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The Initiative

The EurOPDX Consortium has teamed up with other key academic and SME partners in a four-year project funded by the European Union's Horizon 2020 research and innovation programme under the topic "Integrating Activities for Starting Communities". The EurOPDX Research Infrastructure will build on the experience and successes of the Consortium, offering a cutting-edge, and much needed, distributed infrastructure for access to PDX models and expertise, with the aim of improving cancer drug development success rates through the enablement of collaborative PDX research.

We are developing the EurOPDX Data Portal, a user-friendly public repository to facilitate access to, and search into, a curated distributed collection of established PDX models. To enable effective PDX resource sharing, the project will develop common standards and procedures across PDX research, as well as offering training in these areas. These activities will enable the provision of free Trans-national Access (TA) to PDX resources and expertise by 6 infrastructure nodes for academic and industrial cancer researchers from Europe and Worldwide.

A European Research Infrastructure with a global reach

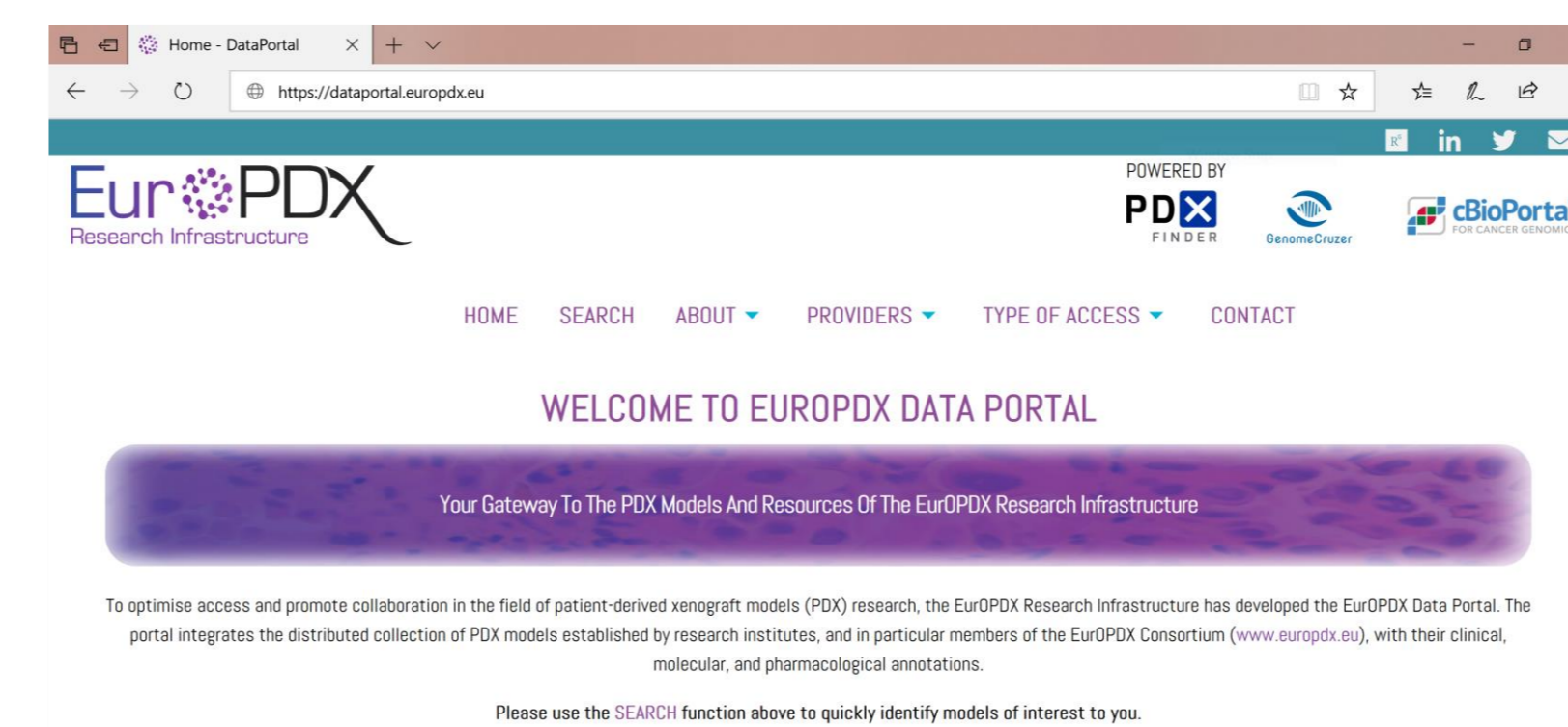
- Infrastructure node
- Project partner
- Project coordinator



The EurOPDX Data Portal

By 2020, we will integrate and curate a distributed collection of over 1500 PDX models covering over 30 pathologies (currently 644 models for colorectal and breast cancers). The EurOPDX Data Portal is built upon the PDX Finder global catalogue search function, and links search queries to cBioPortal and GenomeCruzer tools for in-depth interrogation of models of interest, and associated molecular data.

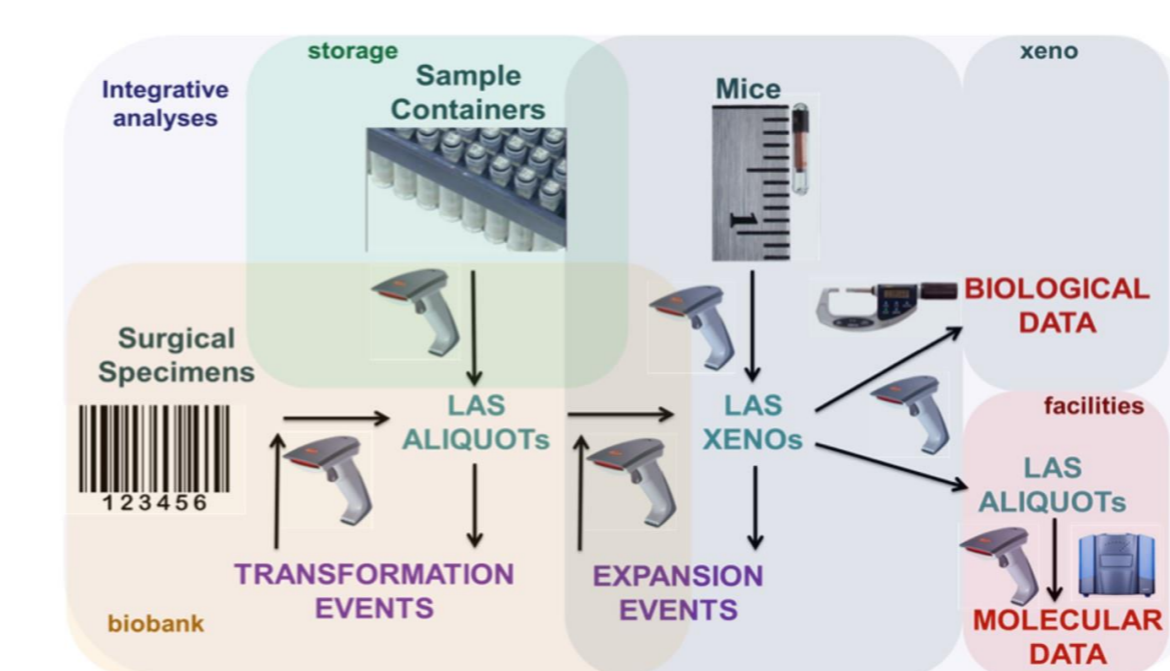
<https://dataportal.europdx.eu>



Improving standards & harmonising procedures

- ❖ Harmonising procedures for biobanking and data tracking through the installation of a common laboratory information management system, the "Laboratory Assistant Suite" (LAS), across the six nodes.

Laboratory Assistant Suite >>>



- ❖ Establishing standards for health monitoring, biobanking and quality controls, to facilitate exchange of models and increase reliability of the material
- ❖ Establishing standards for the performance of preclinical *in vivo* drug efficacy studies using PDXs, to increase the reproducibility and reliability of preclinical data
 - Those standards will be applied in a cross-validation study across all 6 nodes and additional project partners
 - To extend the reach of our work, we will discuss and disseminate these standards with other international initiatives and the scientific community with the aim of reaching a global agreement and having a global impact on reproducibility of preclinical oncology.

Free-of-charge Trans-national Access (TA)

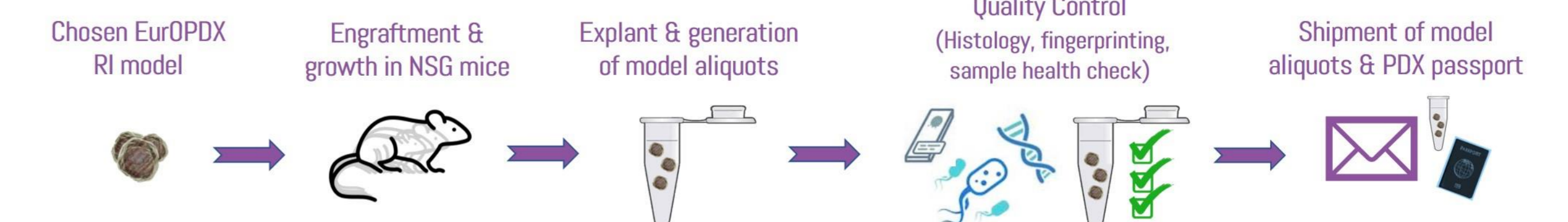
Trans-national Access (TA) offers academic and industry researchers from Europe and worldwide the opportunity to remotely access the PDX models, services, and expertise of the EurOPDX Research Infrastructure free of charge.

As part of the EurOPDX Research Infrastructure grant, three TA calls will be launched between 2018 and 2020.

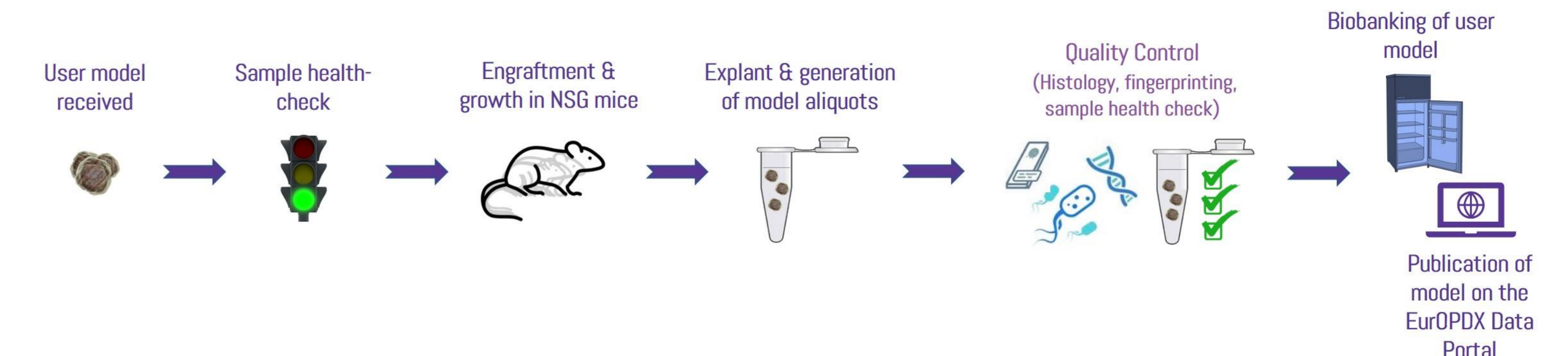


Access will be possible through three different "access units":

- ❖ **Sample** = shipment of frozen PDX tumour samples to selected academic laboratories



- ❖ **Deposit** = deposition of PDX models into the repository and infrastructure biobank



Test (as from the 2nd call in 2019) = performance of in vivo preclinical experiments on PDXs engrafted in immunocompromised mice within the 6 nodes

Deadline for proposals: 31st January 2019.

Application guidelines and forms are available at: www.europdx.eu/europdxri-ta

Additional activities of the EurOPDX Consortium

In parallel, the EurOPDX Consortium continues to develop collaborative studies for:

- ❖ improving PDX models and their characterisation
- ❖ developing new models, in particular if underrepresented in the current collection
- ❖ performing biomarker and efficacy studies to improve cancer management.

Email contact@europdx.eu for any enquiries or interest in joining the Consortium



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