

Sparian Biosciences begins phase 1 clinical trial of SBS-147; a next generation arylepoxamide receptor agonist to treat pain

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Sparian Biosciences Inc, a clinical-stage CNS-focused biopharmaceutical company, announced the initiation of a phase 1 clinical trial of SBS-147, its next generation arylepoxamide receptor (AEAr) agonist, for pain. SBS-147 is being developed for oral administration in both acute and chronic pain. “SBS-147 builds on the success of the first generation AEAa agonist, SBS-1000. The added dosing flexibility as an oral compound expands potential indications to include acute and chronic pain” said Jeffrey B. Reich, MD, chief executive officer, Sparian Biosciences.

In preclinical studies, SBS-147 demonstrates potent analgesia in nociceptive and neuropathic pain models with durable responses out to 24 hours and does not cause respiratory depression or abuse liability as compared to opioids such as morphine.

SBS-1000, the first-generation AEAa agonist for acute pain, completed a phase 1 single ascending dose (SAD) study as a parenteral and continues in development for acute pain.

“Effective pain management remains a significant challenge across medicine and surgery, and SBS-147 has the potential to replace opioids for the treatment of acute and chronic pain. In the face of the ongoing opioid crisis, we believe the AEAa agonists like SBS-147 and SBS-1000 could represent fundamental and critically needed innovation,” said Dr. Reich. “We have been eager to get back into the clinic with the next generation AEAa agonist, one with oral dosing, and we hope that the promising preclinical profile of SBS-147 will translate to human studies.”

The phase 1 clinical trial will be a combined single ascending dose (SAD) and multiple ascending dose (MAD) study that will primarily evaluate the safety, tolerability, and pharmacokinetics of SBS-147 in healthy volunteers. Phase 1 clinical trial will evaluate the safety, tolerability, and pharmacokinetics.

SBS-147 is a novel and potent oral analgesic with a differentiated safety profile being developed for acute and chronic pain. The phase 1 SAD/MAD and phase 2 clinical study of SBS-147 are supported by a \$15M NIH/NIDA HEAL Initiative grant.

The development of SBS-147 from the phase 1 SAD/MAD through phase 2 will be funded by a \$15 million dollar NIH/NIDA HEAL grant. The funding represents the fifth NIH/NIDA grant Sparian has received. Since its founding, Sparian has been awarded a total of \$75 million in government grants to support four programmes. The HEAL (Help End Addiction Long Term) program was created by Congress to advance promising drugs targeting substance use disorders namely opioid addiction.

The research is supported by the National Institute on Drug Abuse (NIDA) HEAL Initiative of the National Institutes of Health under award number 1UG3DA064392-01. The content of this press release is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Sparian Biosciences was co-founded by Jeffrey B. Reich MD, and Gavril Pasternak MD/PhD, and was spun out of Memorial Sloan Kettering Cancer Center (MSK). Sparian has five programs that address acute and chronic pain, opioid use disorder, opioid withdrawal syndrome, acute opioid overdose, and stimulant use disorder. Sparian is the recipient of five NIH/NIDA grants worth nearly \$75 million.

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