



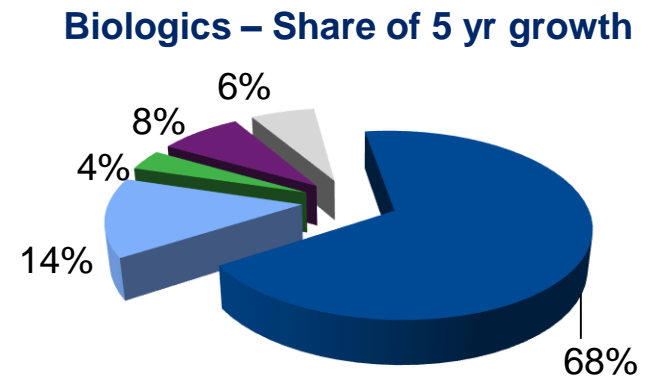
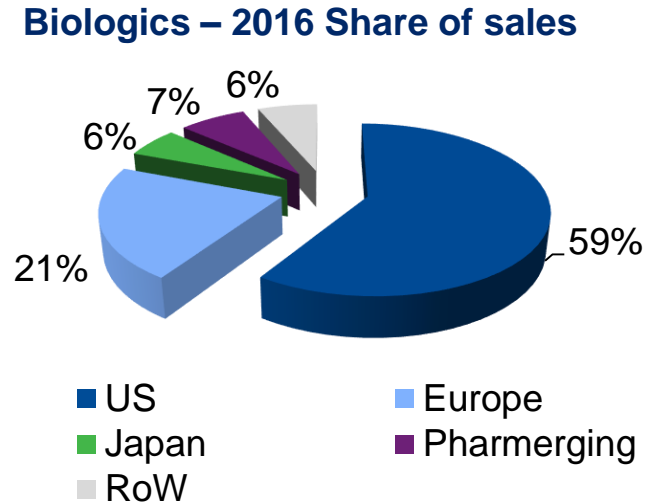
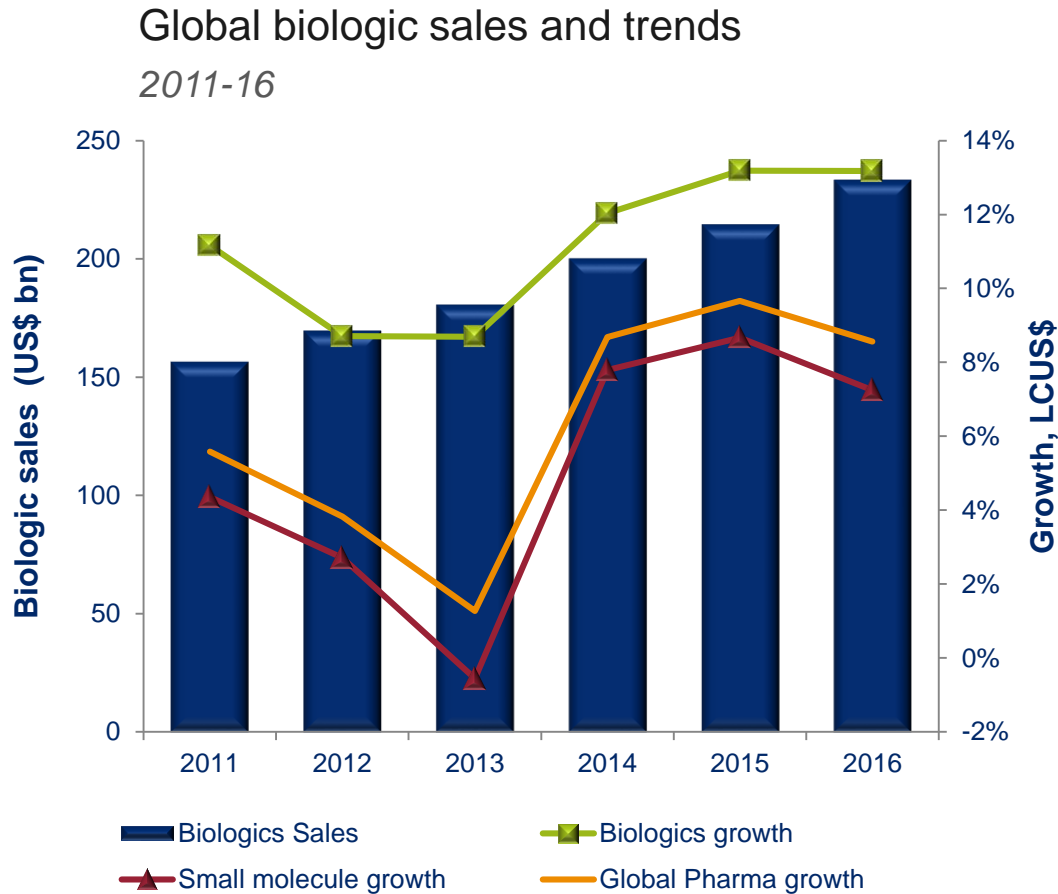
Denis Kent

Thought Leadership

Expertmeeting Ziekenhuisfarmacie
21 maart te Utrecht

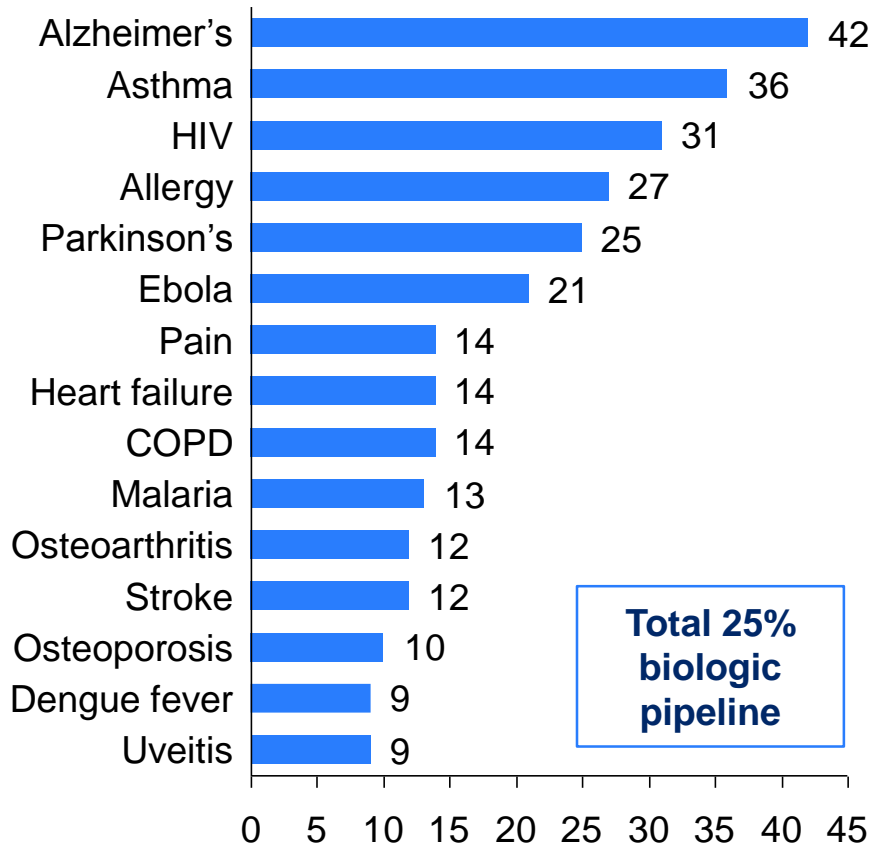
Biologic pharmaceutical growth consistently outcompetes small molecules

Strong launches and lack of biosimilar entrance



Biologics are expanding in to new therapeutic areas

Biologic pipeline: non-traditional biologic indications (Pre-Clin to Reg)



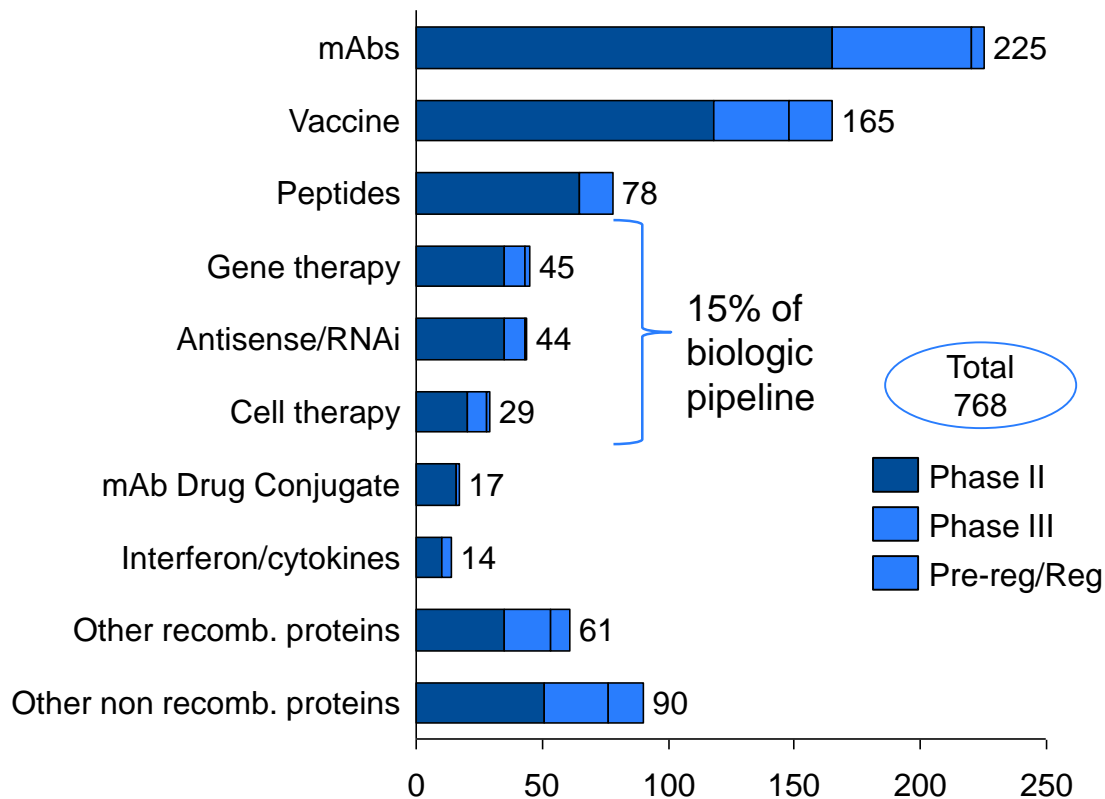
No. of pipeline candidates for indication

Common Factors

- Dominated by small molecules – highly genericised
- High patient population
- Aim to treat severe subsections of these indications
- High cost per patient cause payer concern
- Mixed experience to date with pioneer biologics taking this route (Xolair in respiratory, Praluent in hyperlipidemia)
- Biologic specific challenges such as patient targeting, infrastructure and administration

Gene therapies, Cell therapies and Antisense treatments make up 15% of the PII+ pipeline

Pipeline Biologics by Technology Class,
(Ph II – Registered)



The delay of the innovation cycle

The lack of released funding disrupts the innovative medicine funding model which drives the advancement of new medicines

