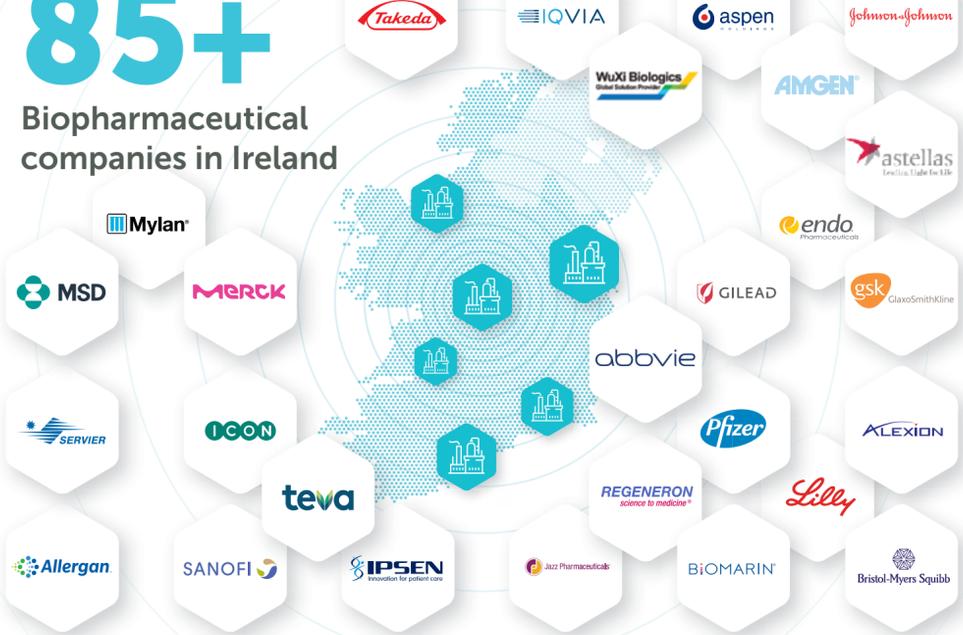


# Biopharmaceutical Industry in Ireland

Q1 2020

## 85+

Biopharmaceutical companies in Ireland

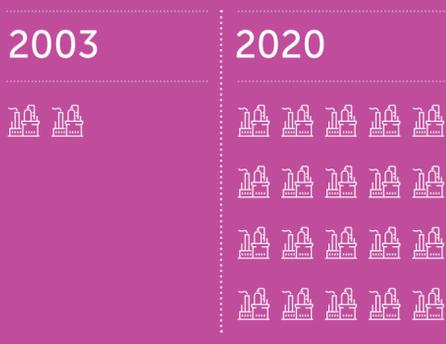


### Activities undertaken in Ireland

- Manufacturing
- Research and Development
- Manufacturing Process Development
- Regulatory Affairs
- Supply Chain Management
- Quality Activities
- Clinical Trial Management (CRO)
- Software Development
- Global Shared Services
- Data Centres
- Digital & Data Analytics
- Contract Manufacturing Organisation (CMO) Management

### Dynamic Growth

Biologics manufacturing sites in Ireland:



All of the world's Top 10 pharmaceutical companies have substantial operations in Ireland.



### Technological Diversity

Manufacturing excellence in drug substance and drug product.



Small molecule and biologics.



€5 billion capital invested in 5 years in new biological production capacity in Ireland.



Exports of €80 billion.<sup>1</sup>



Ireland is the 3rd largest exporter of pharmaceuticals globally.<sup>2</sup>

### Regulations & Standards

90

Biopharmaceutical plants located in Ireland, 50 are FDA approved.



Strong and transparent regulatory framework provided by Ireland's regulator HPRA, EMA and FDA.



Culture of excellence in compliance and regulatory track record.

### R&D/Training

Circa €2 billion invested in Biopharma R&D by IDA client companies annually.

Key Priority Areas:

- Process Optimisation
- Commercialisation
- Digitalisation
- Scale Up
- Competitiveness

### Talent Availability

Ireland has the youngest population in the EU. One-third aged under 25.

Ireland's education system ranked in the top 10 in the world.

Ireland ranks globally as<sup>3</sup>:

- 1st for flexibility and adaptability
- 1st for attracting and retaining talent

24% of graduates were in the areas of Natural Sciences, Mathematics, ICT, & Engineering<sup>4</sup>.

### R&D & Training Infrastructure



### Why Ireland for the Biopharmaceutical Industry?



### Key Academia Industry Collaboration Centres



### Sources

1) CSO figures 2020. 2) World Trade Organisation and UN. 3) IMD World Competitiveness Yearbook. 4) HEA 2017/2018 Key Facts and Figures.