The 2016 David Sackett Trial of the Year Award – By Scott Evans

Ocrelizumab versus Placebo in Primary Progressive Multiple Sclerosis (ORATORIO)

Ocrelizumab versus Placebo in Primary Progressive Multiple Sclerosis (ORATORIO, NCT01194570), a randomized controlled trial, is the 2016 awardee for the prestigious David Sackett Trial of the Year Award, presented annually by the Society for Clinical Trials. Jerry S. Wolinsky, Emeritus Professor in Neurology, The University of Texas Health Science Center at Houston, and the senior investigator on the ORATORIO Trial accepted the award on behalf of the ORATORIO Trial team. Dr. Wolinsky presented the ORATORIO Trial on May 9, 2017 at the Society’s 38th Annual Meeting in Liverpool, England.

Primary progressive multiple sclerosis, accounting for 10 to 15% of the overall population with multiple sclerosis, is characterized by insidious progression of disability from disease onset. No disease-modifying treatments were approved for this form of multiple sclerosis until 28 March 2017 when the U.S. Food and drug administration approved ocrelizumab for this indication on the basis of the ORATORIO trial.

The ORATORIO trial had as its primary objective to determine if ocrelizumab, a humanized anti-CD20 monoclonal antibody directed against CD20-expressing B-cells, delays neurological worsening compared to placebo in patients with primary progressive multiple sclerosis. Ocrelizumab was superior to placebo with respect to the primary endpoint of 12-week confirmed disability progression (CDP) (HR 0.76, CI 0.58 to 0.98, p = 0.04). Using hierarchical testing, results on secondary outcomes including 24-week CDP, change in performance on a timed 25 foot walk, and changes in imaging markers, supported the primary outcome. Infusion-related reactions were more frequent on active treatment (39.9% versus 25.9% on placebo), highest at first infusion and diminished in frequency with subsequent dosing; in 1.2% these were severe, with none life-threatening. Infections and serious infections were similarly distributed and opportunistic infection were not seen during the controlled phase of the trial. Neoplasms were identified in 2.3% of actively treated patients and 0.8% of controls. The most recent safety profile updated in the ocrelizumab all-exposure population including open-label extensions remains consistent with the controlled treatment periods. As the first successful trial conducted in primary progressive multiple sclerosis, this is an important milestone, extending therapy to control worsening to our patients with what previously was a recalcitrant form of the disease.

Each year since 2008, the SCT Trial of the Year has been awarded to a randomized, controlled trial published (either electronically or in print) in the previous calendar year that best fulfills the following standards:

- It improves the lot of humankind.
- It provides the basis for a substantial, beneficial change in health care.
- It reflects expertise in subject matter, excellence in methodology, and concern for study participants.
- It overcomes obstacles in implementation.
• The presentation of its design, execution, and results is a model of clarity and intellectual soundness.

Nominations came from Society members, investigators, and interested scholars from around the world.

The 2016 Trial of the Year selection committee included Scott Evans (Chair), Kay Dickerson, Bob Dworkin, Dean Follmann, Toshimitsu Hamasaki, Frank Rockhold, Yves Rosenberg, Wendy Parulekar, and Janet Wittes.

The 2017 Trial of the Year Selection Committee will issue a call for nominations in fall, 2017. Visit www.sctweb.org for updates.