



Health & Wellness

Jefferson Headache Doc Studies New Migraine Therapy

For anyone who suffers from excruciating migraines, the promise of relief is a blessing. For Stephen D. Silberstein, MD, professor of Neurology and director of the Jefferson Headache Center at the Vickie and Jack Farber Institute for Neuroscience at Thomas Jefferson University Hospital, making that promise might be one step closer to reality.

Silberstein is principal investigator of the HALO trial, which focuses on fremanezumab, a monoclonal antibody that binds to and blocks the action of a protein called calcitonin gene-related peptide (CGRP), which spikes during migraine attacks. By blocking CGRP, researchers hope to break the cycle of increasing inflammation and heightened pain sensitivity that contributes to migraine headaches.

“In phase III clinical trials, fremanezumab proved to be successful in reducing the number of days that chronic migraine sufferers experienced headaches,” Silberstein says. “Results from the study of fremanezumab for the preventive treatment of chronic migraine highlight the importance of therapies targeting CGRP as a potential significant advancement in the treatment of patients suffering from debilitating symptoms.”

Migraine is a neurological condition with symptoms that include severe head pain, nausea, and other physical impairments that can be severely



incapacitating. The World Health Organization estimates between 127 and 300 million people around the world experience chronic migraine—about 38 million in the United States alone.

There are two types of migraine—chronic, where patients suffer 15 or more headache days per month, and episodic, where patients have 14 or fewer headache days per month. Approximately 90 percent of people diagnosed with migraine have episodic migraine; about 10 percent have chronic migraine. Although a number of therapies exist, many only work for a certain time before they fail to prevent or relieve pain.

“The burden of illness faced by those with migraine is immense and can negatively impact every facet of their lives, underscoring a significant unmet need for new preventive treatment options,” Silberstein says.

“Our worldwide effort to evaluate this novel therapeutic approach has shown positive results and was safe in patients. If approved, this treatment would provide physicians with an important new tool to help prevent migraine, reduce a patient’s migraine load, and potentially help patients return to normal.”

The study consisted of giving monthly or quarterly injections of fremanezumab to more than 700 patients who suffered from chronic migraines. Nearly half of them experienced fewer migraine attacks; in some patients the attacks all but vanished.

“We saw some patients with 100 percent reduction in migraine, others with 75 percent reduction,” Silberstein says. “This therapeutic approach offers new hope for people whose migraines cannot be treated with existing medicine.”