Istari Oncology Announces Presentation of Clinical Responses from LUMINOS-102, an ongoing Phase 2 Trial of Lerapolturev in anti-PD-1 Refractory Metastatic Melanoma at the Society for Melanoma Research (SMR) 2022 Congress

- **Among subjects receiving an enhanced dosing regimen of lerapolturev, a complete response and clinical benefit rate (CBR) of 71% has been observed**
- **Anti-tumor responses seen in both injected and non-injected lesions (e.g., abscopal response) including complete resolution of a non-injected lung metastasis**
- **Istari will continue enrolling patients to the enhanced dosing regimen with confirmatory data expected in Q2 2023**

DURHAM, NC, October 18, 2022 – Istari Oncology, Inc., a clinical-stage biotechnology company focused on development of the novel immune activator lerapolturev for the treatment of solid tumors, today announced a poster presentation of new data from an enhanced dosing cohort within the LUMINOS-102 phase 2 clinical trial, which is assessing the safety and efficacy of lerapolturev (formerly PVSRIPO) alone or in combination with a programmed death receptor-1 (PD-1) inhibitor in patients with metastatic melanoma who have progressed on an anti-PD-1 containing regimen, and BRAF/MEK inhibitors if BRAF mutation positive. The presentation is being made at the Society for Melanoma Research (SMR) Congress being held in Edinburgh October 17 - 20, 2022.

Lerapolturev is a novel viral immunotherapy that activates the innate and adaptive immune system to produce a functional, systemic anticancer CD8+ T cell response. Following positive phase 1 monotherapy results,[1] the LUMINOS-102 phase 2 multicenter trial (NCT04577807) was initiated to further explore lerapolturev's impact on this tough-to-treat population of anti-PD-1 relapsed/refractory metastatic melanoma patients.

"LUMINOS-102 initially used the lerapolturev dose that yielded a 67% (4/6) response rate in the phase 1 single-center trial," said Garrett Nichols, MD, MS, Chief Medical Officer at Istari Oncology. "Following DSMB review and protocol amendment, a new dosing regimen was implemented for LUMINOS-102 in March 2022. Our poster presentation at SMR highlights the exciting responses we've seen among subjects treated with the new regimen. We are optimistic that we've now optimized the dosing regimen and are continuing to enroll subjects at this dose to confirm these encouraging results."

The dosing regimen now in place comprises a higher dose of lerapolturev with or without an "induction schedule" of weekly injections for seven weeks, followed by maintenance injections dictated by the cadence of anti-PD-1 infusions (every 2 or 3 weeks). Since implementation, seven (7) patients have been treated with the higher lera dose, with 3 subjects (those who were consented from the start of treatment under the protocol amendment) also receiving the induction dosing schedule. Among these patients, a clinical benefit rate (CR, PR or SD > 6 months) of 71% (5/7) has been observed, including a pathologic complete response (pCR). All subjects were heavily pretreated and had previously failed at least one anti-PD-1 therapy. Some participants had also failed anti-CTLA-4 and BRAF/MEK therapies.

"We are pleased to see lerapolturev treatment yield responses, including responses in non-injected lesions", remarked Yana G. Najjar, MD Assistant Professor of Medicine and Director, Clinical and Translational Center at the UPMC Hillman Cancer Center and Principal Investigator for LUMINOS-102. "Metastatic melanoma patients with anti-PD-1 relapsed/refractory disease have limited options and we've recently seen multiple investigational therapies fail in this setting. We're hopeful that the responses seen with the new lera dosing strategy will be validated with additional patients and lead to further development".

LUMINOS-102 remains open to enrollment, with updates to be presented at an oncology congress in 2023. If successful, Istari plans to leverage its Orphan and Fast Track status in unresectable anti-PD-1 refractory melanoma by collaborating with regulators on a registration strategy.

To view the poster and for more information about Istari Oncology and their ongoing clinical trials, visit www.istarioncology.com.

About Lerapolturev

Lerapolturev is an investigational immunotherapy based on the live attenuated Sabin type 1 polio vaccine genetically modified for safety. Lerapolturev has a distinct target (the poliovirus receptor CD155), which is widely expressed in neoplastic cells of most solid tumors. Via CD155, lerapolturev targets tumors with three key mechanisms: 1) engagement and activation of antigen presenting cells (APCs), leading to T cell priming and sustained, systemic anticancer immunity; 2) direct tumor cell killing and antigen release; and 3) amplification of the immune response via recall of polio vaccine-specific T cells. Lerapolturev has been granted Breakthrough Therapy and Orphan Drug Designation status by the U.S. Food and Drug Administration in recurrent glioblastoma, and Fast Track and Orphan Drug Designation status in refractory melanoma.

About Melanoma

There are estimated to be over 12,000 new and recurrent cases of advanced, unresectable melanoma diagnosed in the U.S. each year, and around 7,000 deaths. While immune checkpoint inhibitors have dramatically improved the outlook for advanced melanoma patients today, most patients treated with these immunotherapies are either primary nonresponders or

eventually develop immune-refractory progressive disease and require additional options, which are poor.

About Istari Oncology
Istari Oncology, Inc., headquartered in Research Triangle Park, North Carolina, is a privately held clinical-stage biotechnology company focused on development of the novel immune activator lerapolturev for the treatment of solid tumors. Istari has licensed a broad range of patents and patent applications and has access to additional intellectual property to continue clinical and commercial development of lerapolturev.

For more information, please visit: www.istarioncology.com.

References

1. Beasley GM, Nair SK, Farrow NE, et al. A phase I trial of intratumoral LERAPOLTUREV in patients with unresectable, treatment-refractory melanoma. *J Immunother Cancer*. 2021 [in press].

###

Istari Oncology Medical Affairs Contact:
Email: MedicalAffairs@istarioncology.com

Investor and Media Contact:
John Higgins
Email: jhiggins@istarioncology.com