

11th APAC Annual meeting

The importance of RWD in the era of precision medicine.

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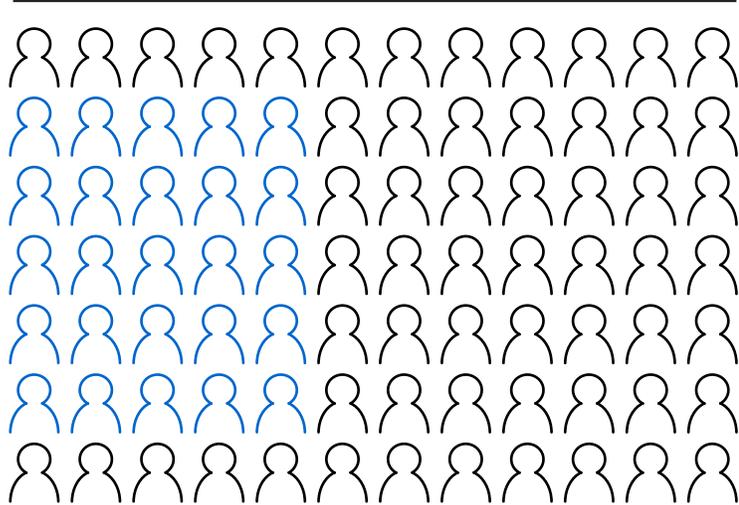
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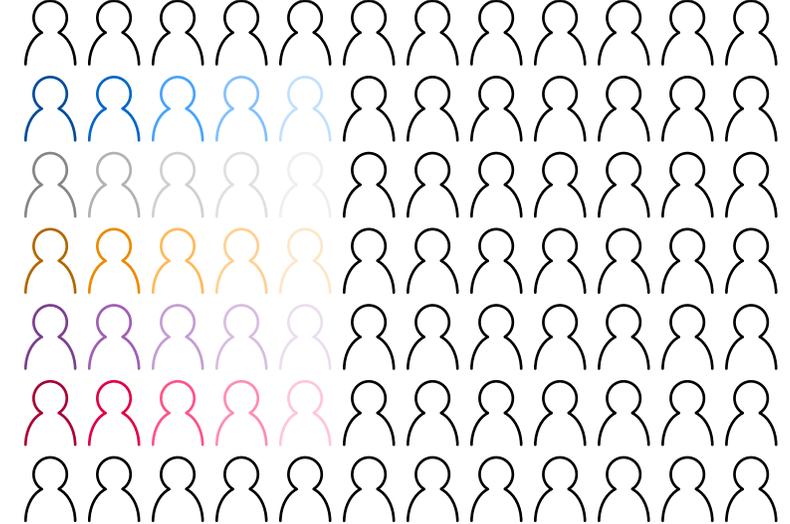
The evolution of medicine



'One-drug-fits-all' treatment approach¹



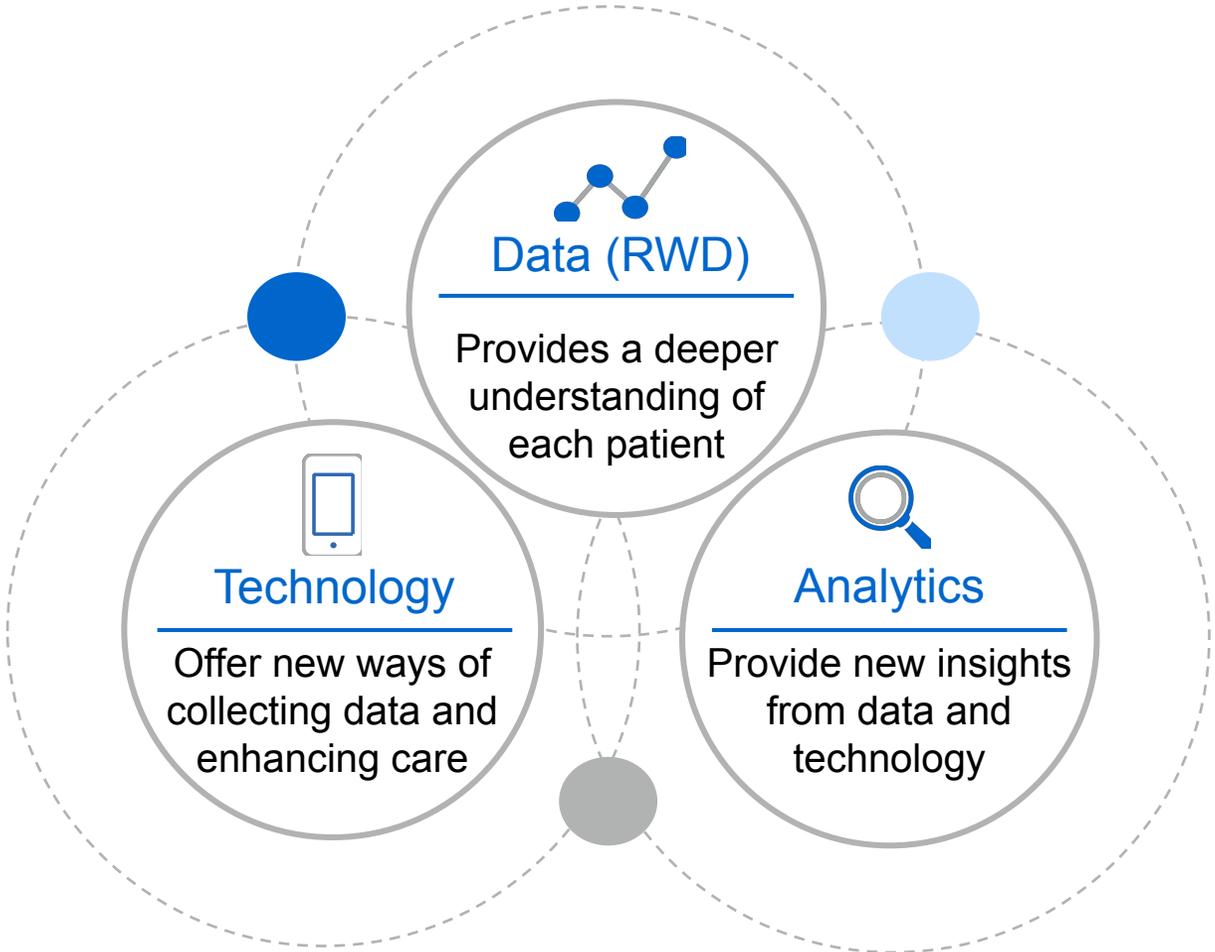
**Tailoring
treatment to the
unique
molecular profile
of a patient¹**



- **RWD** offer a unique opportunity to **better understand health outcomes and clinical care processes.**^{3,4}
- Alongside RCTs, **RWD** can be used to **address knowledge gaps, formulate hypotheses** and **generate fit-for-purpose evidence.**^{3,4}
- A **data infrastructure** to evaluate care plans and patient outcomes **is needed.**^{3,5}
- Continuously feeding **RWD** into such infrastructure would **ensure that we learn with every new patient treated.**^{3,6}

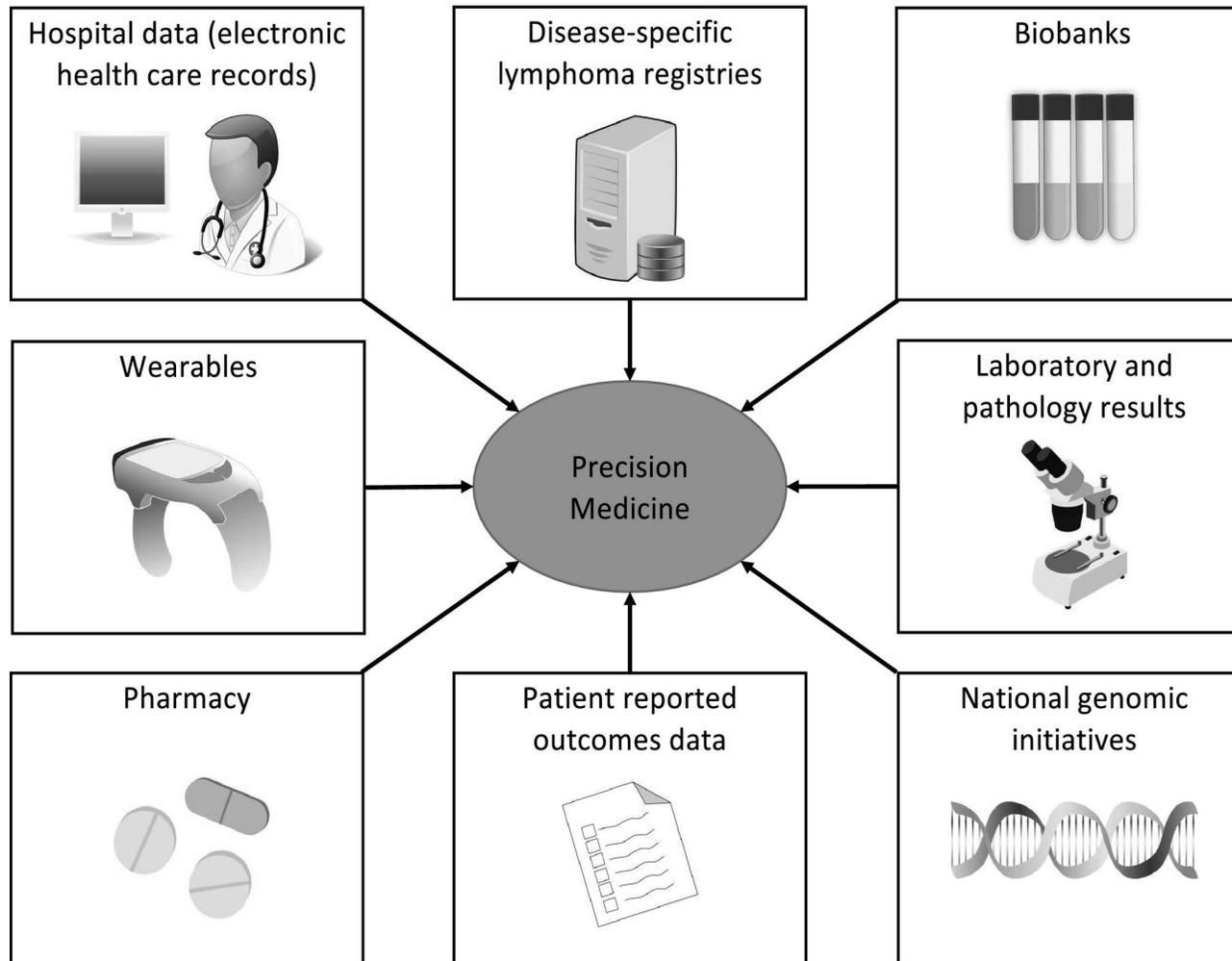
RWD: Real-World data; RCT: Randomized clinical trial; 1. Agyeman, A.A. and Ofori-Asenso, R. (2015) *J Pharm Bioallied Sci* 7(3):239–44.

The convergence of science and technology provides an exceptional opportunity to support this transformation

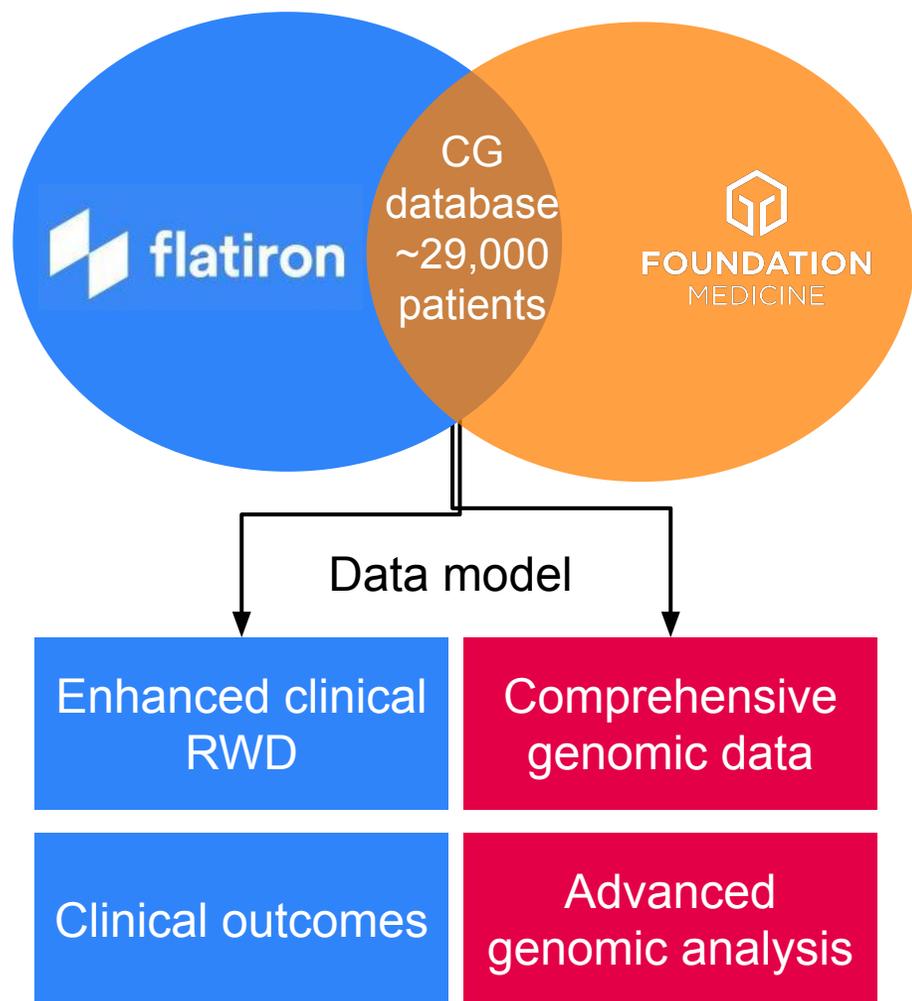


Real-world data, technology and analytics provide opportunities to address healthcare challenges, optimise care and improve patient outcomes

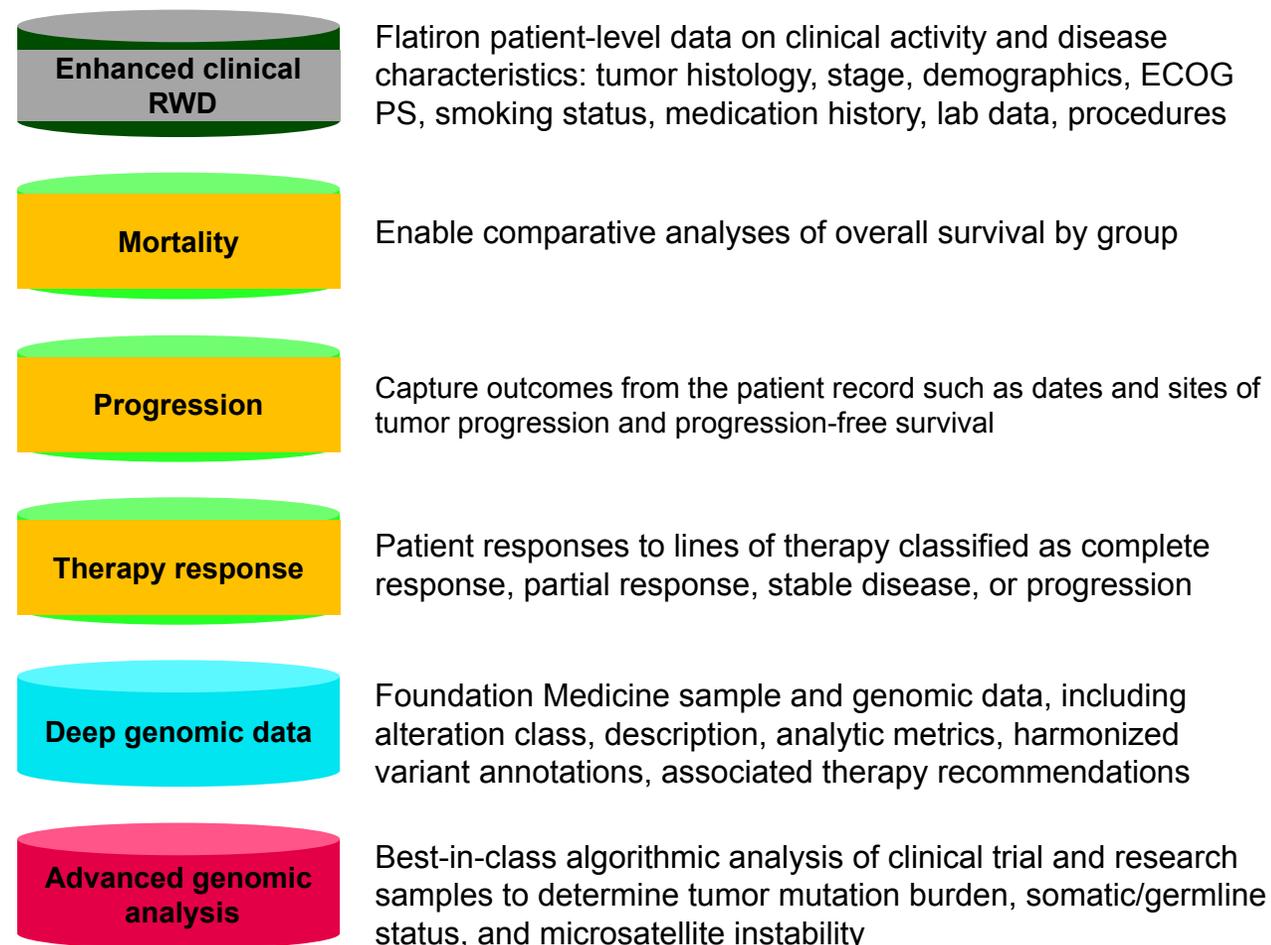
Linkage of various sources of RWD is needed to realise the value of precision medicine



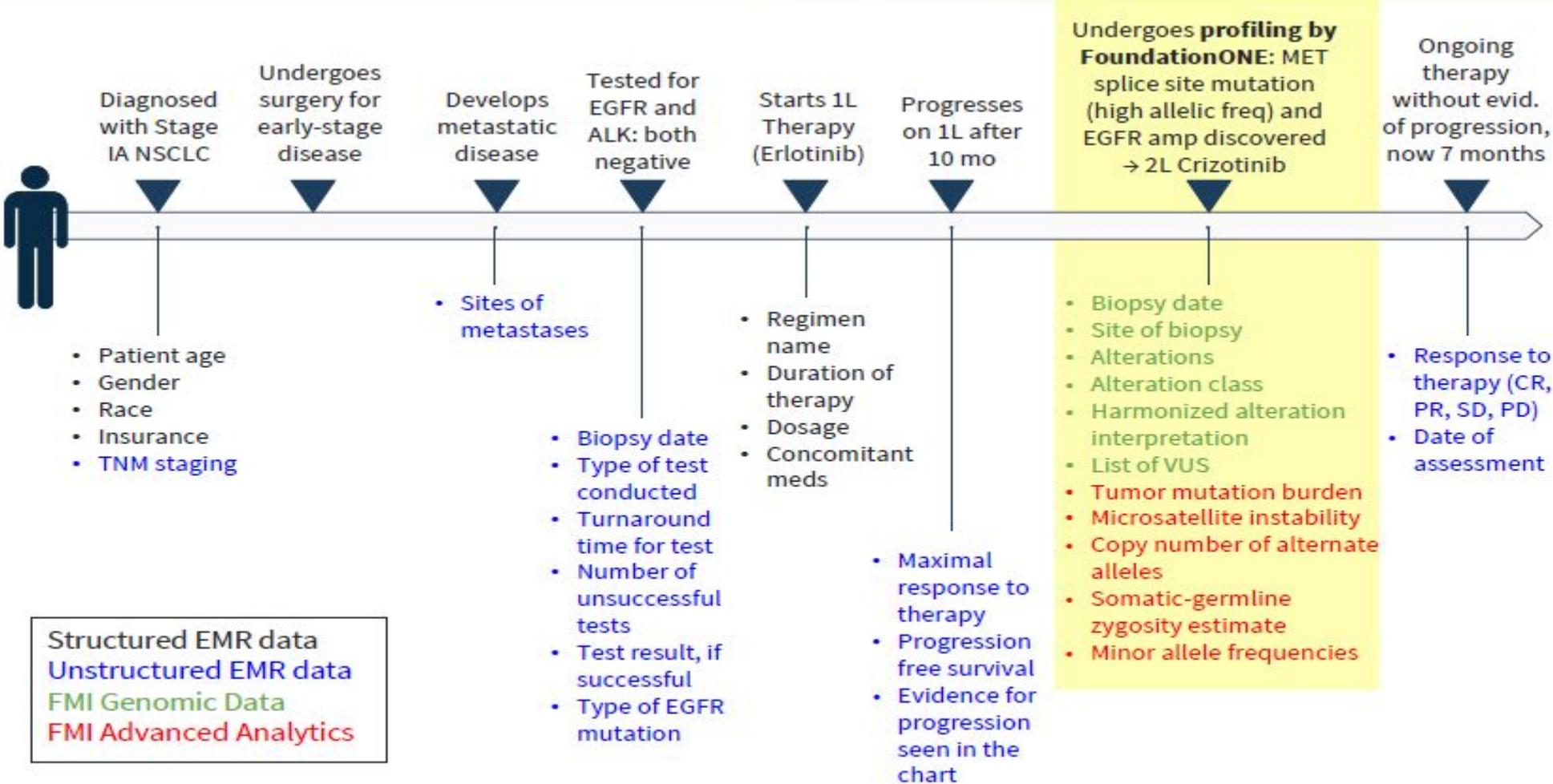
Electronic Health Records (HER) & Comprehensive Genomic Profile data linkage



FMI-Flatiron Clinical-Genomic Linked Dataset



Use case 1 : Patient Journeys: Longitudinal & “Deep” Data



Structured EMR data
 Unstructured EMR data
 FMI Genomic Data
 FMI Advanced Analytics

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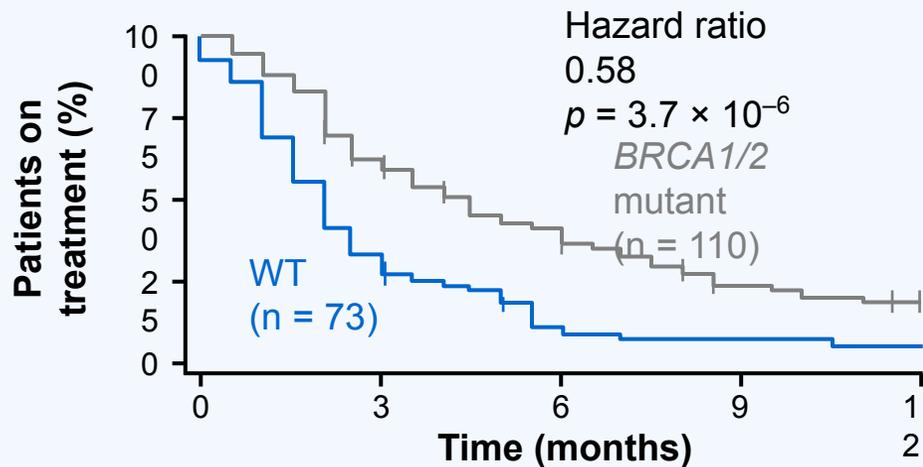
 FOUNDATION MEDICINE²⁴

Use case 2 : RWE to evaluate the therapeutic relevance of BRCA1/2 in cancer patients



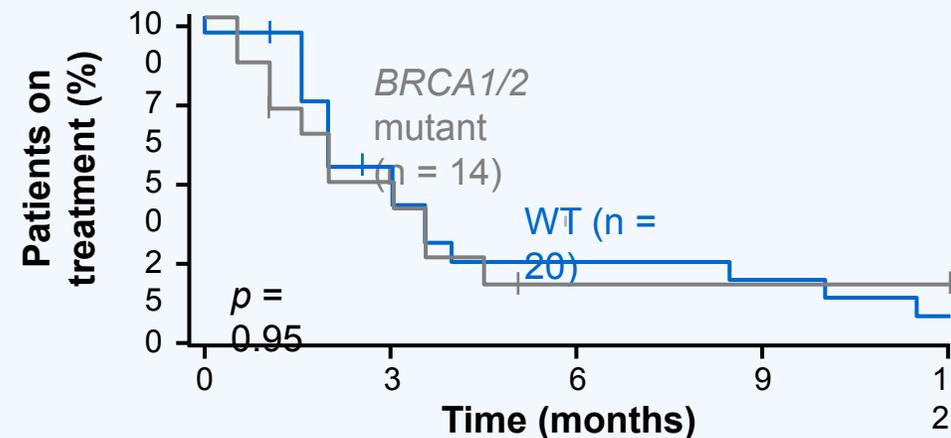
BRCA-associated cancers treated with a PARP inhibitor

(Breast, ovary, pancreatic, prostate)



Non-BRCA-associated cancers treated with a PARP inhibitor

(Lung, colorectal, others)



Mutant *BRCA1/2* does not have the same therapeutic relevance in all cancer types – in a considerable proportion of cancers, it appears to be biologically neutral

RWD: real-world data.

Jonsson, P., et al. (2019) *Nature* 571:576-9.

***Doing now what patients
need next***