

Supplemental Table 1: Baseline Mean CSF Biomarkers by CSF Quantitative Culture Tertile

Biomarkers log ₂ pg/mL	CSF Culture Sterile		CSF CFU 1-14,700		CSF CFU 14,701-206,000		CSF CFU >206,000		P-value
	N	Mean (95% CI)	N	Mean (95% CI)	N	Mean (95% CI)	N	Mean (95% CI)	
Mediate inflammatory responses									
IL-1α	24	2.0 (1.1, 2.8)	98	1.0 (0.5, 1.5)	99	1.3 (0.9, 1.7)	113	1.3 (1.0, 1.7)	0.23
IL-6	24	9.2 (7.8, 10.6)	98	8.3 (7.6, 8.9)	99	7.4 (6.7, 8.1)	113	7.4 (6.9, 8.0)	0.02
IL-1β	24	1.9 (1.0, 2.8)	98	0.7 (0.2, 1.2)	99	0.9 (0.6, 1.3)	113	1.0 (0.6, 1.3)	0.09
PDGF-aa	24	6.9 (6.4, 7.4)	98	6.2 (5.9, 6.5)	99	6.2 (6.0, 6.4)	113	6.3 (6.1, 6.6)	0.08
PDGF-ab	24	1.0 (-0.3, 2.3)	98	-0.2 (-0.8, 0.4)	99	-0.1 (-0.8, 0.6)	113	-0.2 (-0.9, 0.4)	0.39
VEGF	24	6.1 (5.7, 6.6)	98	5.5 (5.2, 5.8)	99	5.3 (5.0, 5.5)	113	5.5 (5.3, 5.8)	0.05
FGF-basic	24	0.2 (-0.8, 1.2)	98	0.0 (-0.4, 0.4)	99	0.2 (-0.2, 0.6)	113	-0.3 (-0.7, 0.1)	0.31
T-helper cell Type 1 (Th ₁) immune response									
IL-12	24	2.6 (1.8, 3.4)	98	1.6 (1.1, 2.1)	99	1.9 (1.6, 2.3)	113	2.1 (1.8, 2.4)	0.12
IL-15	24	1.5 (1.1, 2.0)	98	1.1 (0.7, 1.6)	99	1.5 (1.2, 1.8)	113	1.7 (1.4, 1.9)	0.13
IFN-γ	24	3.0 (2.0, 3.9)	98	1.7 (1.2, 2.2)	99	1.4 (0.9, 1.8)	113	1.3 (0.9, 1.7)	0.02
TNF-α	24	5.6 (4.7, 6.5)	98	5.0 (4.5, 5.5)	99	5.1 (4.7, 5.6)	113	5.2 (4.9, 5.6)	0.70
GM-CSF	24	6.2 (5.4, 7.0)	98	5.2 (4.9, 5.5)	99	4.9 (4.6, 5.2)	113	5.0 (4.7, 5.2)	<0.001
GranzymeB	24	4.5 (3.3, 5.7)	98	3.5 (2.9, 4.1)	99	3.4 (2.9, 3.9)	113	3.4 (2.9, 3.8)	0.30
TRAIL	24	3.2 (2.4, 4.0)	98	2.0 (1.5, 2.5)	99	2.1 (1.6, 2.6)	113	2.2 (1.9, 2.6)	0.14
CCL2 (MCP1)	24	9.6 (9.2, 10.1)	98	9.6 (9.4, 9.9)	99	9.8 (9.5, 10.1)	113	10.2 (9.9, 10.4)	0.03
CCL3 (MIP1α)	24	5.1 (4.4, 5.8)	98	4.6 (4.2, 5.0)	99	5.2 (4.9, 5.5)	113	5.4 (5.2, 5.6)	<0.01
CCL4 (MIP1β)	24	7.5 (6.9, 8.2)	98	7.1 (6.8, 7.4)	99	7.3 (7.1, 7.5)	113	7.3 (7.1, 7.5)	0.53
CCL5 (RANTES)	17	5.8 (4.5, 7.1)	66	4.7 (4.0, 5.3)	65	4.8 (4.2, 5.5)	78	4.5 (3.9, 5.1)	0.35
CXCL10 (IP10)	24	10.9 (10.2, 11.5)	98	10.9 (10.6, 11.2)	99	10.6 (10.3, 10.9)	113	10.3 (9.9, 10.7)	0.09
T-helper cell Type 2 (Th ₂) immune response									
IL-4	24	-0.3 (-1.0, 0.4)	98	-1.1 (-1.7, -0.4)	99	-0.1 (-0.6, 0.3)	113	-0.2 (-0.7, 0.3)	0.08
IL-5	24	0.8 (-0.3, 1.9)	98	-0.2 (-0.8, 0.3)	99	-0.5 (-1.0, 0.0)	113	-0.7 (-1.1, -0.3)	0.07
IL-13	24	4.4 (3.7, 5.0)	98	3.8 (3.5, 4.2)	99	4.0 (3.6, 4.3)	113	4.0 (3.7, 4.3)	0.51
IL-33	24	1.9 (0.3, 3.5)	98	1.4 (0.7, 2.1)	99	1.3 (0.5, 2.1)	113	1.2 (0.5, 2.0)	0.89
IL-25	24	3.3 (2.5, 4.0)	98	2.7 (2.1, 3.3)	99	3.1 (2.6, 3.7)	113	3.4 (2.9, 3.8)	0.31
Eotaxin	24	3.7 (3.0, 4.4)	98	3.1 (2.8, 3.5)	99	3.2 (2.9, 3.6)	113	3.3 (3.0, 3.6)	0.52
Type 3 (Th ₁₇) immune response									
IL-17	24	2.0 (0.8, 3.1)	98	0.6 (0.0, 1.2)	99	-0.2 (-0.7, 0.4)	113	-0.3 (-0.8, 0.2)	<0.01
G-CSF	24	7.0 (5.9, 8.1)	98	5.1 (4.6, 5.6)	99	4.7 (4.3, 5.0)	113	5.0 (4.6, 5.3)	<0.001
CXCL1 (GROA)	24	8.3 (7.3, 9.3)	98	7.1 (6.5, 7.7)	99	7.1 (6.6, 7.6)	113	7.1 (6.7, 7.5)	0.22
CXCL2 (GROB)	24	4.8 (3.9, 5.6)	98	3.5 (3.0, 3.9)	99	3.3 (2.8, 3.7)	113	3.7 (3.3, 4.0)	0.02
IL-8 (CXCL8)	24	9.4 (8.5, 10.4)	98	8.7 (8.2, 9.2)	99	8.6 (8.2, 9.1)	113	8.7 (8.3, 9.1)	0.51
CCL20 (MIP3α)	24	2.7 (2.0, 3.4)	98	1.8 (1.4, 2.2)	99	1.8 (1.5, 2.2)	113	1.8 (1.5, 2.2)	0.17

Modulate/dampen Immune Responses									
IL-1ra	24	11.2 (10.2, 12.3)	98	11.5 (11.1, 11.9)	99	11.7 (11.3, 12.0)	113	12.0 (11.7, 12.3)	0.14
IL-10	24	7.9 (7.1, 8.6)	98	7.8 (7.6, 8.1)	99	7.7 (7.5, 7.9)	113	7.6 (7.4, 7.9)	0.69
IL-2	24	2.6 (2.0, 3.2)	98	1.9 (1.4, 2.3)	99	2.1 (1.8, 2.4)	113	2.0 (1.7, 2.3)	0.29
TGF- α	24	3.0 (2.2, 3.8)	98	2.5 (2.1, 3.0)	99	2.8 (2.5, 3.1)	113	3.0 (2.6, 3.3)	0.42
EGF	24	0.4 (-0.8, 1.6)	98	0.2 (-0.3, 0.7)	99	0.3 (-0.2, 0.8)	113	0.4 (-0.1, 1.0)	0.92
Immune Exhaustion									
PD-L1	24	7.1 (6.5, 7.7)	98	6.4 (6.0, 6.8)	99	6.4 (6.1, 6.7)	113	6.5 (6.2, 6.8)	0.34
Other									
CCL19 (MIP3 β)	24	7.4 (6.4, 8.4)	98	6.7 (6.3, 7.1)	99	6.3 (5.9, 6.6)	113	6.0 (5.7, 6.3)	<0.01
TNFSF5 (CD40L)	24	8.5 (7.6, 9.4)	98	7.8 (7.3, 8.3)	99	7.8 (7.4, 8.3)	113	7.9 (7.6, 8.3)	0.53
Fractalkine (CS3CL1)	24	8.7 (8.3, 9.0)	98	8.0 (7.6, 8.3)	99	7.9 (7.6, 8.2)	113	8.1 (7.9, 8.4)	0.20
Flt3Ligand	24	7.1 (6.8, 7.5)	98	6.5 (6.2, 6.7)	99	6.5 (6.3, 6.7)	113	6.5 (6.3, 6.7)	0.05
IFN- α	24	3.1 (2.2, 3.9)	98	1.6 (1.0, 2.2)	99	1.7 (1.3, 2.1)	113	2.1 (1.7, 2.4)	0.02
IFN- β	24	-1.0 (-2.1, 0.1)	98	-1.3 (-1.9, -0.8)	98	-1.0 (-1.5, -0.6)	113	-1.1 (-1.6, -0.6)	0.83
IL-3	24	0.9 (-0.3, 2.2)	98	1.1 (0.6, 1.7)	99	1.3 (0.7, 2.0)	113	1.4 (0.8, 2.0)	0.87
IL7	24	0.9 (0.1, 1.7)	98	0.6 (0.2, 1.0)	99	0.7 (0.3, 1.1)	113	0.8 (0.5, 1.1)	0.78

Values presented as log2 pg/mL. P-value from unadjusted linear regression.