



Symposium Friday 20 April 2018

Pharmacology forever !

Followed by the valedictory oration of
Prof. dr. Frits Peters

Auditorium O|2 gebouw
De Boelelaan 1108, Amsterdam



UITNODIGING AFSCHIEDSREDE

prof.dr. G.J. Peters

KAN NIET....

VRIJDAG
20 APRIL 2018



Symposium Friday 20 April 2018

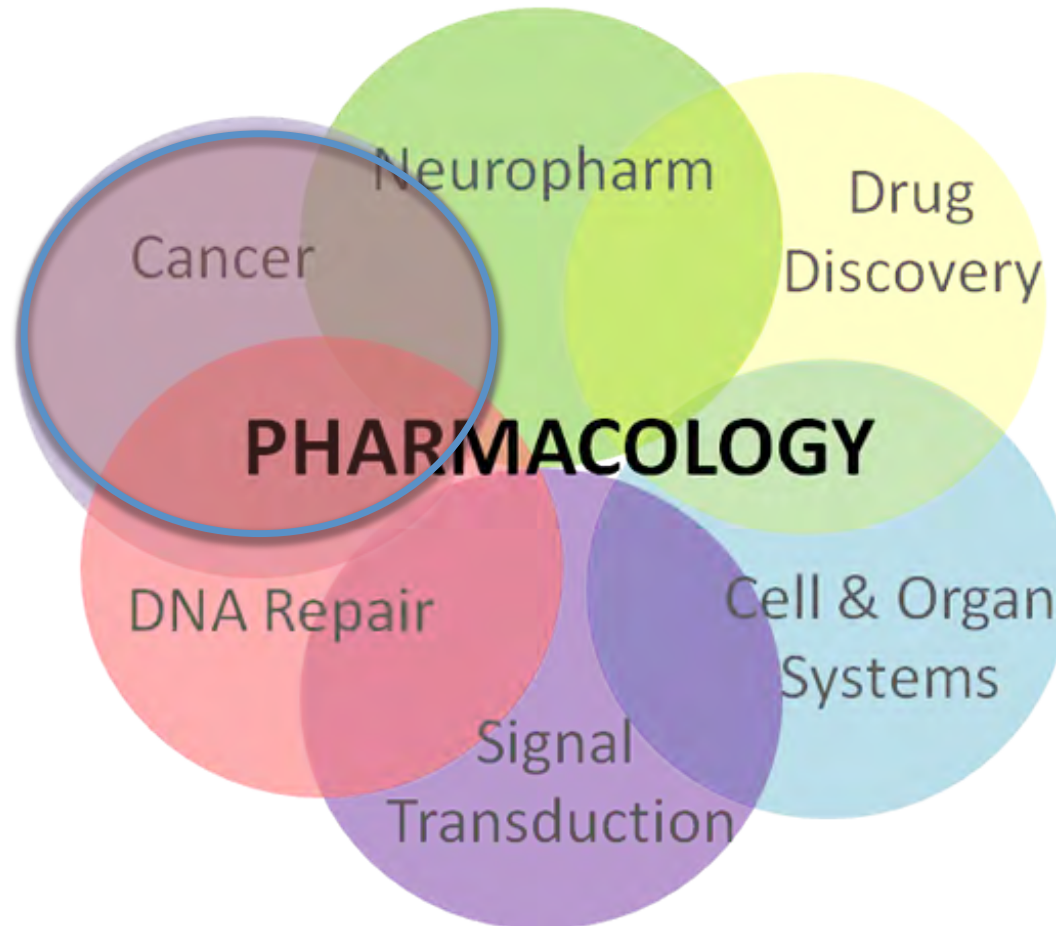
**Pharmacology
forever !**

**Role of
pharmacology
in anticancer
treatment**

Elisa Giovannetti



... from the Greek word ***pharmakon*** (a drug or a poison) and logos (science): the science that deals with drugs



Oncology & Pharmacology numbers

2x

Pharma market
growth 2012-18
(8%)

60%

external
innovation

1.5x

higher launch
value than other
TAs

25%

of Pharma
market in 2020

30%

of industry
pipeline

>2,000

compounds in
(pre-)clinical
development

1

death every 4
seconds

500

molecular targets
in the clinic

46%

first-in-class
pipeline
compounds

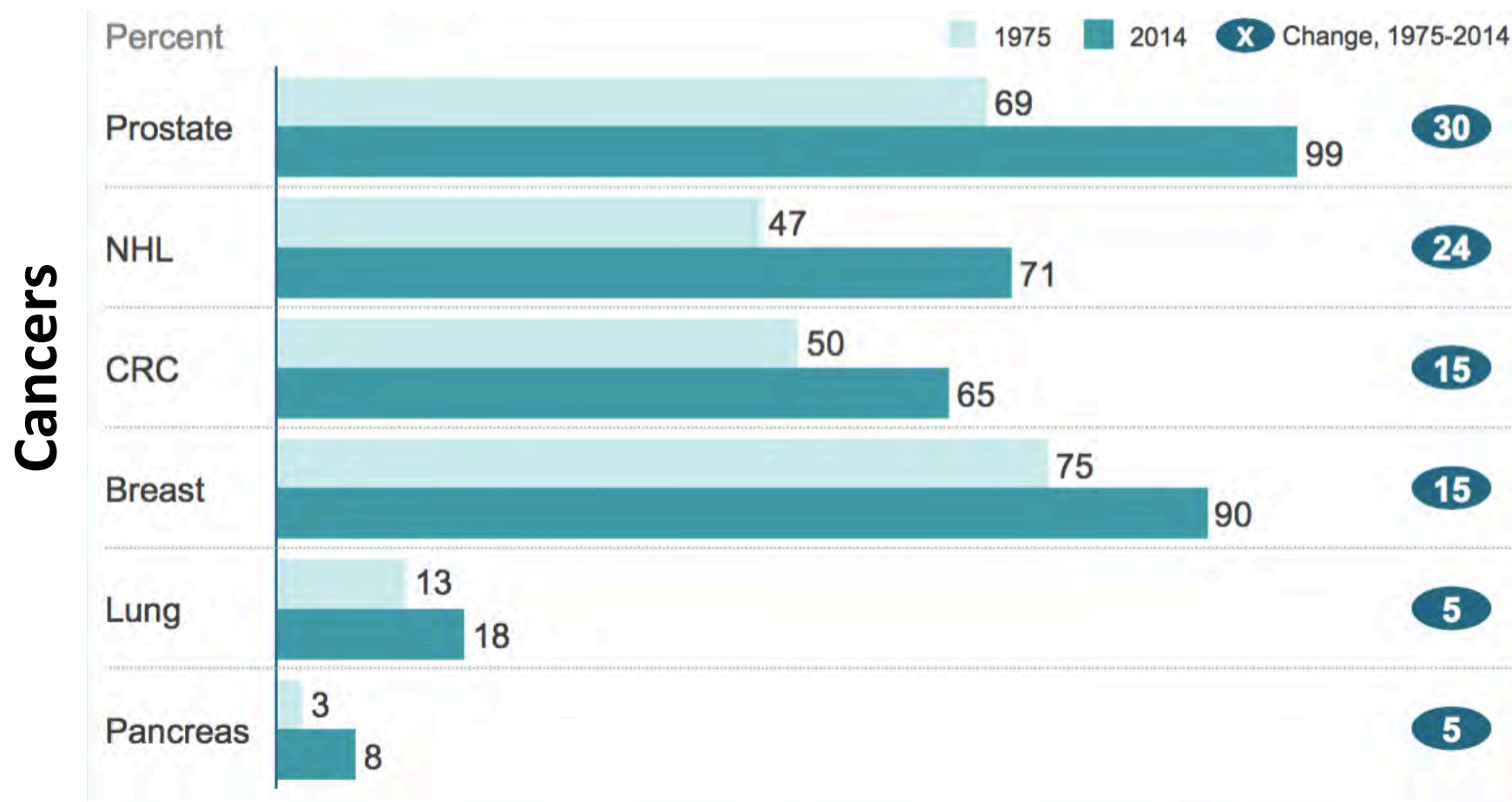
\$150bn

in health
care cost

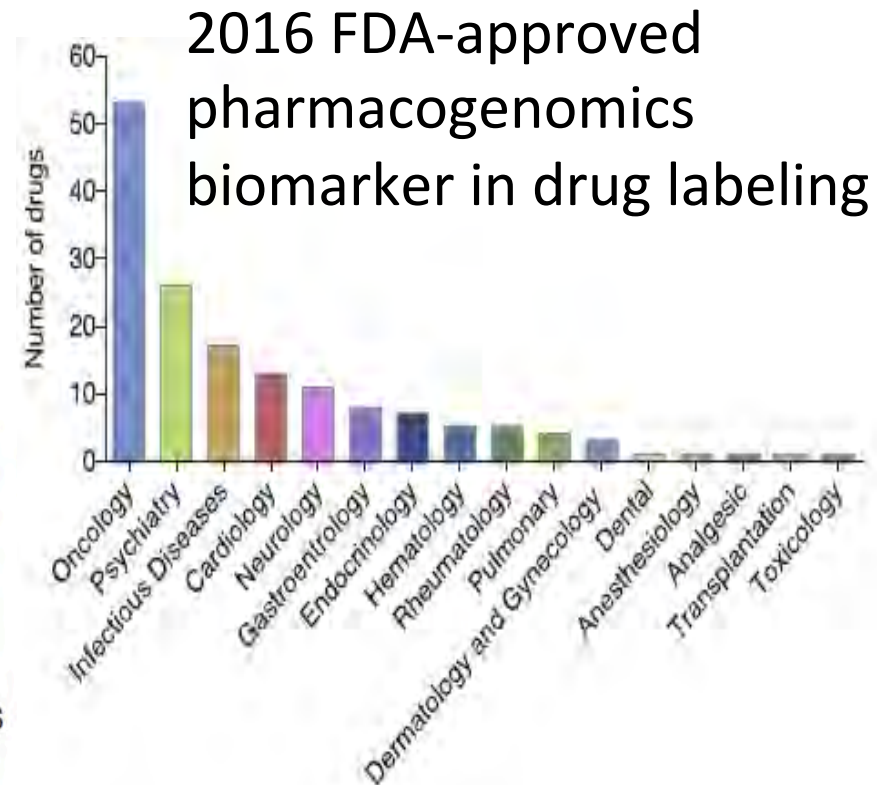
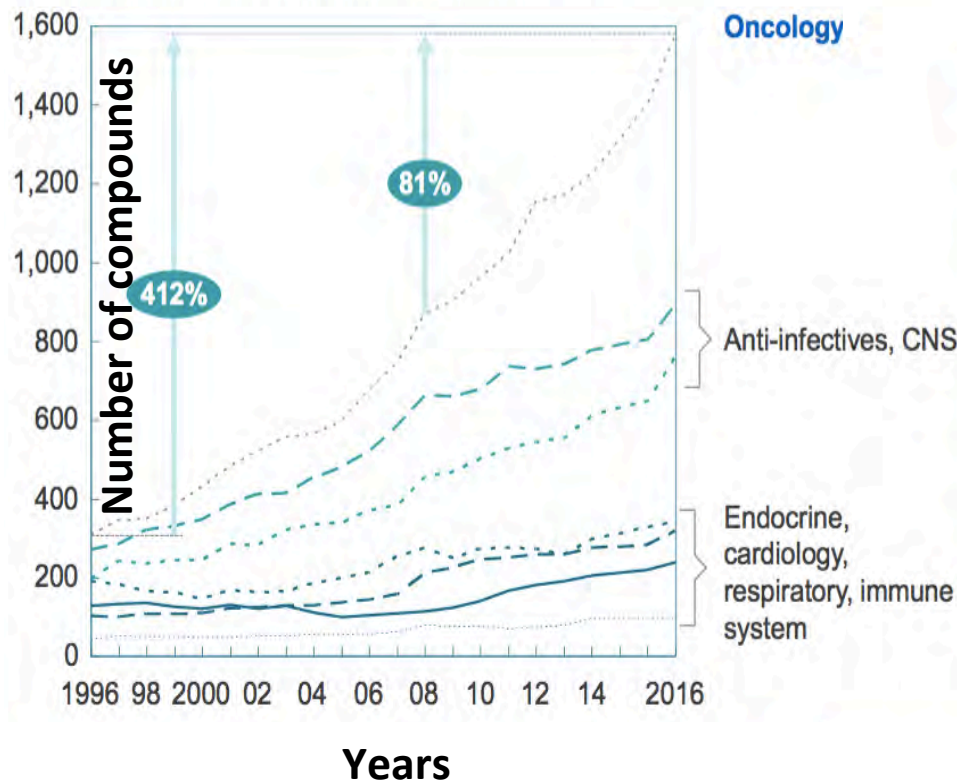
100

drug launches in
last 10 years

5-years Survival Rates improvements in the last 40 years



Seizing an opportunity



Your genome sequence contains 3 billion DNA pairs that add up to one unique you.

Scientists can use the human genome to develop new ways to treat, cure, or prevent thousands of diseases.

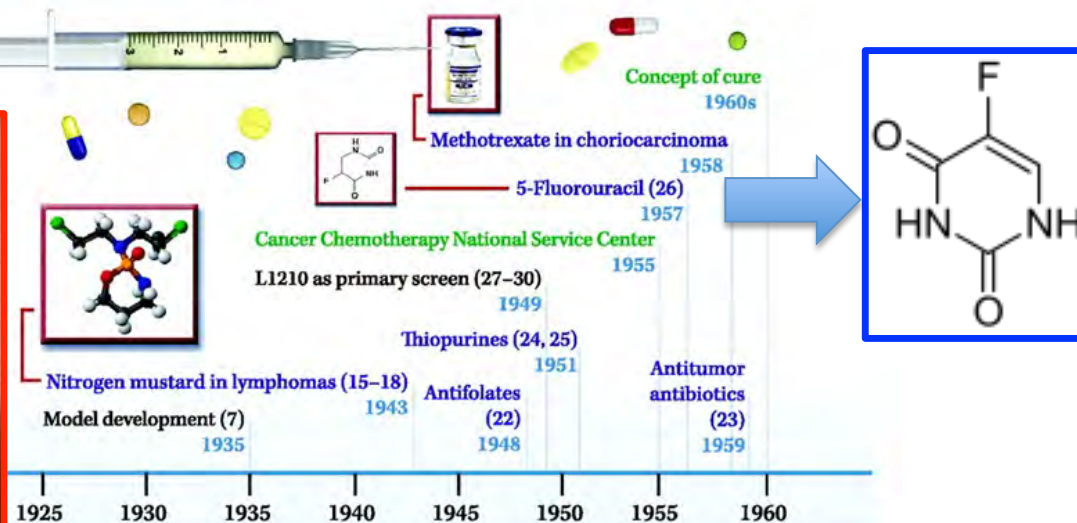
Precision medicine is health care tailored even more uniquely to you.

#PrecisionMedicine

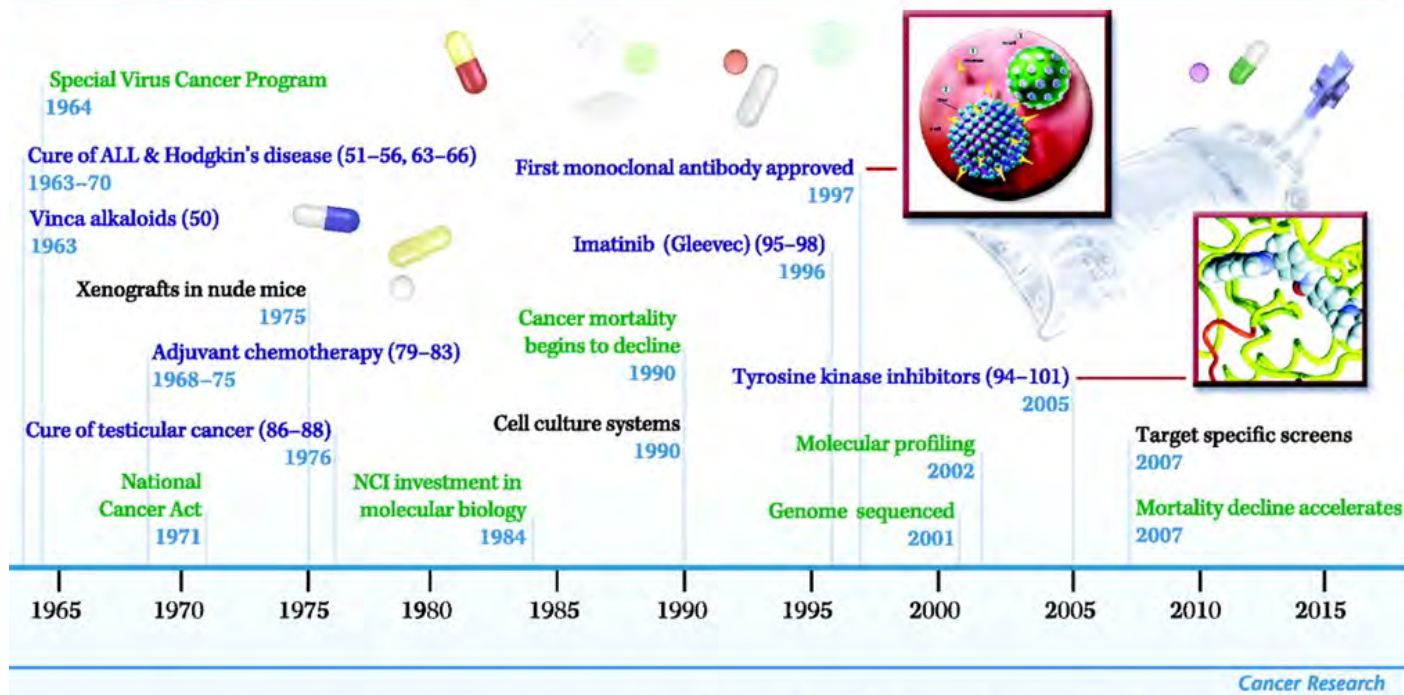
wh.gov/PMI

Key advances in the history of cancer chemotherapy

Advances in drug screening
Events with national impact
Advances in cancer therapeutics

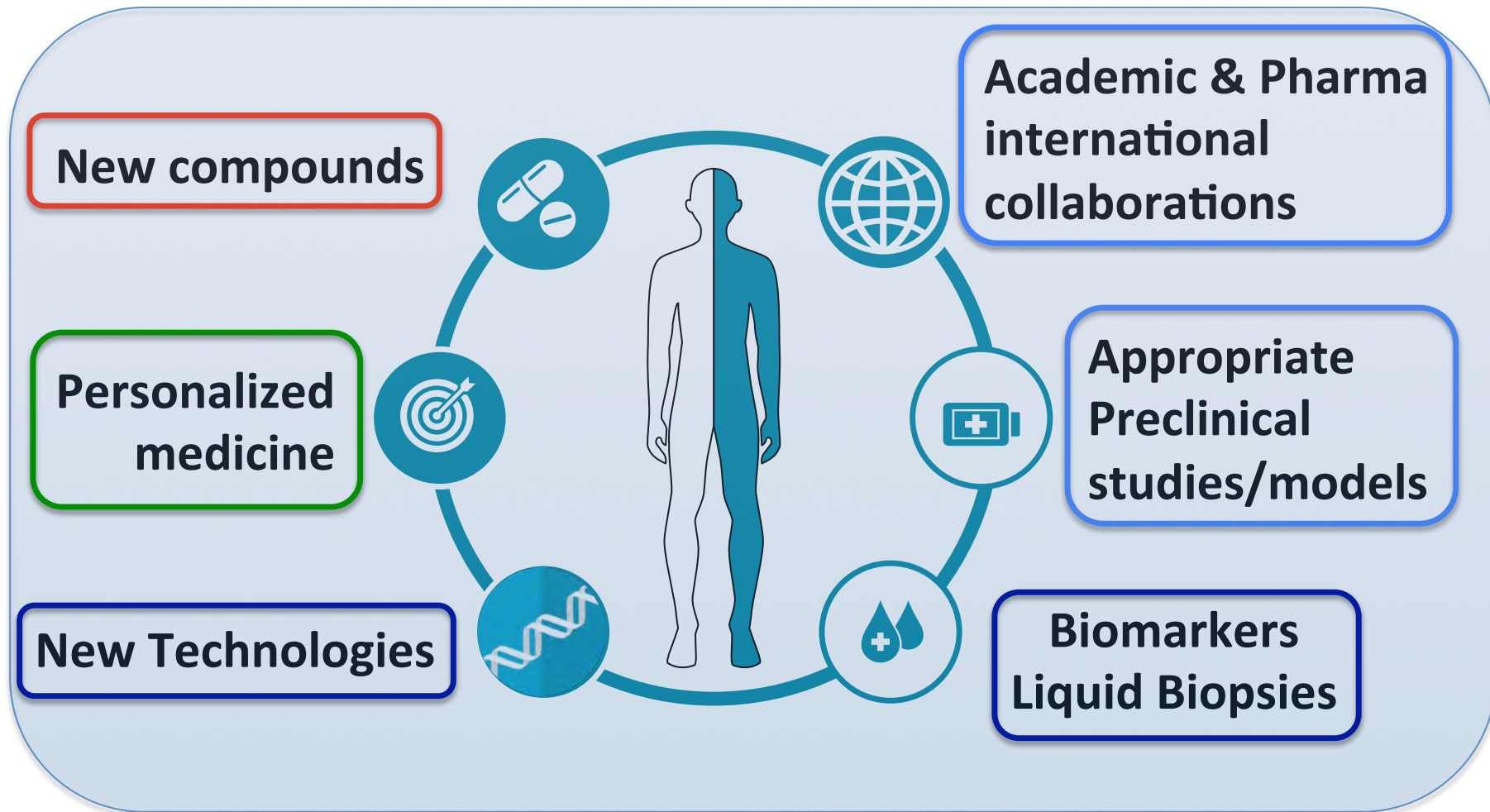


AACR Centennial Series

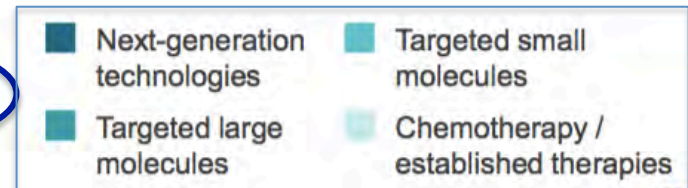
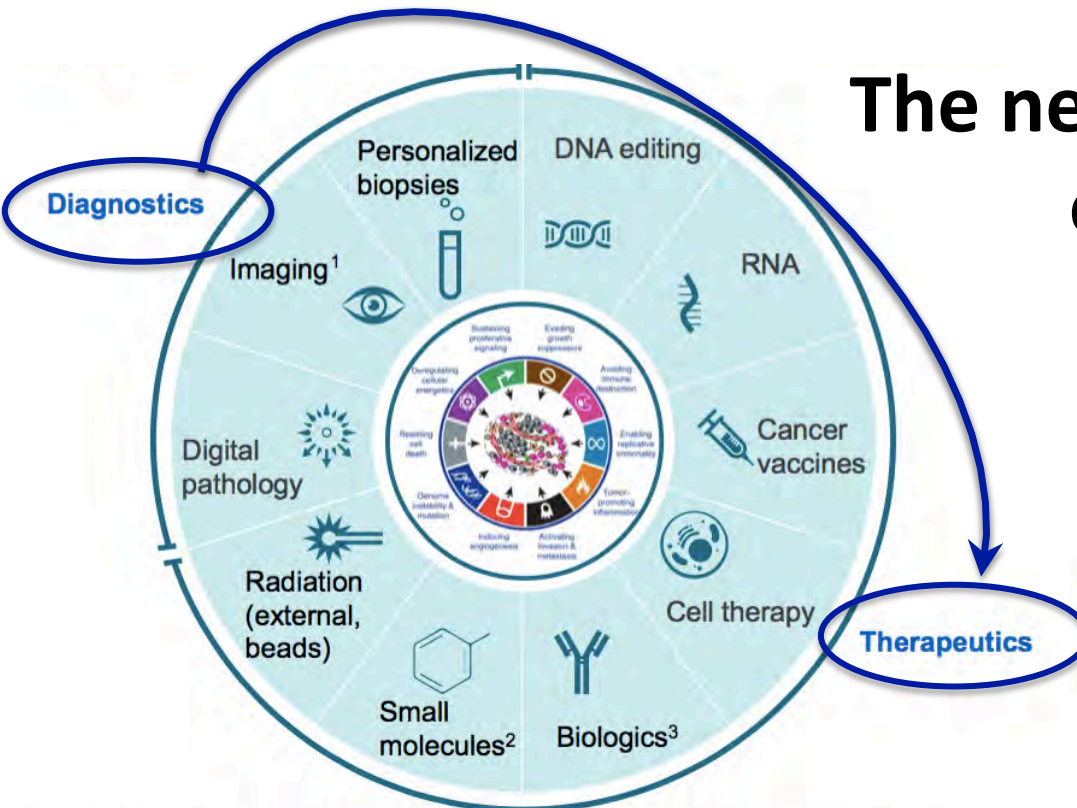


The future of pharmacology

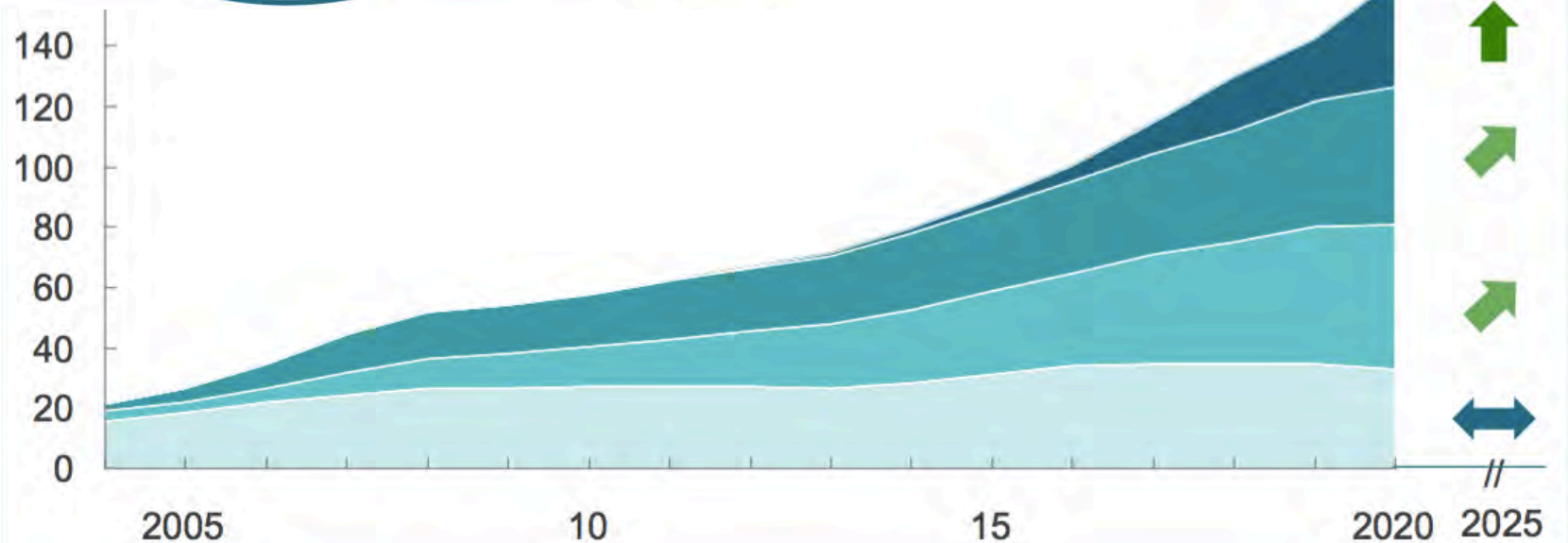
'Prediction is very difficult especially about the future' Niels Bohr



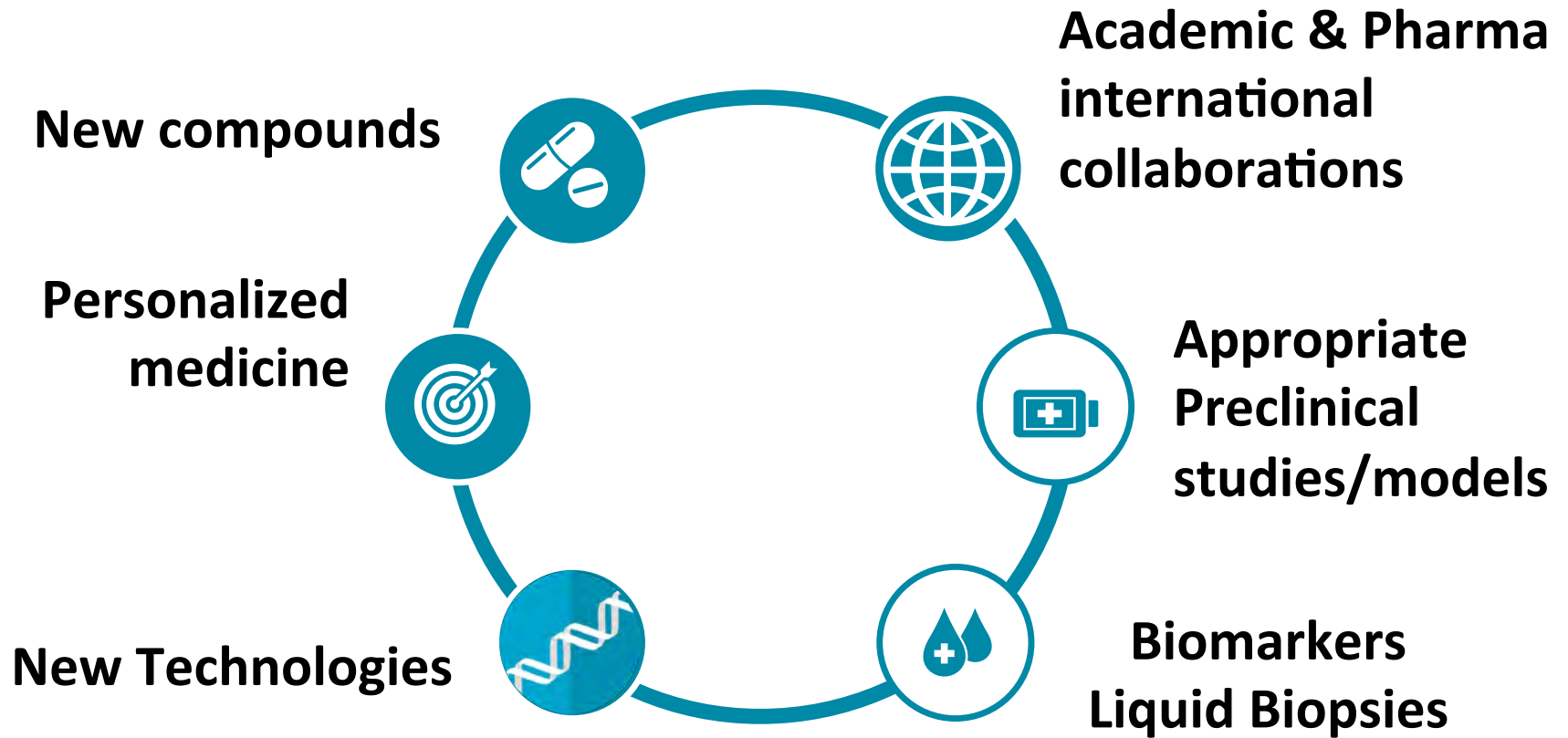
The next wave of hallmarks of cancer technology/ treatments



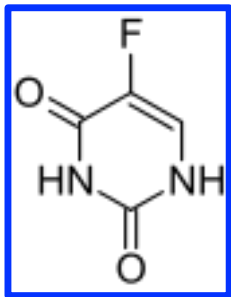
Worldwide Oncology Drug market (US Billions)



Back to the future...



Back to the future...



Gemcitabine
Pemetrexed
Gefitinib
S-1, TAS-102

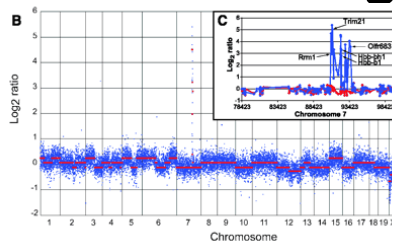
New compounds

**Personalized
medicine**

On the use of pharmacogenetics in cancer treatment
and clinical trials

Jacques Robert^{a,*}, Valérie Le Morvan^a, Elisa Giovannetti^b, Godefridus J. Peters^b,
on behalf of the PAMM Group of EORTC

New Technologies



**EORTC-related new drug discovery and development
activities: role of the Pharmacology and Molecular
Mechanisms Group**

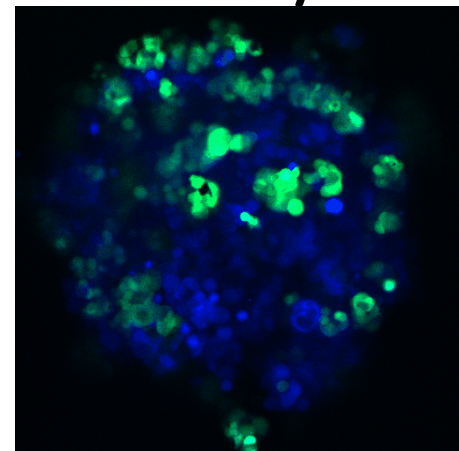
G.J. Peters^{a,*}, E. Chatelut^b, A.K. Larsen^c, N. Zaffaroni^d, on behalf of PAMM

**international
collaborations**

Analysis of Drug Interactions

Irene V. Bijnsdorp, Elisa Giovannetti, and Godefridus J. Peters

**Preclinical
studies/models**



“I am influenced by my teacher and I am proud about this. He is too. Otherwise what is the meaning of teaching?

The teacher gives to the student all he knows, believes, loves, hopes.

The student adds other things and in this way humanity is going forward.”

(Lettera ad una Professoressa)



**Thank you
very much
Frits!**