

RESEARCHERS GATHER FOR FIRST SCIENTIFIC MEETING OF THE INTERNATIONAL PROGRESSIVE MS COLLABORATIVE



“We are addressing one of the most challenging aspects of research in MS: understanding and treating progressive MS.”

Professor Alan Thompson, meeting co-chair.

In the first meeting of its kind, more than 170 MS researchers and clinicians from around the world gathered to discuss key challenges and strategies to expedite treatments for progressive forms of MS. Leading experts across a variety of research areas affirmed the importance of working together globally to drive advances in treating progressive MS, as well as a shared optimism that such an investment can yield the results urgently needed by those living with the disease.

Attendees further noted challenges that must be overcome to identify effective therapies, as well as many current efforts that are underway to tackle these challenges. Increased attention will speed these efforts; but we must do it together.



Five Priority Areas Discussed

Five key research priorities were identified, reported upon, and rigorously discussed for appropriate action.

#1 Identifying Targets and Repurposing Opportunities for Progressive MS

- Studies of MS susceptibility genes show no difference between relapsing and progressive MS, or any genes driving disease severity; while genetic and environmental factors may influence relapses and repair mechanisms.
- A different part of the immune system is more prominent in progressive than relapsing MS; discovering ways to safely target this is important; combination therapies may be appropriate.
- Opportunities may exist for repurposing therapies approved for other diseases; but there need to be incentives and a clear pathway to enable off-patent drugs to be developed for progressive MS.

#2 Experimental Models for Preclinical Evaluation of Therapies

- There is urgent need for models of clinical symptoms and underlying tissue damage in progressive MS.
- Some models permit the study of myelin repair, such as toxin models.
- Progressive MS shows unique pathology, accumulating with advancing age; more information about progression pathology and aging can drive the development of new models for drug testing.

Five Priority Areas Discussed (Cont.)

#3 Strategies for Phase II Clinical Trials

- Testing new therapies in relapsing MS is facilitated by getting MRI signs of positive response in very short (six month) phase II trials; there is no equivalent in progressive MS.
- Biomarkers are needed to measure nerve fiber injury or integrity and other factors contributing to progression; continued trials are needed to evaluate a candidate marker of nerve damage in spinal fluid.
- Emerging imaging biomarkers that can detect brain and spinal cord integrity may be useful for both phase II and phase III trials in progressive MS.
- New clinical trial designs are needed so that more therapies can be tested more quickly at lower cost; a secondary-progressive trial using a novel “adaptive” design is getting underway.

#4 Clinical Outcome Measures and Trial Design

- Better ways to measure improvement and success of therapies in progressive MS is needed; ideally sensitive to change over time, and predictive of future change.
- New technologies may help measure real-time impacts of treatments.
- Improving favorable outcomes requires better stratification of different types of progressive MS.
- It is important to account for co-morbid diseases of trial participants and environmental/lifestyle factors.

Scientific leadership of the Collaborative is evaluating all advice and will be putting forth an action agenda to focus and accelerate progress toward uncovering solutions for everyone affected by Progressive MS.



“There are obvious scientific challenges, and challenges in international efforts. But it is extremely important that this move forward as a global effort.”

Mr. Weyman Johnson, MSIF Chair, who lives with MS.



- Exploring previous clinical trials, patient registries and databases may be fruitful.

#5 Symptom Management and Rehabilitation

- Research is needed to determine ways to keep people exercising beyond time-limited supervised programs.
- Larger, well-controlled trials are needed to evaluate symptomatic therapies and rehabilitation methods, particularly cognitive rehabilitation interventions.
- When testing therapies to treat cognitive impairment, a person’s lifetime intellectual enrichment may influence outcomes, since those with higher “cognitive reserve” may fare better.
- There is an urgent need for symptom management and exercise programs to improve quality of life for those who are severely impacted by MS progression.