

The MS-STAT2 trial in Secondary Progressive MS

Study design and update

Jeremy Chataway, on behalf of the MS-STAT2 investigators:

Co-applicants: Thompson AJ, Chandran S, Ciccarelli O, Ford H, Freemantle N, Frost C, Giovannoni G, Gray E, Greenwood J, Nicholas J, Nicholas R, Nixon S, Pavitt S
 Pls / trial fellows: Ahmed F, Bozzali M, Brownlee W, Chhetri S, Craner M, Duddy M, Evangelou N, Galea I, Harikrishnan S, Harrower T, Hillier C, Hobart J, Kalra S, Lee M, Mattosio M, McDonnell G, McGuigan C, Pearson O, Pluchino S, Robertson N, Rog D, Sharrack B, Shehu A, Shields S, Spilker C, Straukiene A, Young C
 UCL/UCLH: Bianchi A, Blackstone J, Braisher M, Calvi A, Deane E, Doshi A, John N, Li V, Marley G, Williams T



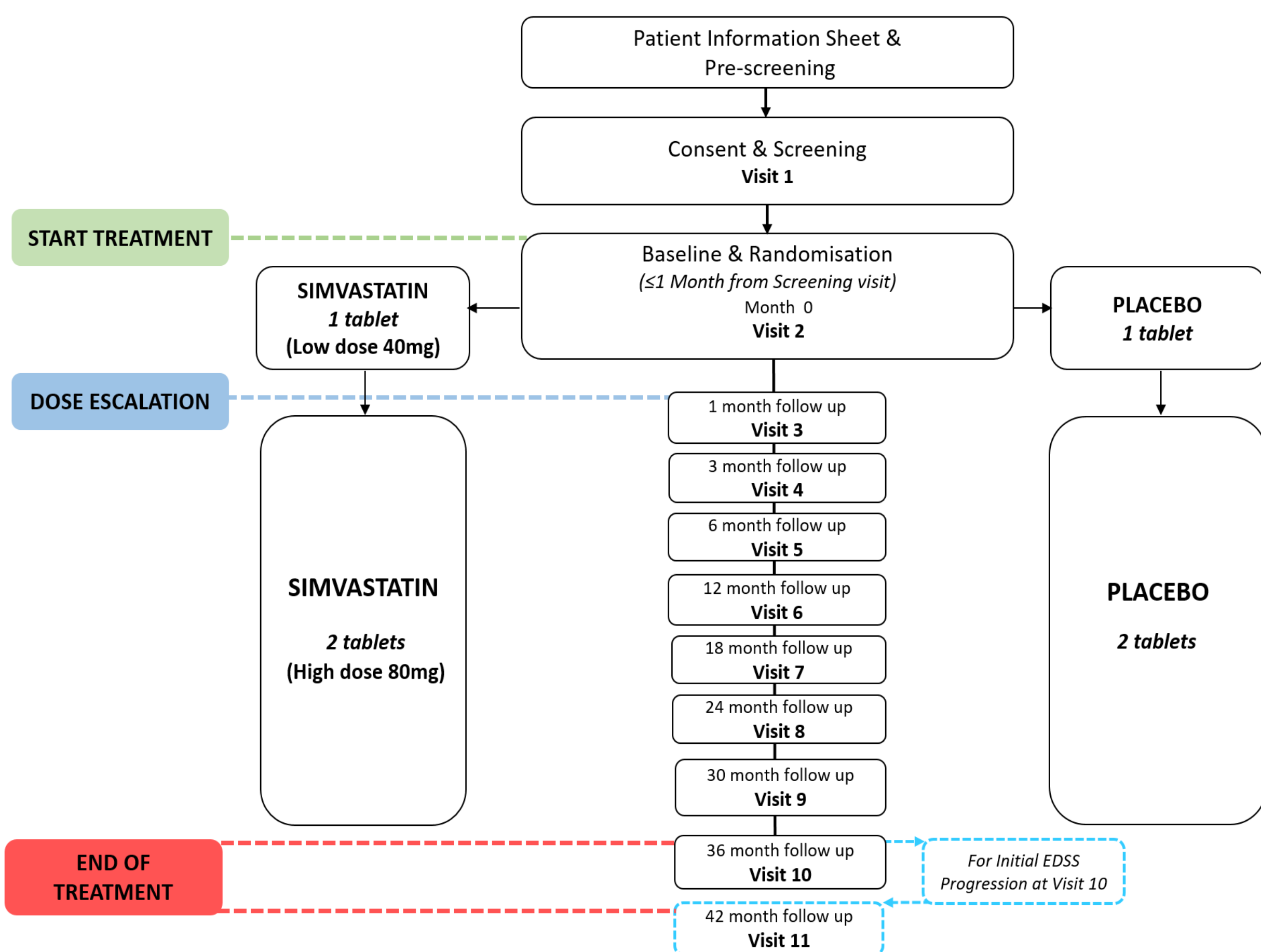
Introduction

The MS-STAT2 study is a Phase III, 3 year multi-centre, randomised, placebo-controlled trial assessing the efficacy of 80mg simvastatin vs. placebo in secondary progressive multiple sclerosis (SPMS). Building upon the promising results of the MS-STAT1 study, it is an academically led study funded through a collaboration of the NIHR HTA, MS Society (UK), National MS Society (US), and the Rosetrees Trust

Study outline

- Recruitment target: 1180 patients, ~30 sites around the UK
- Primary outcome – time to initial disability progression on EDSS
- Secondary outcomes will include a modified Multiple Sclerosis Functional Composite (MSFC), as well as visual, cognitive and patient reported outcomes

Following screening to confirm eligibility and consent, patients will be randomised 1:1 to 80mg simvastatin or placebo and embark on a total of 10 study visits over 3 years



Key messages:

- The MS-STAT2 trial is set to be a landmark study for SPMS
- Recruitment is accelerating at ~30 sites around the UK, with >1/3 of the target already recruited

Eligibility criteria:

- Diagnosis of SPMS with evidence of disability progression over the last 2 years
- No current DMT use, not taking a statin
- EDSS 4.0-6.5 (patients with some disability, but still able to walk 20m, with or without walking aids)
- Age 25-65 (randomisation must occur before 66th birthday)

Contacts and patient referrals:

- Patients may self-refer via the registration of interest portal:
 - www.ms-stat2.info
- Healthcare professionals can contact the MS-STAT2 study team directly:
 - UCLH.QSMSC@nhs.net
- Follow us on twitter:
 - [@MsStat2](https://twitter.com/MsStat2)

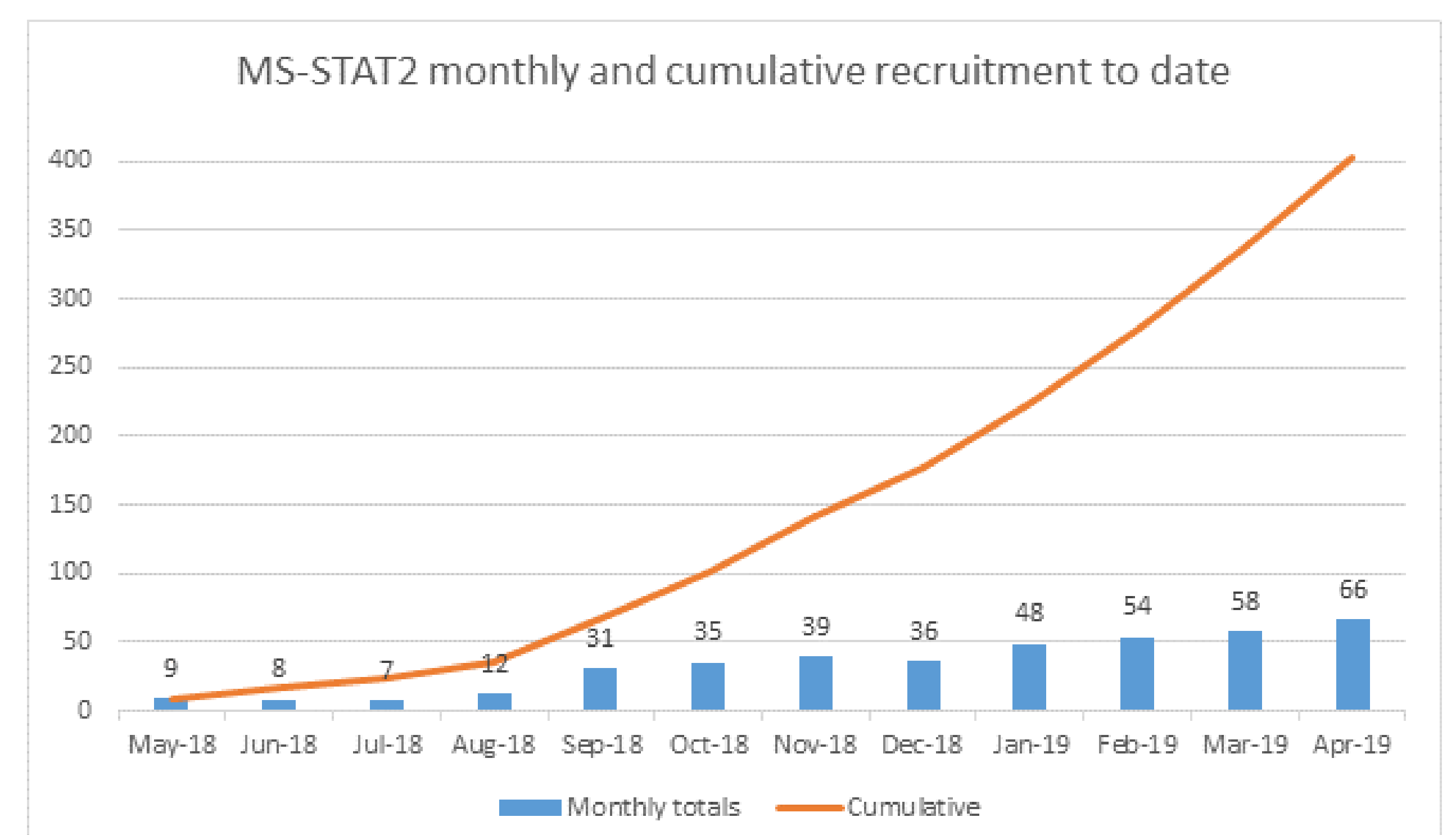
Study sites and recruitment update:

Recruitment is now open at 27 sites, with a total of 30 planned:

MS-STAT2 Sites in the UK and Ireland



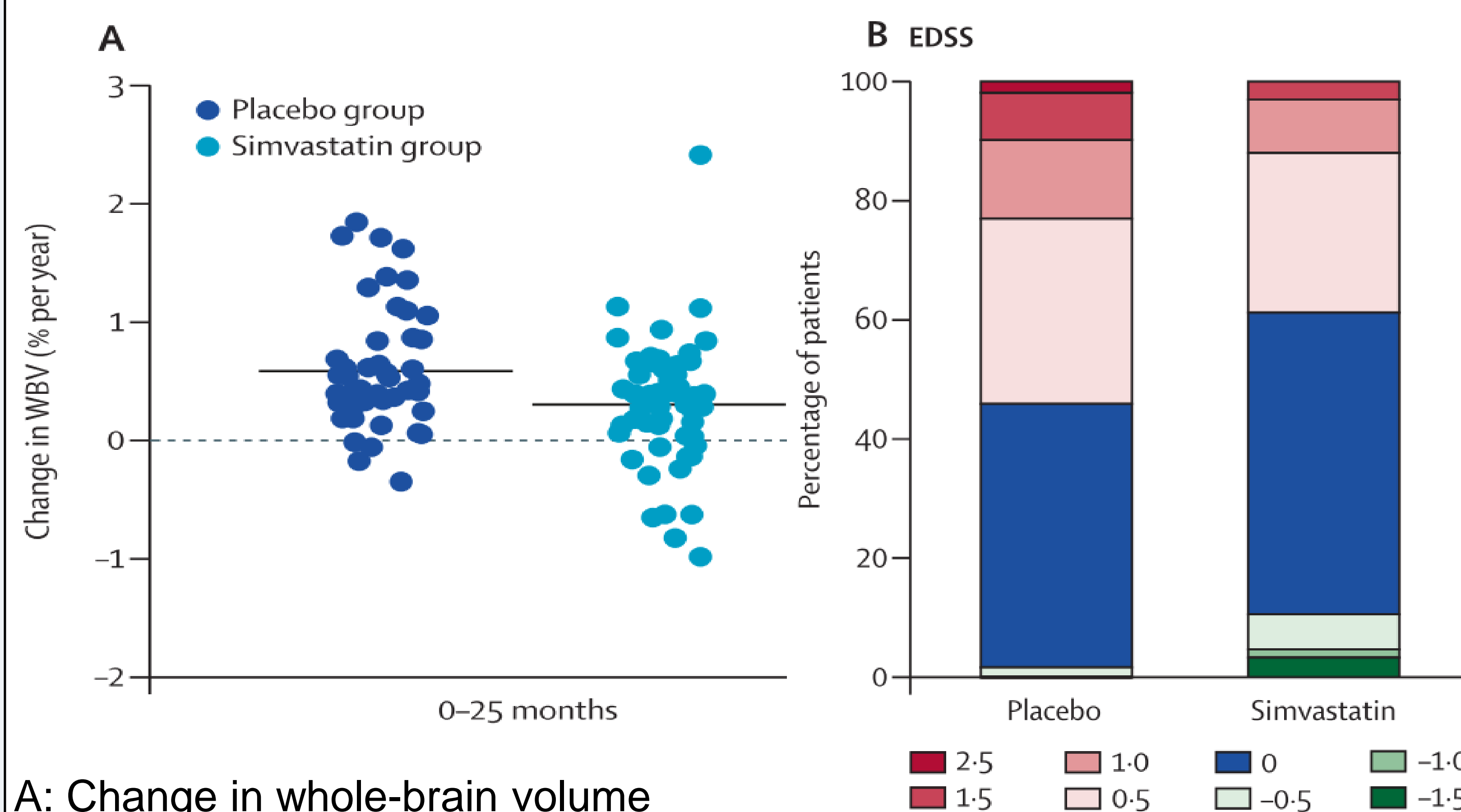
Recruitment continues to accelerate, with >400 patients recruited as of May 2019:



MS-STAT1 results:

140 patients with SPMS were randomised to simvastatin or placebo:

- The 80mg simvastatin treatment was well tolerated with no difference in adverse events between groups.
- In particular, there was no difference in muscle symptoms (14% placebo, 17% simvastatin).
- Simvastatin resulted in a 43% reduction in the annualised rate of whole brain atrophy ($p=0.003$), in addition to reduced disability progression on EDSS ($p<0.01$)



A: Change in whole-brain volume

B: Change in EDSS

For both change in whole-brain volume and EDSS, a positive value indicates a worse outcome

References:

- Chataway, J et al. *The Lancet* 383.9936 (2014): 2213-2221.
 - Chan, D et al. *The Lancet Neurology* 16.8 (2017): 591-600.
- This study is co-funded by the National Institute for Health Research (NIHR) HTA Project Number 15/57/143. The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.