

**Endothelial cell-derived Angiopoietin-2 is a therapeutic target in treatment-naïve and Bevacizumab-resistant glioblastoma, A. Scholz et al., Appendix**

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**Appendix Table S1: Clinical data of the GBM matched biopsy cohort**

Patient ID	Age at diagnosis (years)	Sex	MGMT status	Bev treatment (days)	Last Bev therapy prior to histology (days)
1	51	m	U	91	179
2	30	m	U	407	204
3	52	m	U	84	35
4	41	f	U	166	113
5	56	m	n.a.	288	45
6	47	m	U	214	133
7	39	m	M	42	21
8	41	m	n.a.	528	23
9	32	m	M	154	53
10	63	m	U	336	64
11	72	f	U	392	37
12	70	f	U	258	34
13	63	f	U	280	33
14	46	f	U	170	96
15	62	f	U	210	14
16	43	m	U	140	31
17	45	f	U	281	34
18	49	m	n.a.	84	32
19	65	m	n.a.	62	36
20	66	f	M	293	56
21	55	m	U	n.a.	150
22	51	m	U	90	30
24	65	m	U	180	267
25	53	m	n.a.	114	27
26	41	m	U	217	23
27	49	m	M	160	16
28	59	m	U	n.a.	104
29	55	f	M	326	40
30	62	m	M	117	23

M = male, f = female, n.a = not available, MGMT = O6-Methylguanine-DNA-Methyltransferase, U = unmethylated, M = methylated, Bev = Bevacizumab

**Appendix Table S2: P values Figures, Expanded View Figures**

	P value	
<b>Figure 1 D</b>		
Kruskal-Wallis (Dunn's post test)		
Normal brain vs. Diffuse low grade glioma	> 0,9999	
Normal brain vs. Anaplastic astrocytoma	0,1497	
Normal brain vs. Glioblastoma	0,0006	
Diffuse low grade glioma vs. Anaplastic astrocytoma	0,582	
Diffuse low grade glioma vs. Glioblastoma	< 0,0001	
Anaplastic astrocytoma vs. Glioblastoma	0,0519	
<b>Figure 2 B (CD31)</b>		
Unpaired t test		
P value	0,0277	
<b>Figure 2 B (Desmin)</b>		
Unpaired t test		
P value	0,0425	
<b>Figure 2 D</b>		
Unpaired t test		
P value	0,0091	
<b>Figure 2 F</b>		
Unpaired t test		
P value	0,0017	
<b>Figure 3 B (Iba1)</b>		
Kruskal-Wallis (Dunn's post test)		
normal brain vs. low grade Glioma	0,8432	
normal brain vs. anaplastic Astrocytoma	0,0958	
normal brain vs. Glioblastoma	0,0008	
low grade Glioma vs. anaplastic Astrocytoma	> 0,9999	

low grade Glioma vs. Glioblastoma	0,0179	
anaplastic Astrocytoma vs. Glioblastoma	> 0,9999	
<b>Figure 3 B (CD15)</b>		
Kruskal-Wallis (Dunn's post test)		
normal brain vs. low grade Glioma	0,5997	
normal brain vs. anaplastic Astrocytoma	0,0341	
normal brain vs. Glioblastoma	< 0,0001	
low grade Glioma vs. anaplastic Astrocytoma	0,7896	
low grade Glioma vs. Glioblastoma	0,005	
anaplastic Astrocytoma vs. Glioblastoma	0,7476	
<b>Figure 3 B (CD3)</b>		
Kruskal-Wallis (Dunn's post test)		
normal brain vs. low grade Glioma	> 0,9999	
normal brain vs. anaplastic Astrocytoma	0,2333	
normal brain vs. Glioblastoma	0,0109	
low grade Glioma vs. anaplastic Astrocytoma	0,1487	
low grade Glioma vs. Glioblastoma	0,0006	
anaplastic Astrocytoma vs. Glioblastoma	> 0,9999	
<b>Figure 4 B (CD31)</b>		
Kruskal-Wallis (Dunn's post test)		
Control vs. AMG386	0,4935	
Control vs. Aflibercept	0,3661	
Control vs. Aflibercept + AMG386	< 0,0001	
AMG386 vs. Aflibercept	> 0,9999	
AMG386 vs. Aflibercept + AMG386	0,0213	
Aflibercept vs. Aflibercept + AMG386	0,0141	
<b>Figure 4 B (Desmin)</b>		
Kruskal-Wallis (Dunn's post test)		
Control vs. AMG386	0,0013	
Control vs. Aflibercept	< 0,0001	

Control vs. Aflibercept + AMG386	0,0432	
AMG386 vs. Aflibercept	> 0,9999	
AMG386 vs. Aflibercept + AMG386	> 0,9999	
Aflibercept vs. Aflibercept + AMG386	0,6722	
<b>Figure 4 D</b>		
one-way ANOVA (Tukey's post test)		
Control vs. AMG386	0,2356	
Control vs. Aflibercept	0,0068	
Control vs. Aflibercept + AMG386	0,034	
AMG386 vs. Aflibercept	0,116	
AMG386 vs. Aflibercept + AMG386	0,5378	
Aflibercept vs. Aflibercept + AMG386	0,6353	
<b>Figure 4 E</b>		
one-way ANOVA (Tukey's post test)		
Control vs. AMG386	0,5994	
Control vs. Aflibercept	0,047	
Control vs. Aflibercept + AMG386	0,0017	
AMG386 vs. Aflibercept	0,4422	
AMG386 vs. Aflibercept + AMG386	0,0245	
Aflibercept vs. Aflibercept + AMG386	0,2332	
<b>Figure 4 H (F4/80)</b>		
one-way ANOVA (Tukey's post test)		
control vs. AMG386	< 0,0001	
control vs. Zaltrap	< 0,0001	
control vs. AMG386 + Zaltrap	< 0,0001	
AMG386 vs. Zaltrap	0,9915	
AMG386 vs. AMG386 + Zaltrap	0,6402	
Zaltrap vs. AMG386 + Zaltrap	0,8217	
<b>Figure 4 H (CD3)</b>		
one-way ANOVA (Tukey's post test)		

control vs. AMG386	0,1972	
control vs. Zaltrap	< 0,0001	
control vs. AMG386 + Zaltrap	0,3494	
AMG386 vs. Zaltrap	0,065	
AMG386 vs. AMG386 + Zaltrap	0,9995	
Zaltrap vs. AMG386 + Zaltrap	0,213	

#### **Figure 4 H (Ly6G)**

one-way ANOVA (Tukey's post test)		
control vs. AMG386	0,6334	
control vs. Vasculotide + Zaltrap	0,916	
control vs. Zaltrap	0,1256	
AMG386 vs. Vasculotide + Zaltrap	0,3997	
AMG386 vs. Zaltrap	0,0257	
Vasculotide + Zaltrap vs. Zaltrap	0,5399	

#### **Figure 4 I**

	log-rank	wilcoxon
control vs AMG386	< 0,0001	< 0,0001
control vs afibbercept	< 0,0001	< 0,0001
control vs AMG386+afibbercept	< 0,0001	< 0,0001
afibbercept vs AMG386 + afibbercept	< 0,0001	< 0,0001

#### **Figure 4 K (CD206)**

one-way ANOVA (Tukey's post test)		
Control vs. AMG386	0,0424	
Control vs. Aflibercept	0,4676	
Control vs. Aflibercept + AMG386	0,0751	
AMG386 vs. Aflibercept	0,8121	
AMG386 vs. Aflibercept + AMG386	0,9013	
Aflibercept vs. Aflibercept + AMG386	0,572	

#### **Figure 4 K (ratio)**

one-way ANOVA (Tukey's post test)		

Control vs. AMG386	0,0528	
Control vs. Aflibercept	< 0,0001	
Control vs. Aflibercept + AMG386	< 0,0001	
AMG386 vs. Aflibercept	0,1254	
AMG386 vs. Aflibercept + AMG386	0,0011	
Aflibercept vs. Aflibercept + AMG386	0,1251	

#### **Figure 4 L**

one-way ANOVA (Tukey's post test)		
Control vs. AMG386	0,0146	
Control vs. Aflibercept	0,1278	
Control vs. Aflibercept + AMG386	0,1872	
AMG386 vs. Aflibercept	0,5303	
AMG386 vs. Aflibercept + AMG386	0,4028	
Aflibercept vs. Aflibercept + AMG386	0,9945	

#### **Figure 5 D**

Kruskal-Wallis (Dunn's post test)		
treatment-naive GBM vs. S / RTx / CTx	> 0,9999	
treatment-naive GBM vs. S / RTx / CTx / Bev	0,0296	
S / RTx / CTx vs. S / RTx / CTx / Bev	0,2799	

#### **Figure 5 G**

Kruskal-Wallis (Dunn's post test)		
treatment-naive GBM vs. S / RTx / CTx	> 0,9999	
treatment-naive GBM vs. S / RTx / CTx / Bev	0,0268	
S / RTx / CTx vs. S / RTx / CTx / Bev	0,6731	

#### **Figure 5 H**

Kruskal-Wallis (Dunn's post test)		
treatment-naive GBM vs. S / RTx / CTx	0,0352	
treatment-naive GBM vs. S / RTx / CTx / Bev	< 0,0001	
S / RTx / CTx vs. S / RTx / CTx / Bev	> 0,9999	

<b>Figure 6 C</b>		
Kruskal-Wallis (Dunn's post test)		
treatment-naive GBM vs. S / RTx / CTx	0,033	
treatment-naive GBM vs. S / RTx / CTx / Bev	< 0,0001	
S / RTx / CTx vs. S / RTx / CTx / Bev	> 0,9999	
<b>Figure 6 E</b>		
Kruskal-Wallis (Dunn's post test)		
treatment-naive GBM vs. S / RTx / CTx	> 0,9999	
treatment-naive GBM vs. S / RTx / CTx / Bev	0,0044	
S / RTx / CTx vs. S / RTx / CTx / Bev	0,3274	
<b>Figure 6 H</b>		
Kruskal-Wallis (Dunn's post test)		
treatment-naive GBM vs. S / RTx / CTx	> 0,9999	
treatment-naive GBM vs. S / RTx / CTx / Bev	< 0,0001	
S / RTx / CTx vs. S / RTx / CTx / Bev	0,1153	
<b>Expanded View Figure 1 C</b>		
Kruskal-Wallis (Dunn's post test)		
Low grade glioma vs. Anaplastic astrocytoma	> 0,9999	
Low grade glioma vs. Glioblastoma	0,0001	
Anaplastic astrocytoma vs. Glioblastoma	< 0,0001	
<b>Expanded View Figure 1 D</b>		
Kruskal-Wallis (Dunn's post test)		
NAGM vs. NAWM	0,2833	
NAGM vs. Infiltration zone	< 0,0001	
NAGM vs. Tumor center	< 0,0001	
NAWM vs. Infiltration zone	0,8571	
NAWM vs. Tumor center	< 0,0001	
Infiltration zone vs. Tumor center	0,0004	

<b>Expanded View Figure 3 B</b>		
2-way ANOVA		
day 5		
Control vs. Zaltrap	> 0,9999	
Control vs. AMG386	> 0,9999	
Control vs. AMG386+Zaltrap	> 0,9999	
Zaltrap vs. AMG386	> 0,9999	
Zaltrap vs. AMG386+Zaltrap	> 0,9999	
AMG386 vs. AMG386+Zaltrap	> 0,9999	
day 12		
Control vs. Zaltrap	0,9366	
Control vs. AMG386	0,984	
Control vs. AMG386+Zaltrap	0,9286	
Zaltrap vs. AMG386	0,9978	
Zaltrap vs. AMG386+Zaltrap	> 0,9999	
AMG386 vs. AMG386+Zaltrap	0,9969	
day 19		
Control vs. Zaltrap	< 0,0001	
Control vs. AMG386	0,003	
Control vs. AMG386+Zaltrap	< 0,0001	
Zaltrap vs. AMG386	0,6217	
Zaltrap vs. AMG386+Zaltrap	0,9974	
AMG386 vs. AMG386+Zaltrap	0,7294	
<b>Expanded View Figure 3 C</b>		
one-way ANOVA		
Control vs. AMG386	0,244	
Control vs. Aflibercept	0,5311	
Control vs. Aflibercept+ AMG386	0,0039	
AMG386 vs. Aflibercept	0,9378	
AMG386 vs. Aflibercept+ AMG386	0,2402	
Aflibercept vs. Aflibercept+ AMG386	0,0787	