and institutions provided 319 specific examples of the consequences of non-association. Exclusion from individual grants and strategic areas is a particularly major problem (68%), as is the loss of project coordination (38%).

International networking in collaborative research is indispensable for Switzerland as a location. The relationship with the EU must be regulated as a matter of urgency.

### Survey: Impact of non-association with Horizon Europe Online survey among researchers, companies and institutions in Switzerland, N=880, 2022



# Strong economic and political framework conditions



The pharmaceutical industry recorded exports of **CHF 109.6 billion** in 2022; **47 percent** of those exports went to the **EU.** 

In terms of competitiveness, Switzerland lost ground in 2022 and only just makes it onto the podium.

The pharmaceutical industry's trade surplus was CHF 51 billion in 2022.

### Competition between locations continues to intensify

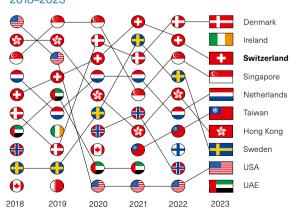
For a short period in 2021, Switzerland occupied the top spot in 2021 Competitiveness Ranking. Since then, however, Switzerland's performance has deteriorated continuously, falling to third place behind Denmark and Ireland in 2023.

Ideal framework conditions are absolutely essential if a business location is to be successful and competitive.

Switzerland's attractiveness as a location is coming under pressure from many sides. Anti-business political initiatives, the looming threat of erosion of the bilateral agreements with the EU and the rising costs of bureaucracy and regulation are putting Switzerland's competitiveness at risk.

### **World Competitiveness Ranking** 2018–2023

80



# Investments in research and development need planning security and legal certainty

Political stability and legal certainty are traditionally important strengths of Switzerland as a location. However, Switzerland has lost ground to other countries in recent years, falling to 12th place in 2021 according to World Bank data.

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

When it comes to attracting new companies or investing in a location, political stability is an important factor in opting for a location

### Ranking of Switzerland in the Political Stability Index 2012–2021

Rank — Political stability



Source: IMD (2023), IMD World Competitiveness Ranking.

### 83

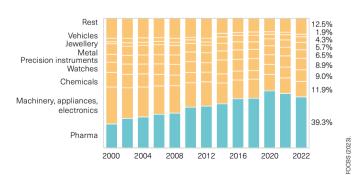
### The pharmaceutical sector is Switzerland's most important export industry

With exports worth around CHF 109.6 billion, accounting for almost 40% of all exports, the pharmaceutical sector is Switzerland's most important export industry.

The pharmaceutical sector has more than doubled its share of the export industry in the last 20 years. The proportional record of pharmaceutical exports in 2020 is due to a temporary, pandemic-related decline in exports from other sectors.

So, the pharmaceutical industry exports as much as the strong MEM sector, the watchmaking industry and the chemicals sector combined.

### Nominal exports in selected industries as percentage of total exports, 2000-2022



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

In 2022, around 47% of Switzerland's pharmaceutical exports went to the European Union, making the EU the most important sales market for pharmaceutical products.

The USA accounts for 27% of exports, making it the single most important country. Exports to the USA have almost doubled from 12.8% to 27% over the past 20 years or so.

After the USA, Switzerland's neighbour (Germany) is the second most important country, accounting for around 12% of Switzerland's pharmaceutical exports. Slovenia is becoming an increasingly important production site: Swiss pharmaceutical exports to this country have increased almost twelvefold in the last 5 years.

### **Growth of pharma exports**

By destination, in percent; 2022



### The pharmaceutical industry relies on highly qualified personnel

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

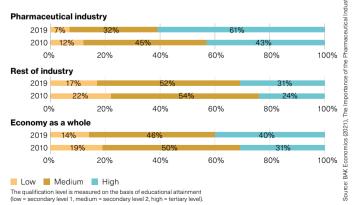
The pharmaceutical industry is set apart by its very high and clearly above-average research intensity. 61% of employees in the pharmaceutical industry have a university degree.

The Swiss labour market is too small to meet the high demand for highly qualified workers, so access to skilled workers from third countries and the EU is of utmost importance.

Qualification structure

2010, 2019

24



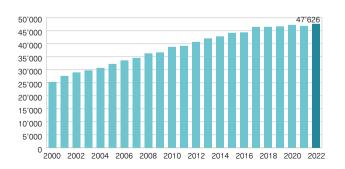
### Pharmaceutical industry employment stagnates

Since 2000, the total number of people employed in the pharmaceutical industry has increased by around 22'000 to more than 47'000.

As the level of employment has grown over the past two decades, so too has the significance of pharmaceutical companies to the labour market.

In recent years, the strong employment growth of the past decades has increasingly weakened. If the pharmaceutical industry is to continue creating lots of attractive jobs, it needs good framework conditions set out in economic policy.

### Number of people employed in the pharma industry In persons. 2000–2022



ource: Federal Statistical Office (2022).

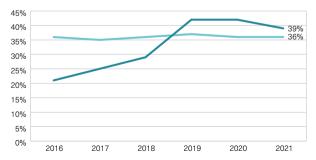
# Female managers are disproportionately represented in the pharmaceutical industry

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

While the proportion of female managers in the economy as a whole stood at 36% in 2021, it was higher in the pharmaceutical industry at 39%.

This means that the pharmaceutical industry employs an above-average number of women in management positions compared to the economy as a whole. The industry is committed to further increasing the proportion of female managers and female employees in general.

### Percentage of female managers in the pharma sector vs economy as a whole, annual average values, in percent; 2016–2021



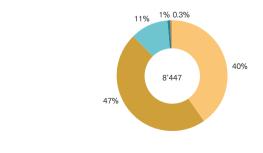
### Switzerland is dependent on the free movement of people

Each day, more than 380'000 cross-border commuters travel from neighbouring countries to their jobs in Switzerland. Without the agreement on the free movement of people concluded with the EU, Switzerland's economy would no longer run smoothly.

The pharmaceutical industry is particularly dependent on cross-border commuters. Around 8'400 cross-border commuters are employed in the industry, so one in five employees in the pharmaceutical sector travels to Switzerland for work.

Regions such as Basel or Geneva are especially reliant on the free movement of people running well, due to both geographical location and historic links with border regions.

### **Cross-border commuters in the pharmaceutical sector** By country of origin, 2022



ource: Federal Statistical Office (2023).

rce Survey (SLFS)

Economy as a whole — Pharmaceutical industry

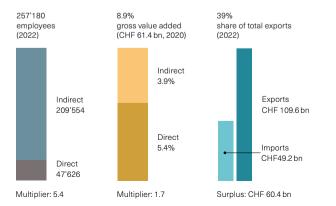
### The pharmaceutical industry is the engine of Switzerland's economy

In 2022, the pharmaceutical industry employed around 47'600 people in Switzerland. The industry purchases products and services such as machinery, chemical substances, cleaning and security staff, insurance services and energy within its activities – creating an additional 250'000 jobs for people in other sectors.

The pharmaceutical industry generates 5.4% of Switzerland's added gross value. This rises to 8.9% when indirect effects are taken into account.

The pharmaceutical industry's trade surplus amounts to CHF 60 billion – making it the driving force behind the Swiss economy.

### 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); FOCBS (2023).

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