Mitigation strategies for GI events are needed. Facilitating management of GI tolerability may improve adherence. 

**INTRODUCTION**

Background: Delayed-release dimethyl fumarate (DMF) is approved in the United States, Canada, Australia, and the European Union for the treatment of multiple sclerosis (MS).

Delayed-release DMF due to GI-related events

**OBJECTIVE**

The primary objective was to evaluate the effect of bismuth subsalicylate on GI events in healthy volunteers receiving delayed-release DMF in an 8-week, double-blind, placebo-controlled, Phase 1 study conducted in Canada, Australia, and the European Union.

**METHODS**

Study Design

**RESULTS**

First GI-Related Event

A total of 186 subjects reported at least one GI event via diary, including 72 (38.6%) and 74 (40.1%) in the placebo and bismuth subsalicylate groups, respectively.

Across the 8-week study period, the most commonly reported GI events in the placebo and bismuth subsalicylate groups were flatulence (51.8% vs 38.6%), diarrhea (51.8% vs 48.2%), upper abdominal pain (25.8% vs 23.0%), nausea (15.8% vs 11.1%), and vomiting (6.6% vs 4.4%).

The mean worst severity scores for flatulence (1.1 vs 1.8; LS mean difference [95% CI]: 0.7 [0.1, 1.3]) and diarrhea (1.0 vs 1.6; LS mean difference [95% CI]: 0.6 [0.0, 1.2]) were numerically lower in the bismuth subsalicylate group compared with the placebo group (Figure 6).

The overall GI event rate (MOGISS) was highest in Week 1 and declined thereafter (Figure 3).

**CONCLUSIONS**

DMF significantly reduced the severity and numerically reduced the incidence of flatulence and diarrhea in healthy volunteers receiving delayed-release DMF, in an 8-week, double-blind, placebo-controlled study.

Further research is needed to confirm these findings and determine the effect of bismuth subsalicylate on GI-related events in patients with MS on delayed-release DMF.