

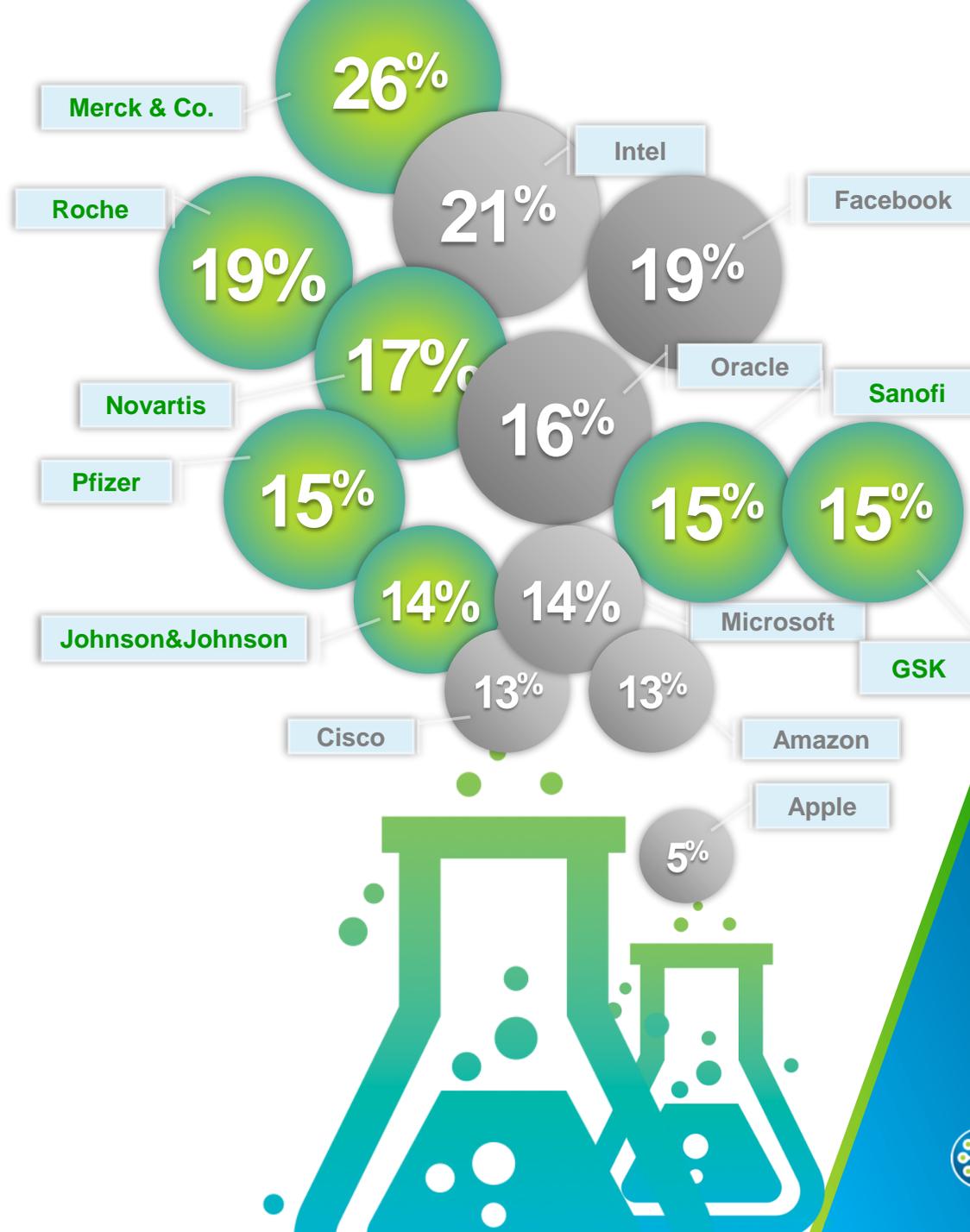
Innovation in Personalized Medicine



Pharmaceutical Companies are Top Corporate R&D Spenders

R&D Intensity

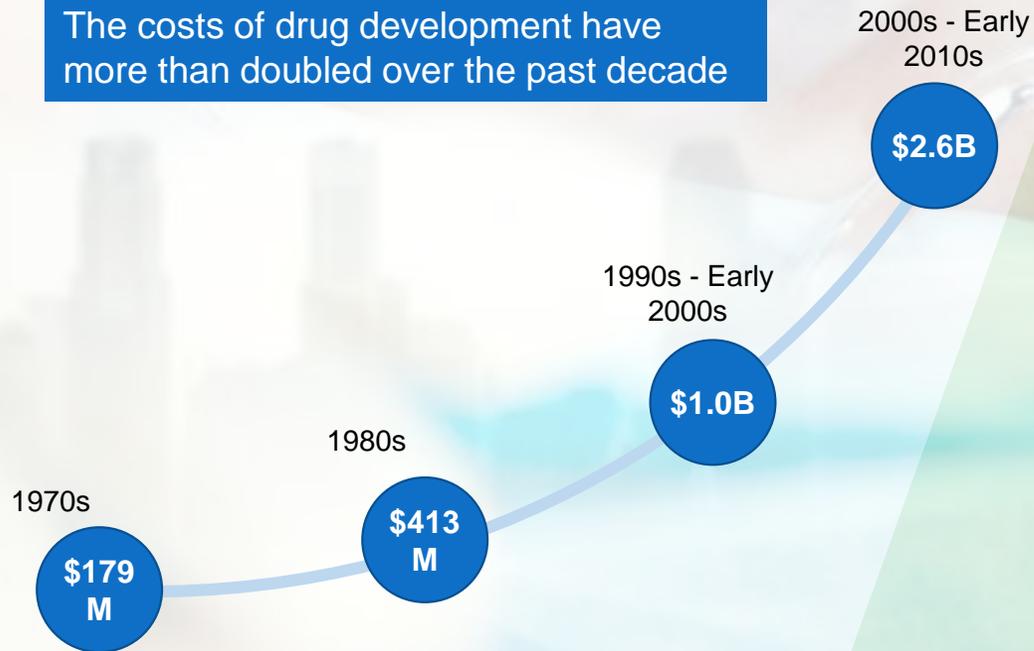
R&D expenditures as a percentage of revenues



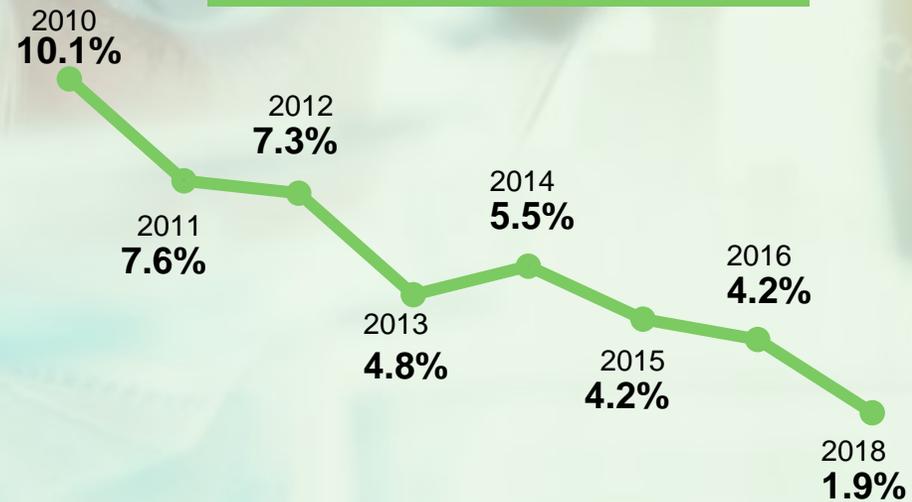
A Tough Road

Extremely low chances to recoup R&D investments

The costs of drug development have more than doubled over the past decade



R&D returns have fallen to the lowest level in nine years

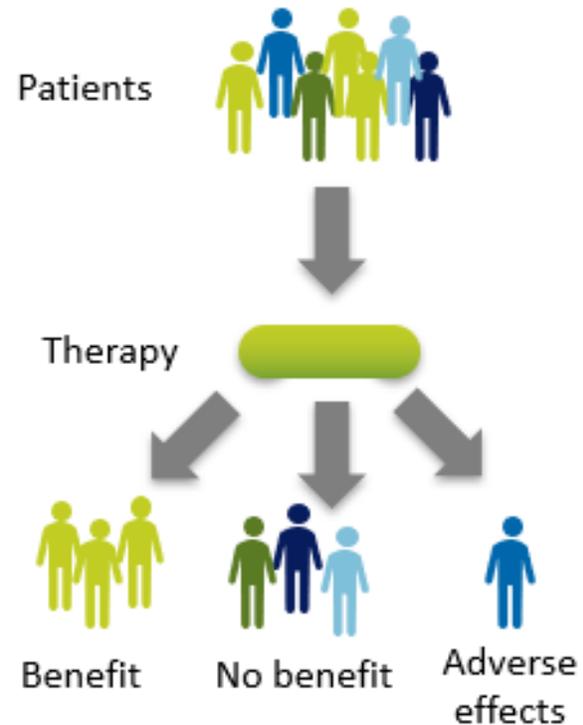


The Old World of Medicine

One size fits all?

Without Personalized Medicine:

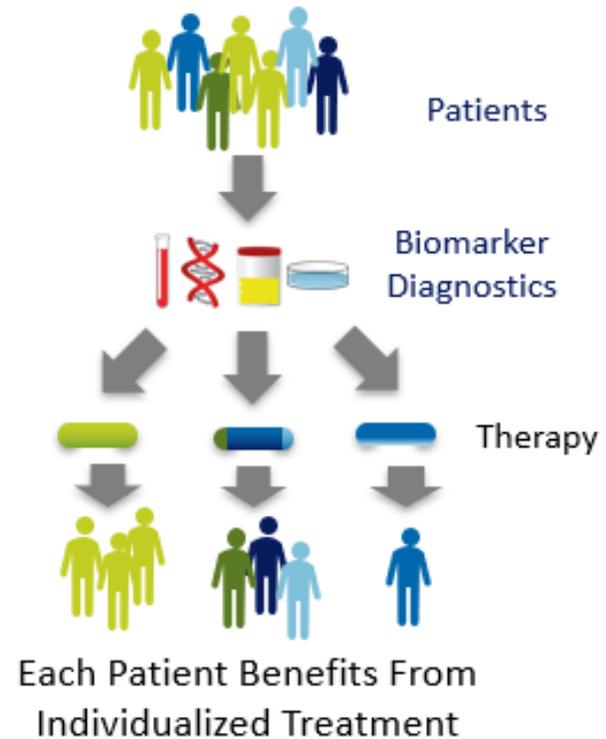
Some Benefit, Some Do Not



A New Era of Medicine

“Tailor Maid” precision medicine

With Personalized Medicine:
Each Patient Receives the Right Medicine For Them



Each Patient Benefits From
Individualized Treatment

What Does the Future Hold?

Over 7000 medicines in development



Cancers
1,813



Infectious Diseases
1,256



Diabetes
475



HIV / AIDS
159



Cardiovascular Disease
599



Immunological Disorders
1,120



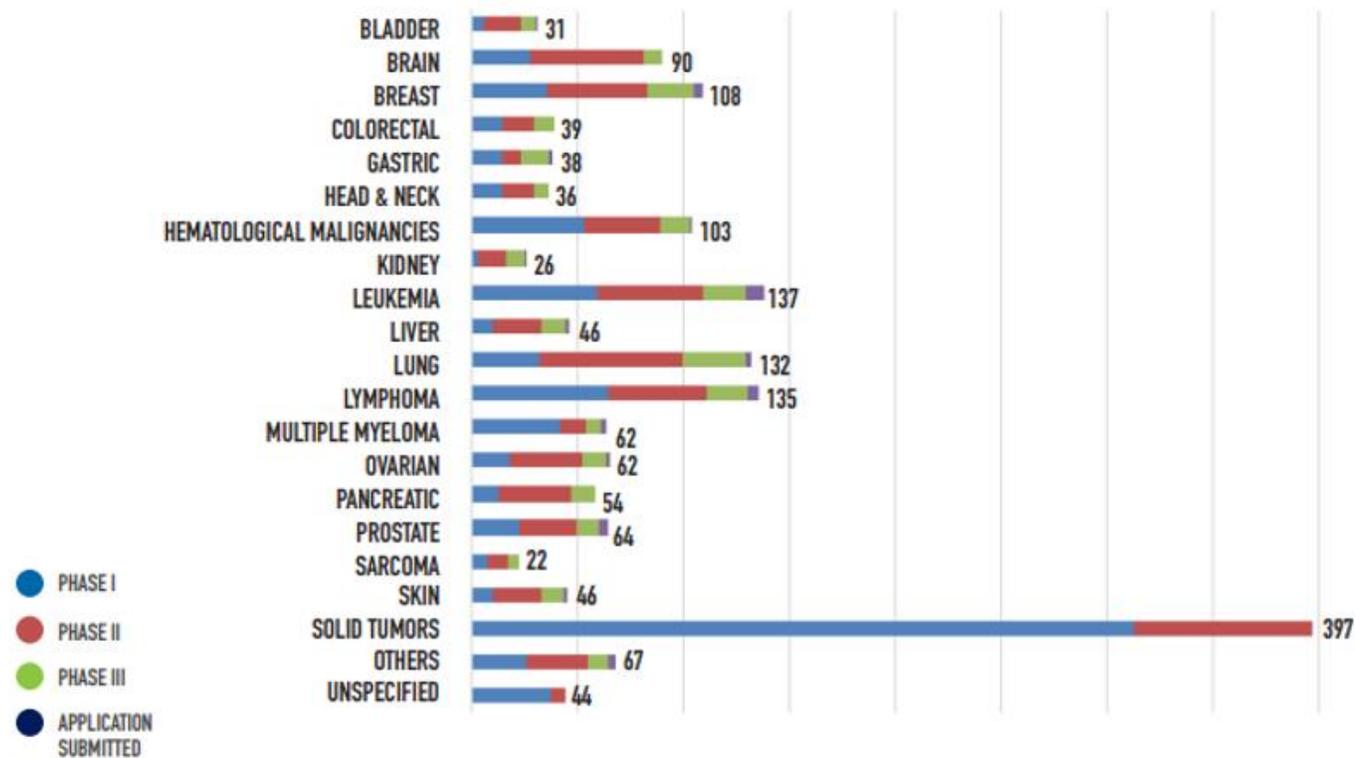
Mental Health Disorders
511



Neurological Disorders
1,329

Treatments for Cancer

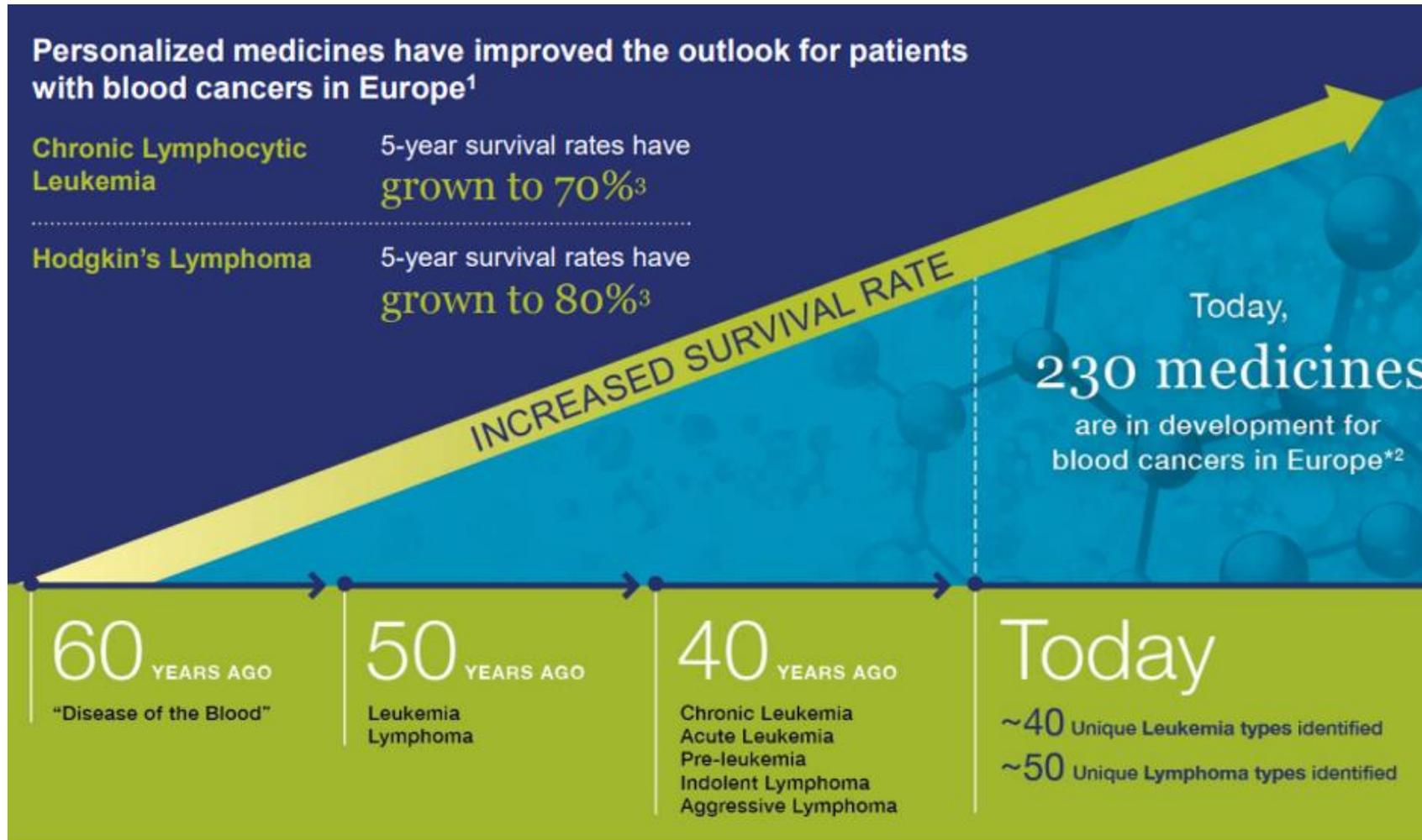
Over 1000 medicines and vaccines for cancers in development



Note: Some medicines may be in more than one category.

Personalized Medicine

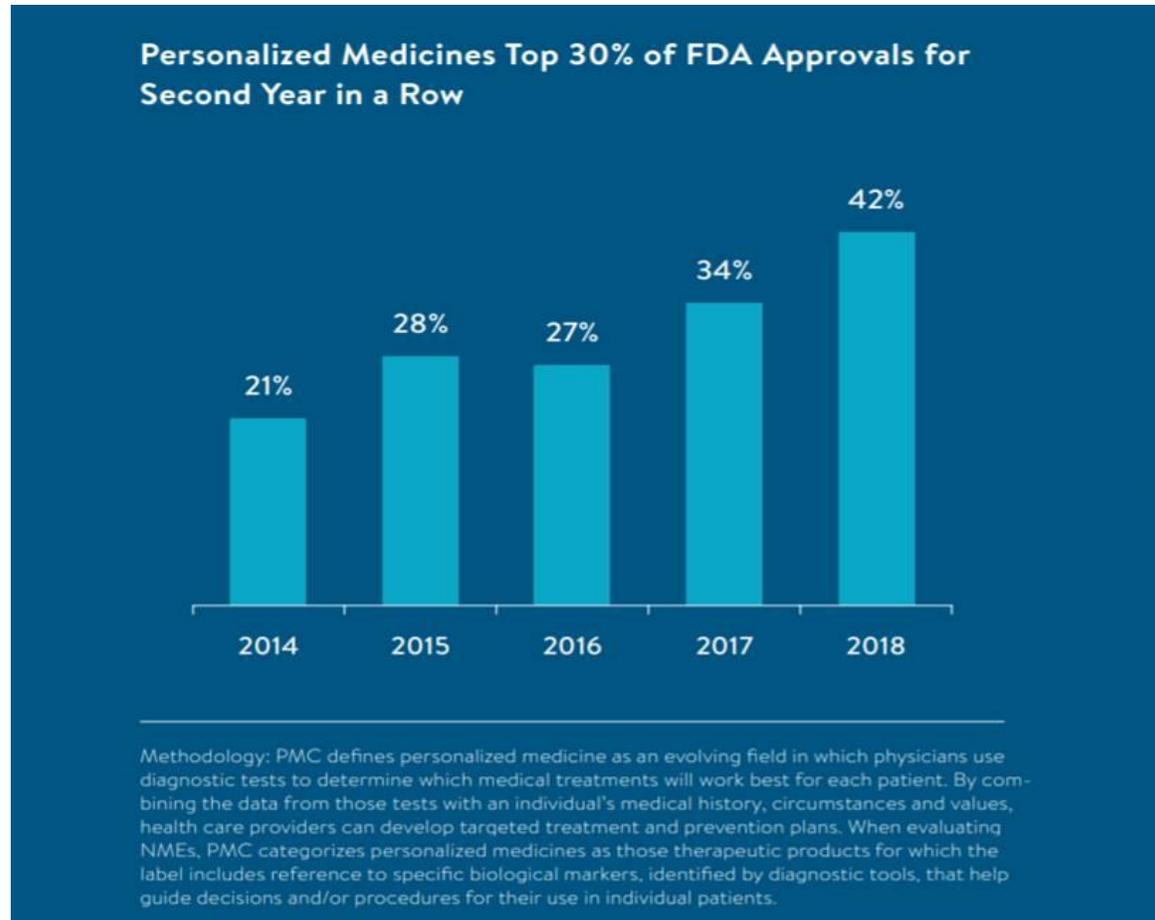
Advances in treating blood cancer



Most New Cancer Medicines in Production are Personalized



Increased Share of New Registered Medicines are Personalized Medicines



Source: http://www.personalizedmedicinecoalition.org/Userfiles/PMCorporate/file/PM_at_FDA_A_Progress_and_Outlook_Rep