

TREAtment patterns with broLucIZumab in GErmany – a retrospective cohort study based on longitudinal prescription data: REALIZE study

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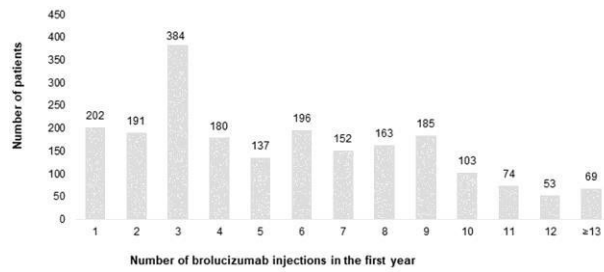
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Supplementary Material

Figure S1: Distribution of number of brolucizumab injections within 12 months overall (a) and in treatment-experienced persistent cohort (b)

(a)



(b)

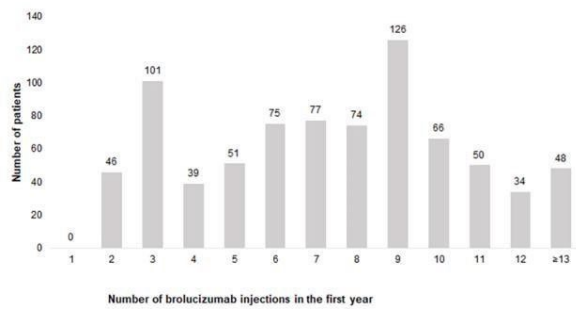
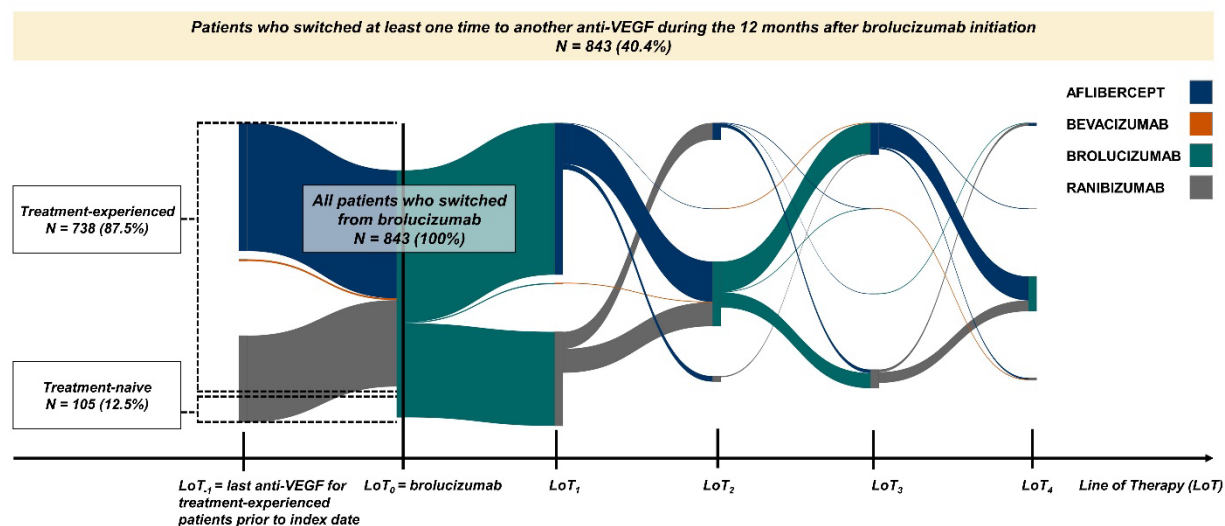


Figure S2: Sankey plot diagram of patients with at least 12-month follow-up (i.e., overall cohort) who switched at least one time after the first brolucizumab injection (i.e., index date) during the follow-up.



Legend: All patients that switch from one product are displayed with the same color of the product they switch to.

Table S1 Characteristics of patients with at least 18-month follow-up

Cohort 18-month follow up					
Overall			Treatment-naïve	Treatment-experienced (N = 441; 78.9%)	
N = 559; 100%			N = 118; 21.1%	Overall N = 441; 100%	Persistent N = 186; 42.2%
Age (years)	Mean (SD)	79.6 (7.8)	79.79 (8.4)	78.8 (7.7)	78.4 (8.5)
	Median (IQR)	81.0 (75.0 – 85.0)	81.0 (74.0 - 86.0)	80.0 (75.0 - 84.0)	79.5 (73.0 - 83.0)
	Min-Max	51.0 – 97.0	51.0 - 97.0	51.0 - 96.0	51.0 - 96.0)
	50-59	15 (2.7%)	3 (2.5%)	12 (2.7%)	0 (0.0%)
	60-69	48 (8.6%)	11 (9.3%)	37 (8.4%)	5 (2.7%)
	70-79	195 (34.9%)	38 (32.2%)	157 (35.6%)	22 (11.8%)
	≥80	301 (53.8%)	66 (56.0%)	235 (53.3%)	66 (35.5%)
Gender	Female	312 (55.8%)	78 (66.1%)	234 (53.1%)	93 (50.0%)
	Male	215 (38.5%)	30 (25.4%)	185 (41.9%)	83 (44.6%)
	Missing	32 (5.7%)	10 (8.5%)	22 (4.0%)	90 (48.4%)

Note: Treatment-naïve and Treatment-experienced cohorts are a sub-cohort of the Overall cohort. Treatment-experienced persistent cohort is a sub-cohort of overall experienced cohort.

Table S2 Characteristics of treatment-experienced patients with at least 18-month-follow-up

Cohort 18-month follow up (559; 100%)			
		<i>Treatment-experienced</i> (N = 441; 78.9%)	
		<i>Overall</i> N = 441; 100%	<i>Persistent</i> N = 186; 42.2%
Anti-VEGF agent before switch to brolucizumab	Aflibercept	239 (54.2%)	106 (57.0%)
	Bevacizumab	8 (1.8%)	3 (1.6%)
	Ranibizumab	194 (43.0%)	77 (41.4%)
Number of previous of anti-VEGF agents	1	215 (48.8%)	97 (52.2%)
	2	224 (50.8%)	88 (47.3%)
	3	2 (0.4%)	1 (0.5%)
Time since the first anti-VEGF injection (months)	Mean (SD)	36.8 (21.1)	35.0 (21.3)
	Median (IQR)	37.0 (17.0 - 58.0)	35.0 (16.0 - 55.0)
	Min-Max	1.0 - 66.0	1.0 - 66.0
Distribution of time since the first anti-VEGF injection (months)	<20	126 (28.6%)	58 (31.2%)
	[20-40)	103 (23.4%)	43 (23.1%)
	[40-60)	112 (25.4%)	49 (26.3%)
	≥60	100 (22.7%)	36 (19.4%)

Last treatment interval between anti-VEGF injections before switch to brolucizumab (weeks)	Mean (SD)	6.9 (8.8)	8.3 (12.4)
	Median (IQR)	5.0 (4.0 – 7.0)	5.1 (4.0 – 7.1)
	Min-Max	0.1 – 97.6	0.1 – 97.6
	Missing	11 (2.5%)	7 (3.8%)
Last three intervals between anti-VEGF injections before switch to brolucizumab (weeks)	Mean (SD)	7.0 (5.7)	7.7 (6.6)
	Median (IQR)	5.3 (4.5 – 7.5)	5.5 (4.7 – 7.7)
	Min-Max	1.1 – 51.7	1.1 – 51.7
	Missing	39 (8.8%)	23 (12.4%)

Note: Treatment-experienced persistent cohort is a sub-cohort of overall experienced cohort.

Table S3 Treatment intervals of cohort treatment-experienced 18-month persistent

Cohort treatment-experienced 18-month persistent			
		<i>Overall</i>	
		N = 186; 100%	
Patients who extended treatment intervals at month 18 compared to the last interval before the switch		Number	129 (69.3%)
Last treatment interval between anti-VEGF injections before switch to brolucizumab (weeks)		Mean (SD)	8.3 (12.4)
		Median (IQR)	5.1 (4.0 – 7.1)
		Min-Max	0.1 – 97.6
		Missing	7 (3.7%)
Last treatment interval between brolucizumab injections at month 18 after switch to brolucizumab (weeks)		Mean (SD)	9.2 (4.1)
		Median (IQR)	8.5 (6.1 – 12.0)
		Min-Max	3.3 – 25.0
Last treatment interval between brolucizumab injections at month 18 after switch to brolucizumab stratified by the length of last interval before switch to brolucizumab (weeks)*	<4 weeks	Number	23 (12.4%)
		Mean (SD)	8.9 (3.5)
		Median (IQR)	9.0 (6.7 – 12.0)
		Min-Max	3.0 – 14.9
	[4-6] weeks	Number	88 (47.3%)
		Mean (SD)	8.9 (3.9)
		Median (IQR)	8.1 (6.1 – 11.0)

[6-8) weeks	Min-Max	3.3 – 25.0
	Number	27 (14.5%)
	Mean (SD)	9.1 (3.2)
	Median (IQR)	8.7 (6.4 – 11.1)
[8-10) weeks	Min-Max	3.9 – 14.4
	Number	17 (9.1%)
	Mean (SD)	8.7 (4.2)
	Median (IQR)	8.0 (6.1 – 10.0)
[10-12) weeks	Min-Max	3.9 – 20.9
	Number	6 (3.2%)
	Mean (SD)	12.2 (7.8)
	Median (IQR)	8.0 (7.7 – 18.9)
≥12 weeks	Min-Max	5.9 – 25.0
	Number	18 (9.7%)
	Mean (SD)	10.8 (5.7)
	Median (IQR)	10.1 (6.4 – 13.7)
	Min-Max	3.4 – 22.0

Note: Treatment-experienced persistent cohort is a sub-cohort of overall experienced cohort.

** Calculated based on number of patients with a pre-switch interval between two anti-VEGF prescriptions (i.e., 179 [96.2%])*