ECTRIMS
EUROPEAN COMMITTEE FOR TREATMENT AND RESEARCH IN MULTIPLE SCLEROSIS

-NEWS RELEASE-

Lipoic acid shows great potential as a disease modifying treatment for secondary progressive MS: ECTRIMS congress

17 September 2016, **London**: The 32nd Congress of the **European Committee for Treatment and Research in Multiple Sclerosis (MS)** continued today in London (September 14-17). One of the parallel sessions reported promising early results on the potential benefits of lipoic acid in secondary progressive MS.

Lipoic acid is produced naturally in our own bodies and is found in many foods, and previous laboratory work has suggested that taking supplements of lipoic acid may help reduce some of the disabling effects of MS. Now this drug candidate is being tested in early stage human trial and can be added to the small number of drugs in development for secondary progressive MS.

Why could lipoic acid be so important?

Most people with MS initially have episodes of neurological symptoms that come and go. This stage of the disease is described as relapsing remitting MS and can last or months or even years. Eventually, however, most people develop deficits that progress over time and their disease is then termed secondary progressive MS.

Much of the progressive disability that occurs in secondary progressive MS is thought to be due to the loss of nerve cells and fibres. Treatments that could prevent or slow this loss could have the potential to prevent or slow disability progression.

Unfortunately, although we now have a range of treatments available for relapsing remitting MS, there are no licensed treatments for secondary progressive MS. As lipoic acid is inexpensive and readily available, and it is tolerated at high doses by MS patients, it is an attractive drug candidate.

Details of the lipoic acid study

In their double-blinded pilot treatment trial of lipoic acid, Chataway *et al*. studied 51 people with confirmed secondary progressive MS for 96 weeks.[i] Lipoic acid, at a dose of 1200mg per day, was given to 27 patients, with a further 24 receiving a placebo. Participants were monitored using MRI scans to measure whole brain atrophy, atrophy of brain substructures and the spinal cord, atrophy of the retina and macular region in the eye, and by clinical assessment and questionnaires to determine impact on symptoms and quality of life.

Promising results: lipoic acid prevents brain atrophy

At the end of the trial, MRI scans revealed a lower rate of whole brain atrophy in the lipoic acid treatment group compared to the placebo group. The rate of brain volume decline over time in those who took lipoic acid supplements was 0.22% per year and 0.65% per year in those who took the placebo. This is a 66% reduction, which is statically significant (p=0.004).

Lipoic acid treatments were well tolerated

The rate of serious adverse events was very similar between both groups. People in the lipoic acid group reported a higher rate of stomach upsets (an adverse effect) and a lower rate of falls (a benefit).

A very positive sign was also that more than 80% of the participants took the tablets regularly throughout the study period (good compliance is a key factor in whether a drug will ultimately be a successful one) and only five participants withdrew during the course of the trial.

Taking lipoic acid forward in clinical trials

The study group recognises that this trial is a pilot. However, the strength of the response seen in patients with secondary progressive MS was sufficiently promising to warrant a larger trial to confirm the possible neuroprotective effects of lipoic acid and to further explore both the clinical benefits and the potential adverse effects.

Prof. Xavier Montalban, President of the European Committee for Treatment and Research In Multiple Sclerosis: *"The MS-STAT trial of high dose simvastatin[ii] has also shown a reduction in the rate of brain volume loss, and the EXPAND trial of siponimod, which will be presented at ECTRIMS tomorrow, has shown a beneficial effect on disability progression. Add in this study on lipoic acid and we are beginning to see several promising treatments emerge for secondary progressive MS."*

-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.

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[i] R.I Spain , K Powers , C Murchison , E Heriza , F.B Horak , J Simon , D.N Bourdette Lipoic acid for neuroprotection in secondary progressive multiple sclerosis: results of a randomised placebo-controlled pilot trial. ECTRIMS oral presentation, Abstract 222

[ii] Chataway J, Schuerer N, Alsanousi A, Chan D, MacManus D, Hunter K, et al. Effect of high-dose simvastatin on brain atrophy and disability in secondary progressive multiple sclerosis (MS-STAT): a randomised, placebo-controlled, phase 2 trial. The Lancet. 2014 Jun;383(9936):2213–21.