

RS Oncology presents translational data identifying potential biomarkers associated with RSO-021 anticancer activity.

April 1, 2024 – Cambridge MA. [RS Oncology](#) announced two abstracts with comprehensive preclinical and translational data in support of their lead clinical oncology compound RSO-021, have been accepted for poster presentations at the Annual Meeting of the American Association for Cancer Research (AACR), taking place April 5-10, 2024 in San Diego. RSO-021 is a first-in-class peroxiredoxin 3 (PRX3) covalent inhibitor that disables a critical antioxidant defense system in the mitochondria of tumor cells. Results from the completed Phase 1 clinical trial ([clinicaltrials.gov #NCT05278975](https://clinicaltrials.gov/#NCT05278975)) will be an oral presentation on June 3rd, at the upcoming ASCO meeting in Chicago. Currently patients are being recruited to the Phase 2 dose expansion cohorts of the [MITOPE clinical trial](#).

“Covalent inactivation of PRX3 by RSO-021 represents a viable anticancer approach by targeting a universal tumor vulnerability of oxidative stress. The results we present at the AACR Annual Meeting will highlight fundamental tumor cell features that are exploitable by this novel treatment.” said Brian Cunniff, Chief Scientific Officer of RS Oncology.

Approximately 90% of mesotheliomas and 15-20% of solid tumors present with malignant pleural effusion (MPE) at late stage leaving the patients with poor prognoses and limited options. RSO-021 is a local therapy for patients with MPE arising from mesothelioma or advanced metastatic tumors. “The discoveries presented at AACR highlight tumor cell features that are associated with sensitivity to RSO-021, providing a potential strategy to maximize patient response to RSO-021”, added George Naumov, Chief Operations Officer of RS Oncology.

Details of the poster presentations:

Title: First-in-class peroxiredoxin 3 (PRX3) inhibitor RSO-021 triggers mesenchymal-to-epithelial transition in mesothelioma

Presenter: Brian Cunniff, CSO of RS Oncology

Session Category and Title: Experimental and Molecular Therapeutics - Other Cellular Mechanisms for Anticancer Drug Action

Session Date and Time: Tuesday Apr 9, 2024 9:00 AM - 12:30 PM

Location: Poster Section 29

Abstract Number: 4716

Title: SLC7A11 modulates sensitivity to the first-in-class mitochondrial peroxiredoxin 3 inhibitor thiostrepton (RSO-021) via a ferroptosis independent pathway

Presenter: Brian Cunniff, CSO of RS Oncology

Session Category and Title: Molecular/Cellular Biology and Genetics- Cellular Stress Responses 1

Session Date and Time: Sunday Apr 7, 2024 1:30 PM - 5:00 PM

Location: Poster Section 16

Published Abstract Number: 384

The full abstracts will be published on March 22, 2024, in an online-only proceedings supplement to the AACR journal, *Cancer Research*.

About RS Oncology

RS Oncology is a private, clinical-stage biotechnology company leading scientific discoveries and global collaborations to improve the lives of patients with the most aggressive cancers. The initial focus is to develop our novel therapy for pleural mesothelioma and other cancers with metastatic disease to the lung. Our first-in-class and first-in-human drug, RSO-021, is currently in phase 2 of the MITOPE study to prove its efficacy in a multicenter clinical trial in the UK. Visit www.RSOncology.com or follow us on [LinkedIn](#) and [X](#).