International attention focussed on progressive MS

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One of the core goals of the International Progressive MS Alliance is to not only bring together researchers and fund research into progressive MS, but also to focus the attention and efforts of the entire global research community on the complex problem that is progressive MS.

Two recent articles published in two of the most prestigious scientific journals, *The Lancet* and *Nature* have certainly gone a long way to achieving this awareness amongst the research community. The Alliance is an unprecedented global collaboration of MS organisations, researchers, clinicians, pharmaceutical companies, and people living with progressive MS. It continues to raise the profile and underline the unmet need of progressive MS, rallying the global community to come together and find solutions. MS Research Australia is proud to be one of the managing members of the Alliance.

The Lancet article is co-authored by Alliance Scientific Steering members Professor Alan Thompson and Professor Robert Fox together with their colleagues Daniel Ontaneda and Professor Jeffrey Cohen. It outlines the current understanding of the biological mechanisms thought to underlie the gradual accumulation of disability in progressive MS. It also reviews the currently available techniques and the remaining challenges facing the research community in being able to measure and monitor both disease progression and any repair that might be induced by the new therapies being developed. There are several biological pathways that are under investigation for their contribution to the ongoing damage to myelin and neurons in progressive MS. These include the role played by the inflammatory and support cells within the brain itself and the role of B immune cells, that take up residence in and around the brain in progressive MS. Mitochondria (the energy power plants of our cells) are also thought to play a role via energy and oxidative stress pathways. The chronic loss of myelin and the sequential loss of neurons in connecting pathways affected by lesions is also a key focus.

All of these biological pathways are potential targets for the development of medications that could halt or reverse the accumulation of disability – teasing out the contribution played by each and identifying the central players will be vital to allow us to hone in on the most promising pathways for drug development.

Both *The Lancet* paper and the *Nature* paper, review the current status of treatments already in the development pipeline for progressive MS, and what we have learned from both the failures and successes of clinical trials to date. Also outlined in the *Nature* paper is the role the Alliance is playing in accelerating efforts to overcome the remaining challenges.
These review articles provide a timely reminder of the challenges we still face in finding solutions for progressive MS, as we await the outcome of the regulatory reviews of the first therapy for progressive MS. The interest and excitement that surround ocrelizumab (Ocrevus®) is only the beginning. The complexity of both relapsing and progressive MS, and the experience gained treating relapsing MS over the past 20 years, strongly suggests that no single progressive MS therapy will be effective for everyone. We must continue to accelerate progress so that everyone affected by progressive MS will have the best treatment available for their needs.

Learn more about the International Progressive MS Alliance www.progressivemsalliance.org