



Changing the game in Alzheimer's disease

**Public private partnerships for effective
clinical trials**



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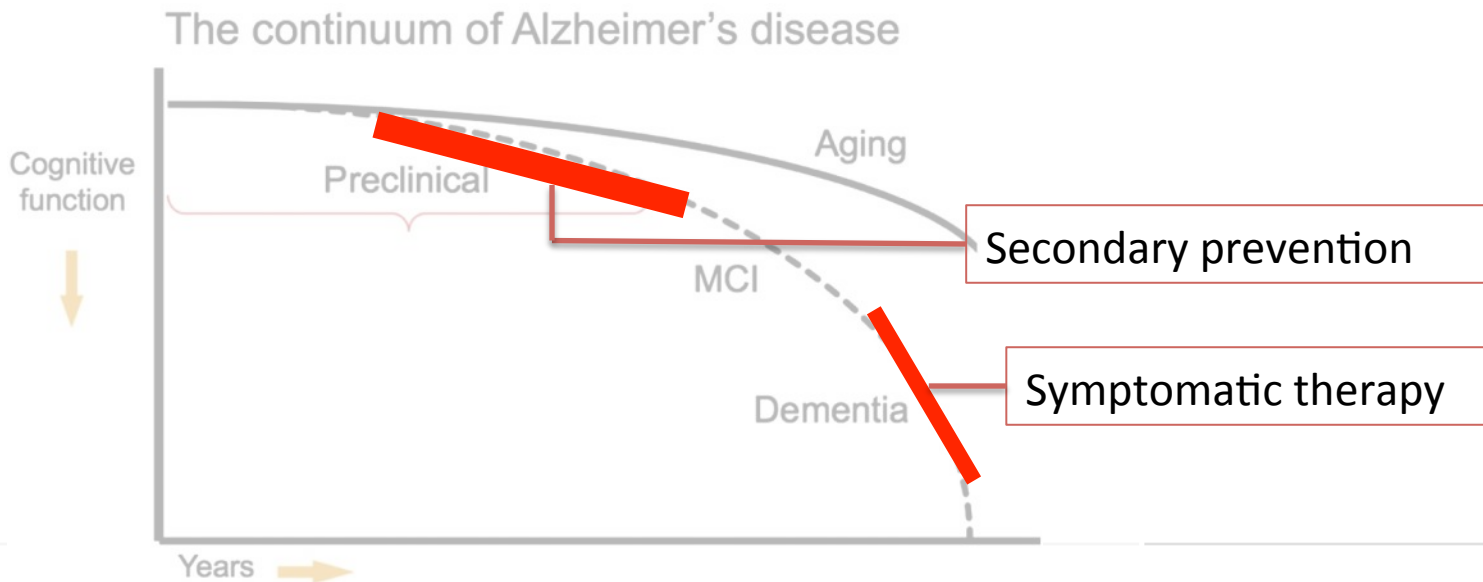
Alzheimer's disease

a world of unmet need

- Global problem
- Scientific advances
- Trials failure

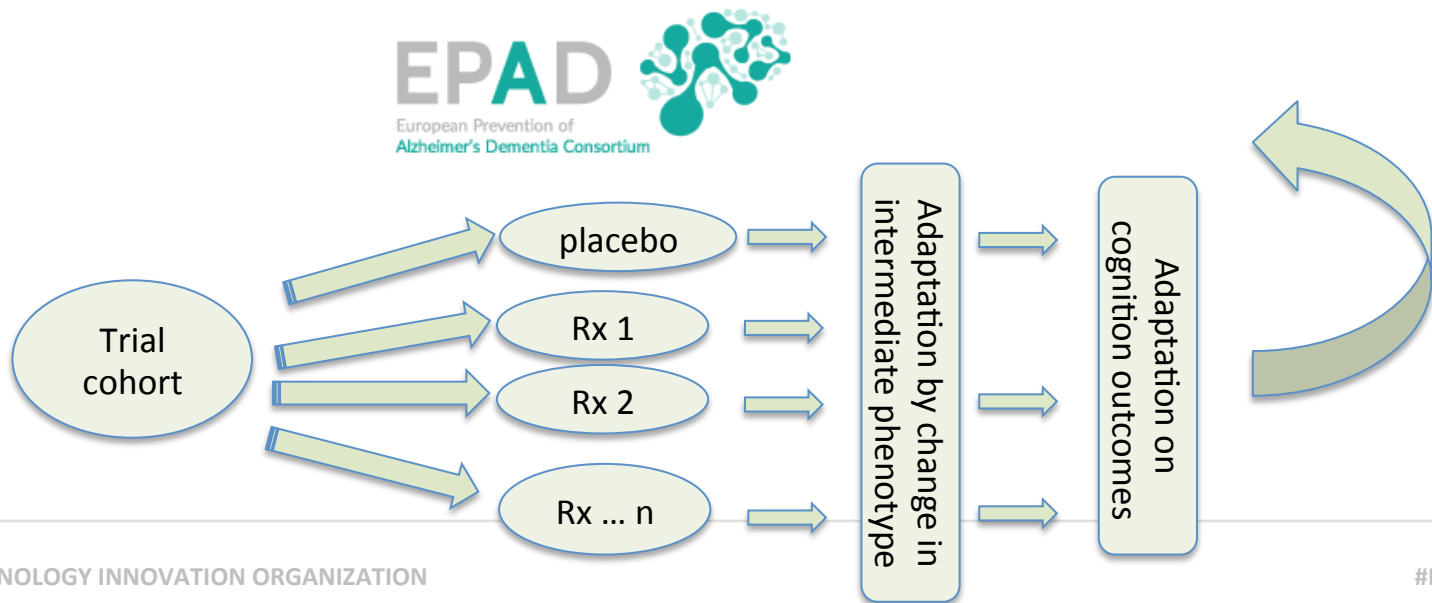
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Therapeutic opportunity; practical challenge



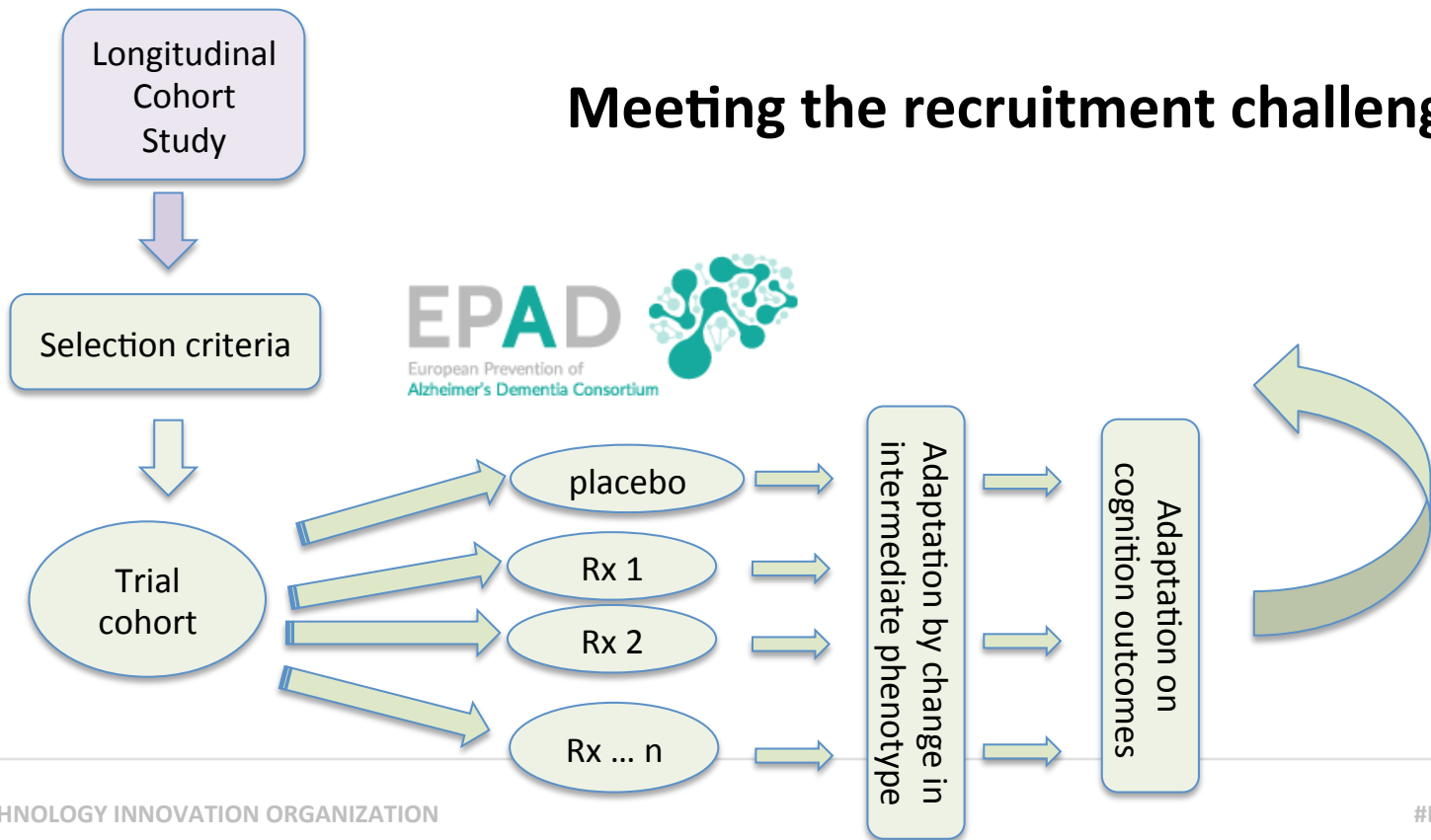
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Adaptive trials to accelerate proof of concept



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Meeting the recruitment challenge



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Collaboration for translational research in dementia

Sample	N
UK Biobank population	502,713
Episodic memory	498,053
Episodic memory >2 SD	17,096
..... plus age 55 years+	12,447
..... plus APOE4 carrier	7,468
..... plus APOE4/4	1,742

Dementias Platform UK

Dementia Discovery cohorts
(n=2m)

Dementia UK BioBank cohort
(n=10k)



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European Medical Information Framework

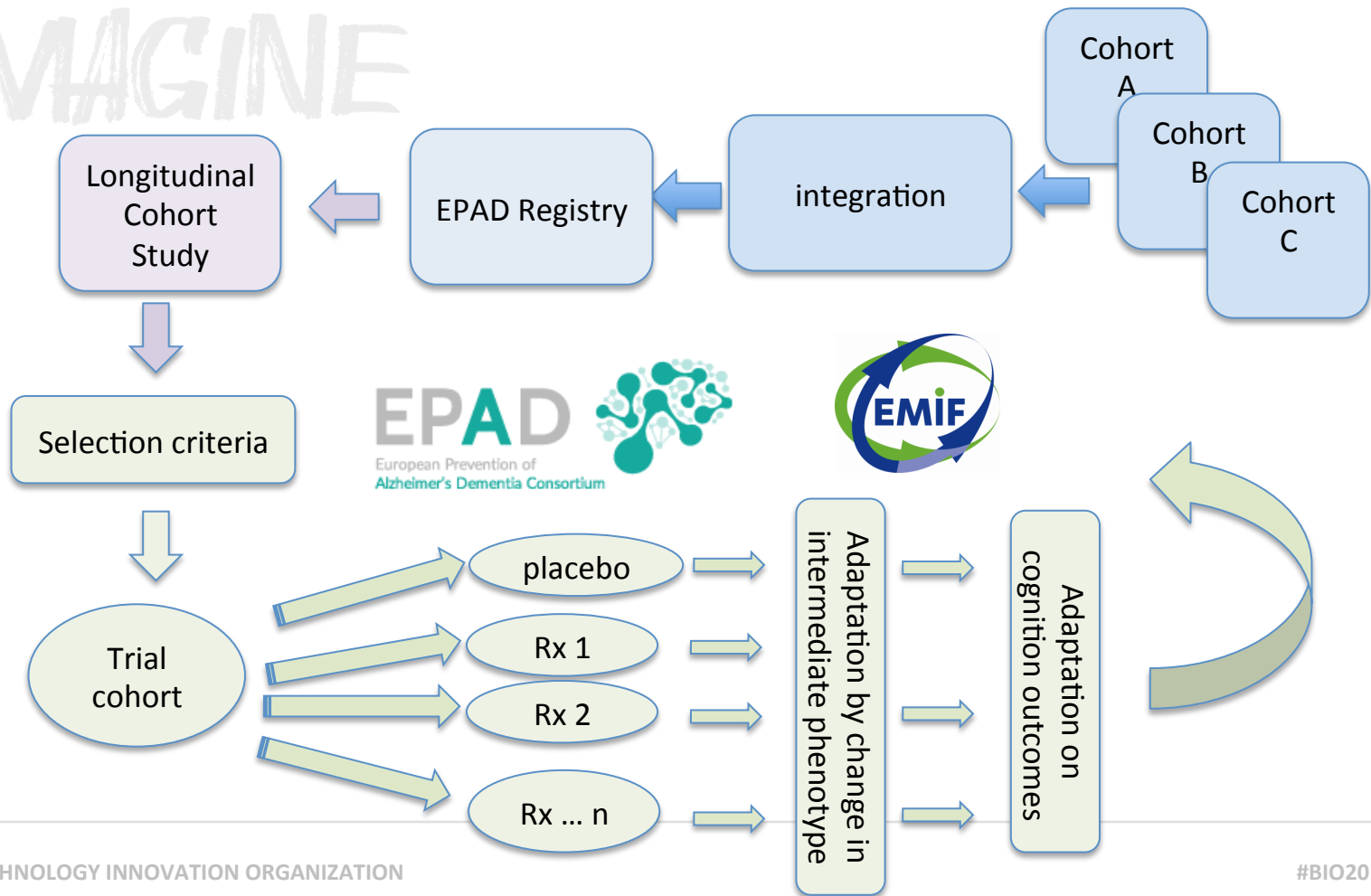
Cohorts and data integration Tools



Number subjects	Controls	SCI	MCI
All	31219	3173	11976
Plasma	3537	1764	3961
DNA	8763	3163	5731
RNA	1637	484	2128
CSF	846	1336	3757
MRI	3449	1035	5586
FDG-PET	551	308	1942
Ab PET	335	143	492

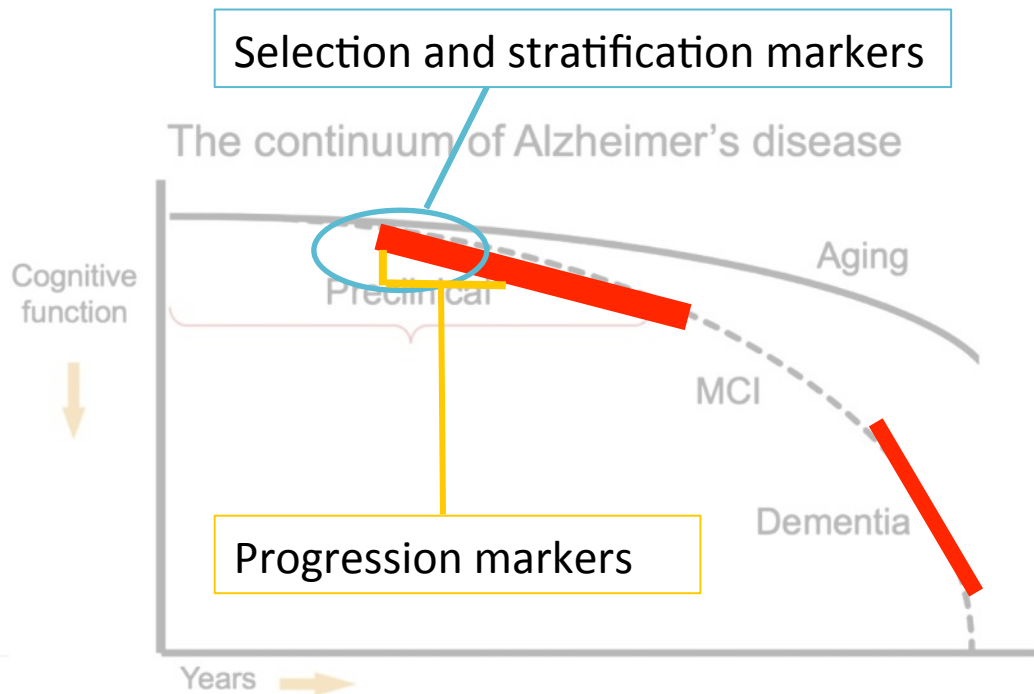


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Addressing the detection challenge



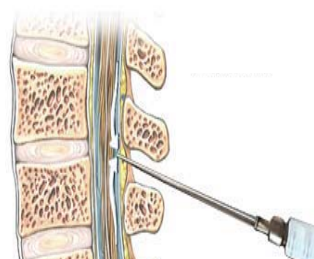
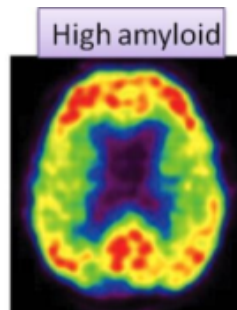
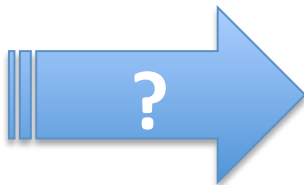
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Preclinical markers for Alzheimer's

Sensitive

Facile

Low cost



Specific

Invasive

Costly

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Preclinical markers for Alzheimer's

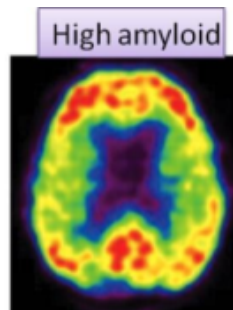
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Facile

Low cost



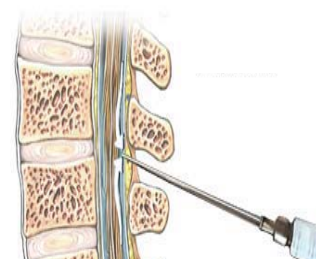
FGG associated with PET amyloid and CSF markers



Specific

Invasive

Costly



- Research cohorts
- Samples
- Industry partners

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Changing the game in Alzheimer's disease IMI and Public Private Partnerships

- Alzheimer's Europe – patient representatives as partners
- Engagement with regulators
- BioTech and InfoTech involvement
- Pharmaceutical companies working together
- Academic groups working to milestone driven goals

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Changing the game

Prevention of Alzheimer's disease

- Reutilising standing cohorts
- Rapid trial initiation
- Proof of concept in man
- 'picking the winner'

Prevent and Effectively Treat Alzheimer's Disease by 2025



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Acknowledgements

- > 50 executive members
- > 150 principal investigators
- > 500 scientists
- > 50,000 volunteers
- > 50,000,000 data contributors
- > 200,000,000 euros from funders



Industry Coordinator : Serge Van Der Geysen
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