

The EurOPDX Research Infrastructure

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Improving and facilitating European and worldwide cancer research with patient-derived xenografts

6th March 2020

RICH-2 Webinar series

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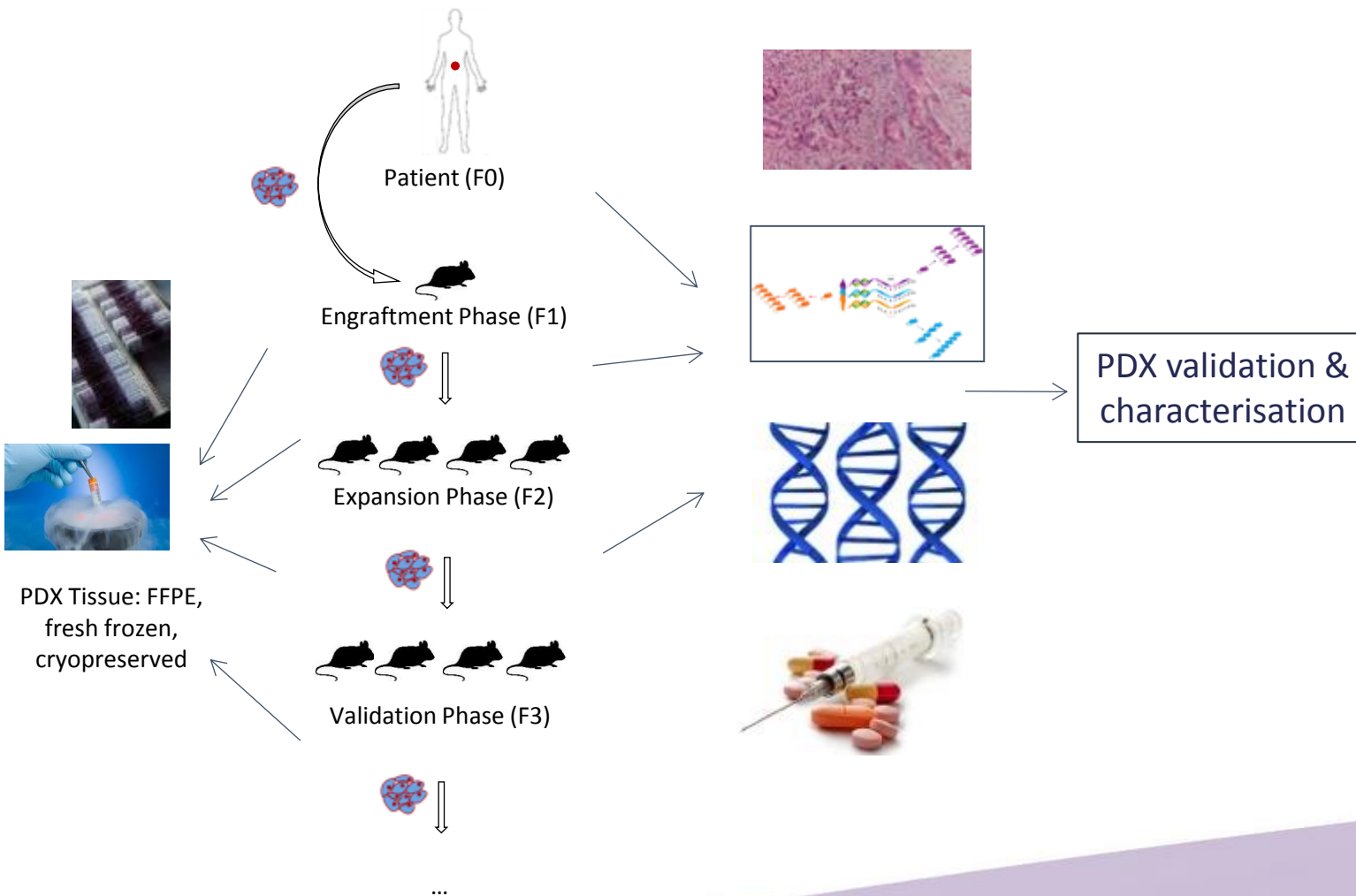
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EDIReX has received funding from the European Union's Horizon 2020 research and innovation programme, grant agreement no. #731105

Patient-derived xenograft models



PDX models widely recognised as **clinically-relevant preclinical models** (Byrne et al, Nat Rev Cancer 2017).

Time consuming and costly establishment and characterisation.

Integrating collections of PDX models allows to **perform studies for genotype/response correlation** on a “population” scale, to **increase predictability of preclinical data for success in the clinic** and improve oncology development success rates.

The **EurOPDX Consortium**, established in 2013, is an initiative to promote scientific collaboration in PDX research in Europe (and beyond), integrate available PDX collections and raise standards in the field.

EurOPDX members and other key partners were awarded a **four year €5 million “Starting Community” grant** from the EU, which began in February 2018.

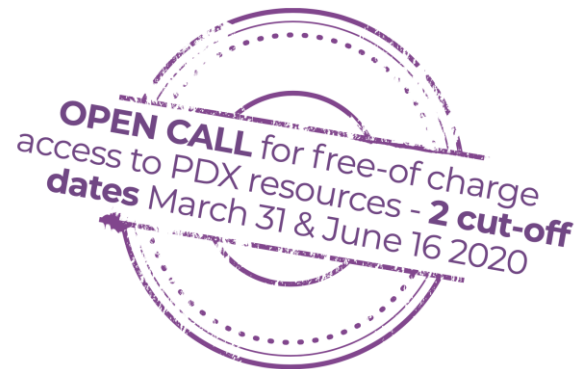
This project is building a cutting-edge and novel **“EurOPDX Research Infrastructure”** for PDX research, and opening access to the PDX models, expertise, and resources of the EurOPDX Consortium for academic researchers and industry.



Trans-national Access (TA)

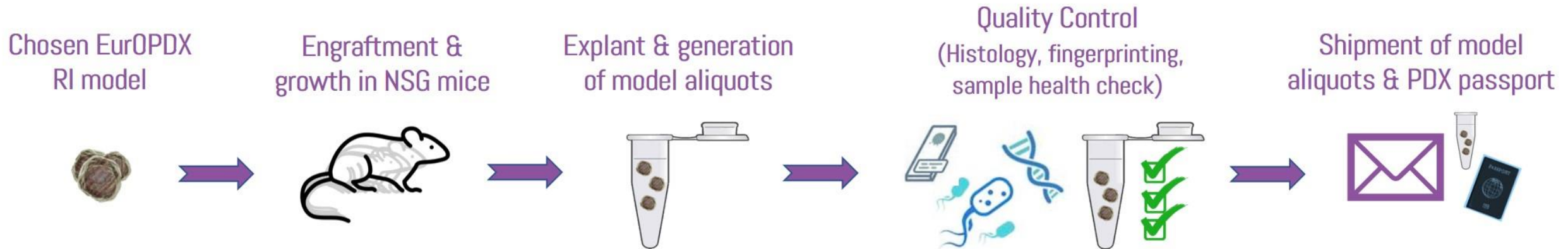
A primary objective of the EurOPDX RI is the provision of “Trans-national Access” (TA), which allows **free-of-charge access to PDX resource and expertise for academic and industry researchers in Europe and Worldwide**, through a **competitive grant programme**.

Access to models is offered through **six state-of-the-art partner facilities or “nodes”** that are applying the SOPs agreed within the project.



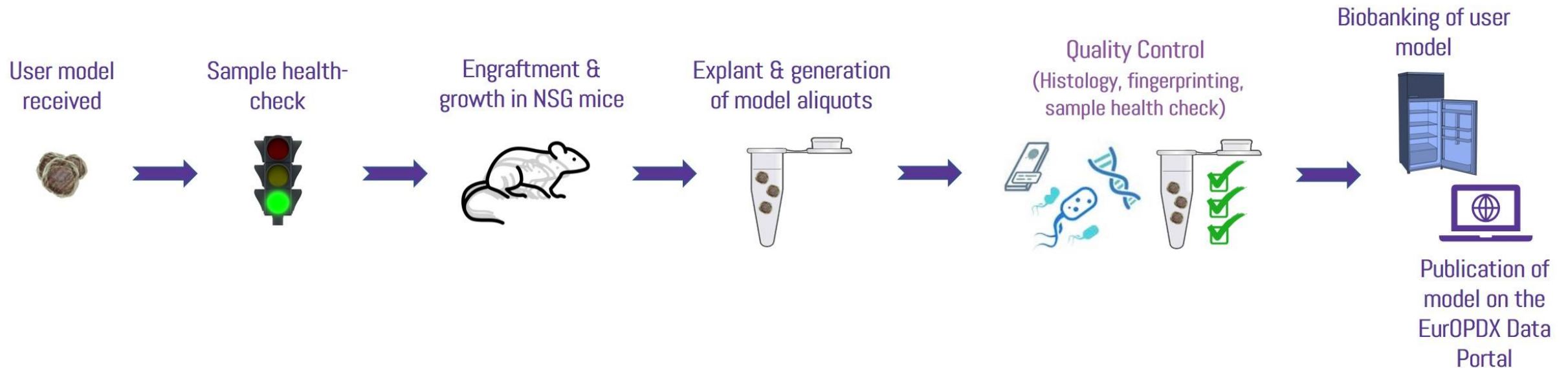
Access is offered through 3 different services

1. SAMPLE - shipment of viable PDX tumour samples to selected academic laboratories

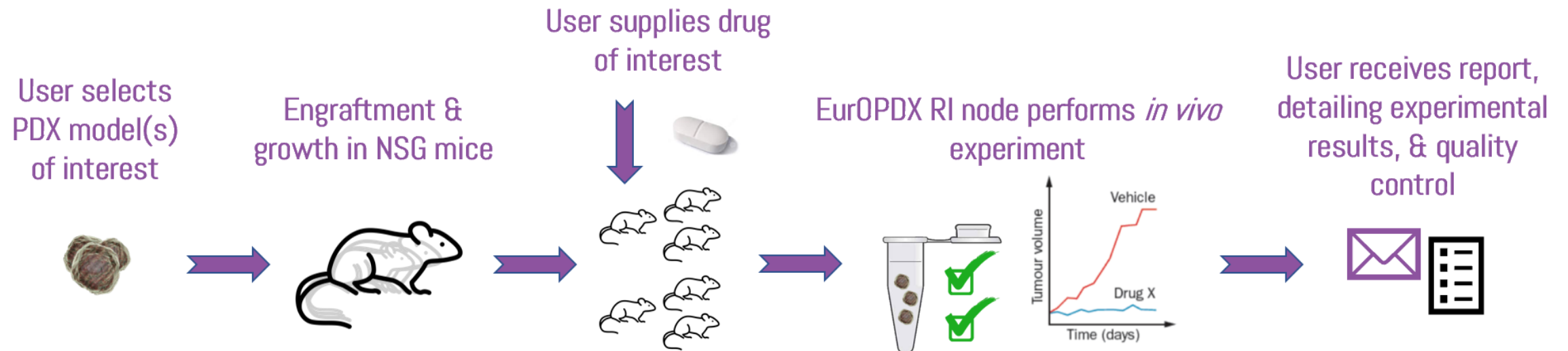


Access is offered through 3 different services

2. DEPOSIT - deposition of PDX models into the EurOPDX Research Infrastructure biobank and EurOPDX Data Portal



3. TEST – performance of *in vivo* studies on selected PDX models for academic and industry researchers



Home Search How to... Type of access PDX owners About Contact Login

EurOPDX Data Portal

The place where European cancer research institutions share data about PDX models...

2nd call for free-of-charge access to PDXs NOW CLOSED !!

EurOPDX Data Portal was developed by the EurOPDX Research Infrastructure to optimize access and promote collaboration in the field of patient-derived xenograft (PDX) models research.

The portal integrates the distributed collection of PDX models established by research institutes, and in particular members of the EurOPDX Consortium (www.europdx.eu), with their clinical, molecular, and pharmacological annotations.

889
PDX models

6
research centres

6
cancer diagnoses

[Explore the EurOPDX data!](#)

Tweets by @EurOPDX

EurOPDX @EurOPDX
Meet us at #PAMM2020 in Stockholm this week to know more about the @EurOPDX #researchinfrastructure and the opportunity offered to the cancer research community to access patient-derived cancer xenograft resources. @KarolinskaUnsj @EORTC
Feb 10, 2020

EurOPDX @EurOPDX
Wahou, what a mine of data to follow-up with! A collection of research and related content from the ICGC/TCGA consortium on whole-genome sequencing and integrative analysis of cancer [nature.com/articles/d4285...](https://www.nature.com/articles/d4285...)

Pan-Cancer Analysis o...

We are **integrating and curating**, based on the PDX Minimal Information standard (Meehan, Conte et al, Cancer Res. 2017) the distributed collection of PDX partners.

Currently almost 900 models, with associated metadata, cytogenetics and IHC, patient treatment, gene mutation/omics, pharmacological characterisation when available, from 6 different institutes:

- 80+ models of **breast cancer**
- 700+ of **colorectal cancer**
- 70+ of **gastric cancer**
- 10 of **pancreatic cancer**
- 4 of **lung**
- 5 of **ovarian cancer**

Search (e.g., Melanoma)



Reset

FILTER BY:

PDX MODEL

DATASET AVAILABLE

DATASOURCE

PROJECT

ACCESS MODALITIES

MOLECULAR DATA

GENE MUTATION

COPY NUMBER ALTERATION

BREAST CANCER BIOMARKERS

TREATMENT/DRUG DOSING

PATIENT TREATMENT STATUS

PATIENT TREATMENT

PDX MODEL DOSING

PATIENT / TUMOR

CANCER BY SYSTEM

TUMOR TYPE

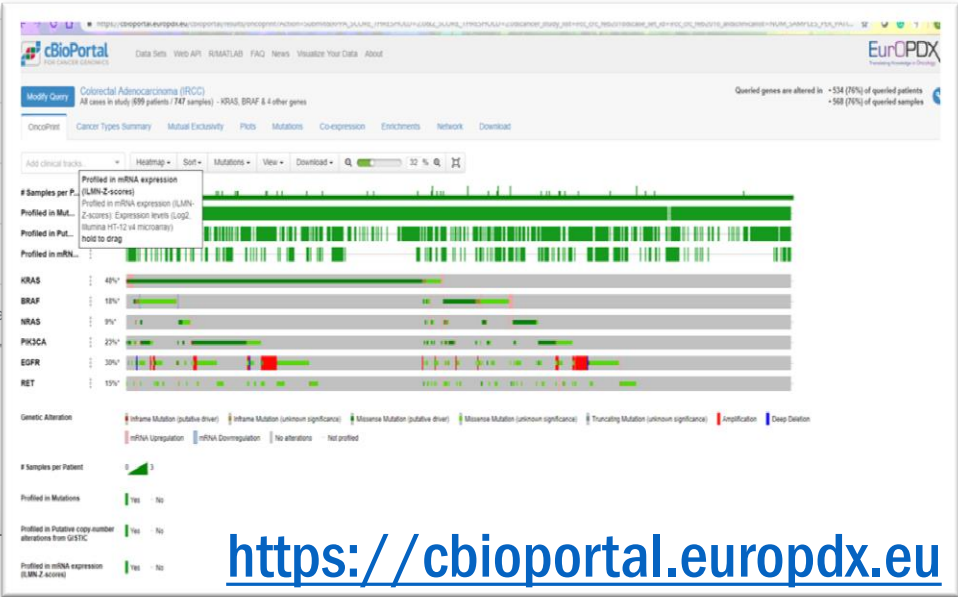
SEX

AGE

EurOPDX Data Portal contains 889 models

MODEL	HISTOLOGY	PRIMARY	COLLECTION	TYPE	DATA AVAILABLE
PAC0015PR TRACE	Pancreatic Ductal Adenocarcinoma	pancreas	pancreas	Primary	Patient Treatment
CRC1309PR IRCC-CRC	Colorectal Carcinoma	Right Colon	Right Colon	Primary	Gene Mutation
CRC1239LM IRCC-CRC	Colorectal Carcinoma	Left Colon	Liver	Metastatic	Copy Number Alteration Gene Mutation
CRC0096LM IRCC-CRC	Colorectal Carcinoma	Colon	Liver	Metastatic	Copy Number Alteration Gene Mutation Dosing Studies
CRC1307LM IRCC-CRC	Colorectal Carcinoma	Rectum	Liver	Metastatic	
CRC0449LM IRCC-CRC	Colorectal Carcinoma	Rectum			
M023 VHIO-CRC	Colon Adenocarcinoma	Colon			
T148 VHIO-CRC	Colon Adenocarcinoma	colon			
CRC0409PR IRCC-CRC	Colorectal Carcinoma	Colon			
CRC0558LM IRCC-CRC	Colorectal Carcinoma	large intestine			

« First 1 2 3 4 5 Last »



<https://cbioportal.europdx.eu>

How to apply?


- **OPEN CALL** launched early February, with **2 cut-off dates (31st March and 16th June)** at which we will collect applications received and run the evaluation process by our independent committee of evaluators.
- Visit www.europdx.eu for all information on the project
- www.europdx.eu/europdxri-ta to find all **call documents** (Guide for Applicants, application forms)
- Application process is quite simple and straightforward. In line with the **3Rs** (Replacement, Reduction and Refinement), please explain in details what available *in vitro* and possibly *in vivo* (e.g. cell line xenograft) justify the use of PDXs.
- **Evaluation & Access provision timelines:**
 - evaluation results available 4-6 weeks after each cut-off dates
 - **SAMPLE** and **DEPOSIT** access can be expected to be completed approximately 4-6 months after completing all necessary paperwork, 9 months for **TEST** access.
- **Helpdesk:** ta@europdx.eu

EDIRx PDX

Research Infrastructure

Thank you!!

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