



SCD-101: A New Anti-Sickling Drug Reduces Pain and Fatigue and Improves Red Blood Cell Shape in Peripheral Blood of Patients with Sickle Cell Disease

Robert Swift, Osheiza Abdulmalik, Qiukan Chen, Toshio Asakura, Kelsey Gustafson, James E Simon, Virdah Zaman, Kevin Alexis Quiusky, Kathryn L. Hassell, Iuliana Shapira, Gurinder Sidhu, Tracian James-Goulbourne, Kisha Carrington, John Muthu and Peter N Gillette

Blood 2016 128:121;

Conclusions: SCD-101 is a promising new drug for the treatment of sickle cell disease, based on the results from the studies reported here. SCD-101 was well tolerated over an 8-fold dose range, and dose-dependent anti-sickling effects on RBC were observed, though without significant changes in hemolysis. Clinical benefits included reduced chronic pain and fatigue, improved sleep and improved ulcer healing. While the identity of the active substance(s) in SCD-101 and the mechanism(s) of action are unknown, SCD-101 has a direct anti-sickling effect on RBCs, compatible with 1/9/2017 SCD-101: A New Anti-Sickling Drug Reduces Pain and Fatigue and Improves Red Blood Cell Shape in Peripheral Blood of Patients with Sickle Cell Dise... <http://www.bloodjournal.org/content/128/22/121> 2/4 an intracellular or membrane effect on RBCs. We hypothesize that the observed effects could be explained by increased vascular flow or increased oxygen delivery or a reduction in inflammation. A placebo-controlled crossover study will be completed in 2016 including a 6-minute walk test as a primary clinical endpoint, and a multi-site Phase 2 study is planned for 2017. As a botanical drug, SCD-101 may be a useful treatment for sickle cell disease worldwide.

<http://www.bloodjournal.org/content/128/22/121> <= CLICK LINK TO OPEN ORIGINAL ARTICLE