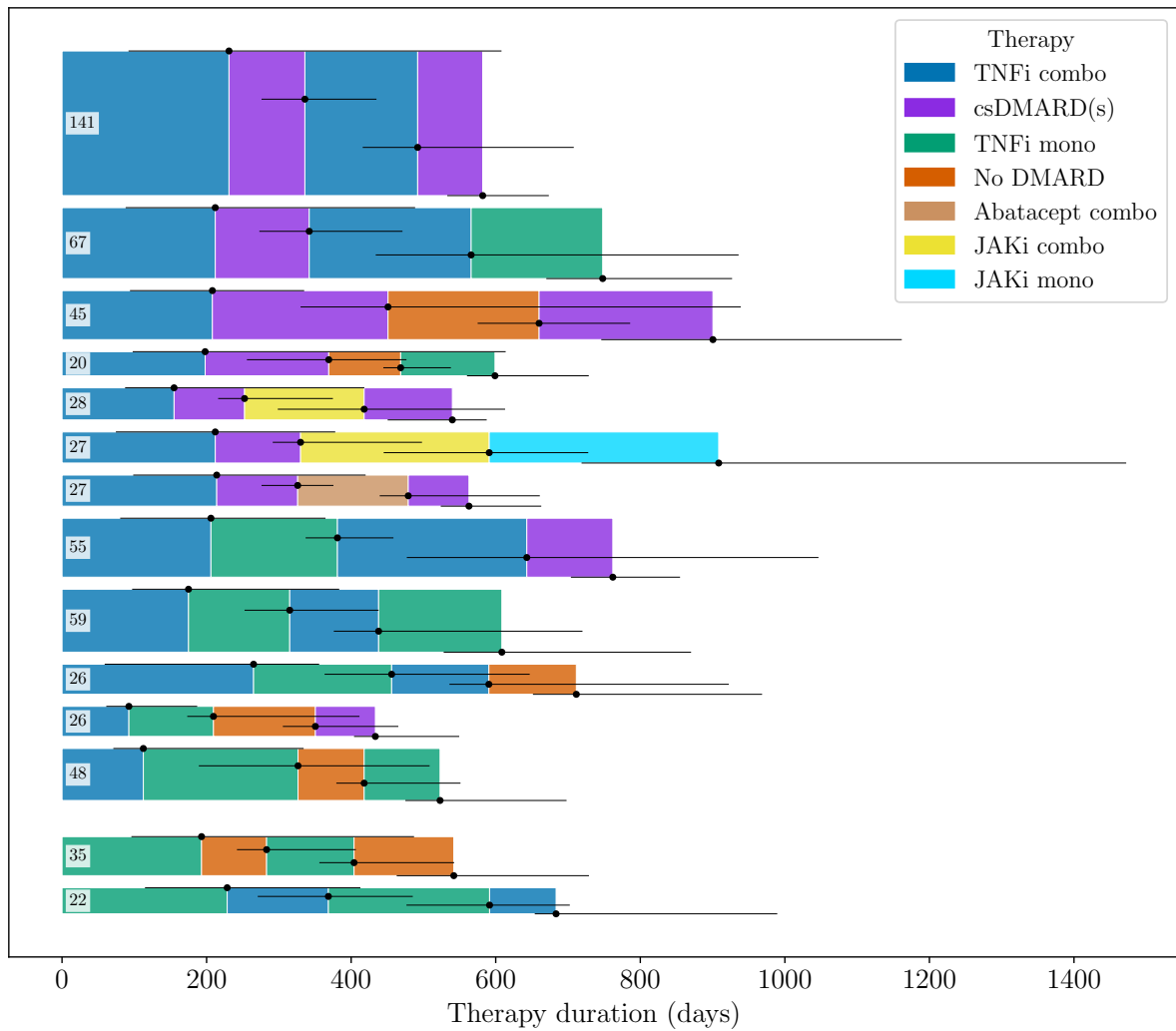
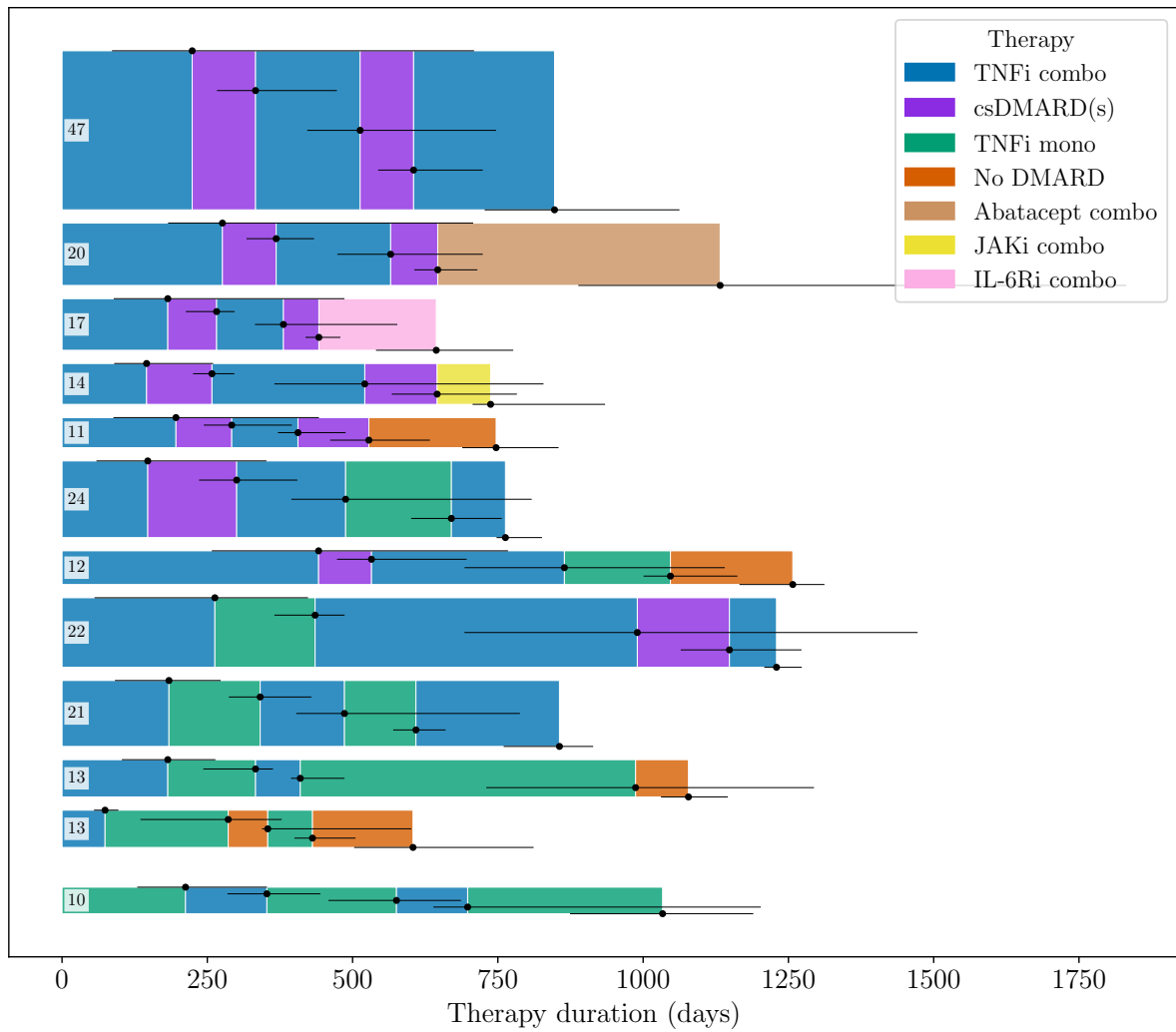


## Supplementary material



**Supplementary Figure 1: The most common treatment patterns for sequences of length four.** In total, 1649 patients were treated with at least four three therapies. Note, however, that some of the patients may have been treated with additional therapies afterwards. The numbers indicate how many patients were treated according to each pattern. Only patterns that occurred at least 20 times in the data are shown.



**Supplementary Figure 2: The most common treatment patterns for sequences of length five.** In total, 1133 patients were treated with at least five therapies. Note, however, that some of the patients may have been treated with additional therapies afterwards. The numbers indicate how many patients were treated according to each pattern. Only patterns that occurred at least 10 times in the data are shown.

**Supplementary Table 1: The main primary reasons for interventions in the most common patterns of up to length three. The percentages are calculated in relation to the number of patients providing at least one primary reason for the last intervention. Primary reasons provided by less than ten patients are not included.**

Pattern	Number of patients	Number of patients providing at least one primary reason for the <i>last</i> intervention	Most common primary reason, <i>n</i> (%)	Second most common primary reason, <i>n</i> (%)	Third most common primary reason, <i>n</i> (%)
TNFi combo → csDMARD(s)	1136	723	“Failure to maintain initial response”, 167 (23%)	“Minor side effect”, 118 (16%)	“Inadequate initial response”, 107 (15%)
TNFi combo → csDMARD(s) → TNFi combo	423	84	“Active disease”, 36 (43%)	“Failure to maintain initial response”, 15 (18%)	“Inadequate initial response”, 10 (12%)
TNFi combo → csDMARD(s) → non-TNFi b/tsDMARD combo	269	74	“Active disease”, 47 (64%)	-	-
TNFi combo → csDMARD(s) → No DMARD	150	72	“Minor side effect”, 18 (25%)	“Other reason”, 14 (19%)	“Temporary interruption”, 12 (17%)
TNFi combo → TNFi mono	734	410	“Minor side effect”, 129 (31%)	“Patient doing well”, 80 (20%)	“Patient preference”, 78 (19%)
TNFi combo → TNFi mono → TNFi combo	264	42	“Active disease”, 20 (48%)	“Minor side effect”, 10 (24%)	-
TNFi combo → TNFi mono → No DMARD	189	113	“Failure to maintain initial response”, 29 (26%)	“Other reason”, 15 (13%)	“Inadequate initial response”, 11 (10%)

TNFi mono → No DMARD	292	176	“Failure to maintain initial response”, 42 (24%)	“Minor side effect”, 37 (21%)	“Inadequate initial response”, 28 (16%)
TNFi mono → No DMARD → TNFi mono	85	24	“Active disease”, 13 (54%)	-	-
TNFi mono → No DMARD → non-TNFi b/tsDMARD mono	73	22	“Active disease”, 18 (82%)	-	-