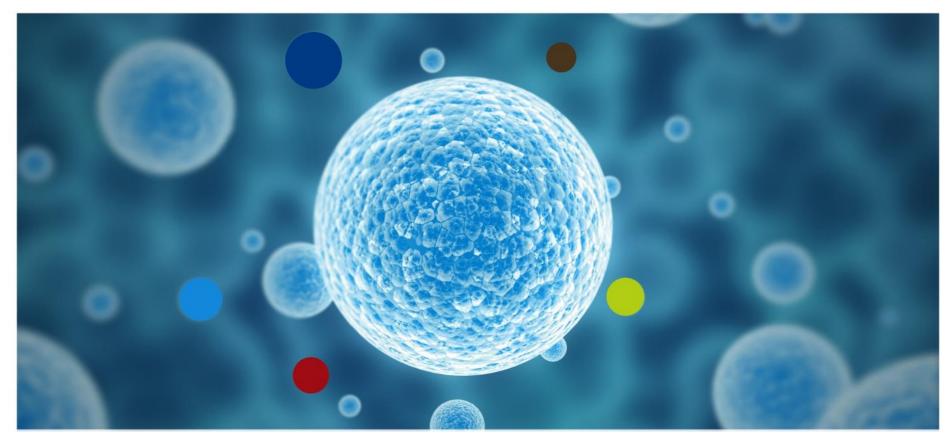
A sustainable European Bank for induced pluripotent Stem Cells





The EBiSC2 project has received funding from the Innovative Medicines Initiative 2 Joint Undertaking (JU) under grant agreement No 821362. The JU receives support from the European Union's Horizon 2020 research and innovation programme and EFPIA.











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Induced Pluripotent Stem Cells

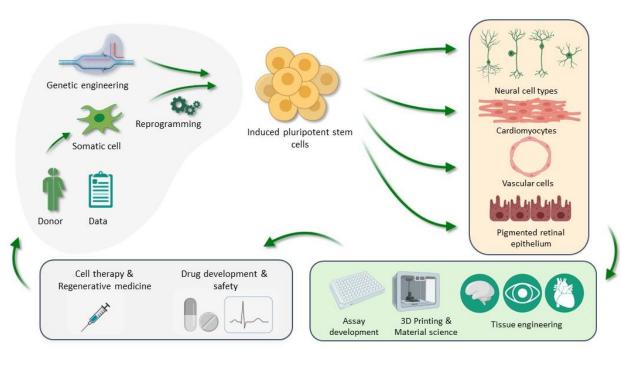


iPSCs are derived :

- from donated samples
- under clear and fully informed consent
- from known disease / genetic backgrounds

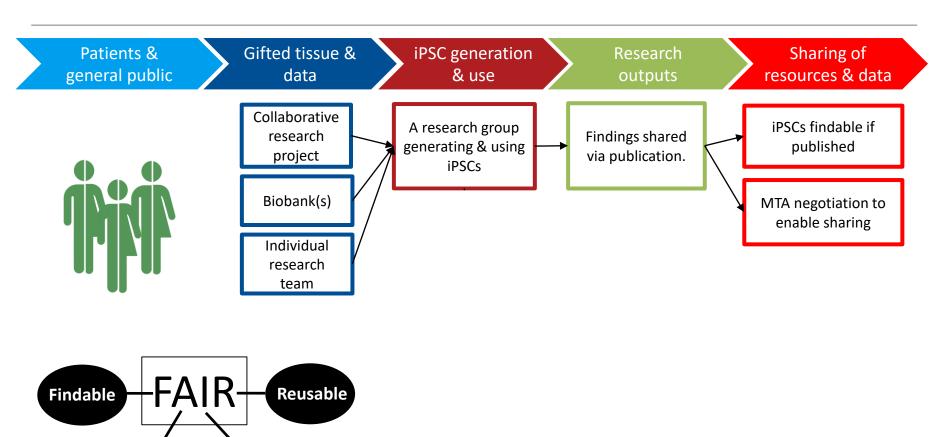
iPSCs can be used:

- to form specific cell types/ tissues
- to research diseases and basic biology



EBiSC: A centralised repository for iPSC tools and data





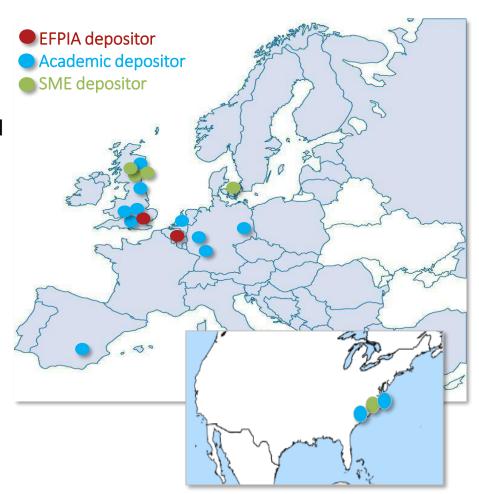
Accessible

Interopable



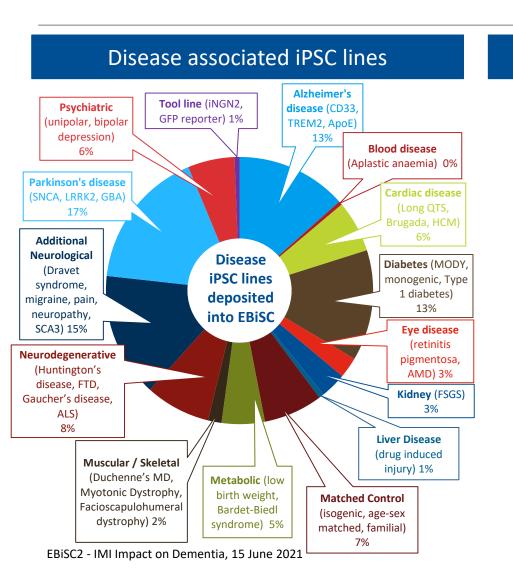
EBiSC iPSC lines are from multiple sources...

- EBiSC iPSC lines deposited by research groups internationally
 - >900 iPSC lines
 - Samples from >30 different clinical studies
 - >20 different depositing institutions
 - Academic, SME and EFPIA depositors
 - European and American depositors to date
 - Publicly funded research projects including ADAPTED, StemBANCC and HipSci.

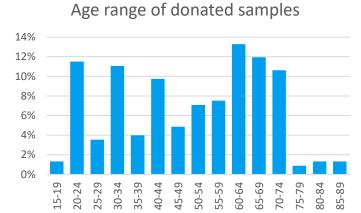


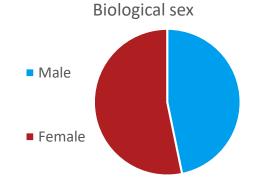
...acting as biological models for individuals from diverse backgrounds.





Healthy 'control' iPSC lines



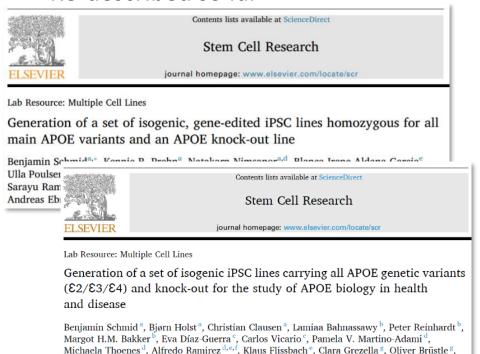


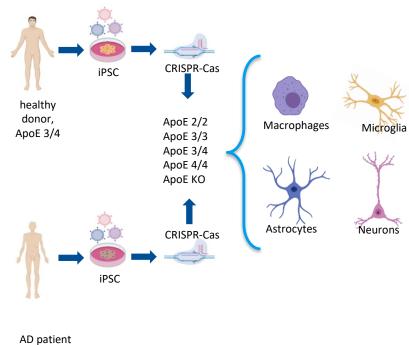


EBiSC engagement: The IMI-ADAPTED experience



- EBiSC engagement allowed ADAPTED a 'Hot-start' for an IMI project by fast tracking cell line generation
- First and only full sets of isogenic lines carrying all variants of APOE + APOE KO described so far





ApoE 4/4

Michael Peitz 8, Andreas Ebneth h,i, Alfredo Cabrera-Socorro h,



Global impact of IMI-ADAPTED: not feasible without EBiSC

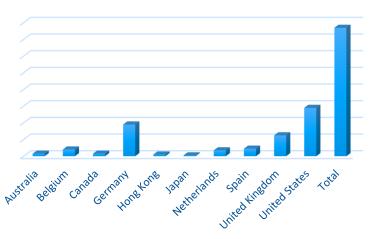


- States Total number of vials supplied world-wide 2016-2021: XXX
- Total revenue generated 2016-2021: XXX.XXX
- Comparable impact in academic and commercial R&D centers
- Worldwide impact, with increasing demand

Academic Commercial Distributor Academic Commercial Distributor Light Commercial Distributor Light Commercial Distributor

ADAPTED iPSC lines: EBiSC Sales 2016-2021 (in €)





Impact of EBiSC on global iPSC research



- Need sustainable home for iPSCs & datasets
- Support with sharing iPSCs with collaborators
- Back up, cross-site storage
- Increased capacity to focus on research
- Accelerated research outputs
- Access to best practice documentation

Individual research projects



Researchers worldwide

- Sustainability of research resources and data
- Provision of industry quality tools & data to other researchers
- Setting standards and best practice
- Increasing accessibility to iPSC research for nonexpert users
- Accelerating research through service provision

- Increased access to clinically relevant, high quality iPSC models
- Reduced costs of research (by accessing existing lines instead of creating new)
- Reduced wastage of resources (due to use of poor quality lines)
 - Increased research reproducibility and findings

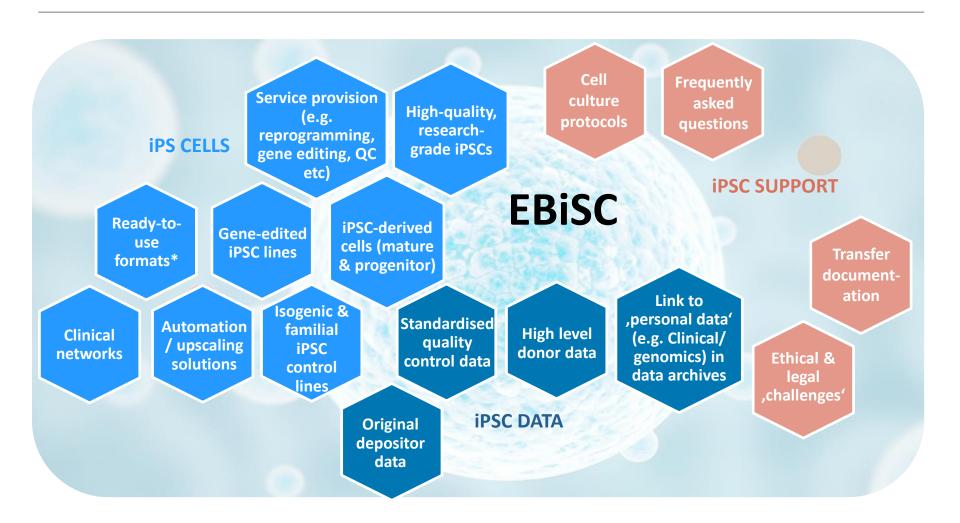


Impact as a Public-Private Partnership

	Public partners	EBISC BIOBANKING	EFPIA partners
•	Engagement & inclusion in other publicly funded research projects	Identifying iPSCs of interest	 Identifying upcoming areas of high interest for research
•	Advising of deposition requirements from 'low infrastructure' organisations (e.g. the need to streamline data management procedures) Need for embargo to allow publication	Deposition into EBiSC	Advising on terms of use and licensing requirements for for-profit organisations
•	Common approaches to inform core protocol developments	iPSC Banking & QC	 Setting standards suitable for industry PoC studies to demonstrate 'real-life' exemplar downstream use
•	Development and testing of user protocols Informing acceptable terms of use for 'non- profit' organisations Access to industry grade tools	Distribution to users worldwide	 Informing acceptable terms of use for 'for-profit' organisations Advising on terms of licensing Access to clinically relevant tools at high volume
•	Development of innovative protocols Advising common applications for academic users	Development of new products & services	 iPSC derived cells for industry: Cell types of interest Performance status & maturity status Formats and scale of intended use

EBiSC resources







MAKING IPSC TOOLS FINDABLE, ACCESSIBLE AND REUSABLE FOR ALL RESEARCHERS, IMPROVING SUSTAINABILITY, REPRODUCIBILITY AND ACCELERATING RESEARCH **OUTPUTS.**

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