

PARGi/PARPi combination for HR-deficient cancers

Invention

Current cancer therapies targeting homologous recombination (HR)-deficient tumors often rely on PARP inhibitors, which, while effective, are limited by significant hematologic toxicities like anemia.

This invention introduces a novel therapeutic strategy combining PARP inhibitors with PARG inhibitors. Remarkably, this combination reduces PARP inhibitor-induced bone marrow toxicity without compromising efficacy in HR-deficient cancer cells.

This approach offers a solution to the dose-limiting side effects that hinder existing treatments, enabling higher tolerable doses and improved patient outcomes.

This combination therapy represents a significant advancement in the treatment of cancers such as ovarian, breast, pancreatic, and prostate cancers associated with HR deficiencies.

Features & Benefits

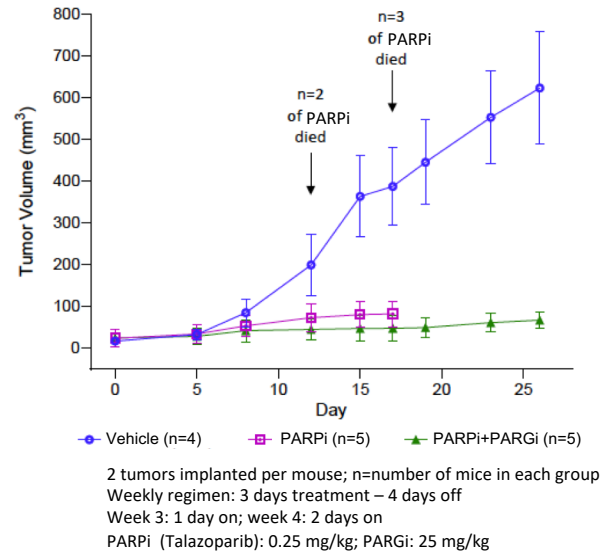
- **Enhanced Safety Profile:** Reduces bone marrow toxicity and improves red blood cell counts, addressing a major limitation of current PARPi therapies while maintaining robust anticancer activity in HR-deficient cancer cells.
- **Broadened Therapeutic Window:** Enables higher or more sustained dosing of PARPi, potentially enhancing overall treatment effectiveness.
- **Expanded patient pool for PARGi:** Instead of being developed as a second line treatment, PARGi might move up to first line of treatment if administered to all HR-deficient cancer patients treated with PARPi.
- **No need for biomarkers:** Contrary to PARGi monotherapy, the PARGi/PARPi combination does not require identification of biomarkers.

Technology Readiness Level

The combination was tested in mice, showing effects on tumor growth, red blood cell counts, and body weight.



Key data



Applications

- **Treatment of all HR-deficient cancers**
 - ovarian cancer
 - breast cancer
 - prostate cancer
 - pancreatic cancer

Intellectual Property

Patent: PARG inhibitors and uses thereof
 Number: PCT/EP2024/079889
 Earliest priority date: 23.10.2023

Partnership sought

Exclusive licensing to industrial partners able to develop and commercialize the technology.

Contact & Inquiries

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Licensing Inquiries

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