## Conclusions

- In pairwise propensity score-matched populations from the NTD MS registry, DMT treatment was associated with significantly higher proportions of relapse-free patients and lower ARR vs. treatment with IFN, GA or TERI.
- There was no evidence of a difference in time to treatment discontinuation between DMT and its comparators.
- Outcomes were determined based on a sensitivity analysis applying pairwise matching.
- Results of a separate analysis of the NTD MS registry comparing DMT with fingolimod are reported elsewhere (poster P651).

## Methods

- **Patients**
  - Inclusion criteria:
    - Age ≥18 years at therapy initiation.
    - Treatment-naive or pre-treated patients with first-line therapy.
    - Baseline value exists.
    - Age ≥18 years at therapy initiation.
    - EDSS baseline value exists.
    - Treatment-naive or pre-treated patients with first-line therapy.
    - Baseline factors in the DMT and respective IFN, GA and TERI post-matched cohorts.
  - Exclusion criteria:
    - Age <18 years at therapy initiation.
    - Treatment-naive or pre-treated patients with first-line therapy.
    - Baseline value exists.
    - Age ≥18 years at therapy initiation.
    - EDSS baseline value exists.
    - Treatment-naive or pre-treated patients with first-line therapy.
    - Baseline factors in the DMT and respective IFN, GA and TERI post-matched cohorts.

- **Propensity-Matched Comparative Effectiveness**
  - Propensity-Matched Comparative Effectiveness: Pairwise- and Non-pairwise (non-simultaneous) censoring was applied as the method of exposure time.
  - Time to 3- and 6-month EDSS confirmed disability progression was included as an exploratory outcome.
  - The proportions of relapse-free patients by Kaplan-Meier estimates – the KM estimates (95% CI). 1-2 years follow-up time.
  - Proportion of patients free of TTD events:
    - DMF 81.3% vs. IFN 78.2% vs. GA 78.2% vs. TERI 78.0% (12 months).
    - DMF 67.2% vs. IFN 62.5%, DMF 65.9% vs. GA 65.9% vs. TERI 65.6% (12 months).
  - The bC-statistic is a measure of balance in matched data and ranges from 0.5–1.0, with the minimum value indicating that the propensity score model is perfectly balanced and has no ability to discriminate between the cohorts after matching.
  - Results of a separate analysis of the NTD MS registry comparing DMT with fingolimod are reported elsewhere (poster P651).

## Results

- **Patients and Matching**
  - The proportions of relapse-free patients by Kaplan-Meier estimates – the KM estimates (95% CI). 1-2 years follow-up time.
  - Proportion of patients free of TTD events:
    - DMF 81.3% vs. IFN 78.2% vs. GA 78.2% vs. TERI 78.0% (12 months).
    - DMF 67.2% vs. IFN 62.5%, DMF 65.9% vs. GA 65.9% vs. TERI 65.6% (12 months).
  - The bC-statistic is a measure of balance in matched data and ranges from 0.5–1.0, with the minimum value indicating that the propensity score model is perfectly balanced and has no ability to discriminate between the cohorts after matching.
  - Results of a separate analysis of the NTD MS registry comparing DMT with fingolimod are reported elsewhere (poster P651).

## Table 1. Baseline factors in the DMT and respective IFN, GA and TERI post-matched cohorts

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>DMF vs. IFN</th>
<th>DMF vs. GA</th>
<th>DMF vs. TERI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>71.5</td>
<td>76.2</td>
<td>63.6</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>54.7</td>
<td>54.1</td>
<td>53.7</td>
</tr>
<tr>
<td>No. at risk</td>
<td>1486</td>
<td>1772</td>
<td>1431</td>
</tr>
</tbody>
</table>

**Table 2. Exposure times for the DMT and IFN, GA and TERI cohorts**

<table>
<thead>
<tr>
<th>Time to First Relapse</th>
<th>DMF vs. IFN</th>
<th>DMF vs. GA</th>
<th>DMF vs. TERI</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-value</td>
<td>0.001</td>
<td>0.002</td>
<td>0.001</td>
</tr>
</tbody>
</table>

**Table 3. Annualised relapse rates for the DMT vs. IFN, GA and TERI cohorts (non-pairwise)**

<table>
<thead>
<tr>
<th>Time to first relapse</th>
<th>DMF vs. IFN</th>
<th>DMF vs. GA</th>
<th>DMF vs. TERI</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-value</td>
<td>0.001</td>
<td>0.002</td>
<td>0.001</td>
</tr>
</tbody>
</table>

**Table 4. Time to first relapse for the DMT vs. (A) IFN, (B) GA and (C) TERI cohorts (pairwise)**

<table>
<thead>
<tr>
<th>Time to First Relapse</th>
<th>DMF vs. IFN</th>
<th>DMF vs. GA</th>
<th>DMF vs. TERI</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-value</td>
<td>0.001</td>
<td>0.002</td>
<td>0.001</td>
</tr>
</tbody>
</table>

**Table 5. Time to confirmed disability progression for the DMT vs. (A) IFN, (B) GA and (C) TERI cohorts (pairwise)**

<table>
<thead>
<tr>
<th>Time to First Relapse</th>
<th>DMF vs. IFN</th>
<th>DMF vs. GA</th>
<th>DMF vs. TERI</th>
</tr>
</thead>
<tbody>
<tr>
<td>P-value</td>
<td>0.001</td>
<td>0.002</td>
<td>0.001</td>
</tr>
</tbody>
</table>