SCOPE – DMD
(Exon Skipping Consortium for Products across Europe in Duchenne Muscular Dystrophy)

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The SCOPE – DMD project will utilise health research outcomes from the TREAT-NMD FP6 project **to perform an innovative, pivotal paediatric clinical trial in order to obtain market authorisation by a European SME for an antisense oligonucleotide (AON) treating a subset of Duchenne Muscular Dystrophy (DMD) patients.**

DMD is an inheritable, **X-chromosome linked, lethal childhood disease** with a prevalence between 0.32 and 0.52 per 10,000 inhabitants. Worldwide, around 240,000 boys suffer from DMD. DMD is caused by mutations often deletions in the **DMD gene that result in the disruption of the open reading frame leading to a loss of dystrophin protein expression**.

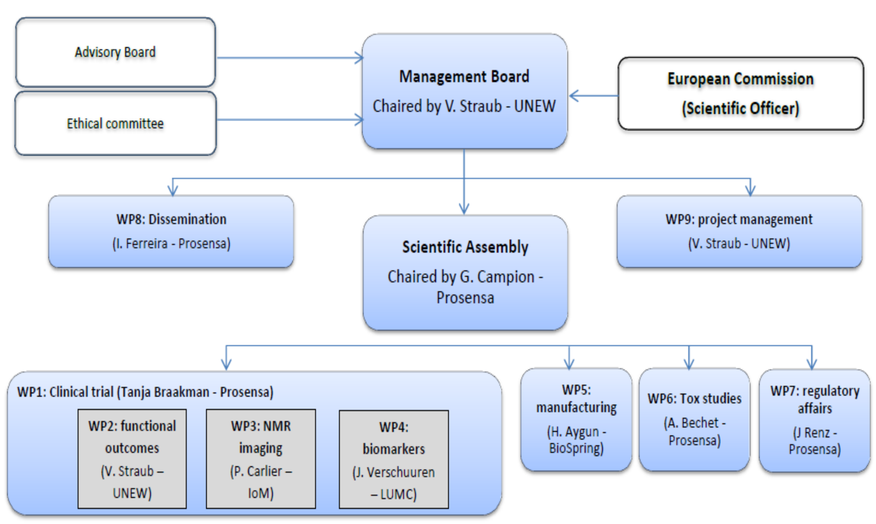
Project and Consortium Structure

The SCOPE – DMD consortium consist of 2 SMEs and 3 academic institutes coordinated by Newcastle University (figure a)

The SCOPE-DMD study is an exploratory, open-label, dose-escalation phase IIb; the efficacy, safety, pharmacodynamics and pharmacokinetics of weekly subcutaneous doses of PRO045 in subjects with DMD will be assessed.

The study is of seamless design which is driven by the need to maximise the data from an exceptionally small patient population and to provide continuity of care in this rapidly progressing disease. – a result of direct feedback from parents. It is made up of two phases: a dose escalation phase with 15 patients and an extended pivotal phase with an additional 55 patients .

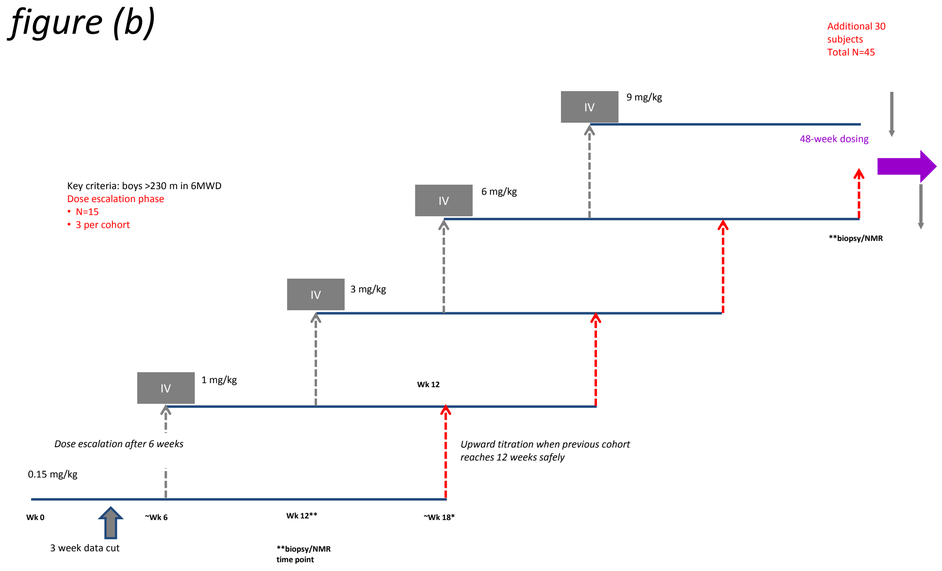
figure (a)



Trial Design

During the dose escalation phase (see figure b), five cohorts of three subjects each are planned (0.15, 1, 3, 6, 9 mg/kg) during which the safety, tolerability and efficacy will be closely monitored. From the dose escalation phase data it is expected to define an optimal dose of PRO045 with clear pharmacodynamic effect within acceptable safety and tolerability profile. Six NMD (neuromuscular disease) clinical centres (NL, Be, Fr, It, UK) will be involved.

figure (b)



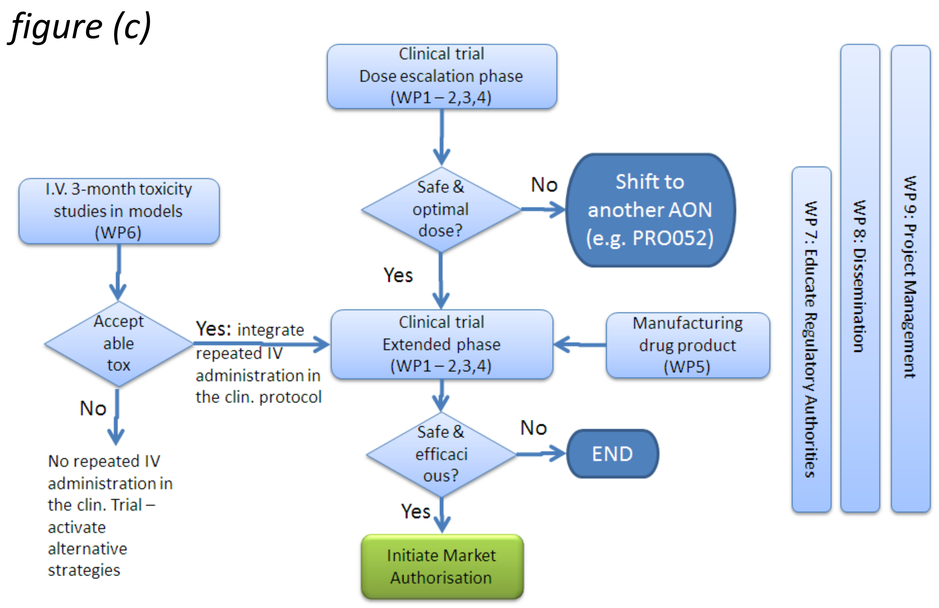
Key outcomes

SCOPE – DMD commenced in June 2013 and is due to finish in May 2016.

SCOPE – DMD aims to explore a number of key outcomes which include (see figure c):

- **functional outcome measures WP2**
- **Imaging WP3**
- **Biomarkers WP4**

figure (c)



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