Glatiramer Acetate Depot (extended-release) phase IIa study in patients with Primary Progressive Multiple Sclerosis: safety and efficacy snapshot

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BACKGROUND

PPMS is characterized by steadily worsening neurologic function (accumulation of disability) from the onset of symptoms, without early relapses or remissions. Glatiramer acetate long-acting injection (GA Depot) consists of extended-release microspheres containing GA, administered intramuscularly (IM) once every 28 days. Results of a 5-year GA Depot phase IIa trial in relapsing remitting MS suggests that GA Depot is safe, tolerable and efficacious. The IM administration route together with the slow-release formulation may result in a noted effect on PPMS patients as well.

OBJECTIVES

To assess the safety and efficacy snapshot data of GA Depot treatment (for up to 144 weeks, cutoff Jan 7, 2021) in the 12 out of 16 primary progressive MS (PPMS) subjects enrolled out of the 24 planned.

DESIGN/METHODS

Eligibility criteria includes: age 18-65 years, subjects diagnosed with PPMS with signs of rapid disease progression (rate of ≥ 1 point increase / year on EDSS score) in the year prior to screening, EDSS score of 2.0 - 6.5 at baseline. Patients are receiving GA Depot IM at a dose of 40 mg every 28 days. Safety is assessed by analysis of adverse events, CBC and blood chemistry. Efficacy is assessed by EDSS, 9HPT, T25FW tests, as well as by MRI analysis.

RESULTS

91.6% of the AEs recorded in the study were mild (Table 1). Most included injection site reactions and general weakness. No unexpected AEs were reported. Two SAEs were reported (one related and one not related to study drug). EDSS score remained stable for all patients and no 12 weeks confirmed disability progression (CDP) was detected (Figure 1). Mean 9HPT score and T25FW remained stable. MRI analysis (compared to baseline) revealed activity which included T2/FLAIR lesions (new or enlarging) in four patients. Three of these patients had also $Gd^{+}T1$ lesions.

Table 1: Adverse Events (mITT)

Severity	Not related***			Related**			Unknown		
	N (events)	%	Rate*	N (events)	%	Rate*	N (events)	%	Rate*
Mild	24	25.3%	0.12	54	56.8%	0.27	9	9.5%	0.05
Moderate	0	0	0	8	8.4%	0.04	0	0	0
Severe	0	0	0	0	0	0	0	0	0

*Rate is number of Adverse Events adjusted to number of injections (200 injections) **Related includes possibly related, probably related. ***Not related include: Unlikely related and not related

Figure 1: Mean EDSS score from baseline (mITT)

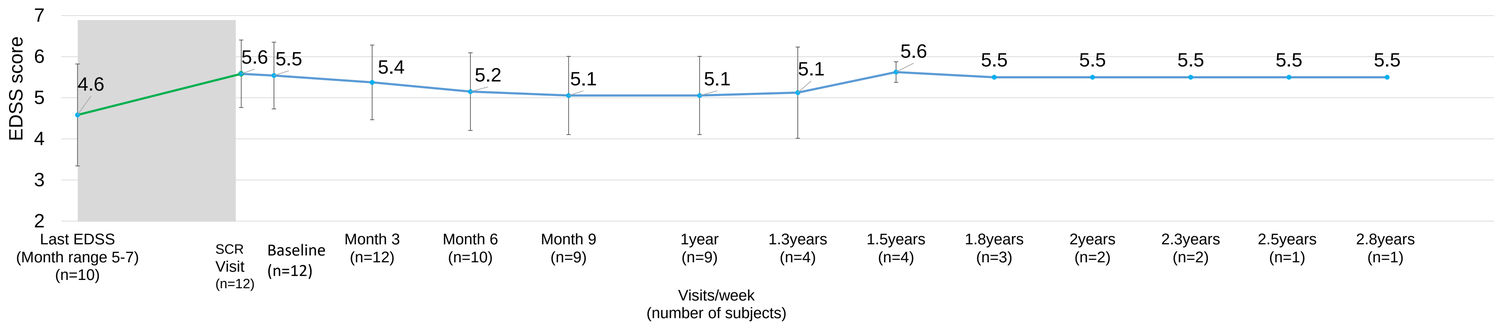

Figure 1:Data presented as mean ± SE. n=12 to 1. EDSS performed up to 4 weeks following planned time point was included in the analysis. mITT: modified Intent To Treat population.

CONCLUSIONS

Our interim Phase II data suggest that GA Depot is a safe and an effective treatment for patients with PPMS, as demonstrated by stable EDSS, 9HPT and T25FW data, which encourages us to continue this on-going Phase II study with more patients.

DISCLOSURES

Prof. Arnon Karni participated as the PPMS study Coordinating PI and as a site PI in the PPMS study, both funded by Mapi Pharma.
Dr. Shlomo Flechter, Dr. Ron Milo, Prof. Ronit Gilad, Prof. Boaz Weller, Prof. Adi Vaknin-Dembinsky, Dr. Mark Hellmann and Dr. Alla Shifrin, participated as a site PI in the PPMS study, funded by Mapi Pharma.
Dr. Laura Popper, Dr. Nadav Bleich Kimelman, Dr. Shai Rubnov (co-inventor of GA Depot), Inna Demender and Uri Danon are employed by Mapi Pharma.
Ehud Marom is a co-inventor of GA Depot, founder, and the CEO of Mapi Pharma.