

## SUPPLEMENTARY MATERIAL

**Table.** Multivariate Cox regression analysis for discontinuation of biological treatment.

Variable	Any cause HR (IC 95%)	Ineffectiveness/Loss of effectiveness HR (IC 95%)	Adverse reaction HR (IC 95%)
<b>Biologic agent</b>			
Anti-TNF	1	1	1
IFN $\beta$	1.88 (0.28-12.78)	0.27 (0.00-76.34)	0.62 (0.00-90.63)
Certolizumab	1.12 (0.70-1.80)	1.11 (0.58-2.10)	1.02 (0.37-2.80)
Glatiramere	2.24 (0.34-14.68)	0.34 (0.00-92.64)	0.87 (0.01-125.07)
Anakinra	1.85 (1.08-3.17)*	1.94 (0.90-4.15)	2.96 (1.06-8.22)*
Rituximab	0.85 (0.66-1.11)	0.49 (0.32-0.77)**	1.06 (0.62-1.82)
Abatacept	1.25 (0.81-1.94)	1.43 (0.85-2.41)	0.96 (0.35-2.66)
Tocilizumab	0.69 (0.40-1.18)	0.64 (0.31-1.30)	0.44 (0.11-1.81)
Golimumab	1.08 (0.53-2.19)	1.27 (0.51-3.13)	0.75 (0.10-5.50)
Ustekinumab	0.40 (0.23-0.68)**	0.60 (0.31-1.18)	-
Natalizumab	1.56 (0.21-11.8)	0.07 (0.00-27.65)	0.26 (0.00-53.97)
<b>Diseases</b>			
Rheumatoid arthritis	1	1	1
Psoriatic arthritis	0.64 (0.50-0.84)**	0.53 (0.37-0.78)**	0.46 (0.24-0.90)*
Ulcerative colitis	2.15 (1.45-3.18)***	1.96 (1.11-3.45)*	1.70 (0.68-4.22)
Crohn's disease	0.91 (0.70-1.19)	0.83 (0.57-1.20)	0.87 (0.49-1.56)
Multiple sclerosis	0.49 (0.07-3.31)	1.96 (0.00-538.37)	1.59 (0.01-229.03)
Ankylosing spondylitis	0.77 (0.61-0.98)*	0.56 (0.39-0.80)**	0.39 (0.19-0.79)
Psoriasis	0.95 (0.76-1.19)	0.61 (0.42-0.87)**	0.67 (0.38-1.18)
Off-label	1.13 (0.92-1.40)	0.85 (0.62-1.18)	0.76 (0.45-1.29)
<b>Treatment line</b>			
First	1	1	1
Second and successive	1.34 (1.17-1.54)***	1.72 (1.41-2.10)***	1.25 (0.91-1.73)

\*p&lt;0.05; \*\*p&lt;0.01; \*\*\*p&lt;0.001