# Overview

The Gastrointestinal (GI) Cancer Clinical Research Unit focuses on the clinical development of novel therapeutics for patients with cancers of the gastrointestinal tract as well as personalised medicine approaches for these patients. The work of the Group combines the preclinical assessment of novel antitumor agents in ‘Avatar’ mouse models with the design, conduction, and analysis of clinical trials with novel antitumor agents in patients with gastrointestinal tumours. Over the last few years the Group has implemented a growing portfolio of clinical trials with new agents spanning a broad range of mechanisms of action.

Key to the work is the development and characterisation of Avatar mouse models for drug screening, biomarker development, and personalised medicine. The Group has developed and has characterised the largest collection of these models in pancreatic cancer. Avatar models are used in critical applications: (i) the screening of new anticancer agents; (ii) conduction of co-clinical trials, in which ongoing clinical trials are performed in parallel with studies using Avatar models of the same cancer type in order to elucidate mechanisms of action and biomarkers of drug response/resistance; and (iii) finally, the Avatar models for personalised cancer treatment integrated with next generation sequencing.

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## Publications