Novartis in Switzerland
Novartis in der Schweiz
Novartis en Suisse
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At work worldwide, at home in Switzerland

Our mission

Our mission is to discover new ways to improve and extend people’s lives. We use science-based innovation to address some of society’s most challenging healthcare issues. We discover and develop breakthrough treatments and find new ways to deliver them to as many people as possible. We also aim to provide a shareholder return that rewards those who invest their money, time and ideas in our company.
A global company with Swiss roots

Novartis is a global company with a strong commitment to its Swiss roots. These stretch back over 150 years. We offer medical solutions to address the changing needs of patients and societies around the world. Our core skills lie in the research and development of new medicines. In 2016, we reached almost a billion people with these medicines. Worldwide, around 123,000 people of 142 nationalities work at Novartis.

Importance of Switzerland

Switzerland is one of the most important research, production and distribution hubs of Novartis. The 13,000 or so employees who work here make an important contribution to the success of the pharmaceutical industry, which has become a stable driver of the economy in Switzerland since Novartis was established in 1996. Around 2% of the company’s total sales are generated in Switzerland.

Many international units are based in Basel, including our company headquarters and the head office of the global Innovative Medicines division. The campus is one of our most important research sites: scientists, physicians and experts from all over the world are engaged in research here on innovative medicines.
Our business model

Novartis focuses on innovative patent-protected medicines, generics and eye-care products – segments with a global reach and strong customer relations. Research and development (R&D) form the core of our business and are a crucial part of our strategy. At the global level, our functional organizations help to increase efficiency and to promote functional excellence.
Our divisions

Innovative Medicines
The Innovative Medicines division includes two business units:

**Novartis Pharmaceuticals** focuses on patented treatments in the areas of cardiovascular, respiratory, neuroscience, ophthalmology, and immunology and dermatology.

**Novartis Oncology** is focused on treatments for a variety of cancers and rare diseases.

**Sandoz**
offers patients and healthcare professionals high-quality, affordable generics and biosimilars. The Sandoz portfolio also includes some mature products that were transferred from the Innovative Medicines division in 2016.

**Alcon**
offers with its Surgical and Vision Care businesses one of the world’s widest selections of eye care devices – from sophisticated equipment for delicate eye surgery to a wide portfolio of advanced contact lenses.
Functional organizations with a global reach

Novartis Institutes for BioMedical Research (NIBR) focuses on discovering new drugs that can change the practice of medicine.

Global Drug Development oversees the development of new medicines.

Novartis Operations comprises Novartis Technical Operations (NTO), our global production unit, and also Novartis Business Services (NBS), our internal services unit.
One of the world’s largest companies

In 2016, Novartis reported worldwide sales of USD 48.5 billion. This makes Novartis the second-largest pharmaceutical company in the world when measured by global pharmaceutical sales alone.

The 10 largest pharmaceutical companies in the world
(by sales of pharmaceutical products)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>Country</th>
<th>Sales (USD billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pfizer</td>
<td>USA</td>
<td>41.6</td>
</tr>
<tr>
<td>2</td>
<td>Novartis</td>
<td>Switzerland</td>
<td>41.4</td>
</tr>
<tr>
<td>3</td>
<td>Gilead Sciences</td>
<td>USA</td>
<td>36.0</td>
</tr>
<tr>
<td>4</td>
<td>Sanofi</td>
<td>France</td>
<td>35.9</td>
</tr>
<tr>
<td>5</td>
<td>Johnson &amp; Johnson</td>
<td>USA</td>
<td>35.3</td>
</tr>
<tr>
<td>6</td>
<td>Roche</td>
<td>Switzerland</td>
<td>34.2</td>
</tr>
<tr>
<td>7</td>
<td>Merck &amp; Co.</td>
<td>USA</td>
<td>33.1</td>
</tr>
<tr>
<td>8</td>
<td>GlaxoSmithKline</td>
<td>UK</td>
<td>28.5</td>
</tr>
<tr>
<td>9</td>
<td>AbbVie</td>
<td>USA</td>
<td>25.9</td>
</tr>
<tr>
<td>10</td>
<td>AstraZeneca</td>
<td>UK</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Source: IMS PADDs Monthly, January 2017
Buyer of goods and services

Novartis offers jobs not only directly, but also indirectly as a buyer of goods and services from suppliers, including many SMEs. Through the procurement of products and services, Novartis indirectly secures more than 40,000 jobs in Switzerland; behind each job at Novartis there are three further indirect jobs. In 2016, the company placed orders worth about CHF 3 billion with companies in the 26 Swiss cantons.

Purchases by canton

<table>
<thead>
<tr>
<th>Top 10</th>
<th>CHF million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zurich (ZH)</td>
<td>826</td>
</tr>
<tr>
<td>Basel-Stadt (BS)</td>
<td>787</td>
</tr>
<tr>
<td>Basel-Land (BL)</td>
<td>343</td>
</tr>
<tr>
<td>Neuchâtel (NE)</td>
<td>199</td>
</tr>
<tr>
<td>Vaud (VD)</td>
<td>174</td>
</tr>
<tr>
<td>Aargau (AG)</td>
<td>121</td>
</tr>
<tr>
<td>Zug (ZG)</td>
<td>119</td>
</tr>
<tr>
<td>Berne (BE)</td>
<td>110</td>
</tr>
<tr>
<td>Geneva (GE)</td>
<td>81</td>
</tr>
<tr>
<td>St. Gallen (SG)</td>
<td>36</td>
</tr>
</tbody>
</table>
Facts and figures 2016

Employees

13,000 employees
- 11% in Switzerland
- 123,000 worldwide

Sales

0.8 bn CHF
- 2% in Switzerland
- 47.8 bn CHF worldwide

Current income taxes

0.7 bn CHF
- 33% in Switzerland
- 2.1 bn CHF worldwide

Research and development

3.4 bn CHF
- 38% in Switzerland
- 8.9 bn CHF worldwide

Investments in property, plants and equipment

0.4 bn CHF
- 22% in Switzerland
- 1.8 bn CHF worldwide
Sites in Switzerland

1 Basel (BS)
   Company headquarters
   Head office of Innovative Medicines division
   Research & development
   Production

2 Schweizerhalle (BL)
   Production

3 Stein (AG)
   Production

4 Schaffhausen (SH)
   Alcon Grieshaber

5 Rotkreuz (ZG)
   Head office of Swiss business units
   – Innovative Medicines
   – Sandoz
   – Alcon

6 Fribourg (FR)
   Alcon Pharmaceuticals

7 Geneva (GE)
   Alcon Management

8 Locarno (TI)
   Novartis Pharmanalytica
1 Basel St. Johann (BS)

Novartis Campus

The Basel site is home to the global headquarters of Novartis. The Novartis Campus is the site of the former industrial complex of the St. Johann works in Basel, which since 2001 has been undergoing a transformation into an ultramodern center for research, development and management. Today more than ever, the development of new ideas and processes requires networking and cooperation across divisions and teams. This has led to forward-looking laboratory models and the multi-space concept with its diverse work and encounter zones.

Novartis has invested around CHF 2.2 billion in the transformation of the campus to date. According to the current plans, space for some 10,000 Novartis associates will be created on the Novartis Campus in Basel by 2030, mainly for research and development, the various business units and general administration.
2 Schweizerhalle (BL)  
Production

There has been production at Schweizerhalle since 1937. Novartis produces active pharmaceutical ingredients and intermediate products here for around 25 medicines. The products are manufactured in technically complex special systems using sophisticated chemical processes, analyzed using state-of-the-art laboratory technologies and released for further processing.
Stein is a strategically important site for the production and launch of innovative medicines. Two of the largest pharmaceutical manufacturing facilities are located here: the solids plant and the steriles plant.

Every year at the Stein site, about 30 kilometers up the Rhine from Basel, some 3 billion tablets, capsules, ampoules, prefilled syringes, vials, autoinjectors and transdermal therapeutic systems are manufactured, inspected, packaged and shipped to more than 150 different countries.
4 Schaffhausen (SH)

Alcon Grieshaber

Alcon Grieshaber AG manufactures surgical instruments used for operations on the eye’s vitreous humor or retina. The company is a global market leader in this area. Its products are used across the globe and guarantee quality and precision.
5  **Rotkreuz (ZG)**  

**Innovative Medicines**  
Sandoz  
Alcon

**Innovative Medicines**  
**Novartis Pharmaceuticals** is responsible for the marketing of around 100 prescription medicines in Switzerland. The most important therapeutic areas include neurology, immunology, dermatology, ophthalmology, cardiovascular and respiratory disorders.

**Novartis Oncology** markets more than 20 prescription medicines in Switzerland in the fields of oncology, hematology and rare diseases.

**Sandoz**  
markets almost 200 products in Switzerland, including for example antibiotics and medicines for asthma, cardiovascular diseases and allergies.

**Alcon**  
and its associates offer the full range of Alcon’s ophthalmic products to patients and eye specialists in Switzerland.
6 Fribourg (FR)  
Alcon Pharmaceuticals

Alcon Pharmaceuticals serves as the central interface in the value chain: More than half of Alcon’s sales are handled through the site in Fribourg. Alcon Pharmaceuticals in Fribourg also supports 16 countries in the region with the European Financial Services Center and is one of the most important suppliers of ophthalmic pharmaceuticals to Novartis Pharma.
7 Geneva (GE)  
Alcon Management

Based in Cointrin (Geneva), Alcon Management S.A. was founded in 2008. Its employees support Alcon’s commercial subsidiaries in Europe, the Middle East and Africa (EMEA) in the handling of their day-to-day business. As Alcon’s second-largest market, the EMEA zone comprises more than 40 subsidiaries, which market Alcon products in more than 90 countries.
8 Locarno (TI)

Pharmanalytica

Analytical tests are performed on more than 150 Novartis products at the Locarno site. Pharmanalytica’s responsibilities include the performance of stability tests and specific release tests for Novartis products, the writing of stability reports, the storage of stability samples in climate chambers and the development of new analytical methods. Locarno handles the global implementation of new analytical technologies at Novartis as well as the analysis of potential counterfeit product.
Working at Novartis

People from around 100 nations work at Novartis sites in Switzerland, creating a multicultural working environment. A corporate culture in which heterogeneity is appreciated contributes to the long-term success of the company. Different educational and knowledge backgrounds as well as different ways of thinking within the workforce foster innovation. For this reason, Diversity & Inclusion Switzerland concerns itself with four main areas: people of different cultural backgrounds, generations and genders as well as people with different individual skills and working styles.

![Pie chart showing the distribution of nationalities at Novartis](chart.png)
Novartis employees in Switzerland

13,000 employees work in Switzerland.

\[33\%\] are Swiss nationals.

\[34\%\] of management functions are held by women.

\[73\%\] of employees work part-time.

430 employees deal with the Swiss market. 73% of them are Swiss.

Employees’ place of residence:

- **SWITZERLAND**: 67%  
- **FRANCE**: 18%  
- **GERMANY**: 15%
Young professionals

Students and university graduates

Our mission is to discover new ways to improve and extend people’s lives. For our core business, we are looking in particular for students and university graduates in the fields of natural science, medicine and engineering. But we are also looking for people in the fields of economics, law, psychology and social sciences who are interested in starting their career at Novartis.

All advertisements for training positions are published on our careers portal. We offer internships at all levels:

– Work experience in preparation for studies
– Bachelor’s degree students
– Master’s degree students
– Graduates
– MBA students
– Postdocs
Vocational training

Around 100 trainees start an apprenticeship at Novartis each year. Altogether, Novartis is training around 300 apprentices at any given time. The main focus of this training lies in research and development as well as production. We offer the following apprenticeships:

- Laboratory technician in biology
- Laboratory technician in chemistry
- Chemical and pharmaceutical technician
- Automation engineer
- Office assistant
- Electronics engineer
- Computer scientist
- Commercial assistant
- Logistician
- Polymechanic
The path to a new medicine

<table>
<thead>
<tr>
<th>Discovery</th>
<th>Clinical trials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target selection</strong></td>
<td><strong>Proof of concept</strong></td>
</tr>
<tr>
<td>Drug research and design</td>
<td>5–15 patients</td>
</tr>
<tr>
<td>Preclinical research</td>
<td></td>
</tr>
</tbody>
</table>

Investigational New Drug Application submitted (IND)

<table>
<thead>
<tr>
<th></th>
<th>&gt;10,000 Compounds</th>
<th>&lt;250 Compounds</th>
<th>&lt;5 Compounds</th>
</tr>
</thead>
</table>

Phase III
1,000–5,000 patients

Submission
Review by regulatory authority

Phase IV
Post-marketing surveillance and research

Production

New Drug Application/Biologics License Application submitted (NDA/BLA)

Approval of one new medicine 10–15 years
Research and development

Therapeutic areas

We focus our R&D efforts on disease areas where there is still significant need for better treatment options and where we believe our skills may help bring new solutions.

With 16 major approvals in key markets and 24 major submissions, we made significant progress in research and development in 2016. Many of our therapeutic solutions are leading in their fields.
Reimagining medicine

Novartis is pursuing a unique approach in pharmaceutical research. For example, in the earliest stages of development, priorities are set by the needs of patients and our understanding of the diseases concerned. Our pipeline contains more than 200 projects in different phases of clinical development, including potentially new products and additional indications or new formulations for established products. In the next few years, we will launch a substantial number of new products worldwide.

To expand our scientific expertise and capacity for innovation, Novartis sets great store by partnerships with companies and universities. Our research unit NIBR (Novartis Institutes for Biomedical Research) alone has more than 300 partnerships with universities and private research institutions throughout the world. NIBR also maintains numerous partnerships in Switzerland that play a substantial part in helping to promote research. Switzerland is a key location for Novartis research and development. In 2016, we invested a total of CHF 3.4 billion in this country.
Basel as one of the key research locations

Basel is of key importance for the research activities of Novartis: More than a third of all NIBR associates work in Basel. And since the establishment of the FMI in Basel, this institute has also achieved significant advances and developed into a research institute of world renown.

NIBR Basel

With its 2,200 or so associates, Novartis Institutes for BioMedical Research (NIBR) Basel is the innovation driver of Novartis, focusing on research into new medicines that can crucially change the practice of medicine. Research in Basel uses pioneering methods and cutting-edge technology to achieve breakthroughs in areas such as the treatment of musculoskeletal disorders, oncology, transplantation and autoimmune diseases.
FMI Basel
The Friedrich Miescher Institute for Biomedical Research (FMI), which was established in Basel as a foundation in 1970, conducts basic research in the field of biomedicine and employs around 330 people. The institute uses the latest technology to look into the underlying molecular mechanisms of cells and organisms involved in health and disease.

The institute focuses on cancer research, epigenetics and neurobiology. Through its association with the Novartis Institutes for BioMedical Research and the University of Basel, the foundation is at the interface between academic research and biomedical practice.
Development of breakthrough medicines

Global Drug Development is responsible for the development of new medicines discovered by our research teams and external partners. It brings together drug development activities at Novartis and makes sure the new products in our pipeline are regularly assessed and that resources can be optimally assigned to the most promising projects. The organization also supports joint standards and processes as well as the company-wide roll-out of proven procedures that will enhance efficiency and effectiveness.

50 trials involving around 450 patients were conducted by Novartis in Switzerland in 2016.
Excellence in manufacturing

In 2016, we centralized all drug manufacturing operations into a new organization with the aim of optimizing capacity planning and improving efficiency and effectiveness, thereby further supporting our ability to implement the Novartis strategy. Novartis Technical Operations (NTO) includes about 28,000 employees and more than 60 manufacturing sites supplying products worldwide.

The new unit has been organized by technology platforms to facilitate simplification, standardization and procurement savings. The technology platforms include Chemical Operations, Anti-Infectives, Aseptics, Biologics, Solids and External Supply Operations. They are supported by the Global Engineering and Supply Chain Management functions.

An early benefit of integration has been better resource allocation. The larger scale of NTO allows for more flexible capacity planning and provides the opportunity to further consolidate our supplier base and improve cost and performance. Additionally, the new structure has made it easier to invest in future manufacturing technologies.
Our contribution to the environment and society

Novartis seeks to resolve some of the world's biggest health problems in collaboration with others. To this end, we have set ourselves the goal of assuming a leading role in the field of ethically irreproachable business practices. In living up to our social responsibilities, our activities focus on two areas: expanding access to healthcare and doing business responsibly.

Expanding access to healthcare

Millions of people have no access to medicines. In order to help them, Novartis is engaged in numerous support and donation programs and has also initiated social projects. Our strategy enables us to reach a lot of patients worldwide with our programs.
Our strategy to promote access to healthcare

### Population size

<table>
<thead>
<tr>
<th>Income Segment</th>
<th>% Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>High income</td>
<td>7%</td>
</tr>
<tr>
<td>Upper-middle to high income</td>
<td>9%</td>
</tr>
<tr>
<td>Middle income</td>
<td>13%</td>
</tr>
<tr>
<td>Low income</td>
<td>55%</td>
</tr>
<tr>
<td>Poor</td>
<td>16%</td>
</tr>
</tbody>
</table>

### Approaches

- Original brands
- Generics
- Patient assistance programs
- Tenders
- Generics
- Differential pricing
- **Novartis Social Business:**
  - Novartis Access
  - Novartis Healthy Family
  - Novartis Malaria Initiative
- Tenders
- Patient assistance programs
- Strategic philanthropy
- Donations
- Strategic philanthropy
- Tenders

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1 PEW Research Center with data from World Bank PovcalNet (data 2011)
Novartis Access
An estimated 28 million people in developing countries die of non-communicable diseases every year. To help cope with this burden, Novartis provides emerging and developing countries with 15 high-quality medicines as part of its Novartis Access initiative launched in 2015. This portfolio of products is offered to governments, NGOs and other healthcare providers in the public sector as a package for one US dollar per treatment per month.
Novartis Healthy Family
With this program, we have set ourselves the goal of promoting health education in developing countries and access to medical care. In 2016, we reached more than 7.7 million people in India, Kenya, Vietnam and Indonesia with educational projects. Around 610,000 patients have taken part in various health camps.

Novartis Malaria Initiative
Over the last ten years, the Novartis Malaria Initiative has played a pioneering role in helping healthcare systems fight malaria. Since 2001, we have cooperated with various organizations to provide more than 800 million treatment units for patients with endemic malaria at cost price, thereby helping to substantially reduce the burden of malaria in Africa. Last year, we reached around 50 million patients with this initiative.
Novartis Foundation

The Novartis Foundation works with more than 35 partners around the world to drive innovative healthcare models that have a transformational impact on the health of the poorest populations. In 2016, Novartis Foundation programs reached 8.9 million people. The following two programs illustrate the work of the Novartis Foundation:

**Hypertension management**
Cardiovascular diseases, of which hypertension is a major cause, are the most common cause of death worldwide, including in many low- and middle-income countries. Together with partners, the Novartis Foundation is using new innovative models in Ghana and Vietnam to bring blood pressure screening services closer to the community.

**Leprosy**
Each year, 200,000 new leprosy patients are still diagnosed. Together with its partners, the Foundation is seeking to stop the transmission of leprosy by testing the people in close contact with patients and treating them if they are symptomatic. If no symptoms are present, they receive prophylactic therapy. This could reduce the risk of contracting the disease in the years following contact with a leprosy patient by up to 50–60%.
Doing business responsibly

As a company, we take our social responsibility seriously. This includes ensuring that our business is conducted in such a way that it is economically, socially and environmentally sustainable. Conserving resources and ensuring the wellbeing of our associates are of the utmost priority. A fundamental component of our long-term business strategy is our Health, Safety and Environment Policy. This policy should enable Novartis to minimize risks in these three areas and also make a contribution to the wellbeing of our associates, society and the environment.
Health
Safe working conditions and the health and wellbeing of our associates are paramount. By integrating the efficient promotion of health, preventive care and prevention campaigns into our management principles and continuing the global Be Healthy initiative launched in 2011, we support a healthy lifestyle for our associates and create optimal conditions for the prevention of diseases.

Safety
Our objective is to achieve a rate of fewer than 0.14 occupational accidents and diseases resulting in an absence of one day or longer for Novartis associates and loan staff from third-party companies. Last year, we recorded 7 occupational accidents resulting in 59 days of absence in Switzerland, which reduced the accident rate to 0.07.

In order to identify and avoid potentially serious accidents, we are also continuing the SIF (Severe Injuries and Fatalities) program this year. The main focus will be on rolling out a Safety for Vendors and Subcontractors management system.
Environment

Energy and greenhouse gas emissions

Our goal is to achieve a 30% reduction in our global greenhouse gas emissions by 2020 and a 50% reduction by 2030. In Switzerland, we are supporting these objectives by constructing new, energy-efficient buildings, increasing our use of district heating and not least changing the way energy is consumed. The emissions depicted below relate to Switzerland and are generated either by our own activities or by the provision of energy by third parties.

While the impact of new buildings is reflected in the reduced level of heating used, amongst other things, we are only seeing a slight reduction in electricity consumption. The savings resulting from the above-mentioned measures are almost canceled out by the increased use of IT and growing automation in the laboratory. Since 2012, energy consumption has fallen by 17%.
To keep greenhouse gas emissions from heating usage as low as possible, the latest three buildings on the Novartis Campus in Basel are equipped with heating pumps and underground registers. This enables the heat to be stored underground to keep the building cool in the summer and then drawn on to heat the building in the winter. This approach is also being used for the office building in Rotkreuz.
Waste
Reducing the overall volume of waste is one of the key environmental objectives of Novartis. Many measures are therefore aimed at either reducing the generation of waste or recycling as much waste as possible.

The volume of hazardous waste generated depends heavily on the production processes used. In Switzerland, it has been reduced by 33% over the last five years from 3.7 to 2.5 kg hazardous waste per kg of product.

Municipal waste accounts for only 10-15% of the total waste volume. Here too, there has been a marked downward trend. From 2012 to 2016, the specific volume of municipal waste also fell by 37% to its present level of 358 kg per person per year.
Sponsoring and Donations

With its Sponsoring and Donations, Novartis engages in various initiatives and projects in humanitarian emergency relief, social affairs and the fostering of culture and sports. The main focus of this support is on activities that are either related to our business interests or in close geographic proximity to the company sites of Novartis.

Fostering social affairs

In the social sphere, institutions and initiatives that help disadvantaged people are sponsored in a variety of ways. For example, Novartis makes substantial contributions to local charitable organizations, neighborhood meeting points, soup kitchens and contact centers for parents, children and juveniles.

Engagement in local communities

The annual Community Partnership Day is an opportunity for Novartis associates to spend a day working on a local, charitable project. In 2016, more than 27,500 associates worldwide got involved, including 3,400 in Switzerland.
Sponsoring culture

In the area of culture, Novartis cultivates long-standing partnerships with such well-known institutions as the Antikenmuseum Basel, Fondation Beyeler, Kunstmuseum Basel and the Museum Rietberg in Zurich as well as the Basel Museumsnacht and the Theater Basel. Novartis is also a principal sponsor of the Baloise Session.

Sponsoring sports

In the field of sports, Novartis serves as the main sponsor of FC Basel and the basketball team Starwings Basket Regio Basel. In central Switzerland, Novartis is a medical partner of the EV Zug hockey team. We also support the junior sections of various football clubs in the Basel region as well as various running sports events.
At work worldwide, at home in Switzerland.