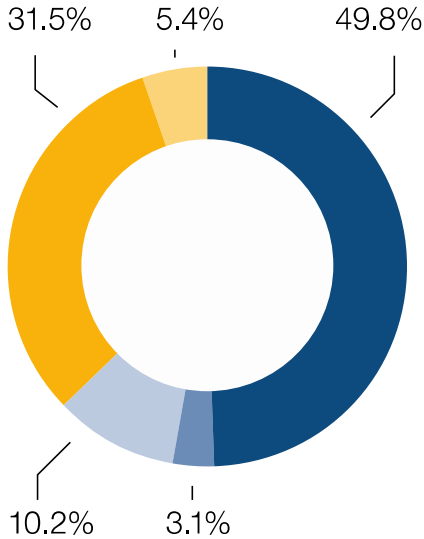


# The Biotechnology Sector in Germany

Alabama Business Development & Trade Mission  
Embassy of the United States of America  
Berlin, 24th April 2017

# A 'typical' German biotech is small, active in healthcare

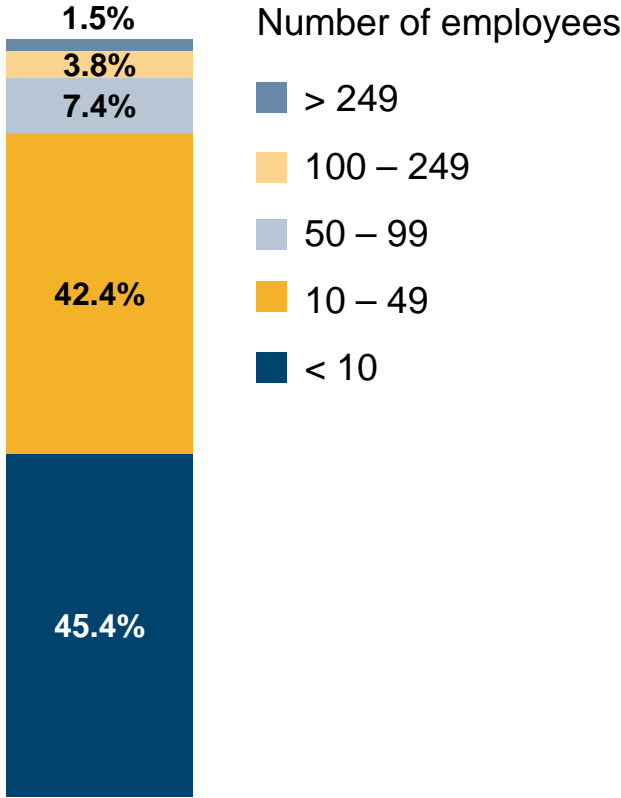
Quick facts: **614** dedicated biotech companies, **20,000+** employees, approx. **20** start-ups yearly



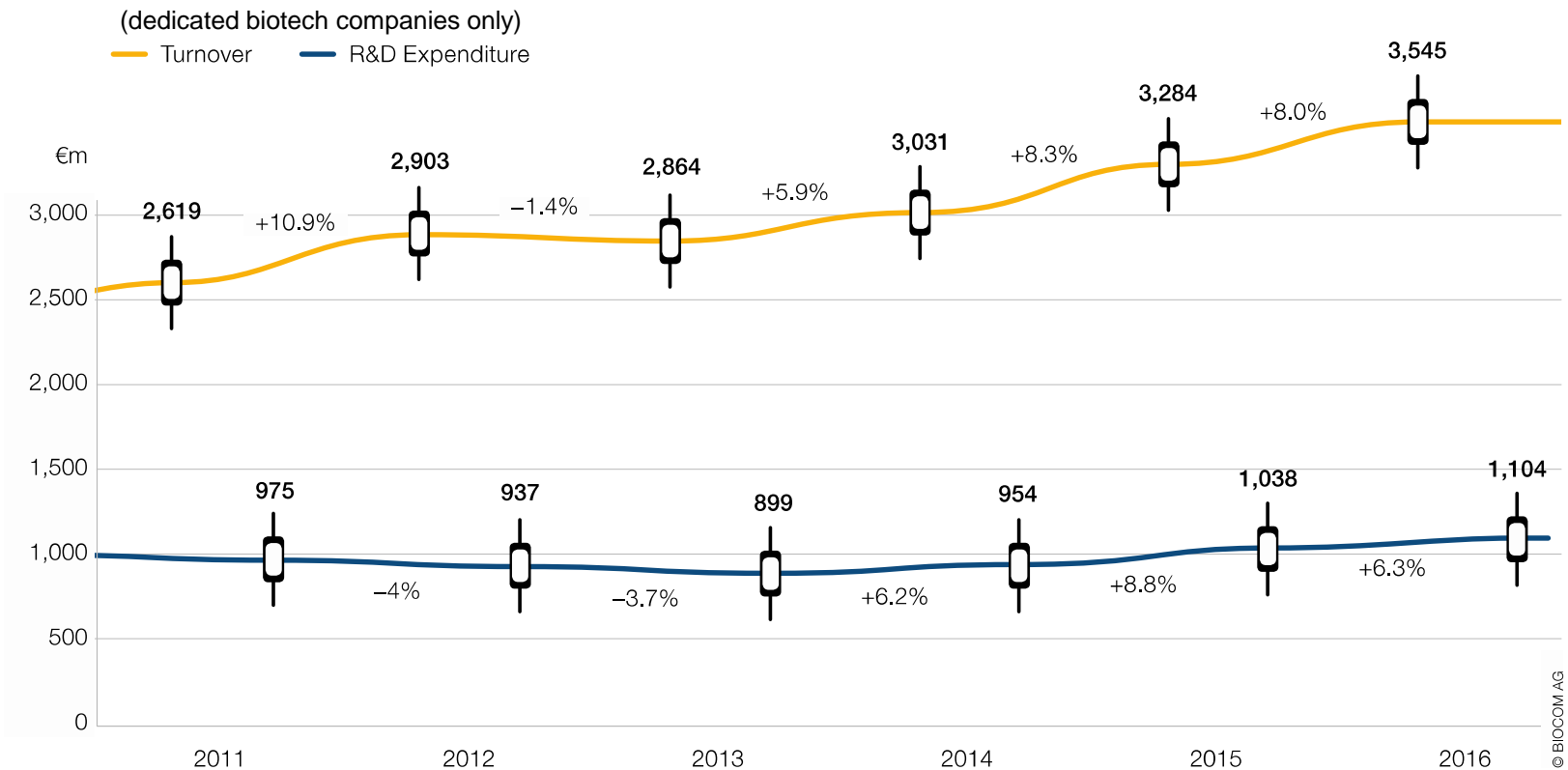
- Health/medicine
- Agricultural biotechnology
- Industrial biotechnology
- Non-specific services
- Bioinformatics

**Left:** Fields of activity of German dedicated biotech companies

**Right:** Size structure of dedicated biotech companies



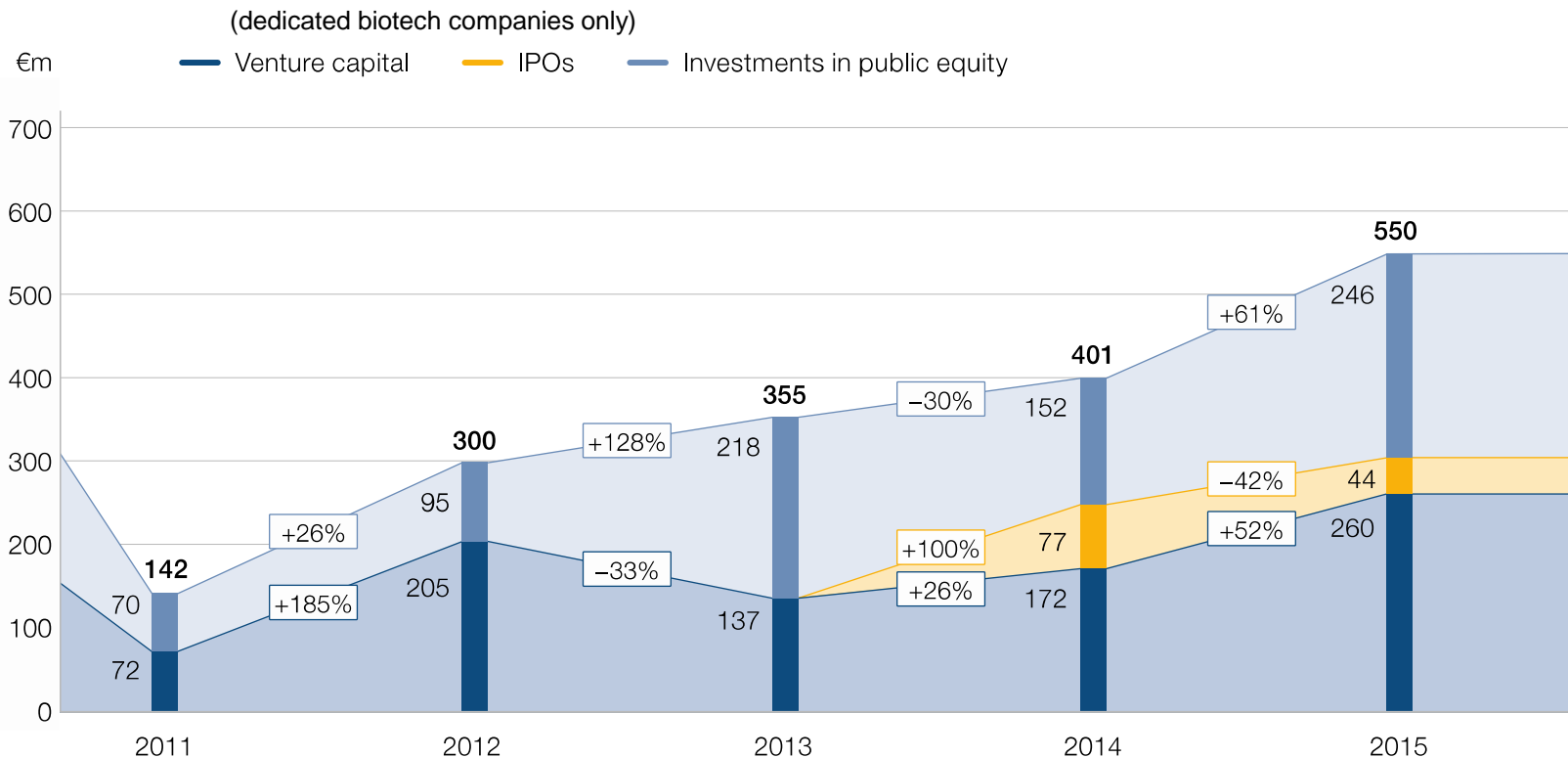
# Revenues of German biotechs increase steadily



For comparison: 2014 revenues of publicly listed biotechs in the US: 72 bn \$

source: EY

# Investment activities recover after slowdown

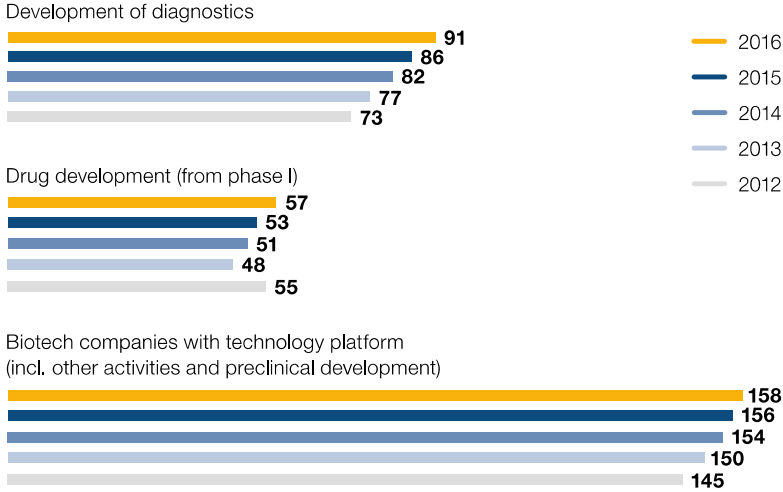


For comparison: 2014 VC raised by biotechs in the US: 6 bn \$

source: NVCA / PwC

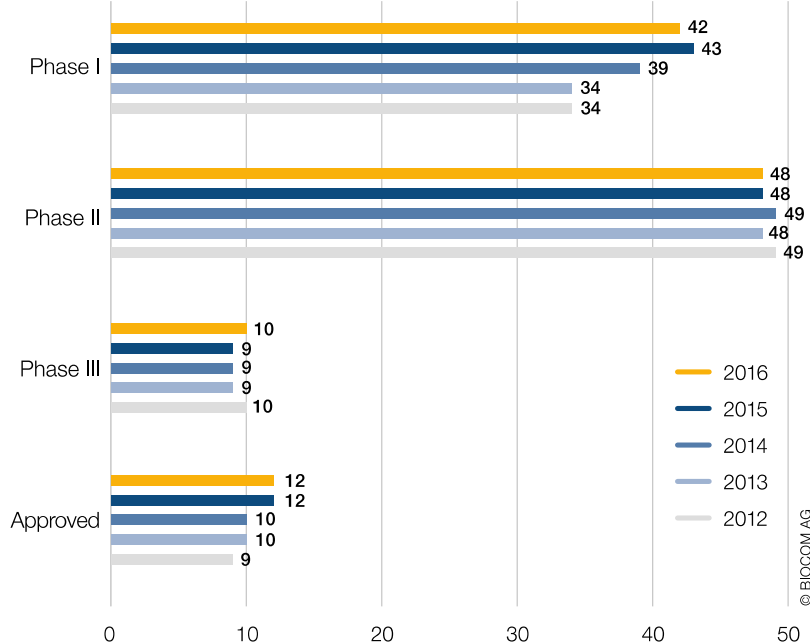
# Activity profiles of biotechs in the healthcare sector

### Sub-sector focus of healthcare biotechs



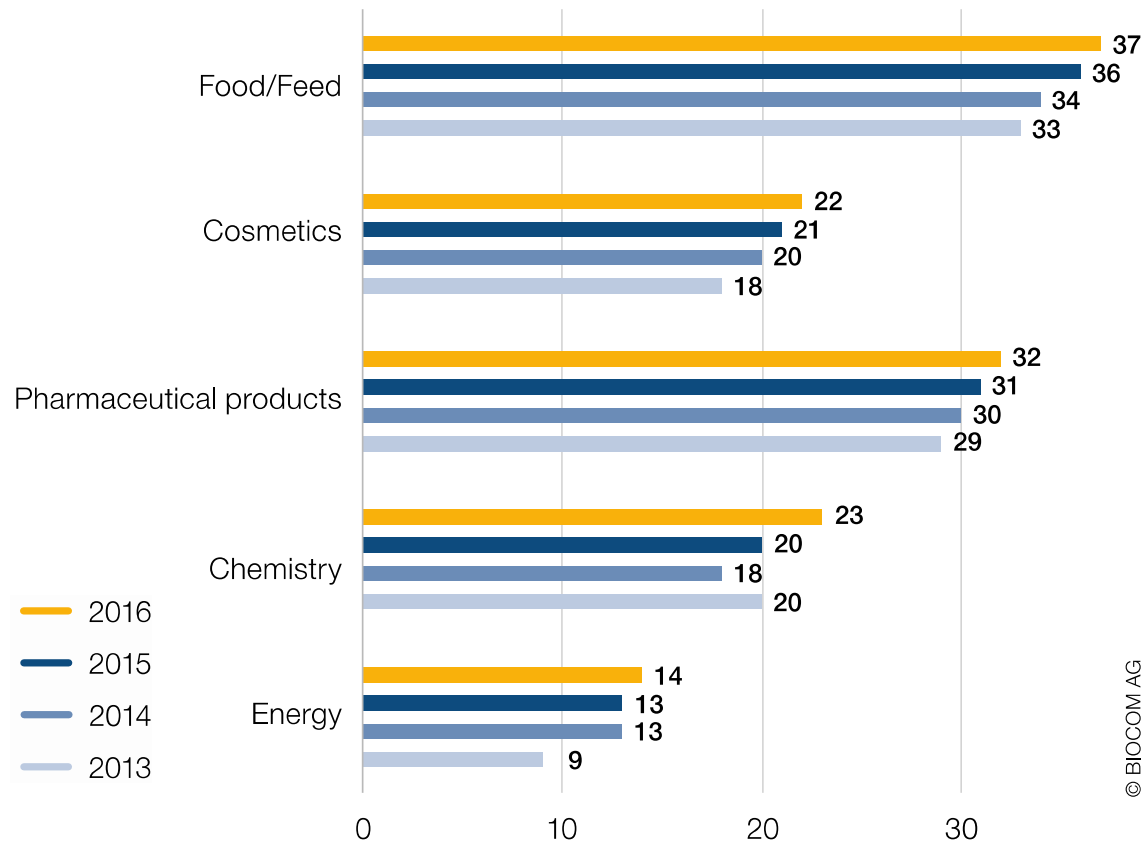
© BIOCUM AG

### Drug development pipeline of dedicated biotechs



© BIOCUM AG

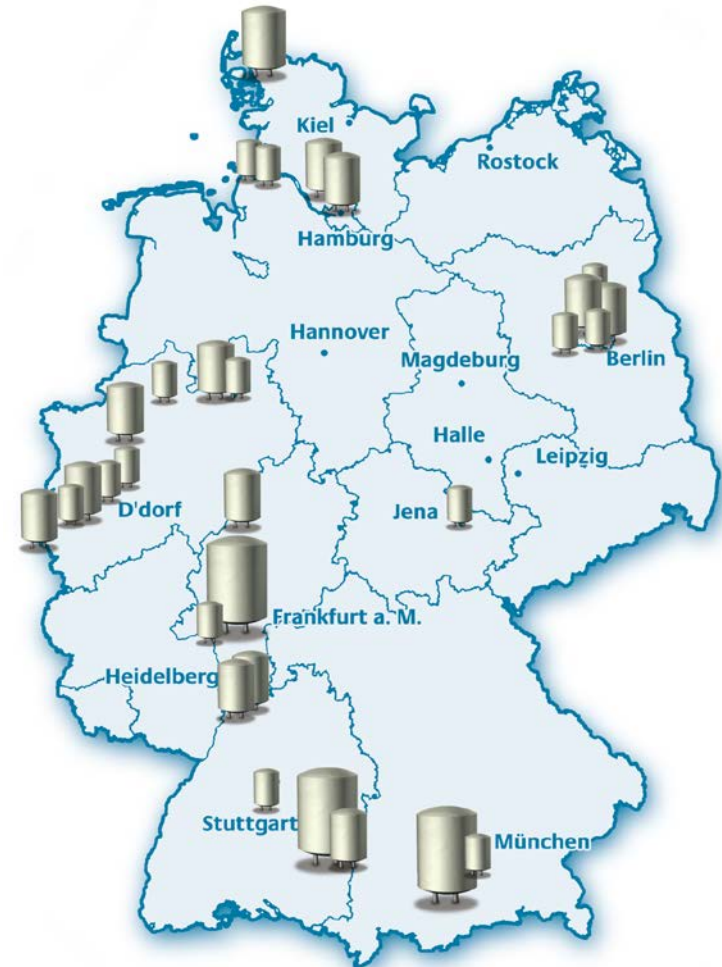
# Industrial biotechnology gains importance



© BIOCOM AG

# Germany is particularly strong in production technology

- Approximately 30 significant biotechnological manufacturing sites
- Total installed fermenter volume: 1 million liters
- No. 2 in the world, behind the USA, in biomanufacturing capacities.
- Biggest producers of biopharmaceuticals in Germany are Boehringer Ingelheim, Roche, Pfizer and Rentschler Biotechnologie



## Major license deals by German biotech companies

year	biotech	licensee	max. total volume	upfront payment
2007	MorphoSys	Novartis (CH)	770 m EUR	n/d
2013	Immatics	Roche (CH)	742 m EUR	13 m EUR
2013	MorphoSys	Celgene (US)	628 m EUR	110 m EUR
2012	Evotec	Bayer (DE)	500 m EUR	12 m EUR
2013	MorphoSys	GSK (GB)	445 m EUR	23 m EUR
2014	CureVac	Boehringer Ingelheim (DE)	430 m EUR	35 m EUR
2015	Phenex	Gilead (US)	395 m EUR	n/d
2005	Coley Pharmaceut.	Pfizer (US)	358 m EUR	38 m EUR
2012	AiCuris	Merck&Co. (US)	333 m EUR	110 m EUR
2009	Micromet	Bayer (DE)	290 m EUR	5 m EUR
2016	BioNTech AG	Genentech (US)	278 m EUR	n/d
2015	BioNTech AG	Sanofi (FR)	272 m EUR / cand.	54 m EUR
2015	BioNTech AG	Eli Lilly (US)	269 m EUR / cand.	27 m EUR
2014	Evotec	Sanofi (FR)	250 m EUR	n/d
2009	Micromet	Sanofi (FR)	160 m EUR	8 m EUR
2012	Phenex	Janssen / J&J (US)	135 m EUR	n/d



## Examples of international mergers & acquisitions

year	biotech	buyer	volume	topic
2016	Ganymed	Astellas (JP)	1,280 m EUR	antibodies
2012	Micromet	Amgen (US)	1,200 m EUR	bi-specific cancer antibodies
2009	Brahms	Thermo (US)	330 m EUR	diagnostics
2015	Suppremol	Baxter (US)	200 m EUR	antibody fragments, autoimmune
2011	mtm	Roche (CH)	130 m EUR	diagnostics
2008	Amaxa	Lonza (CH)	90 m EUR	biopharmaceutical manufacturing
2012	corImmuno	J&J (US)	80 m EUR	cardiovascular therapeutics
2016	Sividon	Myriad (US)	50 m EUR	diagnostics
2010	Probiogen	Minapharm (Egypt)	30 m EUR	biopharmaceutical manufacturing
2010	Geneart	Thermo (US)	23 m EUR	synthetic biology
2016	Biomeva	Asahi (JP)	n/d	biopharmaceutical manufacturing

German biotechnology companies that did major international acquisitions in past years are, e.g. Qiagen (diagnostics), Evotec (discovery technologies), Paion (pain therapeutics), MorphoSys (antibody technology) and BioNTech (antibody technology)

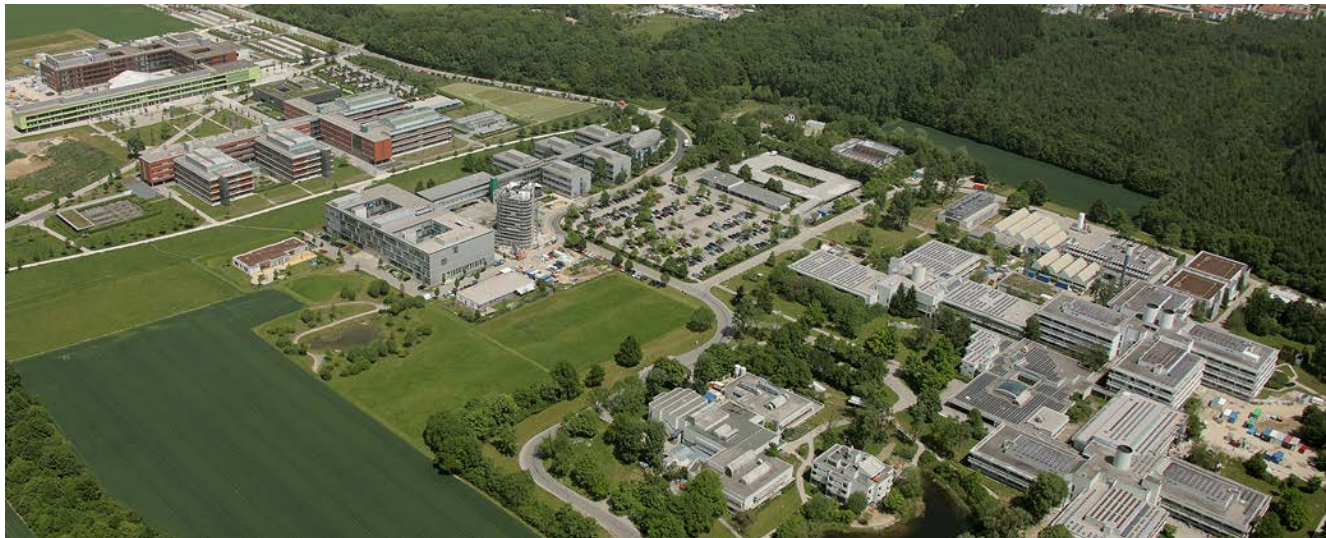
# Germany has a strong research base for life sciences

- 214 research institutions active in biotechnology
  - 61 universities
  - 39 universities of applied sciences
  - 105 non-university research institutes (e.g. Max-Planck, Helmholtz, Fraunhofer)
  - 9 governmental / ministerial research institutes
- 31,680 employees in these institutes (w/o students)
- approx. 3.7 bn EUR annual budget
- Thousands of cooperations
- All major therapeutic areas are covered



# What can you find in Germany

- Biggest European economy and market
- Excellent research infrastructure
- Dynamic biotech industry
- Major pharmaceutical and chemical companies
- Full coverage of all (bio-)pharmaceutical and bioeconomy sectors
- Open and international mindset
- Perfect cooperation and investment opportunities





# Thank you for your attention

Boris Mannhardt, PhD  
BIOCOM AG  
Luetzowstr. 33-36  
10785 Berlin, Germany  
+49 30 26492161  
[b.mannhardt@biocom.de](mailto:b.mannhardt@biocom.de)

