

Case Study

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11-1-2023

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source("R/dgm.r")
source("R/vis.r")
source("R/imp.r")
source("R/sim.r")
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Case study data

We selected patients from MS PATHS that received DMF or FTY and constructed their treatment sequences by identifying consecutive visits on the same DMT. We focused on treatment sequences that started at a follow-up visit (not at the initial MS PATHS visit) and assumed that the baseline visit corresponded to treatment initiation. In this section, we focus on the data of 456 patients with complete baseline data. Details are depicted below:

Parameter	DMF	FTY
Sample size, n		
Total sample size	254	202
Complete cases	254	202
Age		
Median, years (IQR)	44 [37 - 52]	40 [32 - 47]
Gender		
Male, n (%)	49 [19%]	47 [23%]
Female, n (%)	205 [81%]	155 [77%]
Years of education		
Median, years (IQR)	14 [12 - 17]	15 [12 - 16]
Disease duration		
Median, years (IQR)	8 [3 - 14]	6 [3 - 12]
MS type, n (%)		
Relapsing MS (remitting / progressive)	199 [78%]	175 [87%]
Primary Progressive MS	12 [5%]	8 [4%]
Secondary Progressive MS	43 [17%]	19 [9%]
Number of relapses in previous year, n (%)		
0	121 [48%]	104 [51%]
1	69 [27%]	52 [26%]
2	38 [15%]	28 [14%]
>=3	26 [10%]	18 [9%]
Primary DMT efficacy in previous year, n (%)		
High	10 [4%]	15 [7%]
Medium	13 [5%]	26 [13%]

(continued)

Parameter	DMF	FTY
Low	105 [41%]	77 [38%]
None	126 [50%]	84 [42%]
Medical history, n (%)		
Cardiovascular disease	99 [39%]	65 [32%]
Diabetes	21 [8%]	11 [5%]
PDDS score, n (%)		
0 - 1	160 [63%]	152 [75%]
2 - 3	51 [20%]	36 [18%]
4 - 5	31 [12%]	8 [4%]
>= 6	12 [5%]	6 [3%]
Visit count, n (%)		
1 visit	62 [24%]	40 [20%]
2 visits	98 [39%]	50 [25%]
3 visits	45 [18%]	48 [24%]
4 visits	24 [9%]	23 [11%]
>= 5 visits	25 [10%]	41 [20%]

The median number of visits per patient is 2, with an interquartile range from 2 to 3. The figure below depicts the distribution of number of days between consecutive visits for 192 new DMF users and 162 new FTY users having at least one follow-up visit beyond baseline.

Interval between consecutive visits; N = 354 patients

