

Supplemental Table 1. Cytokine levels measured by a planar electrochemiluminescence multiplex assay in plasma samples from healthy controls (HC; n=11), subjects with secondary brain metastases from other organs (BrMet; n=17), and individuals with glioblastoma (GBM; n=27). Concentrations are shown as mean pg/mL \pm SD. P-values were determined by one-way ANOVA adjusted for multiple comparisons using Tukey test. Differences from HC that are not significant are labeled “ns”. **Bolded** analyte concentrations are significantly different between multiplex assay platforms.

Cytokine	HC Conc. pg/mL \pm SD	BrMet Conc. pg/mL \pm SD	% of HC	P-value vs HC	GBM Conc. pg/mL \pm SD	% of HC	P-value vs HC
GM-CSF	0.11 \pm 0.05	0.06 \pm 0.04	54.5%	0.0002	0.04 \pm 0.02	36.4%	<0.0001
IFN- γ	3.97 \pm 1.59	2.89 \pm 3.86	72.8%	ns	0.64 \pm 0.87	16.1%	0.001
IL-1 β	0.03 \pm 0.03	0.15 \pm 0.09	500%	0.0004	0.10 \pm 0.07	333%	0.043
IL-2	0.15 \pm 0.16	0.10 \pm 0.17	66.6%	ns	0.07 \pm 0.11	46.7%	ns
IL-4	0.004 \pm 0.005	0.007 \pm 0.006	175%	ns	0.005 \pm 0.005	125%	ns
IL-5	0.41 \pm 0.28	0.09 \pm 0.09	21.9%	<0.0001	0.06 \pm 0.04	14.6%	<0.0001
IL-6	0.78 \pm 0.19	1.70 \pm 1.05	218%	0.041	1.43 \pm 0.97	183%	ns
IL-7	0.57 \pm 0.23	10.41 \pm 5.06	183%	<0.0001	10.39 \pm 5.26	182%	<0.0001
IL-8	3.30 \pm 1.44	13.21 \pm 12.12	400%	0.0038	7.03 \pm 3.59	213%	ns
IL-10	0.23 \pm 0.07	4.78 \pm 4.30	2078%	ns	8.20 \pm 10.81	3565%	0.021
IL-12 p70	0.12 \pm 0.09	0.11 \pm 0.08	91.7%	ns	0.09 \pm 0.08	75%	ns
IL-13	0.09 \pm 0.13	0.34 \pm 0.51	378%	ns	0.23 \pm 0.30	256%	ns
IL-17A	0.95 \pm 0.48	0.69 \pm 0.62	72.6%	ns	0.30 \pm 0.20	31.6%	0.0006
IL-21	0.00 \pm 0.00	0.00 \pm 0.00	0%	ns	0.00 \pm 0.00	0%	ns
IL-23	0.22 \pm 0.64	0.05 \pm 0.16	22.7%	ns	0.07 \pm 0.17	31.8%	ns
MIP-1 α	7.13 \pm 3.11	8.60 \pm 4.40	121%	ns	5.94 \pm 3.12	83.3%	ns
MIP-1 β	38.56 \pm 12.05	66.88 \pm 30.38	173%	ns	67.95 \pm 34.92	176%	0.024
MIP-3 α	9.36 \pm 7.49	5.22 \pm 3.45	55.8%	ns	4.42 \pm 3.69	47.1%	0.012
TNF- α	1.70 \pm 0.47	1.69 \pm 0.73	99.4%	ns	0.90 \pm 0.53	52.9%	0.0012