PEGASUS LUNG, A PLATFORM STUDY OF SAR444245 (THOR-707, A PEGYLATED RECOMBINANT NON-ALPHA IL-2) WITH ANTI-CANCER AGENTS IN PATIENTS WITH NON-SMALL CELL LUNG CANCER (NSCLC) AND MESOTHELIOMA

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Background SAR444245 (THOR-707) is a recombinant human IL-2 molecule that includes a PEG moiety irreversibly bound to a novel amino acid via click chemistry to block the alpha-binding domain while retaining near-native affinity for the beta/gamma subunits. In animal models, SAR444245 showed anti-tumor benefits, but with no severe side effects, both as single agent and when combined with anti-PD1 comparing with historical data from aldesleukin. The HAMMER trial, which is the FIH study shows preliminary encouraging clinical results: initial efficacy and safety profile with SAR444245 monotherapy and in combination with pembrolizumab support a non-alpha preferential activity, validating preclinical models. The Pegasus Lung Ph2 study will evaluate the clinical benefit of SAR444245 in combination with other anticancer therapies for the treatment of patients with lung cancer or pleural mesothelioma

Methods The Pegasus Lung (NCT04914897) will enroll approximately 354 patients in 6 separate cohorts concurrently or sequentially. In cohorts A1 & A2, patients with first line (L) NSCLC will receive SAR444245 + pembrolizumab. In cohort A3, patients with 1L non-squamous NSCLC will receive SAR444245 + pembrolizumab + pemetrexed + carboplatin/cisplatin. In cohort B1 & B2 patients with 2/3L NSCLC who have progressed on a checkpoint inhibitor (CPI)-based therapy will receive SAR444245 + pembrolizumab, or SAR444245 + pembrolizumab + nab-paclitaxel. In cohort C patients with 2/3L CPI naïve mesothelioma will receive SAR444245 + pembrolizumab. SAR444245 is administered IV at a dose of 24 ug/kg Q3W in an outpatient setting until disease progression or completion of 35 cycles. Pembrolizumab is administered at a dose of 200 mg Q3W until PD or completion of 35 cycles. The study primary objective is to determine the antitumor activity of SAR444245 in combination with other anticancer therapies. Secondary objectives include confirmation of dose and safety profile, assess other indicators of antitumor activity, and assess the pharmacokinetic profile and immunogenicity of SAR444245. The study will be conducted in the US, Australia, France, Italy, Japan, Poland, South Korea, Spain, and Taiwan.

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Trial Registration NCT04914897

Ethics Approval This study has been approved by applicable ethics committees or institutional review boards. All participants gave informed consent before taking part.

Consent Written informed consent was obtained from the patient for publication of this abstract and any accompanying images. A copy of the written consent is available for review by the Editor of this journal.

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