Resource Summary Report

Generated by NIF on May 13, 2025

PREDECT

RRID:SCR_003883

Type: Tool

Proper Citation

PREDECT (RRID:SCR_003883)

Resource Information

URL: http://www.predect.eu/

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Description: Project that aims to create more appropriate in vitro platforms for target validation and drug discovery for breast, prostate and lung cancers. Laboratory platforms to validate whether target modulation would provide a clinical benefit are usually highly reductionist, often using long-established cell lines growing in 2 dimensions in vitro. These models do not reflect the complexity and heterogeneity of a tumor in situ, where biochemical pathways are wired with connections to the complex tumor environment provided by the stroma. PREDECT has the goal of comparing the pathological and molecular profiles of novel in vitro platforms with those of human tumors. Because obtention of clinical material presents both logistics and quality problems for ongoing and intense studies of target validation, PREDECT aims to use material from genetically engineered mouse models, and some advanced xenografts, whose pathology and molecular profiles closely match cohorts of human tumors. PREDECT hopes to provide more appropriate in vitro platforms both for target validation and subsequent preclinical studies which will replace a current cascade of tests which are poorly predictive of clinical activity. The project is expected to shift paradigms in cell biology as well as in preclinical target validation where it should permit greater predictivity of drug efficacy in patient cohorts.

Abbreviations: PREDECT

Synonyms: Preclinical evaluation of drug efficacy in common solid tumours, Predect New models for preclinical evaluation of drug efficacy in common solid tumours

Resource Type: portal, data or information resource, organization portal, consortium

Keywords: drug, oncology, drug development, basic research, in vitro, xenograft, breast,

prostate, lung, pre-clinical, target validation, drug discovery

Funding: Innovative Medicines Initiative;

EFPIA

Resource Name: PREDECT

Resource ID: SCR_003883

Alternate IDs: nlx_158212

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Ratings and Alerts

No rating or validation information has been found for PREDECT.

No alerts have been found for PREDECT.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 8 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>NIF</u>.

Klöß S, et al. (2020) From Cancer to Immune-Mediated Diseases and Tolerance Induction: Lessons Learned From Immune Oncology and Classical Anti-cancer Treatment. Frontiers in immunology, 11, 1423.

Närhi K, et al. (2018) Spatial aspects of oncogenic signalling determine the response to combination therapy in slice explants from Kras-driven lung tumours. The Journal of pathology, 245(1), 101.

de Hoogt R, et al. (2017) Protocols and characterization data for 2D, 3D, and slice-based tumor models from the PREDECT project. Scientific data, 4, 170170.

Stock K, et al. (2016) Capturing tumor complexity in vitro: Comparative analysis of 2D and 3D tumor models for drug discovery. Scientific reports, 6, 28951.

Estrada MF, et al. (2016) Modelling the tumour microenvironment in long-term microencapsulated 3D co-cultures recapitulates phenotypic features of disease progression.

Biomaterials, 78, 50.

Åkerfelt M, et al. (2015) Automated tracking of tumor-stroma morphology in microtissues identifies functional targets within the tumor microenvironment for therapeutic intervention. Oncotarget, 6(30), 30035.

Davies EJ, et al. (2015) Capturing complex tumour biology in vitro: histological and molecular characterisation of precision cut slices. Scientific reports, 5, 17187.

Holmström O, et al. (2015) Quantification of Estrogen Receptor-Alpha Expression in Human Breast Carcinomas With a Miniaturized, Low-Cost Digital Microscope: A Comparison with a High-End Whole Slide-Scanner. PloS one, 10(12), e0144688.