

**Supplementary Table 1.** Statistical data after analyzing the role of Caf in GM-IVH in the short (P14) and the long (P70) term.

Study	Short term (p14)	Long term (P70)
Distance travelled in the open field		[F <sub>(2,70)</sub> =1.59, p=0.211]
Time in rotarod		[F <sub>(2,73)</sub> =1.60, p=0.209]
Maximum speed in rotarod		[F <sub>(5,72)</sub> =0.906, p=0.482]
Swimming velocity in the MWM		[F <sub>(2,73)</sub> =2.70, p=0.074]
What paradigm in the NOD test		[F <sub>(5,200)</sub> =2.32, p=0.038; †p=0.014 vs. Control+Caf10, Control+Caf20 and Col+Caf10]
Where paradigm in the NOD test		[F <sub>(5,213)</sub> =1.28, p=0.278]
When paradigm in the NOD test		[F <sub>(2,209)</sub> =3.97, p=0.002; ‡‡p<0.001 vs. Control, Control+Caf10, Col+Caf10 and Col+Caf20]
Time along acquisition phase of the MWM		day 1 $[F_{(5,305)}=1.72, p=0.128]$ day 2 $[F_{(5,307)}=0.315, **p=0.009 \text{ vs.}$ rest of the groups day 3 $[F_{(5,310)}=2.52, \frac{++}{1+}p=0.029 \text{ vs.}$ Control, Control+Caf10 and Control+Caf20] day 4 $[F_{(5,270)}=5.050, \ \ddagger p<0.01 \text{ vs.}$ Control and Control+Caf10]
Number of entrances in quadrant 2 in the retention 1 of the MWM		[F <sub>(2,67)</sub> =5.88, p=0.004; TTp=0.003 vs. Control, Control+Caf10, Control+Caf20, Col+Caf10]
Number of entrances in quadrant 2 in the retention 2 of the MWM		[F <sub>(2,65)</sub> =4.60, p=0.013; ‡p=0.047 vs. Control+Caf10 and Control+Caf20]
Brain/body weight ratio	$[F_{(2,87)}=4.24, \dagger p=0.017 \text{ vs. Control,}$ Control+Caf10 and Control+Caf20]-	$[F_{(2,93)}=8.38, **p<0.01 \text{ vs. rest of the groups}]$
Cortex size	F <sub>(5,236)</sub> =3.30, p=0.038, **p<0.001 vs. rest of the groups, \(\preceq\text{p}\)=0.001 vs. Control+caf10]	[F <sub>(2,187)</sub> =3.32, p=0.038, #p=0.007 vs. Control+Caf20, Col+Caf10 and Col+Caf20]
Hippocampus size	[F <sub>(2,117)</sub> =0.117, p=0.890]	[F <sub>(2,83)</sub> =0.779, p=0.453]
Ventricle size	[F <sub>(2,107)</sub> =0.198, p=0.5]	[F <sub>(2,163)</sub> =3.12, p=0.046; TTp=0.005 vs. Control, Control+Caf10,

## Supplementary Material

		Control+Caf20, Col+Caf20]	
Cortex NeuN/DAPI ratio	[F <sub>(2,271)</sub> =9.53, p<0.001; **p<0.01 vs. rest of the groups]-	[F <sub>(2,2983)</sub> =4.45, p=0.012; **p<0.01 vs. rest of the groups]	
SVZ NeuN/DAPI ratio	P14 $[F_{(2,420)}=11.82, p<0.01;$ **p<0.01 vs. rest of the groups]	[F <sub>(2,559)</sub> =0.351, p=0.704]	
Cortex neurite curvature ratio	$[F_{(2,4048)}=16.79, p<0.01; **p<0.01]$ vs. rest of the groups, ††p<0.01 vs. Control, Control+Caf10 and Control+Caf20]	[F <sub>(2,3645)</sub> =2.65, p=0.071]	
SVZ neurite curvature ratio	F <sub>(2,1129)</sub> =7.27, p=0.001; **p<0.01 vs. rest of the groups]	[F <sub>(2,1016)</sub> =0.269, p=0.765]	
Cortex P-tau/ total tau ratio	$[F_{(2,30)}=3.33, p=0.49; \perp p=0.006]$ vs. Control and Control+Caf10]	[F <sub>(2,26)</sub> =0.016, p=0.984]	
Striatum P-tau/total tau ratio	[F <sub>(2,27)</sub> =0.031, p=0.970]	[F <sub>(2,25)</sub> =0.768, p=0.474]	
Density of Ki67 <sup>+</sup> cells	[F <sub>(2,94)</sub> =1.74 p=0.181]	[F <sub>(2,85)</sub> =0.023, p=0.977]	
DCX burden	[F <sub>(2,95)</sub> =5.86, p=0.003; ##p=0.004 vs. Control and <u>C</u> eol+Caf20]	[F <sub>(2,83)</sub> =0.694, p=0.503]	
DCX/ Ki67 <sup>+</sup> ratio	[F <sub>(2,96)</sub> =0.00, p=1.00]	[F <sub>(2,84)</sub> =0.00, p=1.00]	
Cortex hemorrhage burden	$[F_{(2,150)}=4.27, p=.016; \overline{TT} p=0.001]$ vs. Control, Control+Caf20 and Col+Caf20]	[F <sub>(2,153)</sub> =12.02, p<0.001, **p=0.001 vs. rest of the groups]	
SVZ hemorrhage burden	$[F_{(2,73)}=5.93, p=0.004, **p=0.003]$ vs. rest of the groups]	[F <sub>(2,71)</sub> =4.74, p=0.012, ††p=0.010 vs. Control, Control+Caf10, Control+Caf20 and Col+Caf20]	
Cortex microglia burden	[F <sub>(2,1814)</sub> =87.42, p<0.001, **p<0.01 vs. rest of the groups, TTp<0.01 vs. Control+Caf20]	[F <sub>(2,2914)</sub> =6.22, p=0.002; ††p<0.01 vs. Control, Control+Caf10, Col+Caf10 and Col+Caf20]	
SVZ microglia burden	F <sub>(2,335)</sub> =12.11, p<0.001; **p<0.01 vs. rest of the groups, TTp<0.01 vs. Control+Caf20]	[F <sub>(2,547)</sub> =7.14, p=0.001; **p<0.01 vs. rest of the groups]	

**Supplementary Table 2.** Hemorrhage burden are limited by Caf treatment in the cortex and SVZ both in the short (P14) and the Long (P70) term.

**Supplementary Table 2.** Hemorrhage burden was ameliorated by Caf treatement in the cortex and the hippocampus in animilas with GM-IVH.

	Hemorrhage burden (% area affected)			
	Cortex		SVZ	
Group	P14	P70	P14	P70
Control	0.057±0.006	0.022±0.003	0.138±0.035	0.446±0.130
Control+Caf10	0.066±0.006	0.036±0.003	0.279±0.050	0.451±0.231
Control+Caf20	0.054±0.005	0.046±0.006	0.252±0.049	0.506±0.363
Col	0.084±0.007 <b>TT</b>	0.173±0.035**	0.841±0.307**	1.634±0.362††
Col+Caf10	0.047±0.006	0.070±0.009	0.359±0.067	0.959±0.316
Col+Caf20	0.061±0.03	0.055±0.009	0.162±0.054	0.524±0.120

Hemorrhage burden was increased in the cortex from animals with Col lesions. Caf treatment limited this situation in the short  $[F_{(2,150)}=4.27, p=.016; TTp=0.001 \text{ vs. Control}, Control+Caf20 \text{ and Col+Caf20}].$  In the long term, Caf treatment completely counterbalanced increased cortical hemorrhage burden  $[F_{(2,153)}=12.02, p<0.001, **p=0.001 \text{ vs. rest of the groups}]$ ). Hemorrhage burden was also improved in the SVZ after Caf treatment at P14  $[F_{(2,73)}=5.93, p=0.004, **p=0.003 \text{ vs. rest of the groups}]$ . By P70 Caf at the highest dose (20 mg/Kg/day) successfully reduced hemorrhage burden in the SVZ  $[F_{(2,71)}=4.74, p=0.012, \dagger \dagger p=0.010 \text{ vs. Control}, Control+Caf10, Control+Caf20 and Col+Caf20]$ .