IA-12 Precision oncology for pancreatic cancer. Andrew V. Biankin. Regius Professor of Surgery Director, Wolfson Wohl Cancer Research Centre, Executive Director, International Cancer Genome Consortium, Director, Glasgow Precision Oncology Laboratory, Chair, Precision-Panc Therapeutic Development Platform Institute of Cancer Sciences, University of Glasgow, Glasgow, United Kingdom.
Pancreatic cancer presents distinct challenges in advancing more contemporary therapeutic approaches that target specific molecular aberrations within subgroups of patients. This "precision oncology" approach requires:

1. The ability to define targetable molecular pathology and the characteristics of molecular subtypes which harbour vulnerabilities and build preclinical platforms of evidence that support the testing of therapeutic strategies in clinical trials.

2. The capability and capacity to accurately select subgroups of participants and provide feasible opportunities for clinical trials of novel therapeutic strategies in the real world.

3. The ability to robustly aggregate data from clinical trials and cohorts to inform the evolution of novel therapeutic approaches.

To achieve these goals, the Glasgow Precision Oncology Laboratory has endeavoured to define molecular vulnerabilities and build the systems that enable the above 3 requirements.

The Glasgow Cancer Test
The GPOL team have created a new suite of tests that not only covers what is already known about cancer, but also allows for new information to be assimilated. The content of the GCTs is carefully curated to include genomic features for which there is high-quality objective evidence for a biological role in cancer. These genomic features are tiered by clinical actionability and confidence to generate a nested set of cancer assays to accommodate different clinical or scientific requirements and financial and infrastructure constraints so as to meet increasing demand, especially in cancers of unmet need.

Precision-panc
Precision-Panc was designed to be the evolution of clinical trial platforms that involved molecular profiling for difficult to treat cancers, typically not a priority for commercial therapeutic development. It was developed in partnership with, and has significant funding support from industry. In order to institute a step change for pancreatic cancer, it was necessary to transform pancreatic cancer therapeutic development into a more competitive arena so as to secure greater investment from pharmaceutical companies. Essential to this strategy is the concept that molecular

profiling of all cancer patients should be performed for clinical trials (Reasons to be testing: the dawn of complex molecular profiling in routine oncology practice. Beer et al. Ann Oncol. 2019 30:1691-1694). In the area of human data science, extremely accurate information from digital pathology and digital imaging necessitates the molecular profiling of cancer coupled with accurate clinical data at scale and is the long-term goal of the processes developed through Precision-Panc.

From commencement of funding, the first site was open within 8 months, with the first randomisation a month after that. From first randomisation, after 2 years, 26 sites have been opened, 277 participants have entered the platform, 216 registered for studies and 113 proceeded to a trial. Current rate of participant entry into Precision-Panc is 15 - 20 per month. Of the 6 specific trials currently on the platform, one has completed, 5 continue with more in development in order to accommodate all therapeutic opportunities (eg:metastatic, 2nd-line, local advanced, resectable disease).

ICGC-ARGO

The International Cancer Genome Consortium's new initiative called ARGO (Accelerating Research in Genomic Oncology) designed and led by GPOL aims to deliver a Million patient years of precision oncology knowledge. Platforms such as Precision-panc will contribute data to ICGC-ARGO to enable pooled analysis of granular standardised datasets across and between different cancer types.