



SEngine Precision Medicine Presents Data at 2021 AACR Annual Meeting Demonstrating Clinical Utility and Predictive Value of PARIS® Test in Ovarian Cancer

SEATTLE, April 13, 2021 -- **SEngine Precision Medicine**, a precision oncology company that pre-tests drugs on patient-derived live tumor specimens employing its CLIA certified PARIS® Test, today presented results from an ovarian cancer study indicating strong predictive value of the PARIS® Test ([abstract number 534](#)) at the American Association for Cancer Research annual meeting, taking place virtually from April 10-15, 2021.

The poster presentation highlighted the utility of the PARIS® Test, a CLIA certified functional drug sensitivity assay, to support clinical decision making in ovarian cancer. In an ovarian cancer cohort of 44 evaluable patient samples, authors found that:

- Ovarian cancer patient-derived 3D cultures preserve the histopathological and molecular features of original tumor samples.
- For 82% of patient samples tested, the PARIS® Test identified at least one drug with good to exceptional response that is either FDA approved or in clinical trials.
- In 22/24 patient tests (91%), the results demonstrated resistance to at least one drug on which the patient's disease progressed in clinic.
- The PARIS® Test showed good clinical response concordant with assay results for 10/12 patients (83%) evaluated for clinical prediction.

This study also presents an example of clinical benefit for a patient with ovarian cancer who received an individualized therapy based on PARIS® Test results. The patient was diagnosed with stage IV low-grade epithelial serous carcinoma that progressed on multiple rounds of chemotherapies. The patient's tumor responded to the PARIS®-guided treatment Ibrutinib, a targeted drug, that to the study authors' knowledge has never before been employed for ovarian cancer. Ibrutinib is an FDA approved drug only used to treat mantle cell lymphoma and chronic lymphocytic leukemia.

"The PARIS® Test identified a novel therapy, Ibrutinib, that has successfully controlled the patient's disease with CA 125 levels dropping by over half during the course of treatment and improvement in her symptoms," noted Heidi Gray, MD, treating physician in the patient case study presented at AACR 2021. "This is a breakthrough example of the power of phenotypic testing to identify effective treatments for individual patients by scanning a broad menu of oncology drugs."

"The PARIS® Test adds a new dimension to precision oncology by confronting patients' tumor cells with drugs outside the body. By harnessing a unique series of algorithms applied to the results of the PARIS® Test, drug sensitivity versus resistance is accurately predicted and drug responses are ranked for each patient," said Carla Grandori, MD, PhD,

co-founder and Chief Executive Officer of SEngine Precision Medicine. “Through this case and others, we have learned that cancer is not so strong after all, even when refractory to multiple chemotherapy regimens. Cancers have vulnerabilities that can be exploited by a growing array of targeted drugs. In the case study presented at AACR 2021, the patient’s tumor responded to Ibrutinib, a well-tolerated drug that could potentially help 10% of patients with ovarian cancer.”

“Every patient’s cancer is unique, and we observe distinctive patterns of genomic features and targeted drug responses across patients that highlight the need to individualize therapy. Our data provides compelling evidence that the organ of tumor origin only partially matters for determining effective therapies and that supports the use of a range of existing targeted therapies for ovarian cancer,” commented Goldie Lui, PhD, Lead Scientist at SEngine Precision Medicine and first author of this study.

Details related to the poster presentation are as follows:

Title: Functional drug screening of organoids from ovarian cancer patients demonstrates clinical and genomic concordance and identifies novel therapeutic vulnerabilities

Lead Author: Goldie Lui, PhD

Senior Author: Carla Grandori, MD, PhD

Abstract Number: 534

Session Title: Laboratory Correlates for Targeted Agents

About PARIS® Test

The PARIS® Test is based on the capability to propagate patient-specific cancer cells outside the body and is applicable to all solid tumors including colon, breast, lung, ovarian and pancreatic cancer. Cancer-derived cells grown in 3D outside the body maintain the functionality of the original tumor as well as its genomic characteristics. For cancers where a treatment path is not clear, such as many metastatic and recurrent cancers, the PARIS® Test provides crucial information to treating physicians to match the right drug to the right patient.

About SEngine Precision Medicine

SEngine Precision Medicine Inc. is a precision oncology company revolutionizing cancer therapies by pre-testing drugs on patient-derived 3D cultures grown ex-vivo utilizing patient specific tumor cells. As a spin-out from the world-renowned Fred Hutchinson Cancer Research Center, SEngine is leveraging over two decades of R&D in diagnostics and drug discovery. The Company is commercializing the PARIS® Test, a next generation diagnostic test that predicts drug responses integrating knowledge of cancer genomics with phenotypic testing of patient-derived live cells combined with robotics and AI-driven computational tools. SEngine’s CLIA certified PARIS® Test generates actionable drug sensitivity reports for patients with solid tumors. SEngine is also pursuing drug discovery via strategic collaborations with biopharmaceutical / pharma companies leveraging its precision oncology platform.

Discover more at [SEngineMedicine.com](https://www.senginemedicine.com) and follow the latest news from SEngine on Twitter at [@SEngineMedicine](https://twitter.com/SEngineMedicine) and on [LinkedIn](https://www.linkedin.com/company/seengine).

[View Press Release at Globe Newswire](#)