TREAT-NMD–EMEA workshop on clinical outcome measures in SMA signals collaborative approach to future clinical trials

TREAT-NMD, an EU-funded 'network of excellence' that aims to accelerate cutting-edge treatments for rare inherited neuromuscular diseases, announces a successful meeting on spinal muscular atrophy (SMA) outcome measures with the European Medicines Agency (EMEA).

A TREAT-NMD-led workshop hosted at the offices of the EMEA in London helped set the collaborative agenda for future trials in SMA. Participants included 50 representatives from the neuromuscular field, including healthcare professionals, scientists, patients and pharmaceutical industry representatives. EMEA representatives included the chairs of the Medicines, Paediatric, Orphan Drug and Scientific Assessment committees. There was active participation from all parties. Input from the International Care Committee (ICC) for SMA ensured that there was global representation at the meeting, the outcomes of which will also be shared with the US Food and Drug Administration (FDA).

In a new development for the neuromuscular field, the workshop focused not on discussing product-specific issues but on establishing broader common ground between the regulatory authorities and those interested in running clinical trials in SMA. In order for trials to move through the approval process without delays, consensus between trial planners and regulators on endpoints and novel methodologies is essential.

The SMA community is working extensively together and the meeting demonstrated this close link as all present spoke with a united voice on the most appropriate outcome measures for particular clinical situations. The community was complimented on its proactive approach to regulatory topics, its organisation and its international teamwork in addressing clinical trial questions for SMA.

Reactions to the presentations and discussions were positive. Meeting outcomes included the following:

SMA Type I
Using time-to-event as a primary outcome measures seem reasonable. Continued development of secondary outcome measures and protocols suitable for this population is necessary.

SMA Type II (non-ambulant)
It is important to demonstrate internal consistency, clinical meaningfulness and responder profiles for the functional scales intended to be used. Secondary measures trending in the same direction will be of critical importance.

SMA Type III (ambulant)
The 6 minute walk test seems reasonable – but the clinical meaning of an improvement needs to be carefully described. Secondary measures will need to be further defined.

Across all patient types, quality of life and caregiver burden scales will be important. It is also important to educate the regulators about disease mechanism and disease phenotypes. The EMEA and FDA are willing to work with the SMA community on biomarker qualification using the new guidance published June 30. EMEA encourages the organisations to seek a Scientific Advice meeting on specific questions relating to SMA.

The EMEA leadership expressed its appreciation for this type of organised, harmonised input from specialists in the field, which is something that is particularly valuable when addressing rare diseases such as SMA. This meeting was a key milestone in the process of developing consensus on outcome measures and endpoints and can be seen as the start of a longer dialogue on regulatory issues relating not only to SMA but also to other rare neuromuscular disorders. A full meeting report is in preparation and will be available via the workshop organisers at **www.treat-nmd.eu**.