



KEY FIGURES



Sources: Interpharma, 2014/2015 and BFS, 2012

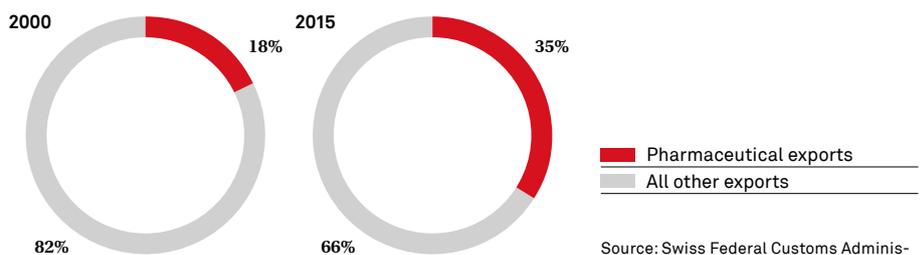
SWITZERLAND – PHARMA HUB

AT A GLANCE

A third of Swiss exports come from the pharmaceutical industry, making this industry a large contributor to the Swiss national economy. Both multinational corporations, such as Roche and Novartis, and small- and medium-sized pharmaceutical companies have excellent infrastructures and skilled employees at their disposal in Switzerland. The cooperation between large and small companies and the proximity to research institutions offer an ideal environment for research and innovation and form the basis for a highly-specialized production location. Switzerland's sophisticated healthcare system also offers ideal conditions as a test and sales market in which products can be launched.

Swiss pharmaceutical industry exports

Share of overall exports (in %)



Top 10 companies

according to the number of employees in Switzerland in 2013

Novartis	Celgene
Roche	Vifor
Janssen-Cilag	Biogen
Actelion	UCB
Merck Serono	Amgen

Source: interpharma, 2015

POWERED BY

RESEARCH AND DEVELOPMENT (R&D)

- The **availability of highly qualified scientists** is excellent as a result of globally leading universities and financially sound, research-oriented pharmaceutical companies. Novartis employs around 2,700 geneticists, pharmacologists, biologists and other specialists and, in 2012 alone, registered a total of 660 patent applications. Roche employs around 3,000 researchers, who submitted 460 patents.
- In 2015, Roche and Novartis together invested 19 billion Swiss francs globally, or around 19% of sales, in research and development. In Switzerland, the total investment in R&D of all the pharmaceutical companies based here amounted to around 6.5 billion Swiss francs in 2014.

Global Innovation Index 2015

The ten most innovative countries in the world

Country	Ranking
Switzerland	1
United Kingdom	2
Sweden	3
The Netherlands	4
USA	5
Finland	6
Singapore	7
Ireland	8
Luxembourg	9
Denmark	10

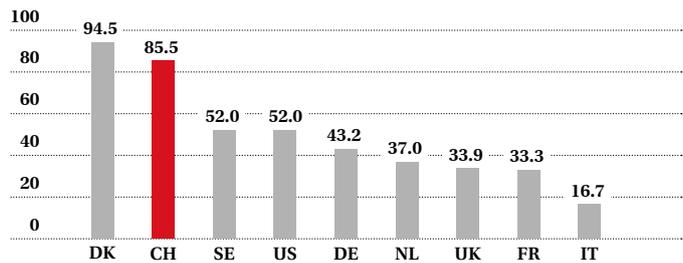
Source: INSEAD/Cornell University/WIPO, 2015

- The ETH's Department for System Biology, which comprises 15 professors and 300 employees, will be moved to a new building by 2020, and is expected to grow to 500 employees. There were 956 people studying life sciences at bachelor's, master's and doctoral level at the EPFL in 2013. 1,326 individuals attended life science courses at technical universities that same year.
- The Friedrich Miescher Institute in Basel devotes itself to fundamental biomedical research and employs 300 international members of staff.
- Switzerland Innovation** is intended to contribute to securing the leading role of Switzerland as an innovation nation and thus maintaining its competitiveness. The Innovation Park was launched at the start of 2016 with the two hubs associated with the two Swiss Federal Institutes of Technology in Zurich and Lausanne, as well as the three network locations in the Aargau, in Northwest Switzerland and in Biel.

- Efficient and straightforward application procedures are in place to protect intellectual property. Switzerland is one of the countries with the highest number of pharmaceutical patents per capita when compared with other countries. It also has an extensive range of specialists offering the best possible IP marketing (licensing, patent transactions or strategic partnerships).

Pharmaceutical patent applications submitted to the European Patent Office

Applications per million inhabitants; Average 2000-2010



Source: BAK Basel Economics; OECD REGPAT database, 2012

- It takes around **eleven months to obtain a license for a new pharmaceutical product** from the Swiss Agency for Therapeutic Products Swissmedic (excluding time required by the company internally), making the Swiss registration procedure one of the fastest application procedures worldwide. A normal evaluation of a license application for human medicine with a new active substance costs 70,000 Swiss francs (105,000 Swiss francs to expedite the procedure).
- The laboratory technicians in Switzerland tend to show long-term loyalty to their **employers, meaning there is a low staff turnover rate** – this is in contrast to the situation in the USA where the majority of researchers are not employed permanently and third-party funding is spent on projects. Staff turnover can lead to a loss of know-how.

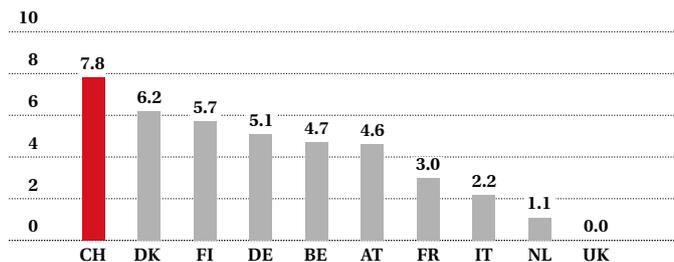
COSTS AND FINANCING

- Switzerland is by far the **most significant stock exchange** for life science companies in Europe. Around a third of market capitalization on the SIX Swiss Exchange is attributable to life science companies. 42% of the capitalization of European life science companies can be found on the SIX.
- The Swiss Federal Commission for Technology and Innovation (CTI) promotes the transfer of technology by **offering funding for up to 50% of expenses for collaborative R&D** projects between industry and universities. Around 1,000 research positions a year are funded in this way. The companies are granted the IP rights.

- Pre-seed and seed funding worth between 30,000 and 150,000 Swiss francs are possible through national universities.
- In recent years, **value creation within the Swiss pharmaceutical industry** has continued to increase more significantly than in any other country.

Value creation in the pharmaceutical industry

Growth rate per year in %; average 2001-2013

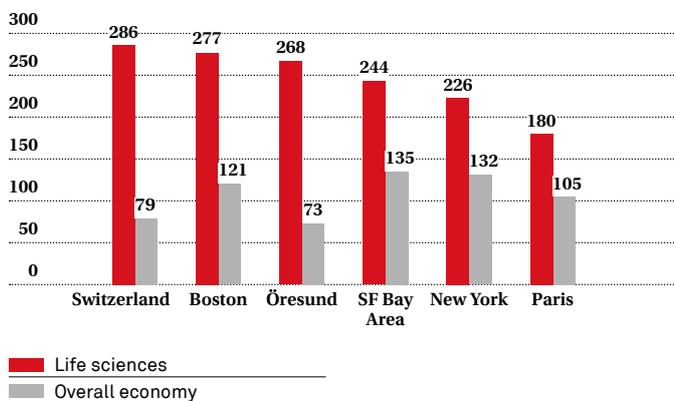


Source: Interpharma, 2015

- The interim financial statement for the EU's 7th Framework Program for Research and Technological Development (2007 – 2013) exemplifies how competitive Swiss researchers are on an international level. Switzerland received around 1,560 million Swiss francs in funding between 2007 and mid-2012. Switzerland also had the fourth highest success rate with submitted projects over this period.

Productivity of the life sciences industry

in an international comparison per employee (in USD 1,000, adjusted for purchasing power), 2012



Source: BAKBASEL, 2014 (international data according to the BAKBASEL database 2013, Swiss data in accordance with ESA 2010.)

- SMEs which invest more than 10% of their turnover in research and development are eligible to receive financial support as part of the Eurostars support program. The budget until 2020 amounts to 1.14 billion euros. Switzerland is funding projects with up to a maximum amount of 500,000 euros.
- The Swiss life science industry has the **highest level of productivity** compared to other top international locations.
- First-class infrastructure of **technology and innovation parks**, as well as **research institutions** such as Campus Biotech Geneva, EPFL Innovation Park Lausanne, the BioArk in Monthey, Bio-Technopark Zurich or Biopôle Lausanne, promote startups and spin-offs.
- Startups and newly-established foreign companies are eligible for partial or in some cases complete **exemption from corporate and capital taxes** at cantonal level for a period of up to ten years.
- A **reduced value added tax rate** of 2.5% applies to chemical and pharmaceutical products.

FRAMEWORK CONDITIONS AND MARKET ENTRY

- Free trade agreements with the EU and 38 other countries, including China, guarantee **access to the most important export markets**. 192.5 million euros are saved yearly through pharmaceutical and chemical exports to Germany, France, Austria and the United Kingdom alone. Furthermore, Switzerland has the third most dense network of bilateral investment treaties (after Germany and China).
- **Mutual recognition of conformity and quality control** leads to significant cost savings when trading with the EU, the EEA, the EFTA States and Canada. In the pharmaceutical industry alone, these savings amount to between 150 and 300 million Swiss francs per year.
- Due to the international recognition of its high quality standards, Switzerland is well-suited to being a **strategic test market** ("early adopter market") for introducing new medical products.
- Unlike in some countries, biotech and gene tech licensing applications are regulated by a single central authority (Federal Coordination Center for Biotechnology). This guarantees **minimal bureaucracy and simple procedures**.
- The **Swiss Export Risk Insurance (SERV)**, an independent institution governed by public law, guarantees protection for high-risk export transactions. In 2015, insurance policies and insurance commitments in principle amounting to 1.9 billion Swiss francs were issued for the chemical and pharmaceutical industry.

TESTIMONIAL



“Helsinn follows an integrated licensing strategy that enables us to benefit from the network of international pharmaceutical companies located in Switzerland, as well as specialist local companies. Helsinn licenses new materials from these companies at an early stage and enhances them before marketing them. Switzerland is an ideal location for us, with it being close to other pharmaceutical companies and top researchers with spin-off ideas, as well as leading research institutions and hospitals.”

RICCARDO BRAGLIA
CEO of Helsinn Holding SA
www.helsinn.com

CURRENT DEVELOPMENTS

- The aims of the master plan for strengthening biomedical research and technology are twofold: The Swiss Federation wants to provide the best possible basic conditions for biomedical research and technology and at the same time guarantee the public access to the achievements and products of biomedicine. For that purpose a total of 21 measures will be implemented in various areas by 2023.
- The **Switzerland Future Fund** project (www.zukunftsfondschweiz.ch) provides for a fund to be established, by means of which pension funds can make part of their funds available to startup companies in Switzerland as venture capital. The aim is to encourage the creation of new companies and jobs in promising business sectors. The pharmaceutical industry would also benefit from this.
- Bilateral agreements provide Swiss pharmaceutical companies with **privileged access to the domestic and labor market within the EU as well as to EU research funding programs**. Switzerland and the EU are currently engaged in negotiations aimed at maintaining the framework conditions for market access, research partnerships and the recruitment of specialists.
- The bill for a reform of the Taxation of Corporate Taxpayers was rejected by the Swiss people on 12 February 2017. This means that the current attractive regulations in the area of taxation remain valid. Switzerland, which has one of the lowest debt ratios by European standards (35% as measured by GDP), has the financial strength to offer a low level of taxation in the long term. It can be assumed that a new business-friendly proposal will soon be developed by the Swiss Federal Finance Administration, which will then be discussed and decided upon by the Swiss parliament. This process is expected to last until 2019.

CONTACTS AND FURTHER INFORMATION

Authorities and Regulators

State Secretariat for Education,
Research and Innovation SBFI
www.sbf.admin.ch

Federal Office for Health
www.bag.admin.ch

Swiss Federal Approval and
Regulatory Authority for Medicines
www.swissmedic.ch

Swiss National Funds
www.snf.ch

Swiss Federal Commission for
Technology
and Innovation KTI
www.kti.admin.ch

Institute of Intellectual
Property IGE
www.ige.ch

Associations and Networks

www.interpharma.ch
www.scienceindustries.ch
www.vips.ch
www.gensuisse.ch
www.switt.ch
www.bioalps.org
www.farmaindustriaticino.ch

Innovation and Startup Support

www.biovalley.ch
www.bio-technopark.ch
www.campusbiotech.ch
www.lifescience-zurich.ch
www.lsnb.ch
www.swissparks.ch
www.switzerland-innovation.com
www.ctistartup.ch
www.theark.ch

Financing

www.cti-invest.ch
www.six-swiss-exchange.ch
www.seca.ch
www.nvfund.com
www.newventuretec.com
www.devigier.ch
www.hbmhealthcare.com

Publications

Importance of the pharmaceutical
industry in Switzerland
www.interpharma.ch
> Fakten & Statistiken
> Pharma-Markt Schweiz
(in German)

Site Selection for Life Science
Companies in Europe 2015
www.kpmg.com
> Switzerland > Research > Articles
& Publications

Legislation regarding health
www.bag.admin.ch
> Documentation > Legislation

S-GE Resources

Handbook for Investors
www.s-ge.com/handbookforinvestors

Information on Swiss Free Trade
Agreements www.sge.com/fta

Additional factsheets on the
business location Switzerland:
www.s-ge.com/invest-businessenvironment

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