Global research is focusing on better therapies for all stages of multiple sclerosis: ECTRIMS congress

19 September 2016, London: The 32nd Congress of the European Committee for Treatment and Research in Multiple Sclerosis (MS) closed on Saturday 17th in London. The final late-breaking session included news on the progress that is being made in determining the most effective drug treatments for the relapsing remitting stage of MS and in developing much-needed novel therapies for the secondary, progressive stage.

**Alemtuzumab: using real world clinical data to find out how it compares to other MS drugs**

One of the key presentations today reported important results comparing alemtuzumab with beta interferon, fingolimod and natalizumab. All four drugs are licensed for the treatment of patients in the relapsing-remitting stage of MS, in which episodes of new neurological symptoms are followed by at least partial recovery.

Research over the last two decades has revolutionized therapy for MS patients and disease-modifying drugs are now often used as soon as a diagnosis is made in order to slow disease progression and delay the onset of disability.

New drugs have been developed regularly and individual treatments have been licensed when they have proved effective compared with placebo or one established treatment. A new drug does not need to be tested against all available treatments for MS, so the efficacy of already licensed drugs is difficult to compare. A comparison over different clinical trials is compromised by the fact that individual trials may differ significantly in their design and may be undertaken in very different groups of people.

The answer to this problem is to gather data on how all these drugs perform after they are approved for use in the clinic. MSBase ([https://www.msbase.org](https://www.msbase.org)) is a registry that aims to collect clinical outcome data from people with MS in real-world clinical practice. By collecting sufficiently large amounts of such data, it is possible to statistically match the different patient populations and allows comparing the efficacy of different treatments in routine clinical practice.

Tomas Kalincik (University of Melbourne, Australia), on behalf of the MSBase collaboration, presented results from a study comparing the efficacy of alemtuzumab against three other treatments (fingolimod, beta interferon and natalizumab), all of which have been shown previously to reduce the frequency of MS relapses.

The real world data confirmed trial results and showed that alemtuzumab was better at suppressing relapses compared to beta interferon and fingolimod, and was similarly effective compared to natalizumab. Although patients treated with natalizumab showed slightly more clinical improvement than those treated with alemtuzumab, the rates of disability progression (worsening function) did not appear to differ significantly between the two drugs.

These findings demonstrate that real-world data obtained as part of clinical practice can be used to answer questions about the relative efficacy of treatments that would be difficult and prohibitively expensive to answer in dedicated treatment trials. This is important for people with MS, and the clinicians who advise them, to enable well-informed choices between treatments based on their relative efficacy and the risk of side effects.

**More exciting news about new treatments for secondary progressive MS**

During the late break session, details were given about the EXPAND trial of the novel therapy siponimod (BAF312).

Many people with MS who have initially had relapses and remission eventually develop progressive disability that is not the result of relapses. This is known as secondary progressive MS (SPMS) and currently licensed treatments have only very moderate efficacy.
In the late breaking news session, Ludwig Kappos (University of Basel, Switzerland) reported the main results of EXPAND, which has included 1,651 patients with SPMS from 31 countries. SPMS patients, who were included only if they showed evidence of disability progression within the previous two years, were treated daily with either 2mg siponimod or a placebo (two patients were placed in the treatment group for every one patient in the placebo group).

The main outcome was confirmed MS progression over three months, measured using Expanded Disability Status Scale (EDSS) scores. When compared with placebo, siponimod reduced progression by 21% (HR 0.74), and this difference was statistically significant. At 6 months the reduction was 26%, and again this was statistically significant. Treatment effects were more noticeable in those who had had relapses, and treatment was associated with a reduction in the annualised relapse rate (which fell by about half compared with the placebo group).

Prof. Xavier Montalban, President of the European Committee for Treatment and Research In Multiple Sclerosis: “The take home message from today is that EXPAND is the largest study to date to present data showing that a drug candidate for secondary progressive MS (siponimod) impacts on a clinical measure of disability progression. It is encouraging that we now have a potential treatment for SPMS that might be available for patients in the near future.”

-ENDS-

Notes to editors
The European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS) is an independent representative European-wide organisation devoted to multiple sclerosis (MS). For a quarter of a century, ECTRIMS has served as Europe’s and the world’s largest professional organisation dedicated to the understanding and treatment of Multiple Sclerosis

MISSION
To facilitate communication, create synergies, and promote and enhance research and learning among professionals for the ultimate benefit of people affected by MS.

VISION
ECTRIMS works with researchers and clinicians of its member countries and with other organisations that share similar missions and objectives on a worldwide scale, creating networking and collaboration opportunities. The ultimate goal of ECTRIMS is to improve basic and clinical research and clinical outcomes in MS.