

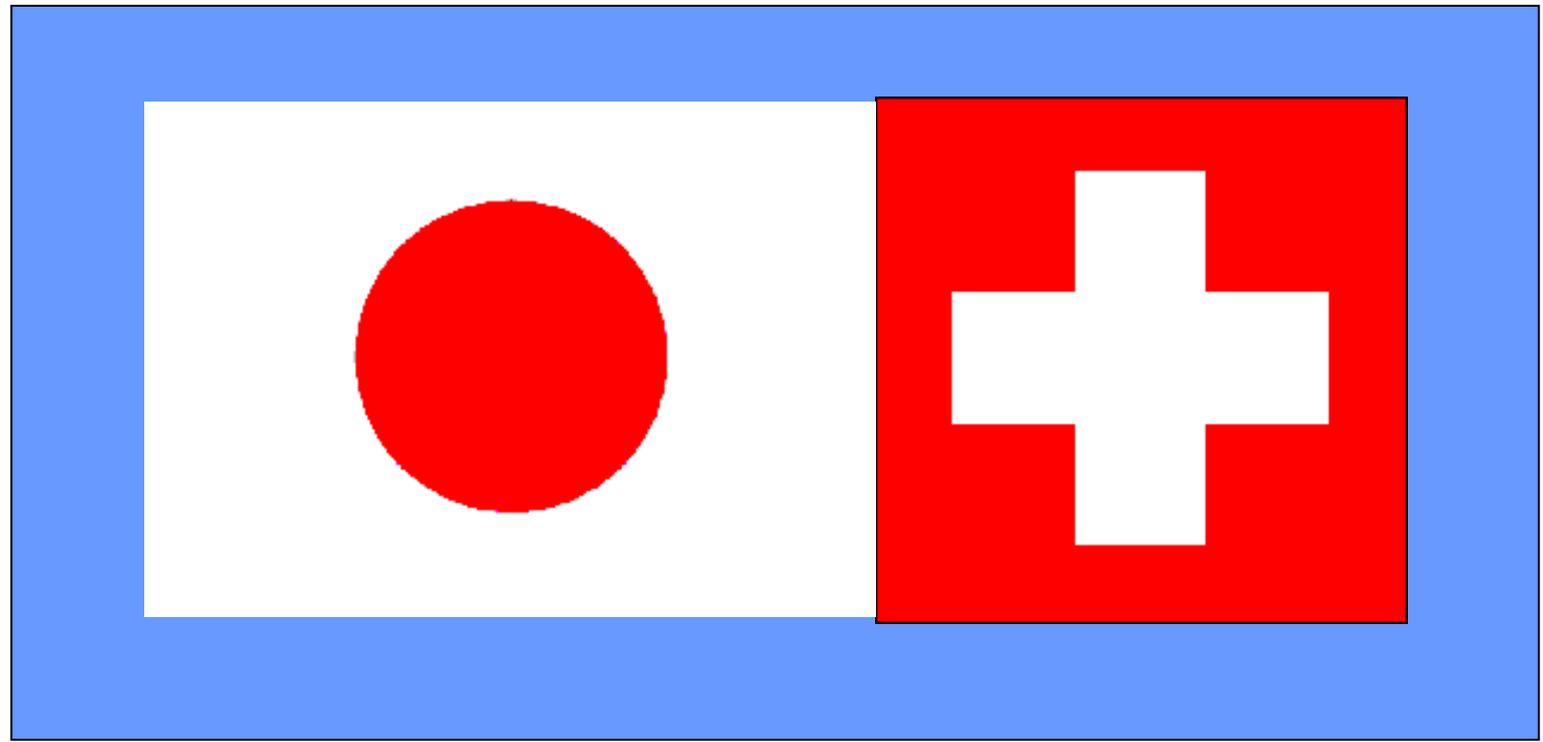


One Nation – One Biotech Cluster

**D. P. Alexakis – Swiss Biotech
Association**



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SwissBiotech – Heading towards success !

«The **Swiss industry** is emerging as a sleeping **giant** and one to watch in coming years » *Ernst & Young, 2002*

« Switzerland ... has a combined **science citation** intensity being **higher** than USA, UK and the other OECD countries »

David A. King, Nature, 15 July 2004, Science Magazine, 20004

« ... Switzerland is probably one of the best places for **biotech companies** to **establish** themselves... »

Ernesto Bertarelli, SERONO International SA



Switzerland at a Glance

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- 2004 was globally the 2nd best year in financing
- Record number of FDA approvals for biotech products
- Basilea was the 1st IPO since 2002 in Switzerland; more companies to come in the near future
- Switzerland ranks as number 6 in Europe
- and number 9 worldwide (since 1998)
- CHF 194 million of venture capital found its way into Swiss biotechs, which makes Switzerland rank as number 3 in Europe
- Total of 223 companies (4 less than 2003) which reflects some consolidation trends going on in the industry
- Still tough times for early stage, not product focused companies regarding financing

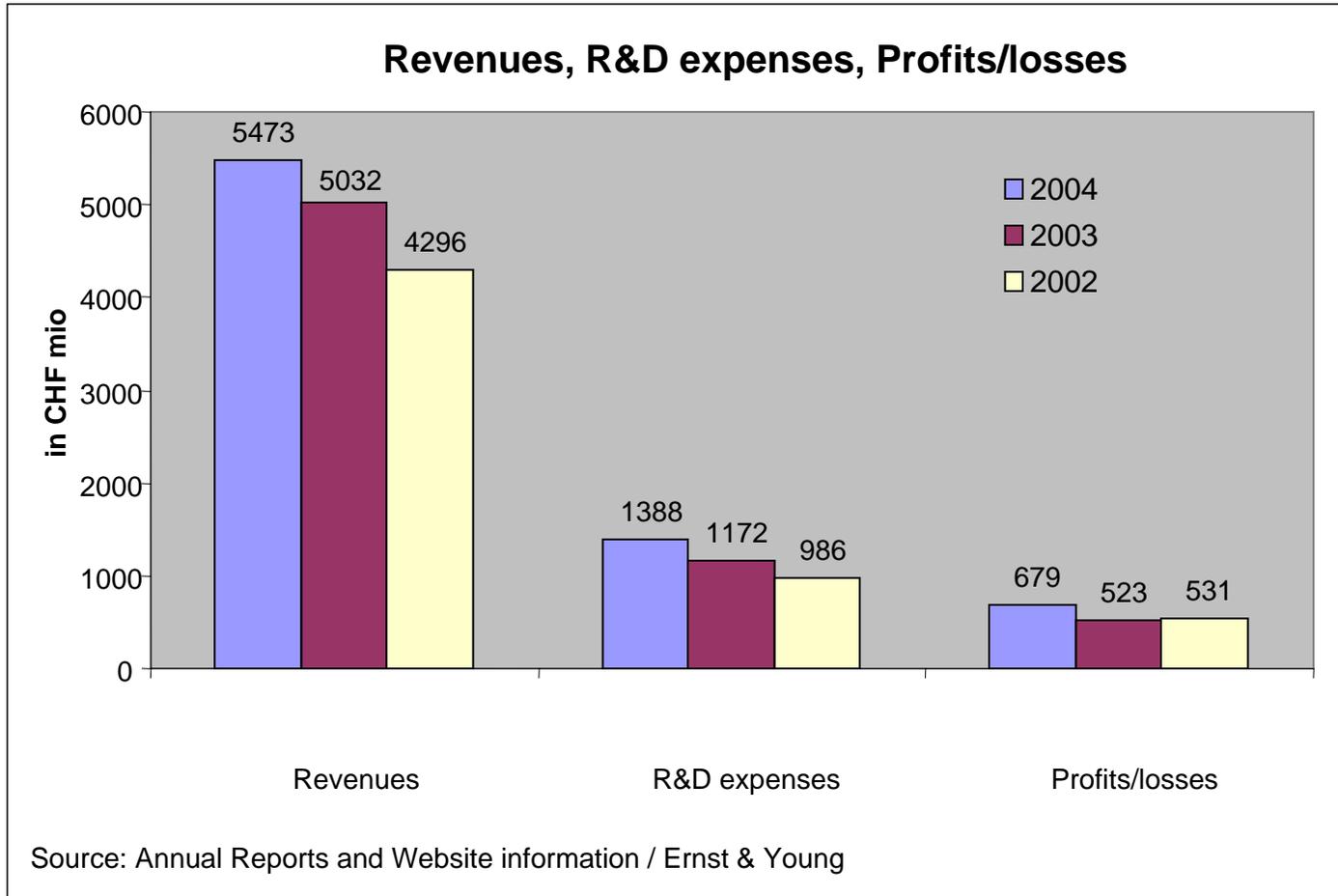


Swiss Biotech Association SBA (130 member companies)

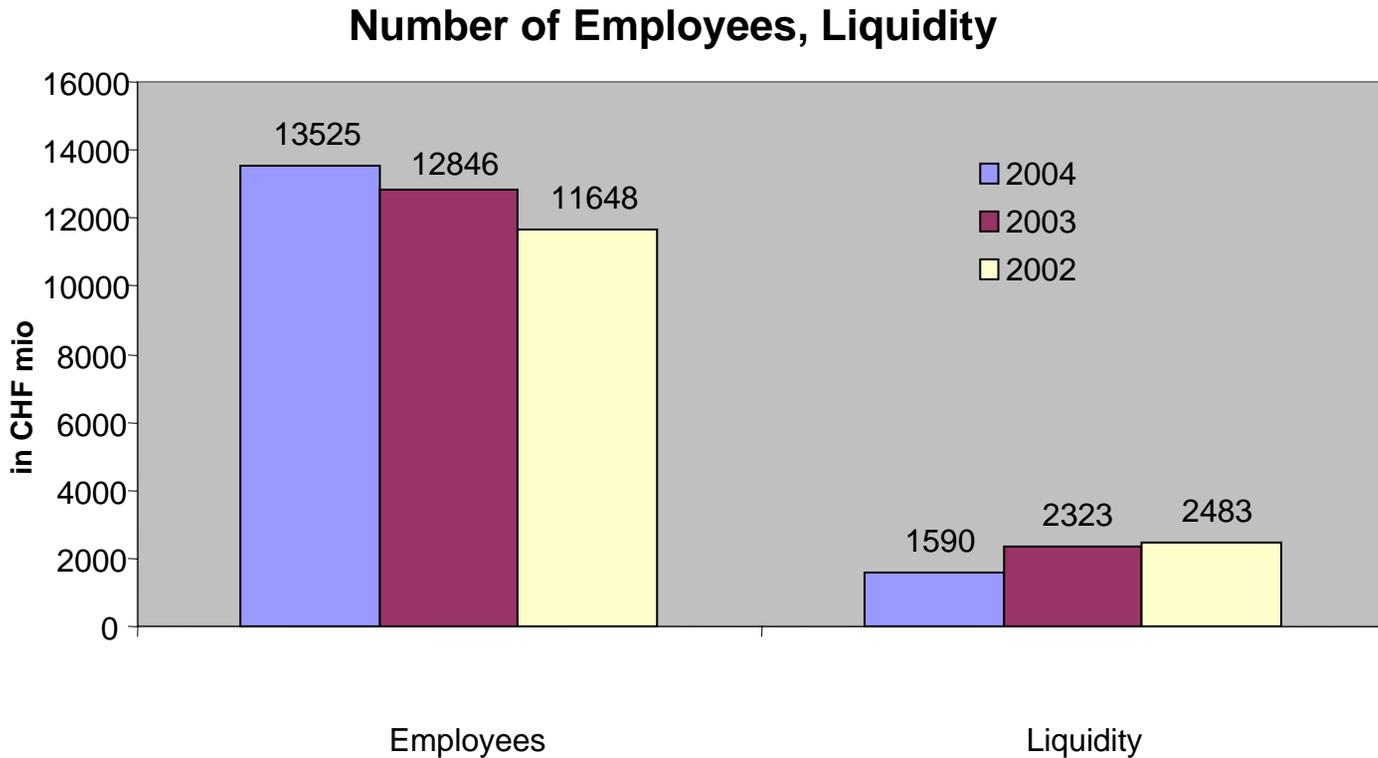
The SBA intends to secure the position to which biotechnology SMEs will be entitled now and in future. Focus is on:

- Support to create the conditions in biotechnology appropriate for SMEs.
- Continue the awareness programme to reduce the fear connected with modern biotechnology
- Intensify research-related communication between universities and the biotech industry
- Promotion of the opportunities attached to professional careers in science and biotechnology sector
- **Integration of the Swiss Biotech Industry on the national level, on European level and on the global level.**

Switzerland at a Glance – Tables / 1

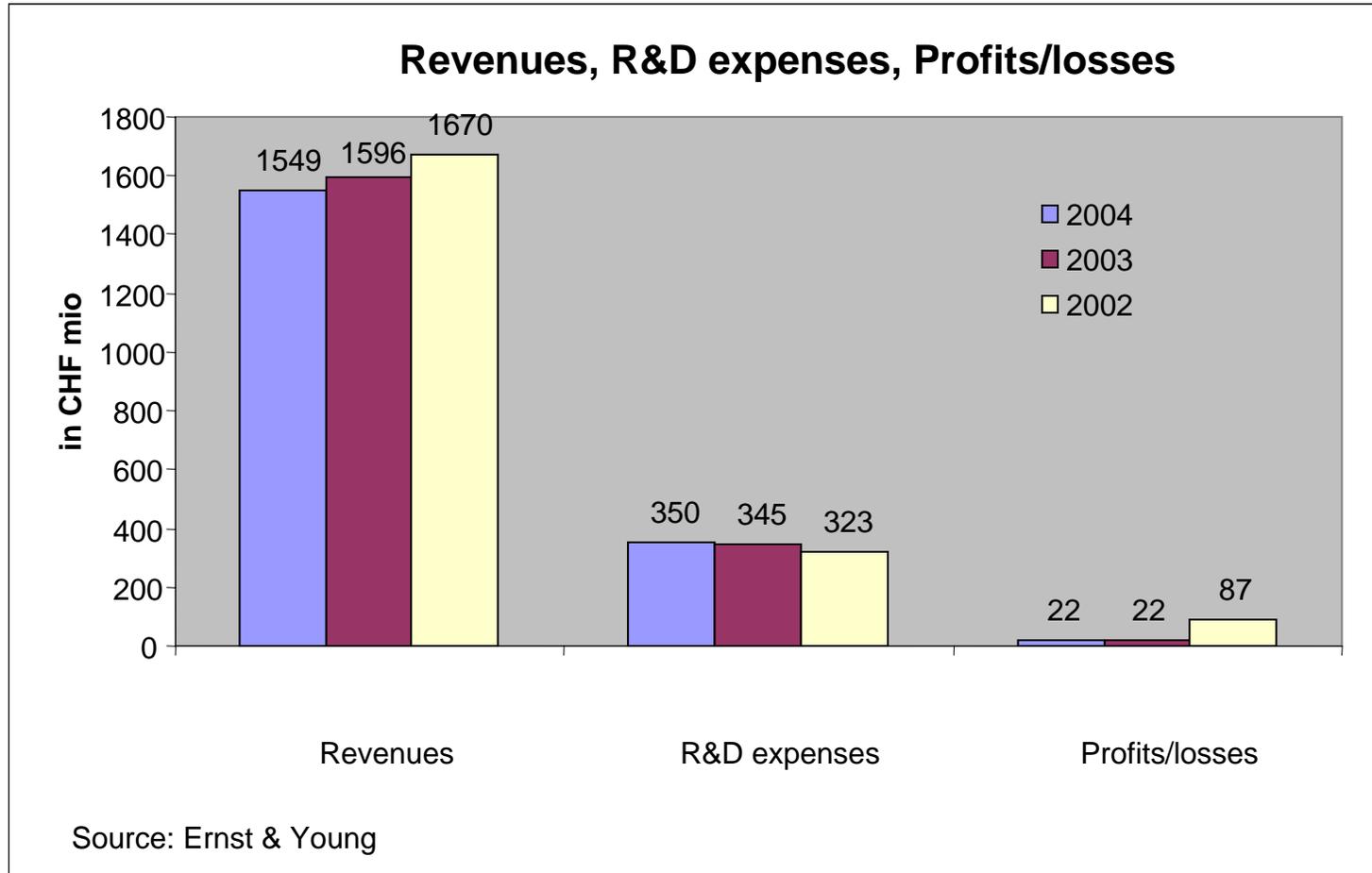


Switzerland at a Glance – Tables / 2



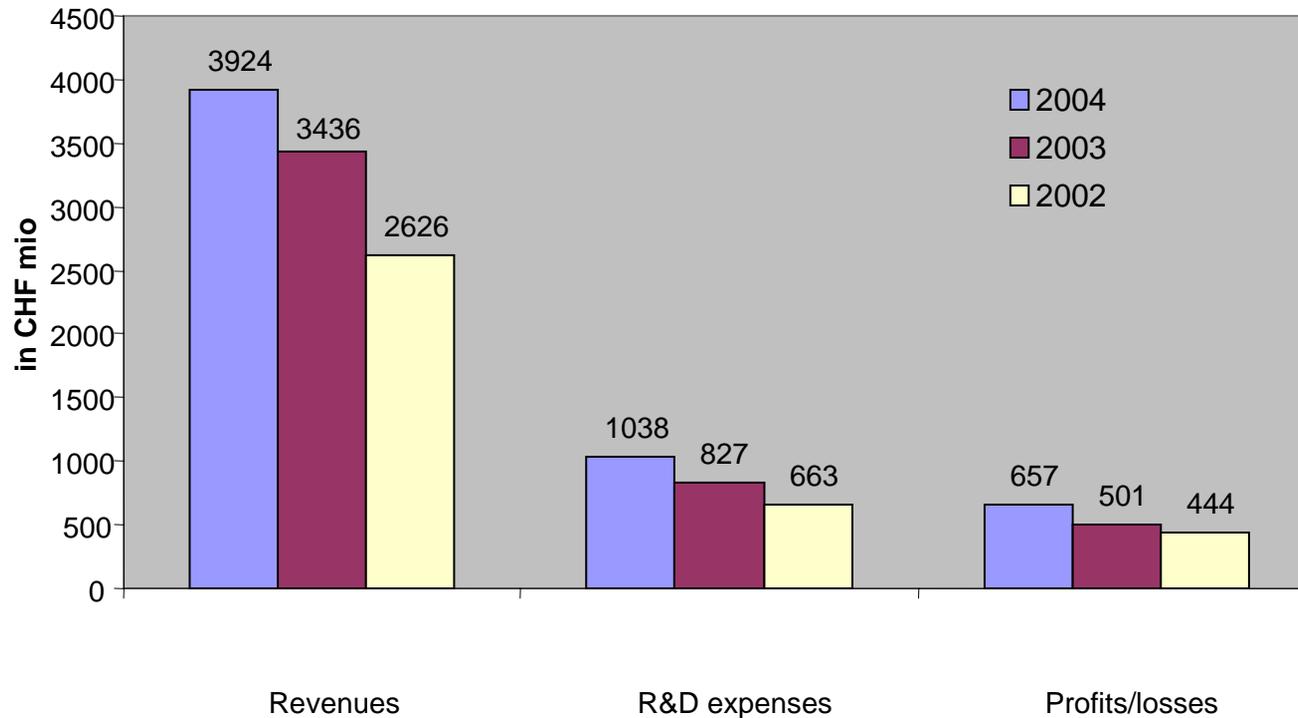
Source: Annual Reports and Website information

Swiss **Private** Companies in 2005 / 1



Swiss Public Companies in 2005 / 1

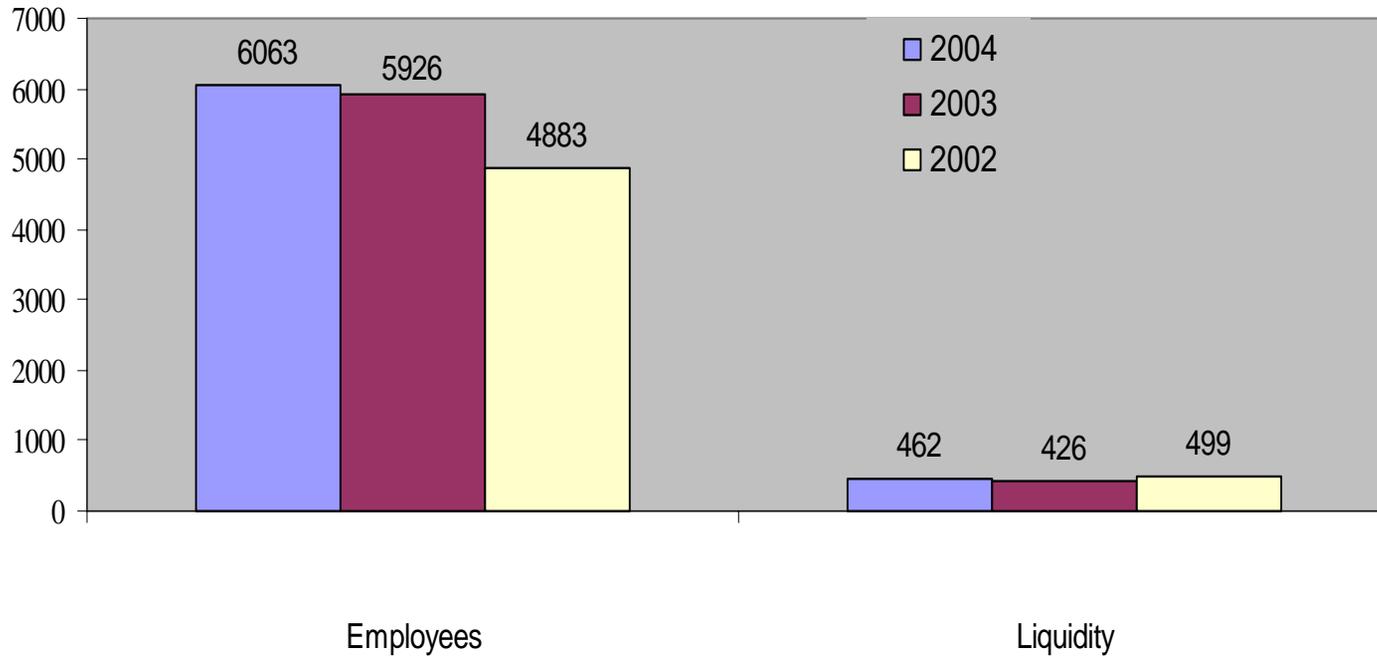
Revenues, R&D expenses, Profits/losses



Source: Annual Reports and Website information

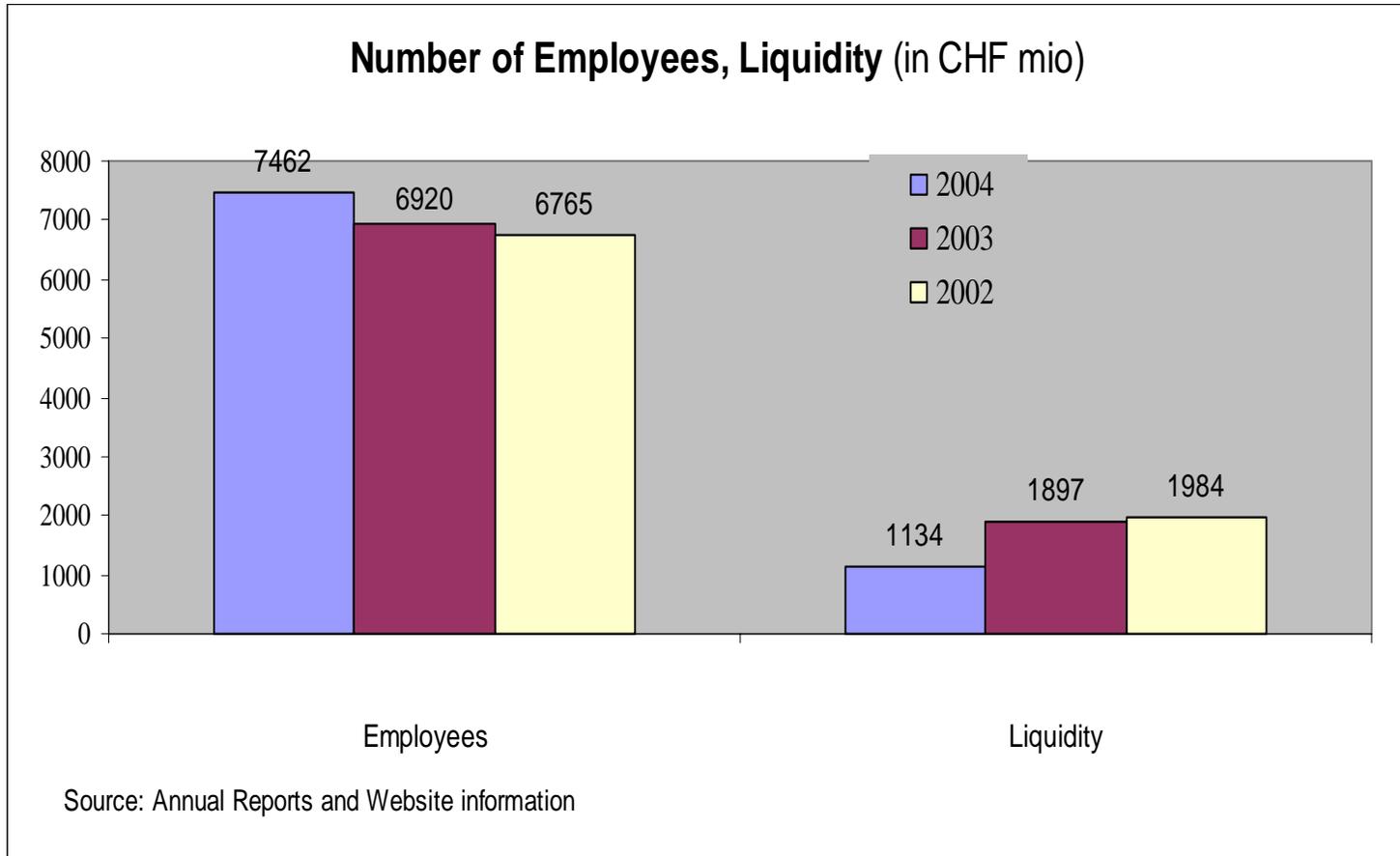
Swiss Private Companies in 2005 / 2

Number of Employees, Liquidity (in CHF mio)

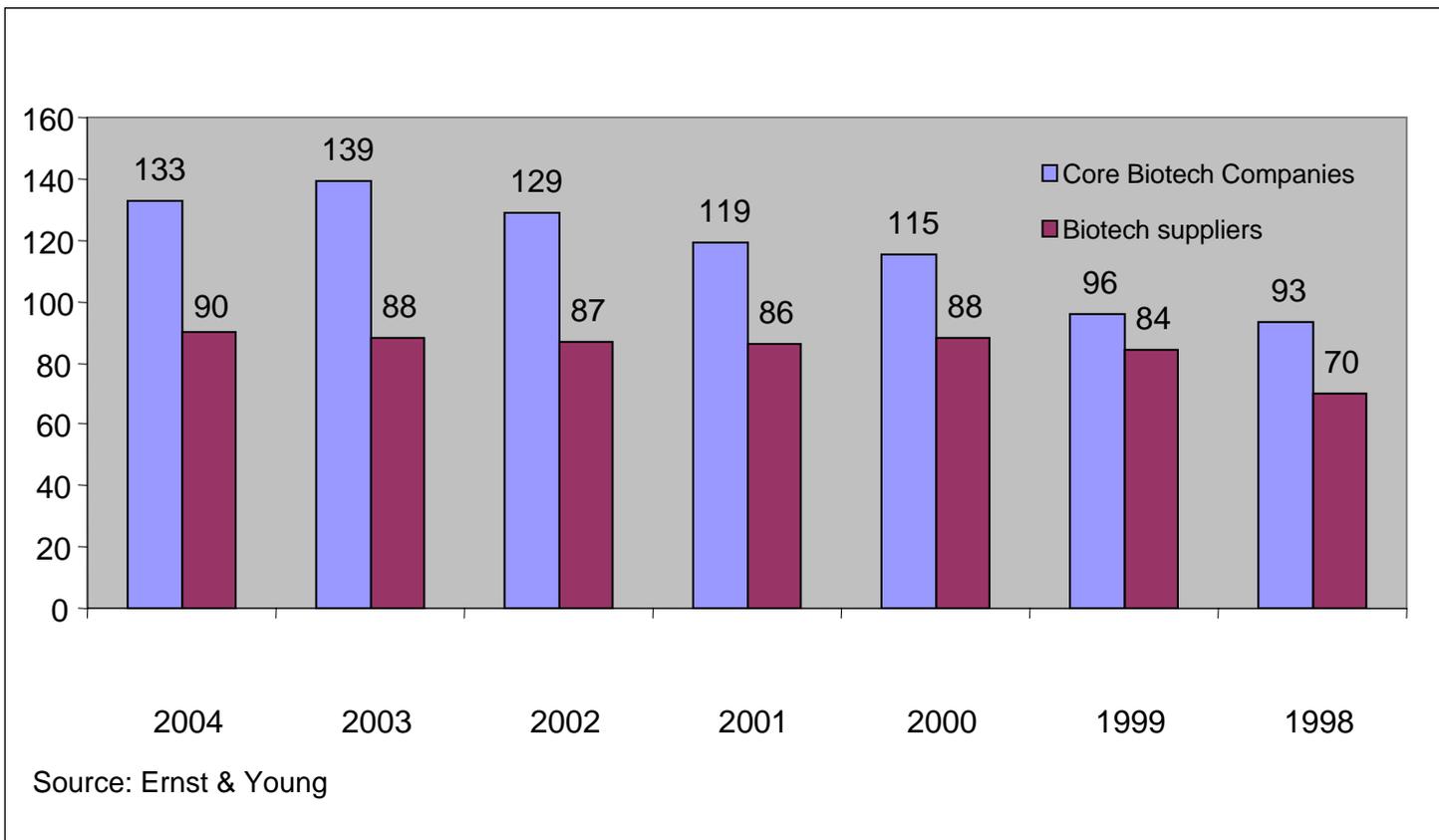


Source: Ernst & Young

Swiss Public Companies in 2005 / 2

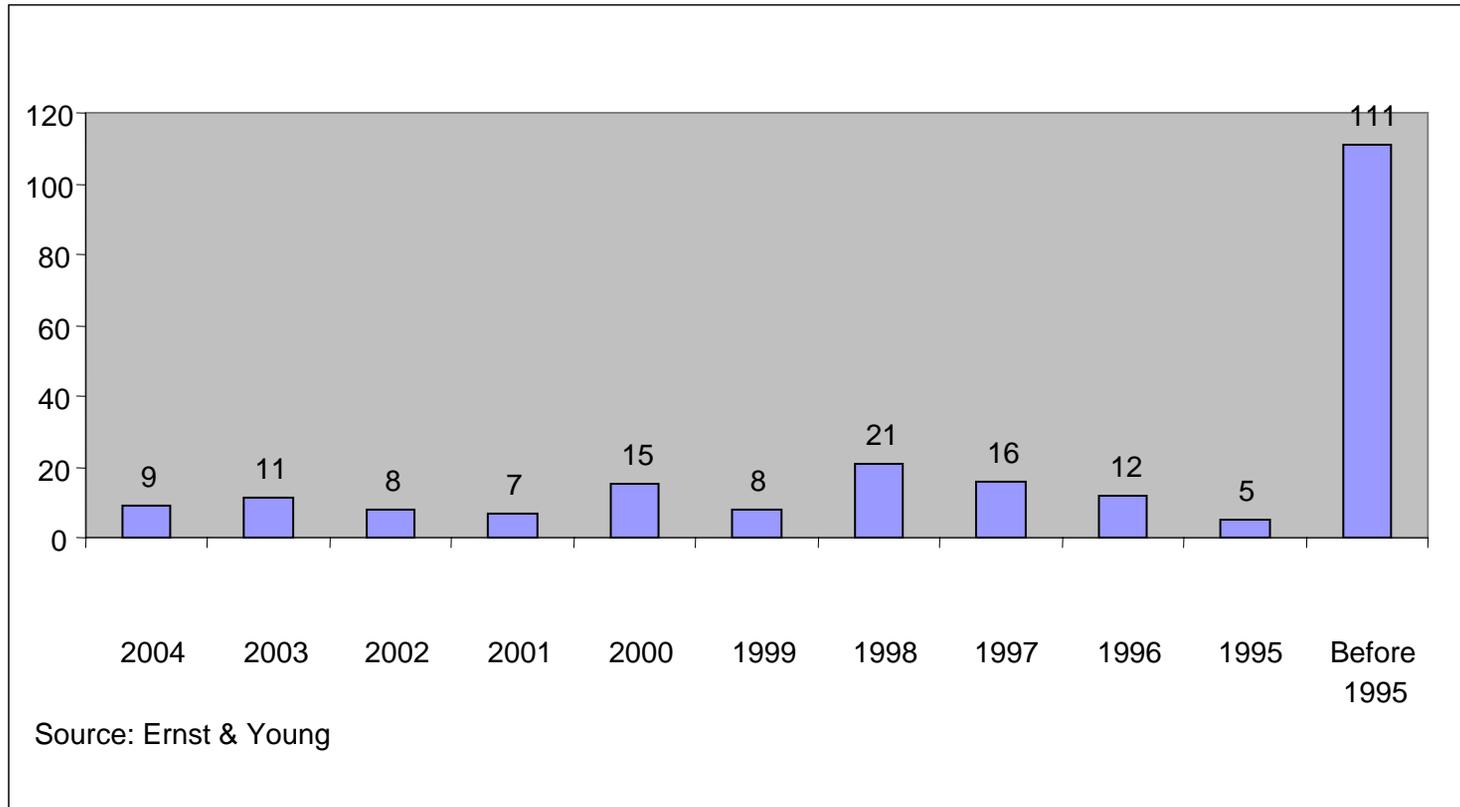


Number of Biotechs in Switzerland

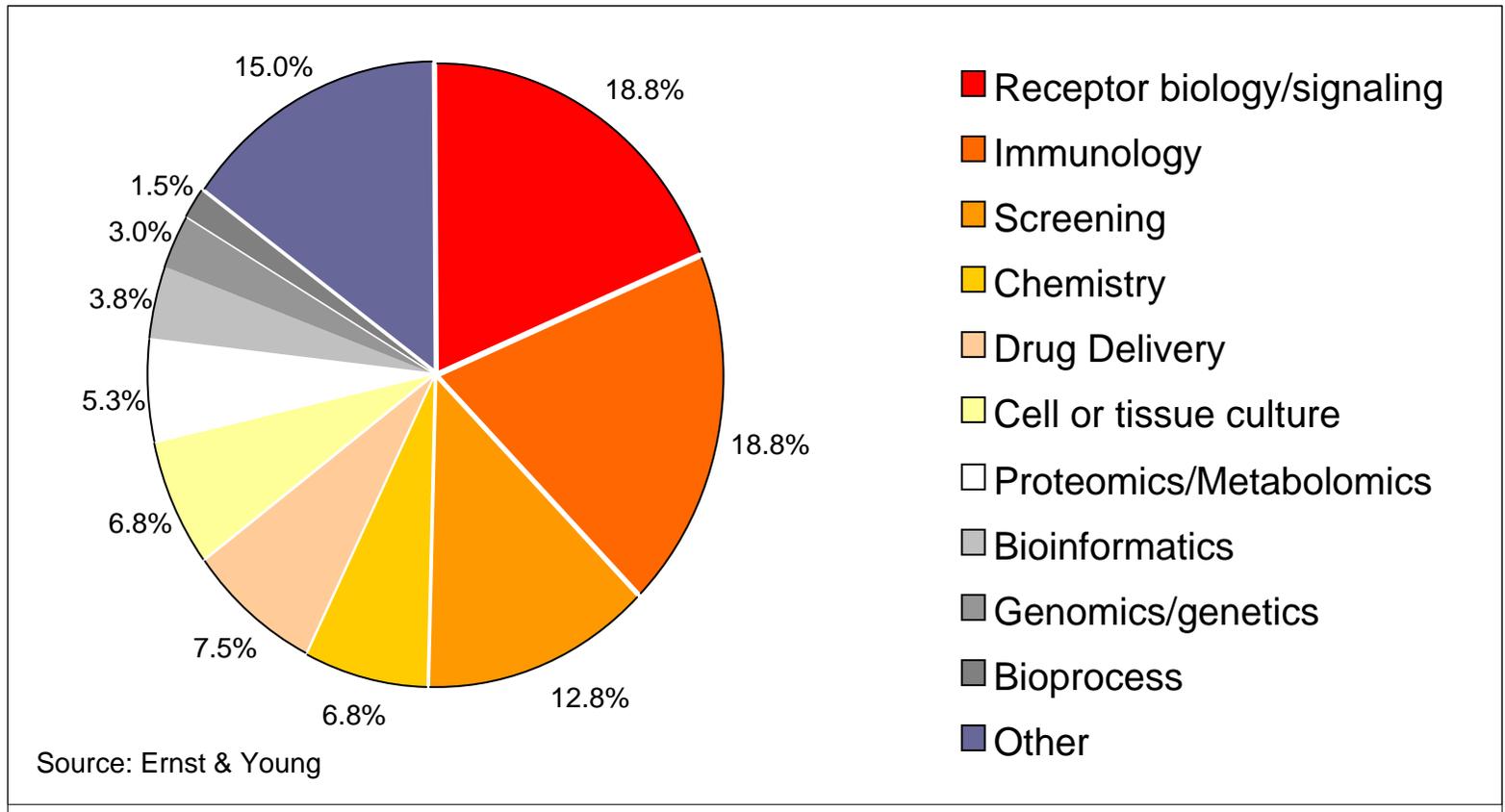


Year of Company Foundation

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Activity Fields of Core Biotech



European Public Companies Products Pipeline

<i>Country</i>	<i>Pre-clinical</i>	<i>Phase I</i>	<i>Phase II</i>	<i>Phase III</i>	<i>Total</i>
<i>UK</i>	65	50	56	23	194
<i>Switzerland</i>	45	12	11	11	79
<i>Sweden</i>	14	8	10	0	32
<i>France</i>	16	8	6	1	31
<i>Denmark</i>	14	5	5	4	28



Swiss Biotech – Summary

Companies – size distribution :

- 6 public companies (globally active), such as Serono, Berna Biotech and Actelion ;
- 18 medium-sized companies with 50-100 employees (many of these more or less ready for IPO)
- 199 smaller companies with less than 50 employees

Influx of venture capital :

2001:	CHF 106 million
2002:	CHF 148 million
2003:	CHF 130 million
2004:	CHF 194 million

- **In 2002, 2003 and 2004 Switzerland ranked third in Europe regarding venture capital influx into the country.**

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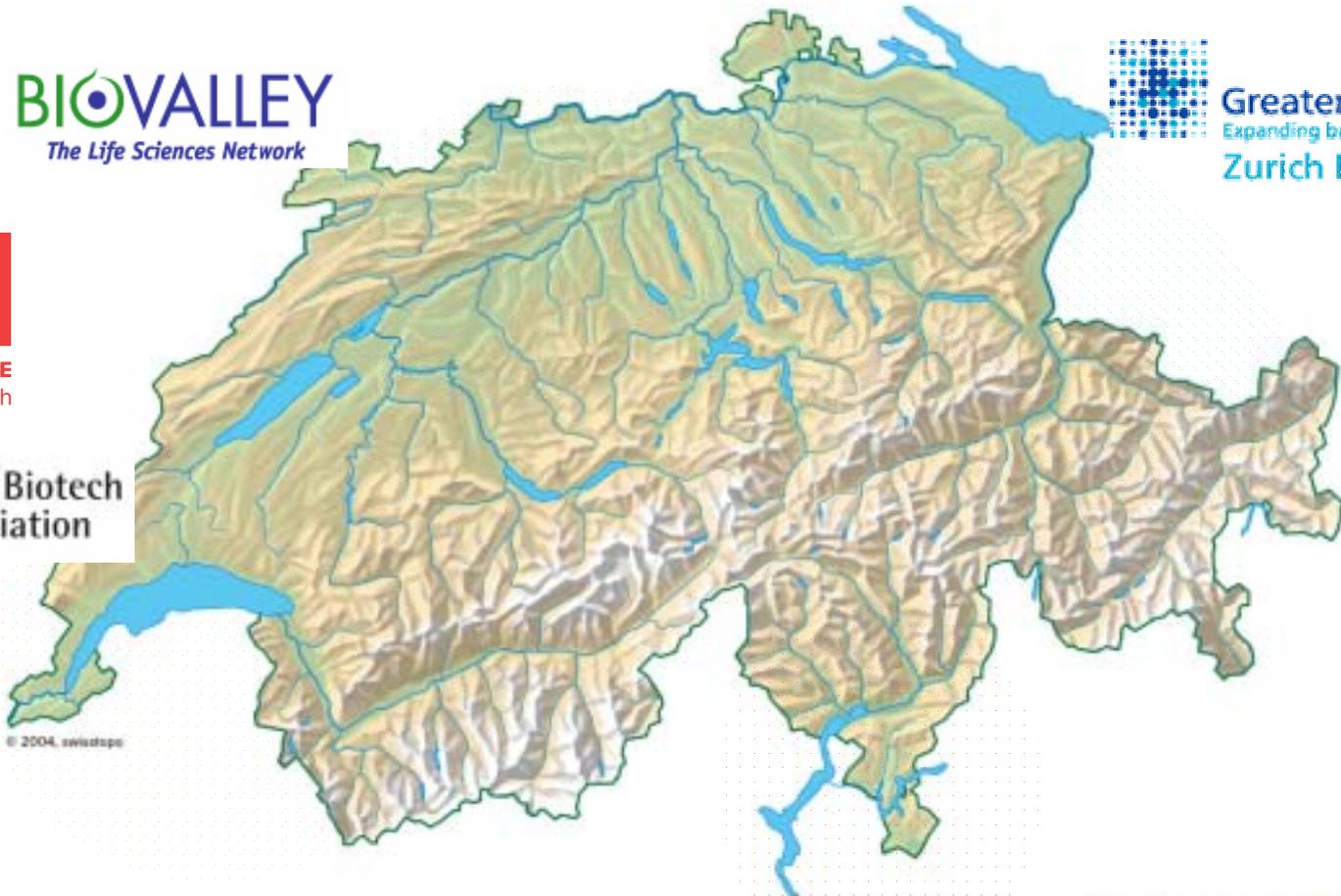
BIOVALLEY
The Life Sciences Network



Greater Zurich Area
Expanding business horizons
Zurich MedNet

SWX 
SWISS EXCHANGE
www.swx.ch

 **Swiss Biotech Association**



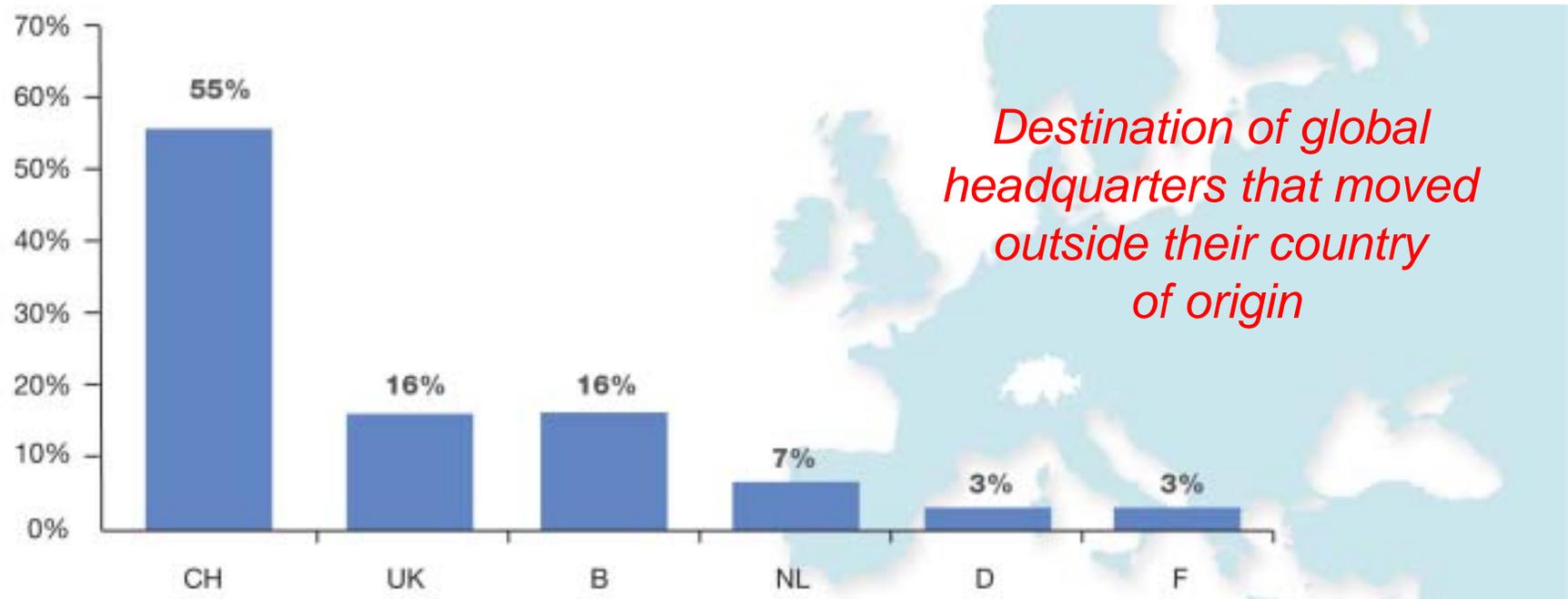
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bioalps
GRENZÜBERGRENZÜBERSCHREITEND

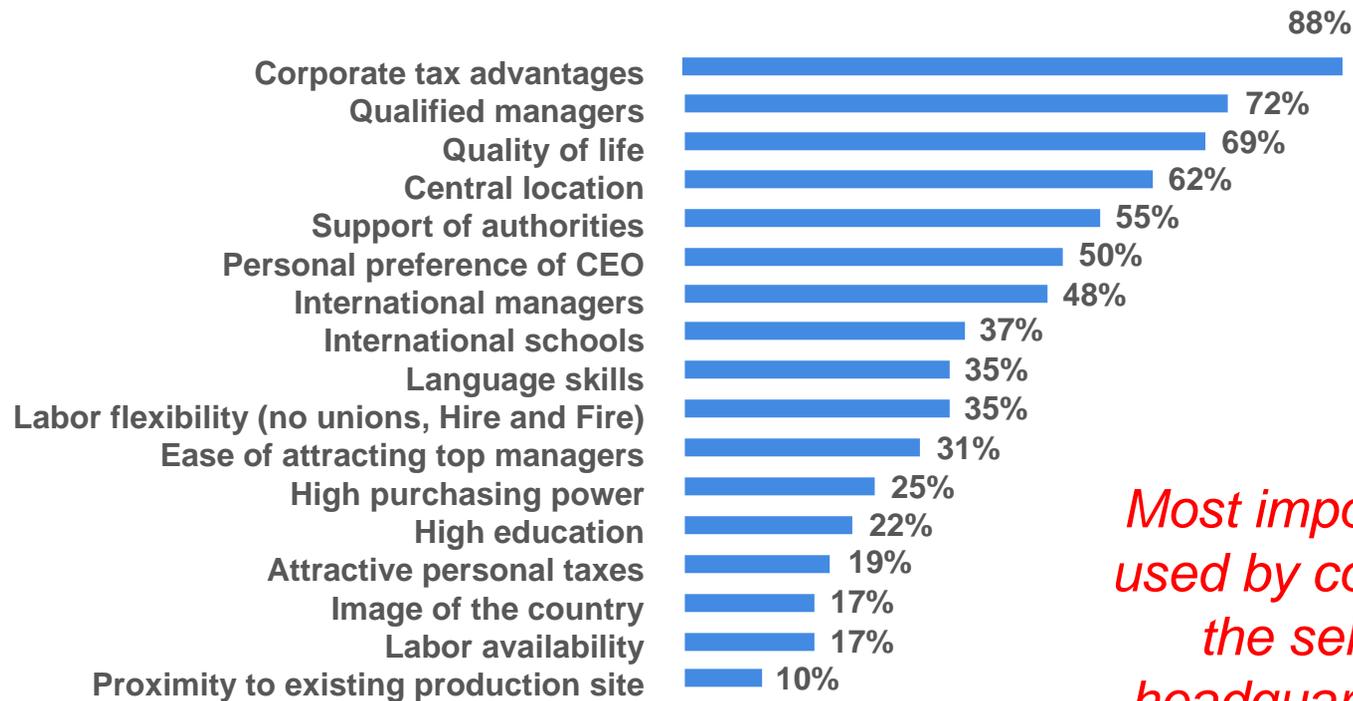
biopol  **TICINO**

Compared to other European countries Switzerland is very attractive as global headquarters location

As % of all global headquarters that moved to these countries



Companies use very specific criteria to determine the appropriate headquarters location



Most important criteria used by companies for the selection of headquarters location



Ticino - Southern part of CH

Biopolo Ticino (1/2)



- **Main Industry**

- Chemical and pharmaceutical
- Banking
- Textile
- Tourism

- **Key Academic Institutions**

- Università della Svizzera Italiana, Accademia di architettura,
- University of Applied sciences
- Institute for Research in Biomedicine
- Istituto Oncologico della Svizzera Italiana
- Istituto delle Molle per la ricerca sull'intelligenza artificiale
- Centro Svizzero di Calcolo Scientifico

- **Initiative: www.biopolo.ch**



- **Specialities**

- Strong manufacturing cluster
- Strong clinical settings (public and private)

- **„Flagships“ (selection)**

- Helsinn SA, IBSA SA
- KerrHawe SA, Medacta SA
- Jetpharma SA, Micromacinazione SA
- Start-ups:
 - Mondobiotech SA
 - Oncore therapeutics SA

- **Competitive Advantages**

- Competitive position for research in human immunology
- Proximity to Italy
- Quality of life



Specialities

- International conferences – BioSquare 2004, MipTec, ECB11..., etc.
- lectures / BioTech roundtables
- access to trinational Life Sciences Network in France, Germany and Switzerland
- BioValley Journal (www.biovalley.com)



„Flagships“(selection)

- Actelion Pharmaceutical Ltd.
- Basilea Pharmaceutica AG (IPO in March 2004)
- Hesperion
- RCC, Solvias, Speedel, etc.

Competitive Advantages

- BioValley (cross-border) initiative
- “big pharma” connections
- High concentration of science and engineering community

BioValley Basel (1/2)

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Main Industry

- Life Sciences: Novartis, Roche, Aventis, Syngenta, Lonza
- Chemistry: Ciba Specialty Chemicals, Clariant
- Logistics: Danzas, Panalpina, Rhenus

Key Academic Institutions

- Universities of Basel, Biocenter/Pharmacenter
- Department of clinical-biological sciences (DKBW)
- National Nanotechnology Center of Competences in Research (NCCR)
- European Center of Pharmaceutical Medicine (ECPM)
- As from 2006: ETH Institute for systemsbiology
- Friedrich Miescher Institute (FMI)
- Swiss Tropical Institute
- Universities of Mulhouse, Freiburg, Strasbourg

Initiative: www.biovalley.com

BIOVALLEY
The Life Sciences Network



Greater Zurich Area Zurich MedNet (1/2)

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Main Industry

- (Mechanical) Engineering
- Services
- Banking

Key Academic Institutions

- University of Zurich
- Federal Institute of Technology (ETHZ)
- Universities of Applied Sciences (Wädenswil, Winterthur)
- University Hospital
- Neuroscience Center
- Functional Genomics Center

Initiative: www.zurichmednet.org



Greater Zurich Area / Zurich MedNet (2/2)



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Specialities

- LifeScience Incubator - Biotop
- LifeScience Park Zurich-Schlieren
- Conferences and Life Science seminars
- Focused Investment conferences

„Flagships“(selection)

- Cytos Biotechnology
- ESBATech
- Prionics
- SWX – Swiss Exchange
- Nobel BioCare
- Novo Nordisk

Competitive Advantages

- global initiative
- virtual network
- financial community





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Lake Geneva Area / BioAlps (1/2)



Main Industry

- Microelectronics
- Watches
- Private Banking

Key Academic Institutions

- University of Geneva / Lausanne (HUG/CHUV)
- Swiss Federal Institute of Technology (EPFL)
- Swiss Institute for Cancer Research Ludwig Institute
- Swiss Institute for Bioinformatics
- ISREC, Lausanne

Initiative: www.bioalps.com



Lake Geneva Area / BioAlps (2/2)



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Specialities

- Geneva Proteomics (GeneProt)
- joint efforts of academic institutions in Life Sciences
- scientific parks / incubators

„Flagships“ (selection)

- Serono International Ltd.
- Modex Therapeutics
- NovImmune
- Medtronic
- GeneBio, Covance

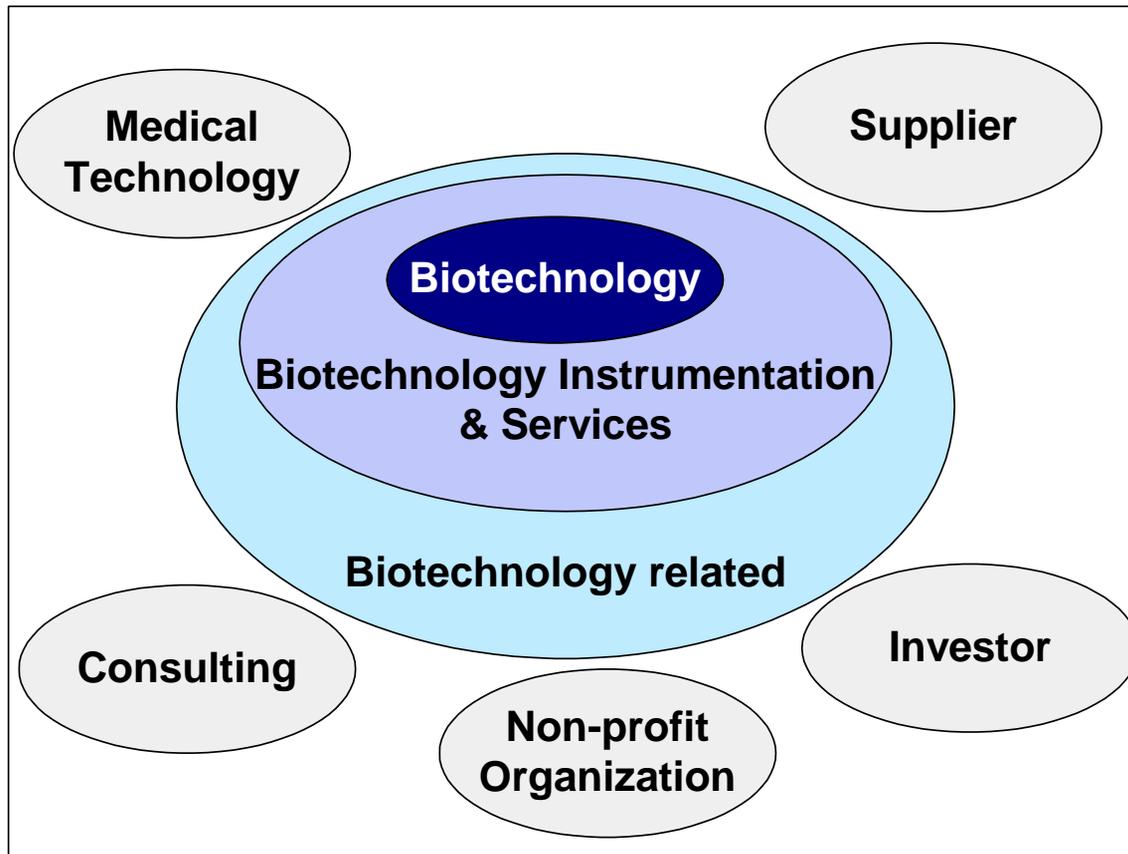
Competitive Advantages

- multi-disciplinary research activities
- international environment
- quality of life



National Strengths through competent information

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- **Database with over 1000 Swiss contacts**
- **Organizations active in the Life Sciences area**
- **Main focus on Biotechnology**

www.swisslifesciences.ch



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