samumed

PRESS RELEASE

Samumed Publishes Unique Mechanism of Action for SM08502 in Targeting Gastrointestinal Tumors

SM08502 induces anti-tumor activity and reduces Wnt pathway gene expression through potent inhibition of CDC-like kinases (CLKs)
Publication highlights new discovery of a relationship between Wnt signaling and inhibition of CLK2 together with CLK3

SAN DIEGO – October 2, 2019 - Samumed, LLC, announced today the publication of data demonstrating a novel mechanism of action for SM08502 in preclinical gastrointestinal cancer models in which the small molecule generates strong anti-tumor effects via inhibition of CLK2 and CLK3. The article titled "The CLK inhibitor SM08502 induces anti-tumor activity and reduces Wnt pathway gene expression in gastrointestinal cancer models" was published in the peer-reviewed journal *Cancer Letters*.

Regulation of CLK2 and CLK3 is a novel strategy that leads to modulation of Wnt pathway signaling in cancer. The paper focuses on SM08502, which is a small-molecule CLK2/3 inhibitor currently being evaluated in a Phase 1 study in the U.S.; the study is designed to assess the safety and pharmacokinetics of SM08502 in patients with multiple types of advanced solid tumors (NCT03355066).

"It is well documented that aberrant Wnt pathway signaling occurs in many types of cancer, including around 90% of colorectal cancers, but the complexity of the Wnt signaling pathway has presented challenges for developing safe and efficacious Wnt signaling modulators for cancer treatment to date," said Yusuf Yazici, M.D., Chief Medical Officer of Samumed. "These published data identified a novel mechanism for impacting Wnt pathway signaling via potent inhibition of CLK2 and CLK3 and subsequent effects on alternative splicing. Our first-in-class CLK inhibitor, SM08502, had strong anti-tumor effects and diminished aberrant Wnt pathway activity in these mouse models and demonstrated its potential to treat gastrointestinal cancers. We look forward to the availability of data from our ongoing Phase 1 safety and pharmacokinetics trial in subjects with advanced solid tumors."

Data highlights include:

- SM08502 is a potent small-molecule CLK2 and CLK3 inhibitor
- CLK3 is a potential oncogenic kinase, as has been reported for CLK2
- SM08502 inhibited the Wnt signaling pathway *in vitro* and *in vivo* in colorectal cancer models
- Inhibition of CLK2 and CLK3 affected alternative splicing, which underlies inhibition of aberrant Wnt signaling

samumed

- SM08502 demonstrated significant anti-tumor effects in xenograft models of gastrointestinal cancer

About SM08502
SM08502, a small-molecule CLK inhibitor, which also modulates the Wnt signaling pathway, is in development for the treatment of advanced solid tumors. SM08502's mechanism of action via inhibition of CDC-like kinases (CLKs) has potential to attenuate the expression of genes that control proliferation of tumor cells.

About Samumed
Samumed's small-molecule drug platform is harnessing the innate restorative power of the Wnt pathway to reverse the course of severe and prevalent diseases. Learn more about Samumed's potential regenerative drug candidates and broad clinical pipeline at https://www.samumed.com/pipeline/default.aspx.

Corporate Contact:
Erich Horsley
Samumed, LLC
erich@samumed.com
858-365-0200

Investor Contact:
Daniel Ferry
LifeSci Advisors
daniel@lifesciadvisors.com
617-535-7746

Media Contact:
Josephine Belluardo, Ph.D.
LifeSci Public Relations
jo@lifescipublicrelations.com
646-751-4361