Surface Oncology to Present Preclinical Data Highlighting the IL-27 Gene Expression Signature in Treatment-Resistant Cancers at the 10th Annual International Cytokine and Interferon Society Meeting

September 14, 2022

- New preclinical data indicate IL-27 induces a gene expression signature that has been associated with resistance to chemotherapy, radiotherapy, and checkpoint inhibition -

- Findings support the ongoing clinical investigation of SRF388 in multiple tumor types -

CAMBRIDGE, Mass., Sept. 14, 2022 (GLOBE NEWSWIRE) -- Surface Oncology (Nasdaq: SURF), a clinical-stage immuno-oncology company developing next-generation immunotherapies that target the tumor microenvironment, today announced that the company will present new preclinical data on the role of IL-27 in therapy resistance at the 10th Annual Cytokines Meeting of the International Cytokine and Interferon Society (ICIS) being held September 20 – 23 at Big Island, Hawaii. The poster, entitled *IL-27 Inhibits Immune Cell Reinvigoration Mediated by PD-(L)1 Blockade and Induces a Type 1 Interferon Gene Expression Signature Associated with Resistance to Therapy in Cancer Patients (#297)*, will first be presented in a virtual preview session today at 2:00 - 3:30 pm HST/8:00 - 9:30 pm EDT.

"IL-27 is a key regulator in the immunosuppressive environment of a variety of tumors, and it can counteract T cell reinvigoration seen after PD-(L)1 pathway inhibition, thus preventing T cells from attacking the cancer cells," said Vito Palombella, chief scientific officer, Surface Oncology. "We have identified an IL-27 gene signature that is enriched in several tumor types from The Cancer Genome Atlas (TCGA). Interestingly, this IL-27 signature includes many interferon (IFN) stimulated genes that have been associated with resistance to therapy across different cancers. These findings further bolster our belief that SRF388, a first-in-class anti-IL-27 monoclonal antibody, holds important potential in the treatment of certain cancers."

Summary of key data:

- IL-27 induces the expression of several immunoregulatory receptors (e.g., PD-L1, TIM-3, LAG-3, and TIGIT) and reduces inflammatory cytokine production
- An IFN-stimulated gene signature is expressed in a variety of human tumors and associated with resistance to cancer therapies including chemotherapy, radiotherapy, and immune checkpoint inhibition. These IFN-stimulated genes are also upregulated by IL-27.
- IL-27 and Type 1 interferons (IFNα2, IFNβ1) counteract the immune cell reinvigoration seen after PD-(L)1 pathway blockade in human PBMCs, while IFNγ does not.
- Loss of IL-27 function, through either genetic deficiency or pharmacologic inhibition by SRF388, a first-in-class anti-IL-27 monoclonal antibody, leads to tumor growth inhibition in mouse models and early clinical data have shown monotherapy activity of SRF388 in patients with cancer (NCT04374877).

Poster presentation details:

- **Title:** *IL-27 Inhibits Immune Cell Reinvigoration Mediated by PD-(L)1 Blockade and Induces a Type 1 Interferon Gene Expression Signature Associated with Resistance to Therapy in Cancer Patients*
- **Poster number:** 297
- **Virtual presentations:** Wednesday, September 14, 2:00 - 3:30 pm HST/8:00 - 9:30 pm EDT and Thursday, September 15, 8:00 - 9:30 am HST/2:00 - 3:30 pm EDT
- **In-person session:** Thursday, September 22, 4:00 - 5:30 pm HST

The poster can also be found on Surface Oncology's website.

About SRF388
SRF388 is a fully human anti-IL-27 antibody designed to inhibit the activity of this immunosuppressive cytokine. Surface Oncology has identified particular tumor types, including liver, kidney and lung cancer, where IL-27 appears to play an important role in the immunosuppressive tumor microenvironment and may contribute to resistance to treatment with checkpoint inhibitors. SRF388 targets the rate-limiting p28 subunit of IL-27, and preclinical studies have shown that treatment with SRF388 blocks the immunosuppressive biologic effects of IL-27, resulting in immune cell activation in combination with other cancer therapies including anti-PD-1 therapy, as well as potent anti-tumor effects as a monotherapy. Furthermore, Surface Oncology has identified a potential biomarker associated with IL-27 that may be useful in helping to identify patients most likely to respond to SRF388. In November 2020, Surface announced that SRF388 was granted Orphan Drug designation and Fast Track designation for the treatment of refractory hepatocellular carcinoma from the FDA.

About Surface Oncology
Surface Oncology is an immuno-oncology company developing next-generation antibody therapies focused on the tumor microenvironment. Its pipeline includes two wholly-owned clinical-stage programs targeting CD39 (SRF617) and IL-27 (SRF388), as well as a preclinical program focused on selectively depleting regulatory T cells in the tumor microenvironment via targeting CCR8 (SRF114). In addition, Surface has two partnerships with major pharmaceutical companies: a collaboration with Novartis targeting CD73 (NZV930; Phase 1) and a collaboration with GlaxoSmithKline targeting

PVRIG (GSK4381562, formerly SRF813; Phase 1). Surface's novel, investigational, cancer immunotherapies are designed to achieve a clinically meaningful and sustained anti-tumor response and may be used alone or in combination with other therapies. For more information, please visit www.surfaceoncology.com.

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Source: Surface Oncology, Inc.