



## News from ACTRIMS 2016

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The “American Committee for Treatment and Research in Multiple Sclerosis (ACTRIMS) Forum” was held in New Orleans, the former capital of Louisiana, February 18<sup>th</sup>-20<sup>th</sup>, 2016. The main topic of the meeting was progressive multiple sclerosis (MS).

Being more humbler than the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS), and having almost no participation from countries outside North America, the most important titles of this meeting were the pathology of MS progression, the role of B cells in progression, anti-B cell therapies, new clinical endpoints alternative to Expanded Disability Status Scale, new molecular and radiological biomarkers, neuroprotective therapies, and the role of stem cell therapy in MS.

Of those presented at the ACTRIMS Forum, the featured articles were OPERA I, II and ORATORIO studies, which were finalized last year. In all three studies, Ocrelizumab, which is a monoclonal antibody that binds to CD20, was tested in patients with relapsing remitting (RR) MS (OPERA I and II) and primary progressive (PP) MS (ORATORIO). At the end of the ORATORIO trial, a 24% decrease in the percentage of patients with primary-progressive multiple sclerosis (PPMS) with permanent disability was found in the ocrelizumab treatment group compared with the placebo group at week 120. Such a striking result in PPMS, a disease that is difficult to treat, was greeted joyfully with surprise by the MS community. At the forum, the most important differences of ORATORIO from other negative progressive MS studies were emphasized as patients being included in the study at an earlier period and the greater percentage of patients with contrast-enhancing brain lesions on magnetic resonance imaging. Therefore, the most important factor underlying the positive results was specified as inclusion of patients with progressive MS in which inflammation is predominant.

Beyond the stunning ocrelizumab trials, a study that showed that high-dose MD1003, a biotin analog, slowed the progression of MS was another featured topic at the forum.

Another study that was conducted in the University of California, San Francisco and presented by Jennifer S. Graves also drew attention because of its interesting results. In their study on the relationship between ovarian age with brain gray matter volume and disability, Graves et al. studied anti-Mullerian hormone levels, which indirectly give an idea about ovarian-age. Interestingly, despite being unable to find a difference between patients and healthy controls, the researchers demonstrated that the level of this hormone was lower in patients with more disability and in patients with cortical atrophy compared with the other group. This situation gives rise to thought that ovarian function is worse in patients with more disability. Considering the vice versa, loss of ovarian function might also be considered as a precursor of progression.

Another interesting topic was about the intrathecal use of rituximab. In the RIVITALISE trial by Bibiana Bielekova et al. from the National Institutes of Health, patients with secondary progressive MS were randomized to receive intrathecal and intravenous rituximab. The authors used an intrathecal dose of 200 mg rituximab that was given only twice, 2 weeks apart. Interestingly, the study was terminated early because of the lack of adequate effect of intrathecal rituximab on B cells.

One of the outstanding events other than the scientific presentations at the forum was the election of Jack Antel, from Montreal Neurological Institute McGill University, as the president of ACTRIMS. In addition, Jerry S. Wolinsky from the University of Texas, who is one of the former presidents of ACTRIMS, was awarded the title “Professor emeritus”. Although the congress was dull for a MS congress, it was remarkable in terms of handling a subject such as progressive MS, which has been left unattended for a long time.