

## ABN - Abstract

### The MS-SMART trial in Secondary Progressive MS – current update

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MS-SMART is an ongoing multicentre, multi-arm, double blind, placebo-controlled phase IIb randomised controlled trial to establish whether putative neuroprotective drugs (fluoxetine, riluzole, amiloride or placebo) can slow down the progression of brain volume loss in secondary progressive multiple sclerosis (SPMS) over 96 weeks using MRI-derived Percentage Brain Volume Change (PBVC) as the primary outcome. 360 patients have been screened so far, 328 (92%) consented and 272 randomized (65% of the total UK cohort—440). Patients will have outcome-data collected after 0, 24, 48 and 96 weeks. The trial is using a range of conventional and novel imaging techniques to better understand neuroprotection in SPMS. Core data includes: new and enlarging T2 lesions count, persistent new T1 hypointense lesion, whole brain atrophy, grey matter volume, and advanced imaging in 2 centres [cervical cord area change, MR spectroscopy and Magnetic Transfer Ratio (MTR)]. Additional measures include: CSF neurofilament levels and optical coherence tomography (OCT) to measure Retinal Nerve Fibre Layer (RNFL) thickness.

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