



Small Molecules

Small molecules play a crucial role in cancer therapy development due to their targeted action, ease of administration, and adaptability in combination therapies.

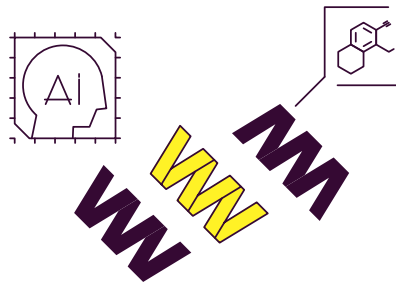
The Oncode Accelerator Small Molecules Workstream translates fundamental discoveries into new cancer therapies by integrating our innovation Platforms — Patient Cohorts, Organoids, and Artificial Intelligence — across the drug development pipeline. Preclinical discovery and development is carried out in leading academic and industry facilities, supporting the execution of Demonstrator Projects at any stage.

This infographic highlights the services and capabilities available to drug developers during a Demonstrator Project, which can be executed at any stage of the Workstream pipeline and incorporates at least one of the innovative Platforms.



Oncode Accelerator

Outsmarting cancer
Impacting lives

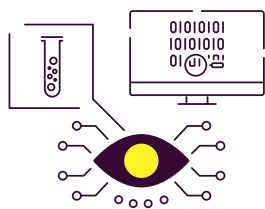


Hit Finding

Artificial Intelligence | Organoids | Patient Cohorts

Target (safety) assessment • Assay development (protein production, in vitro and in situ assay development) • Virtual Screen (AI) • Drug Repurposing Screen • High-throughput screen • Focused library screen • Phenotypic screen • Hit triage, resynthesis and confirmation • Resynthesis of hits

The Oncode Accelerator Project receives funding from the Dutch National Growth Fund (NGF). It is a collaboration between 6 coordinating partners: Leiden University, Leiden University Medical Center, the Netherlands Cancer Institute, Princess Máxima Center, UMC Utrecht, and the Oncode Accelerator Foundation, who lead individual consortia within the Oncode Accelerator Project.



Lead Finding

Artificial Intelligence | Organoids | Patient Cohorts

Medicinal chemistry
AI-assisted Analog Design • Compound Synthesis • ADME-T profiling

Structural Biology studies to guide rational design
X-ray crystallography or cryo-EM

Lead profiling
Rodent pharmacokinetics • Multi-omics approach to profile lead candidate for mode-of-action studies • Activity-based protein profiling / chemical proteomics for cellular target engagement studies

In vivo assessment of efficacy and/or target engagement
(excluding providing or developing of animal models)



Lead Optimization

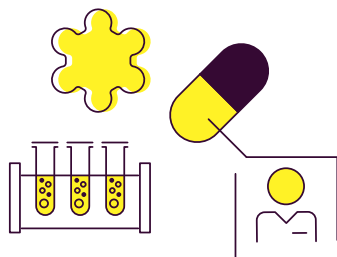
Artificial Intelligence | Organoids | Patient Cohorts

Medicinal Chemistry
AI-assisted compound design • Compound synthesis • In vitro ADME-T and pharmacokinetics (rodent and non-rodent) • Not included: providing or developing of animal/PD models

Structural Biology studies to guide rational design
X-ray crystallography or cryo-EM

Lead profiling
Multi-omics approach to profile clinical candidate mode-of-action • Activity-based Protein Profiling (ABPP) / Chemical proteomics (for target engagement studies)

Compound scale-up
Scale-up synthesis for in vivo testing and dose-range finding (DRF) toxicity studies.



Preclinical Development

Organoids | Patient Cohorts

Non-GLP toxicology • Salt selection, formulation and stability studies • AMS microdosing, microtracing (phase 0 study) • Further compound scale-up • Scale-up of synthesis and route scouting



Interested in applying for a Demonstrator Project?

Scan the QR-code to get started or go to oncodeaccelerator.nl



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Impacting lives*

www.oncodeaccelerator.nl