

## Czech Centre for Phenogenomics became a member of the EurOPDX Consortium

EurOPDX consortium, founded in 2013, currently brings together 14 research centres and universities dealing with cancer research. The main objective of the consortium is to build a large collection of mouse PDX (patient derived xenograft) models that would cover the widest possible range of different types of cancer, and to improve standards in preclinical research. The EurOPDX consortium members have collectively created a panel of over 880 subcutaneous and orthotopic PDX models from 6 main cancer types.

PDX models are models, in which tissue or cells from a patient's tumour are implemented in an immunodeficient or humanized mouse. Mouse PDX models thus enable to create an environment suitable for the natural growth of cancer, for monitoring its development and, as well as for assessment of appropriate treatment for the patient, from whom the cancer tissue was derived. Mouse PDX models thus provide a promising research platform for personalized medicine, including preclinical studies.

Within the Czech Centre for Phenogenomics (CCP), a special unit of PDX/cancer models is working on generation of new PDX orthotopic mouse models. For this purpose, the unit uses the most suitable mouse strains NSG and NSG-SGM3. CCP scientists orthotopically implant samples/xenografts and then systematically monitor progression of the tumour in very similar environment to the original one. Tumour samples are then stored in the CCP cryobank, and in parallel PDX models and tumours are evaluated by the CCP histopathology, haematology, biochemistry, immunology and imaging teams, and analysed using microCT, MALDI and metabolomics methods according to the needs and interest of users from the scientific community or pharmaceutical companies. The main advantage of CCP compared to other EurOPDX consortium members is the ability to perform multi-modal analyses of PDX models within one workplace.

For more information about EurOPDX consortium, please visit: [www.europdx.eu](http://www.europdx.eu).

To contact PDX unit please use [ccp-pm-pdx@img.cas.cz](mailto:ccp-pm-pdx@img.cas.cz).

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