[FOR IMMEDIATE RELEASE]

Invitrocue's Onco-PDO test is Singapore's and world's first validated and approved Clinical Cancer Drug Screening service for Personalised Oncology

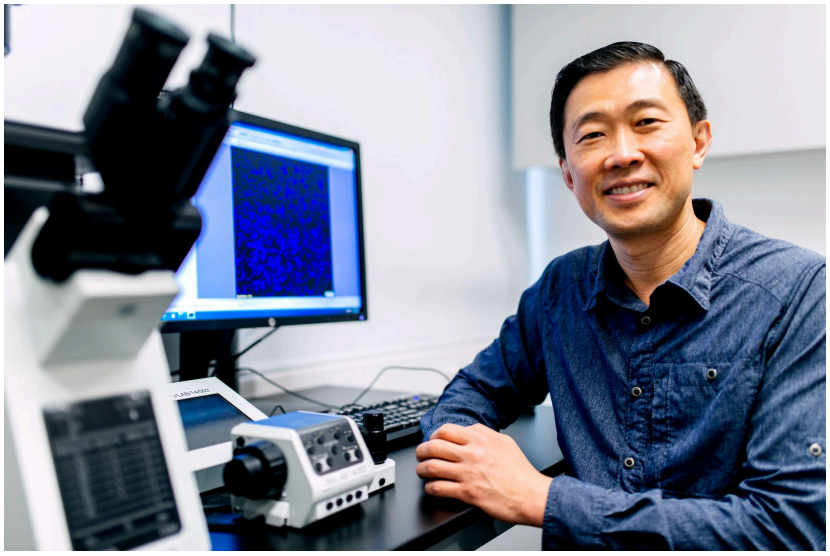
- *Onco-PDO tailors cancer treatments to individual tumour responses, ensuring patients receive the most effective drug treatment for their specific cancer types and stages.*
- *The test offers highly accurate results of patient tumour responses to various chemotherapy and targeted drug therapies, thereby reducing overall costs and treatment time for selected cancer treatments.*
- *Onco-PDO has a 92% success rate in culturing Patient-Derived Organoids (PDOs), accurately replicating original tumour tissue traits and enhancing chemotherapy drug efficacy testing.*
- *Each test can evaluate the PDOs (3D cells) against eight or more chemotherapy agents (including selected Targeted Drugs and Immunotherapy Drugs), producing a comprehensive drug response report in under two weeks.*

Singapore, 5 March 2024 — Invitrocue, Singapore's leading biotechnology and medical innovation company, has achieved a breakthrough in clinical drug testing with **Onco-PDO,** their personalised oncology drug test. Available in Invitrocue-owned clinical laboratory licenced by Ministry of Health (MOH), Onco-PDO is the first clinical cancer drug screening test in Singapore that looks to personalise treatments by improving the efficiency of chemotherapy regimes through testing using patients' own cancer cells, reducing overall treatment costs and time.

Backed by more than eight years of cumulative validation data, the Onco-PDO test is built on Invitrocue's proprietary 3D liver cancer organoid tissue engineering technology, initially developed jointly with A*STAR's Institute of Bioengineering and Nanotechnology, Massachusetts Institute of Technology (MIT), and the Genome Institute of Singapore in 2012.

Onco-PDO test is CE marked in Europe and in February this year, it has been approved to be covered under National Public Healthcare Insurance in Germany.

The test equips clinicians and oncologists with critical data to prioritise drugs that demonstrate optimal results in targeting each patients' cancer cells with **75 - 80% positive** predictive accuracy and >90% negative prediction rate, depending on cancer type. For patients experiencing relapses or showing no response to multiple treatments, Onco-PDO identifies drugs to which their tumours are either responsive or resistant, thereby improving their response to specific cancer treatments.



(Dr. Steven Fang, Founder and Chief Executive Officer of Invitrocue)

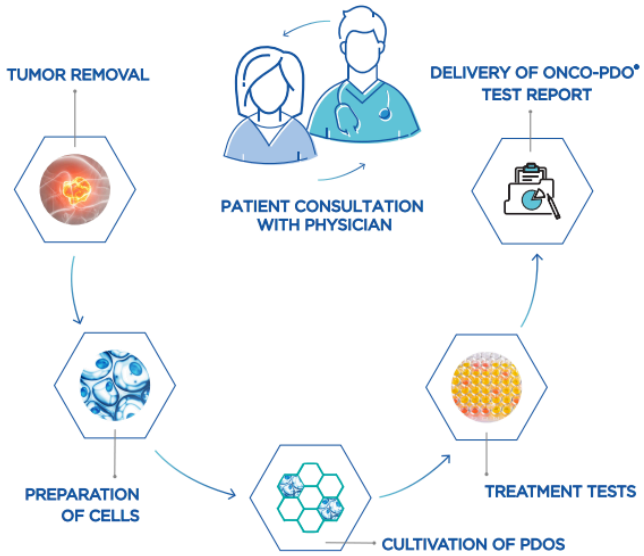
Dr. Steven Fang (PhD) , Co-Founder & Executive Director of Invitrocue, explains that every cancer tumour is unique, hence requiring a personalised approach. With Onco-PDO as an invaluable clinical tool, oncologists can accurately personalise cancer drugs and dosing strategies for each patient:

“The published literature for breast cancer, colorectal cancer, and ovarian cancer tells a sobering tale, with success rates for chemotherapy treatments driven by general population-based data[3-9] currently ranging from 4% to a modest 48%. Due to the heterogenous and unique nature of malignant tumours, patients often have to endure multiple rounds of treatment before finding an efficacious regime."

<u>The Science Behind Onco-PDO</u>

Traditional laboratory procedures for testing patient-derived cancer cells against chemotherapy agents can take months, and are typically used for research purposes rather than clinical applications.

Through Onco-PDO, a patient’s tumour cells are obtained through surgery or biopsy, then subjected to cell scaffolding technology to simulate their responses to various drugs outside the body. Each test can assess the 3D cells against up to eight chemotherapy agents, generating a detailed report on their responsiveness to each drug within a clinically relevant timeframe of just 10 to 14 days.



(A workflow describing the testing process)

Championing Singapore's National Plans

With close to 130 approved chemotherapy drugs available for testing, Onco-PDO is pushing the frontiers of precision medicine, in line with Singapore's 10-year National Precision Medicine Strategy.

"Cancer is the top killer in Singapore, accounting for nearly 24 per cent of deaths in 2022. And cancer treatment is expensive, with each cycle costing up to five-figure sums, notwithstanding consultation and administrative costs. What Onco-PDO looks to do is to provide an added support for oncologists and patients by potentially cutting down the treatment time and total costs of treatment," adds **Fang.**

The test will be available to patients in Singapore through their oncologists. To facilitate the adoption of this technology, Invitrocue will also offer comprehensive training to oncologists across hospitals and clinics on the logistics and administration of the test. To start the process, tumour samples can be done by way of surgical resection or core biopsy at the hospital and then forwarded to Invitrocue's clinical laboratory for the test to begin.

Currently, the test can be performed for patients with breast, ovarian, lung, colorectal, pancreatic, liver, gastric cancers, as well as head and neck cancers. Invitrocue is actively exploring opportunities to expand its application to other cancer types soon.

To achieve global scalability, Invitrocue is actively collaborating with medical partners and oncologists worldwide to advance its technology, potentially including immunotherapy drug

testing. Invitrocue now operates in Singapore, Hong Kong, and Germany, with a recent expansion into Malaysia. The company plans to expand into more countries in the Southeast Asia region and has already garnered significant interest from patients and clinicians in the United States.

For more information about the Onco-PDO test and Invitrocue's innovative medical solutions, please visit Invitrocue's website at www.invitrocue.com/oncology/onco-pdo.

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About Invitrocue

Founded in 2012, Invitrocue emerged as a result of pioneering research conducted at A*STAR's Institute of Bioengineering and Nanotechnology in Singapore, the Massachusetts Institute of Technology in Cambridge, and the Genome Institute of Singapore. Leveraging proprietary 3D cell culture technology, Invitrocue has successfully transformed these innovations into a range of commercial services.

Their medical and technological advancements play a pivotal role in supporting cancer treatment, collaborating with leading global cancer centres and pharmaceutical companies in their drug development endeavours. Headquartered in Singapore, Invitrocue operates globally, with a presence in Germany, Spain, Brazil, Australia, China, and Hong Kong.

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Appendix A

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