

# SWISS BIOTECH DAY 2021

Picture: © Swiss Biotech Association





Media conference September 7, 2021





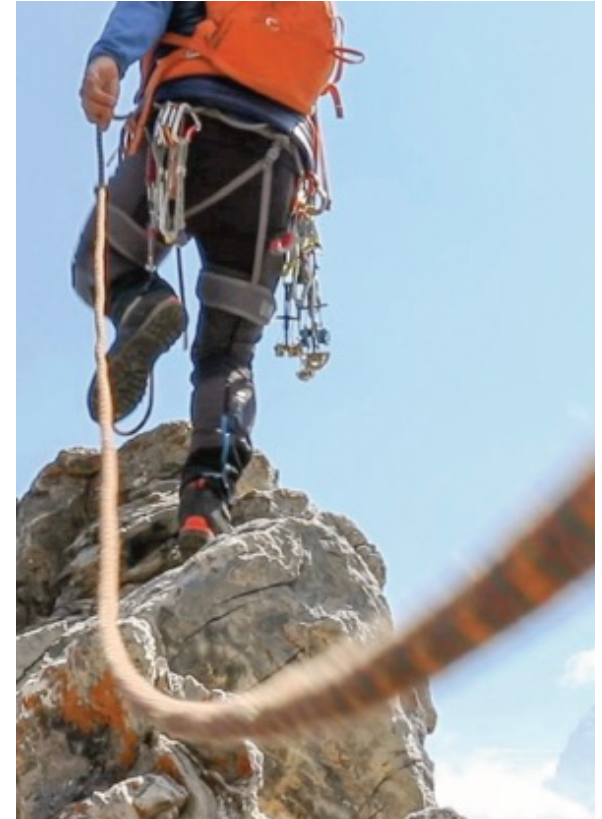
# Welcome

Michael Altorfer, Ph.D.

CEO, Swiss Biotech Association

## 2020 best year ever for financing & innovation

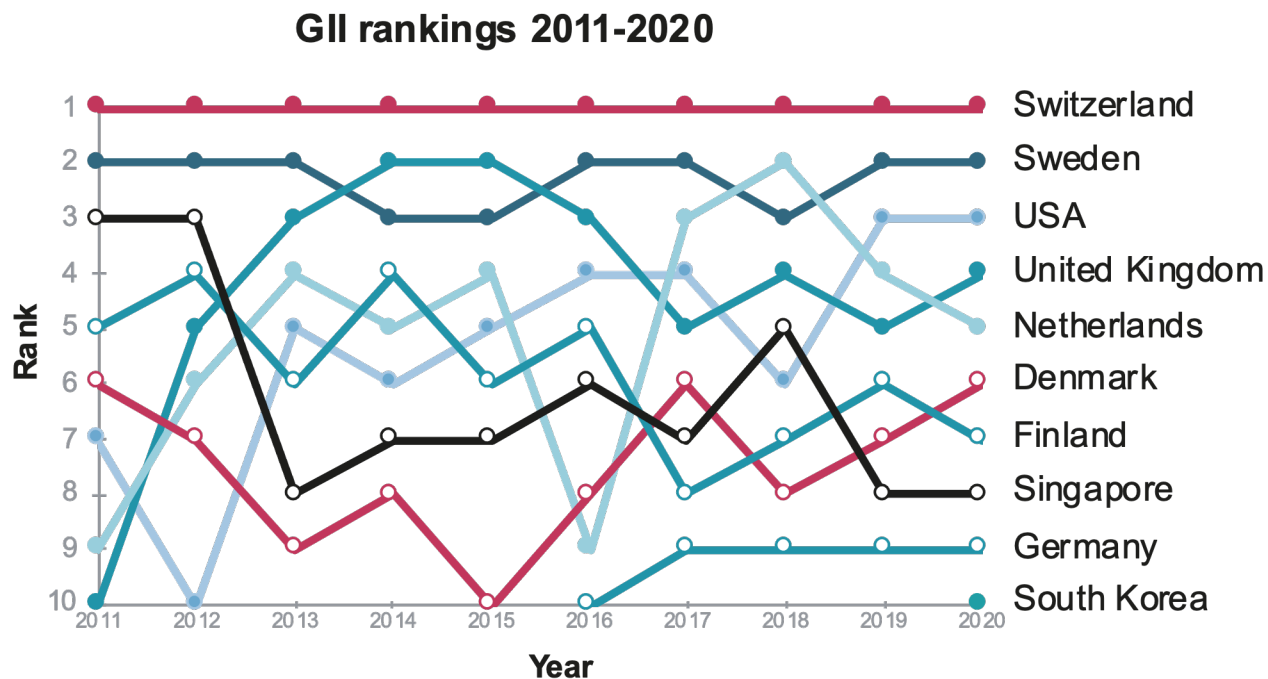
- Capital investments in Swiss biotech companies almost tripled from 2019 to 2020 to CHF 3.4B (USD 3.7B)
- R&D investments increased 10% to CHF 2.2B (USD 2.4B)
- The number of employees in Swiss R&D biotech companies increased by 8% to 16,300
- High quality patent output helped maintain Switzerland's top ranking in Global Innovation Index for the tenth consecutive year





# Winning portfolio with high quality patent output

Switzerland ranked #1 in Global Innovation Index (GII) since 2011



# Swiss biotech ecosystem response to COVID-19

Thriving ecosystem delivers innovation swiftly

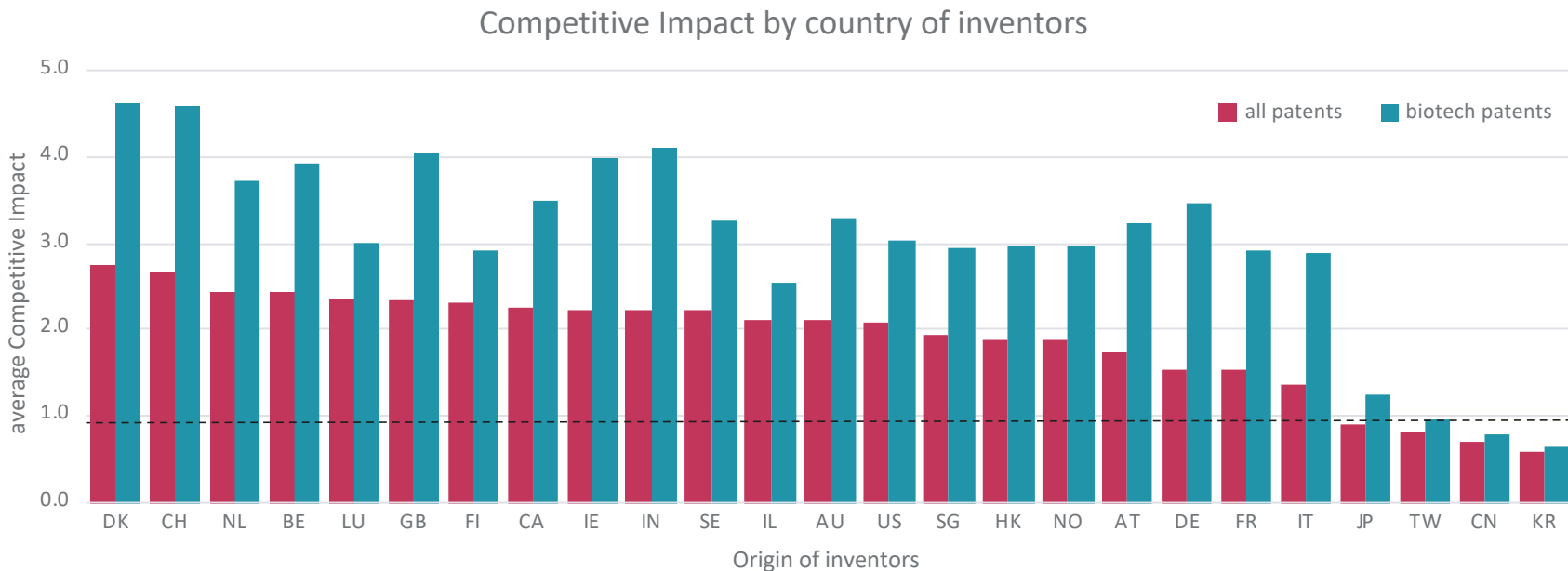


- Synthetic COVID-19 virus reproduced by the University of Berne within **1 month** of genetic sequence made public
- SOPHIA GENETICS AI platform predicts COVID-19 evolution for >1,000 hospitals just **4 months** after pandemic declared
- Lonza sets up Moderna RNA vaccine production lines **in just 8 months**
- Molecular Partners and Humabs Biomed initiate Covid-19 specific therapeutics development programs



# Swiss biotech patents regarded as “jewels in the crown”

Denmark and Switzerland rank first, for both biotech and all patents



The dotted line represents the predefined average C1 value 1 for all patents active worldwide

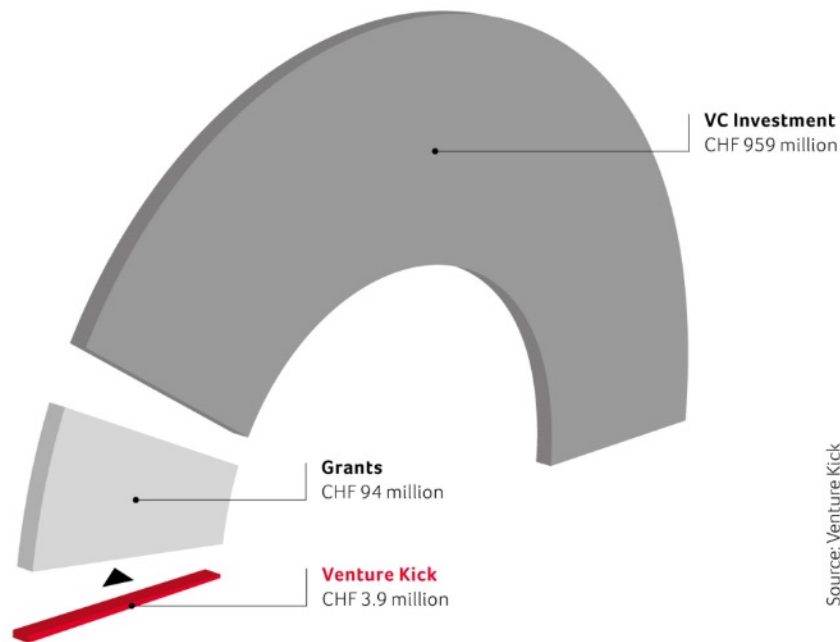
## A strong startup environment

30 - 40 biotech companies founded each year

Enabler Venture Kick:

From 2007 - 2020 Venture Kick invested CHF 4.0 million in > 80 Swiss biotech startups.

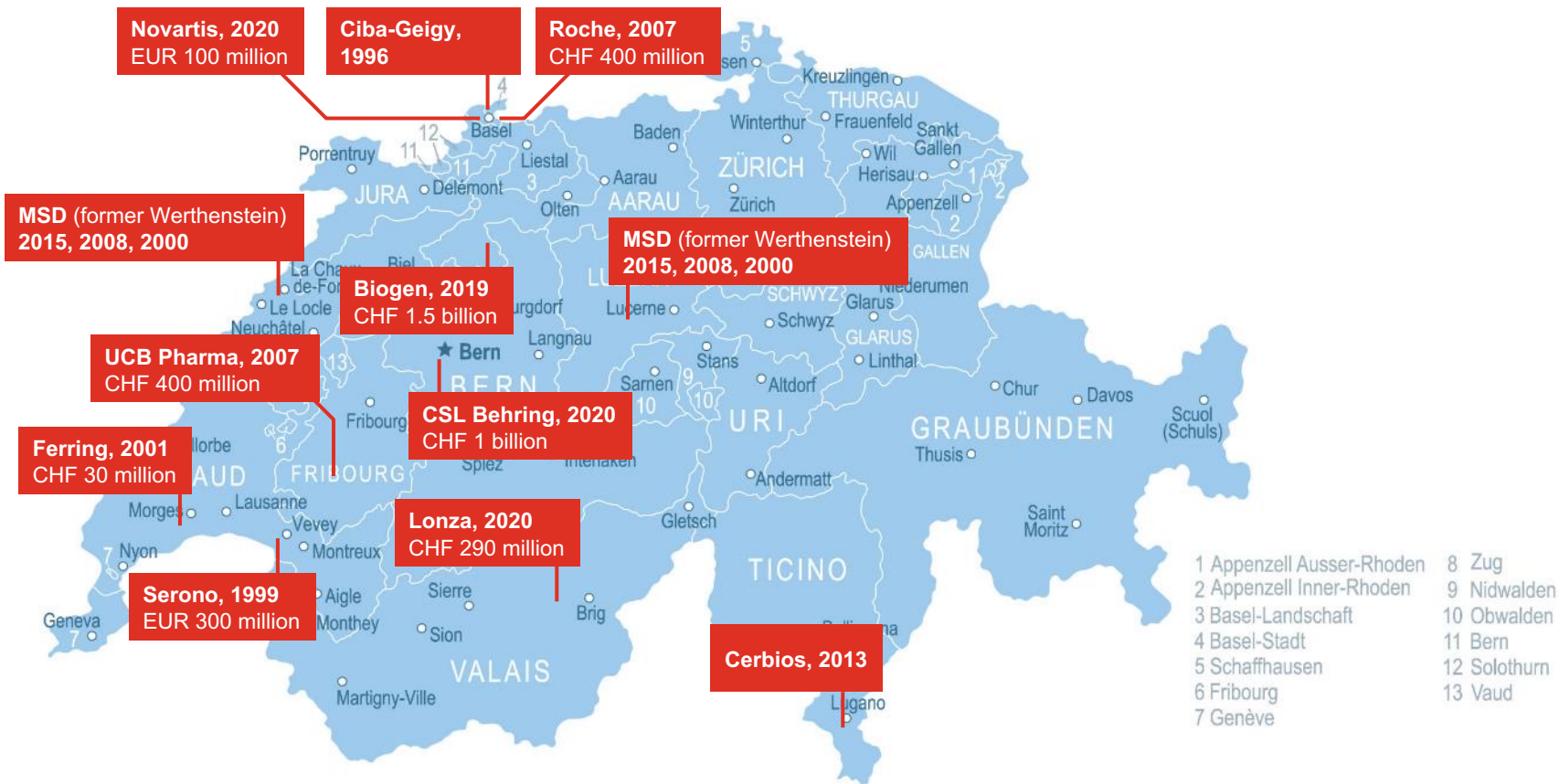
This amount was amplified > 270 fold as the companies subsequently raised a total of > 1 billion CHF in grants and VC investments.



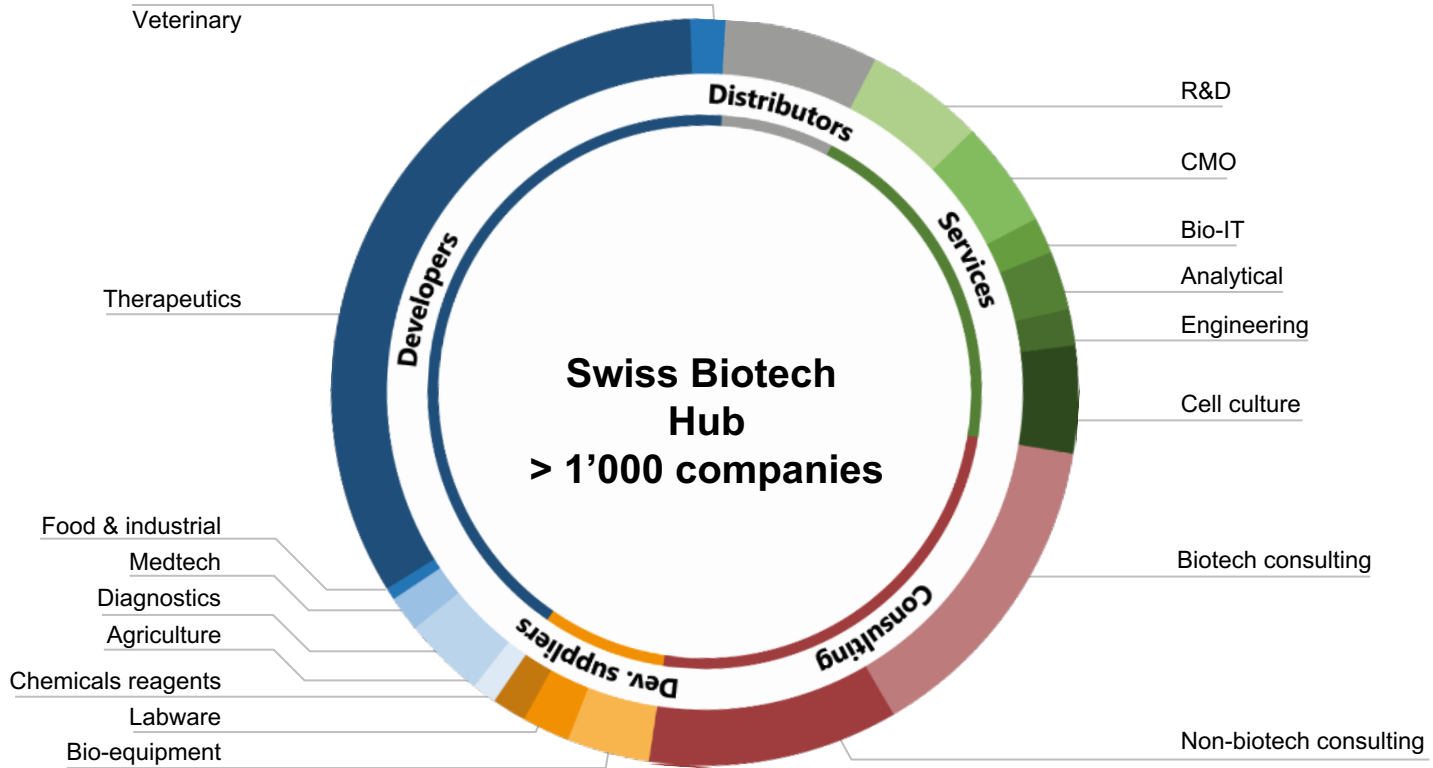
Source: Venture Kick



# Major investments in biopharmaceutical production sites



# A tight cross-functional network





# Members of the Swiss Biotech Association (347)



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## The Swiss Biotech Ventures

Finding the right partner – Swiss biotech ventures, investors, pharma companies

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<https://ventures.swissbiotech.org>



# Swiss Biotech Report Update

Jürg Zürcher

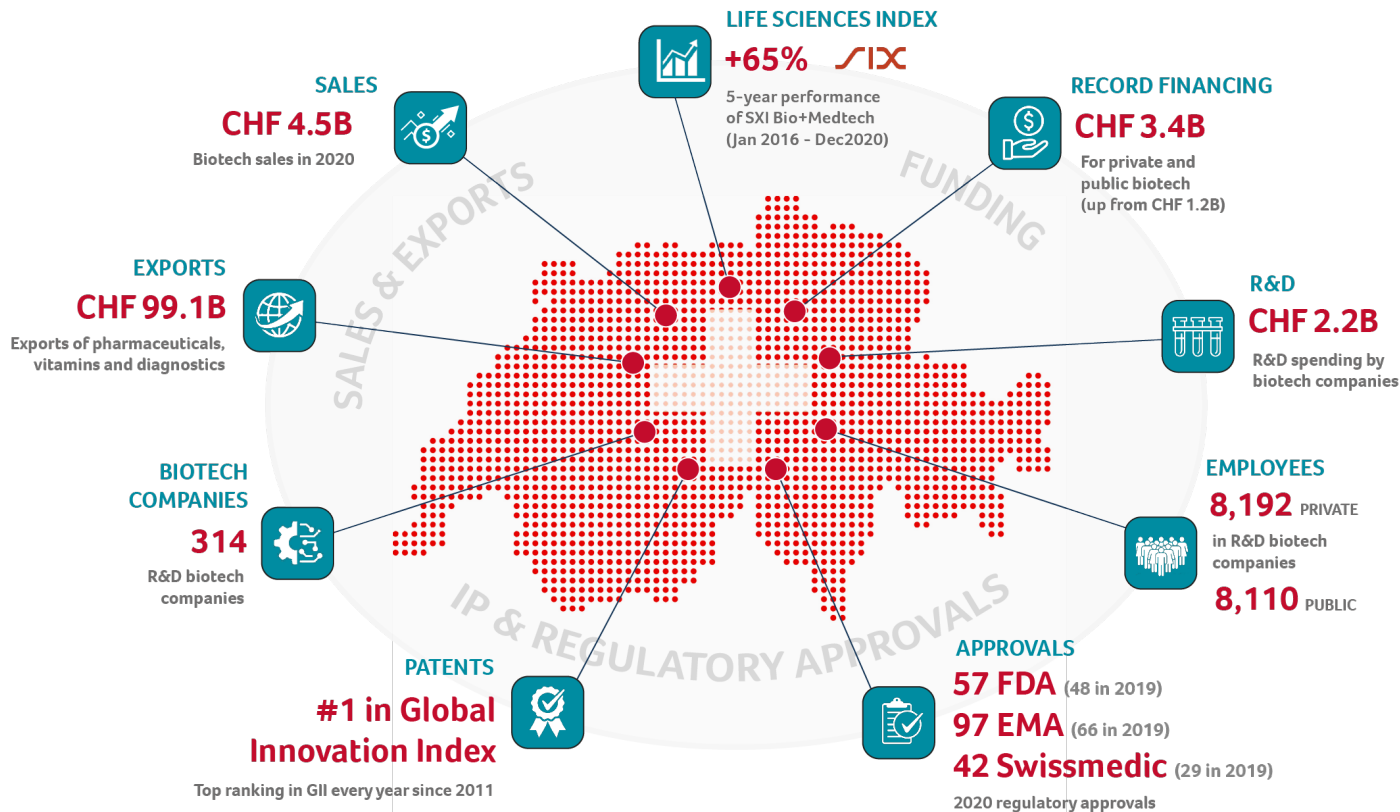
Expert and EY Senior Advisor in the field of Biotechnology, EY

The 2020 data in the presented tables is based on information that was available up until April 16, 2021, when this report was compiled and went to press. At this time, some of the companies had not yet disclosed their financial figures for 2020.

Therefore, some figures were carefully extrapolated on the basis of the latest interim data publicly available (i.e., Q3 or Q4 2020)

# Switzerland: A dynamic biotech ecosystem

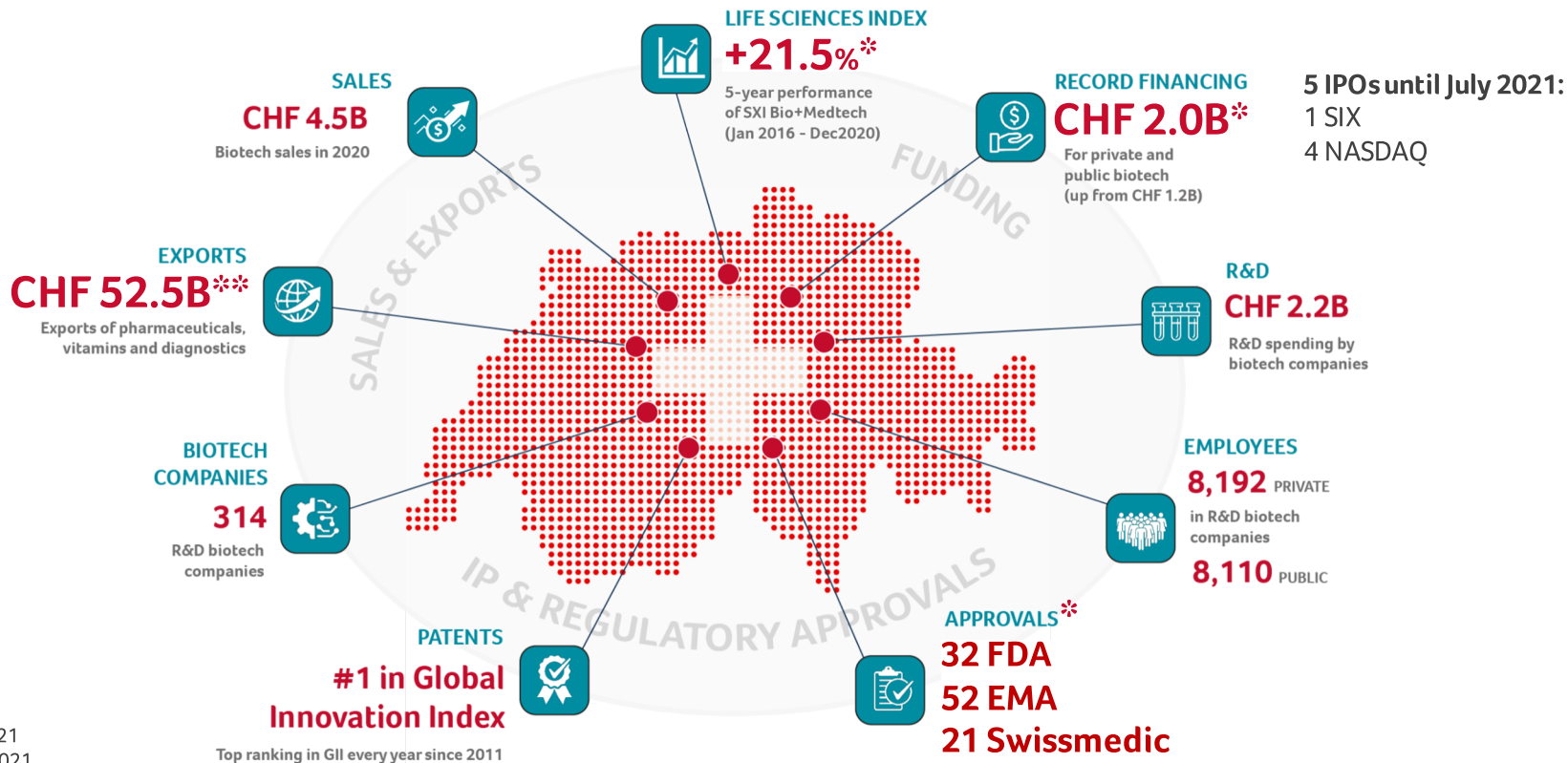
## Key 2020 figures at a glance






# Switzerland: A dynamic biotech ecosystem

## Mid-year update 2021



\* Until Jul 2021  
\*\* Until Jun 2021



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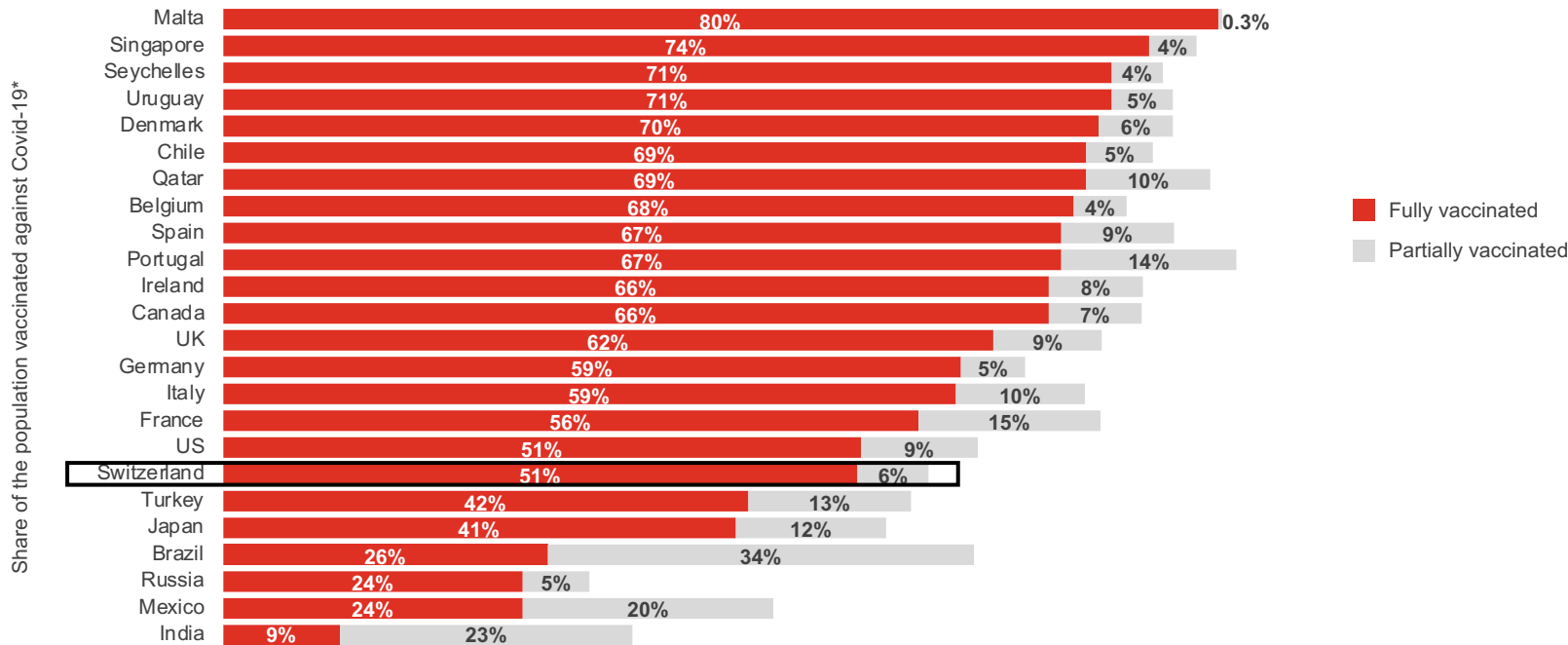
# COVID-19: Current developments in the pharmaceutical and diagnostics industry

Frederik Schmachtenberg, PhD

Partner, EY Life Sciences

# COVID-19 vaccination rate

32,7% of the world's population has received at least one dose of a COVID-19 vaccine



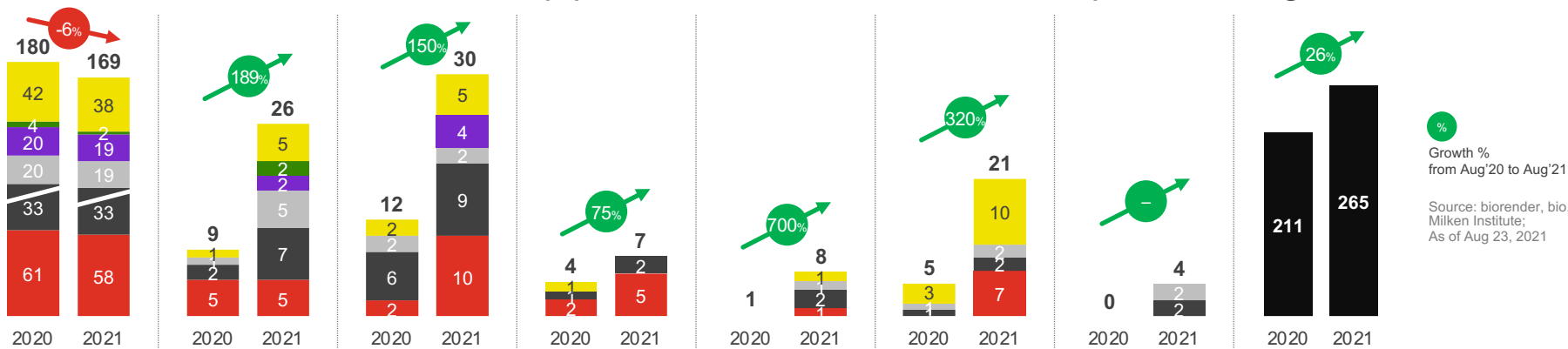
- **5 billion** doses have been administered worldwide, and **33,56 million** are currently administered each day
- Only **1,4%** of the population in low-income countries have received at least one dose

\* As of August 23, 2021

Source: Our World in Data, John Hopkins, Data as of 23rd August 2021; Note: (\*): Shown only countries which have vaccinated % more than 25% and major countries

# Vaccines against SARS-Cov2 virus (as of Aug 23, 2021)

265 vaccine candidates in the pipeline, an increase of 26% compared to Aug 2020



%  
Growth %  
from Aug'20 to Aug'21

Source: biorender, bio.org, Milken Institute; As of Aug 23, 2021



- 265 vaccines in the pipeline (compared to 211 in August 2020, an increase of 26%), 64% of which are still in very early development
- 4 approved vaccines: BioNTech / Pfizer, Moderna, AstraZeneca, and J&J
- All companies in the process of trying to obtain regulatory approval are challenged with the new virus variants and being able to show clinical data specific to the variants

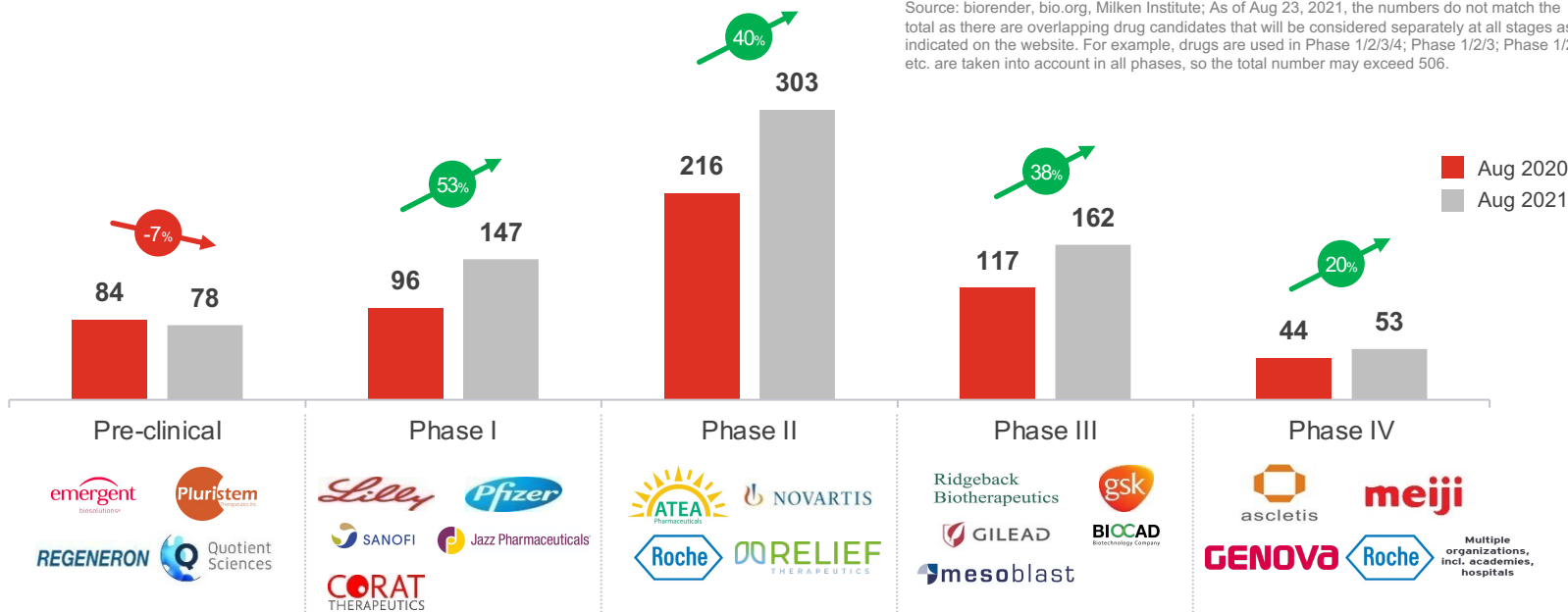


# Therapeutics to treat COVID-19

506 therapeutic drug candidates in the pipeline, Increase by +28% (vs. 396 in 2020)

Therapeutic drug candidates (as of August 23, 2021)

Source: biorender, bio.org, Milken Institute; As of Aug 23, 2021, the numbers do not match the total as there are overlapping drug candidates that will be considered separately at all stages as indicated on the website. For example, drugs are used in Phase 1/2/3/4; Phase 1/2/3; Phase 1/2, etc. are taken into account in all phases, so the total number may exceed 506.

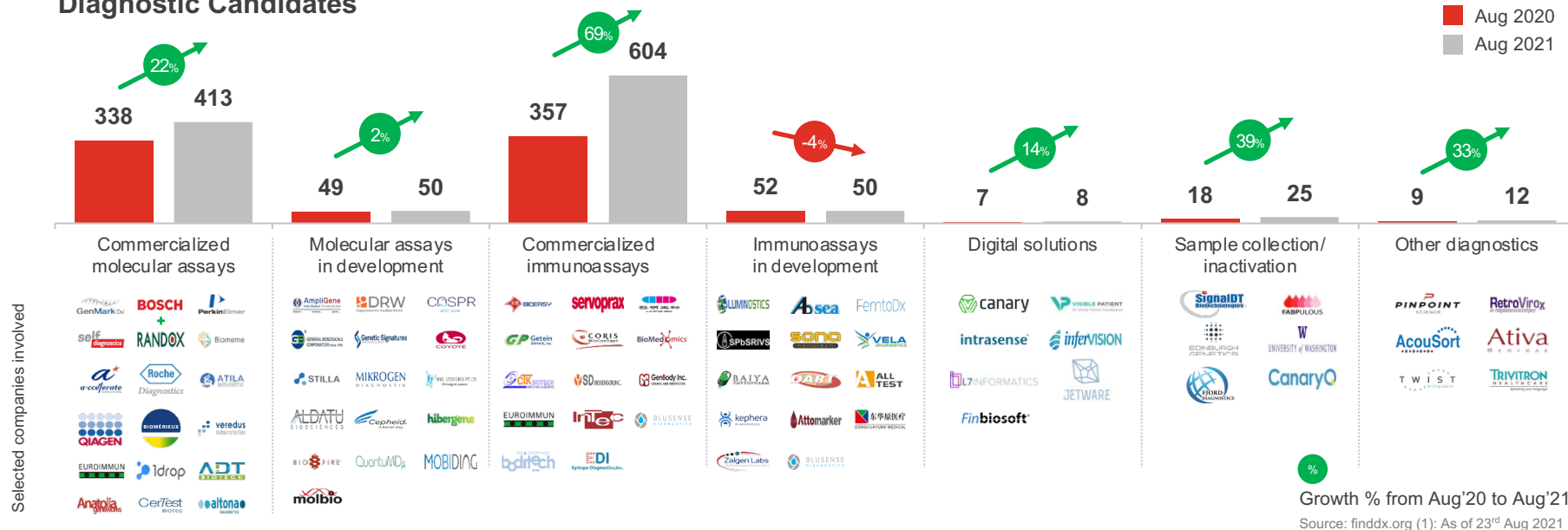


- Total of 506 therapeutic drug candidates potentially effective against COVID-19, some of which are already approved in other indications or are available as generics
- Therapeutics pipeline increased by 28% compared to the previous year (where there were 396 candidates)
- 465 therapeutics are in Phase II (+ 40%) or Phase III (+ 38%) and, thus, close to approval

# Diagnostic tests for COVID-19 detection

1,162 tests on the market (+ 40% vs. 2020) and 100 tests in development

## Diagnostic Candidates



- A total of 1'162 tests are on the market, an increase of 40% compared prior year (comparing Aug'20 to '21)
- Of these, 413 molecular tests and around 604 immunoassays for the detection of SARS-Cov2 are currently commercialized
- Another 100 tests are in development (50 molecular tests and 50 immunoassays tests)
- Factors for success in the commercialization of tests:
  - Reliability of the test result
  - Speed (time until the results become available)
  - Ability to rapidly scale up production and distribute

## Your EY Contact



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# Highlights from European Site Selection report

André Güdel

International Business Development, Global Location and Site Analyst, KPMG AG





# New KPMG Report

## Site Selection for Life Sciences Companies in Europe

**Press Conference Swiss Biotech Day**

—

September 7, 2021

# Background



1

Europe is the 2<sup>nd</sup> largest market for biological and pharmaceutical products and for medical devices

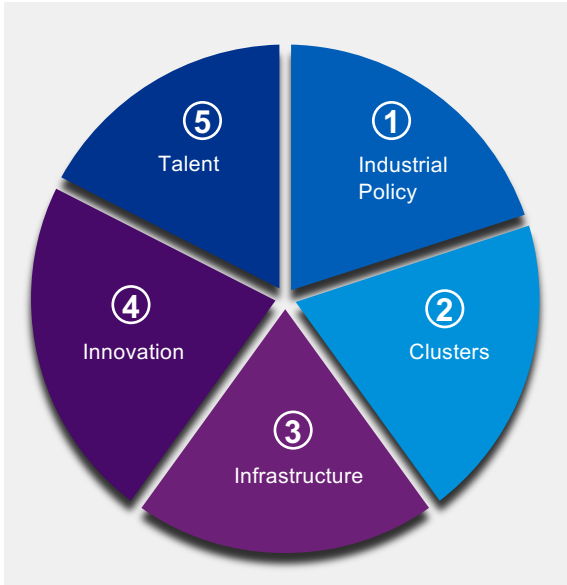
2

Need from industry for unbiased information: Over 25 Life Sciences manufacturing and green field projects in Europe in first 8 month in Europe.

3

Tool for Investment Promotion Agencies to benchmark their country/region against others

# Topics Covered



## Overview on Key Site Selection Criteria

- Comparisons on industrial policies, cluster size, infrastructure, taxation, innovation, availability of talents

## Other Topics

- Overview on FDA approved manufacturing plants
- Up-date on EU funding
- Summary on regulatory requirements, market entry strategies, etc.

# Key Trends



## Recent Developments and Outlook

- Return of industrial strategies on EU level and on country levels
- BEPS 2.0: Possible shift from tax incentives to subsidies and loans
- Number of first time launchers is increasing
- Changes in the regulatory environment might affect business models
- Need for manufacturing capacity for biologics products, leading to more projects



# Download & Contact



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