

Supplemental Table 1. Comparison of publications depicting cytokine fluctuation in ME/CFS and our long-COVID cytokine results.

Cytokine	Higher in ME/CFS	Lower in ME/CFS	No Change	Total Studies	Long-COVID
Pro-inflammatory					
IL-1b	7 (28%) [1-7]	0	18 (72%) [8-25]	25	NC
TNF α	4 (15%) [1, 2, 5, 21]	0	22 (85%) [4, 6-20, 22, 24-28]	26	NC
IL-6	6 (24%) [1, 4, 6, 7, 11, 29]	2 (8%) [2, 9]	17 (68%) [8, 10, 12-16, 18, 19, 21, 23, 24, 26, 30-33]	25	Down
Anti-inflammatory					
IL-10	2 (13%) [1, 2]	1 (6%) [9]	12 (81%) [4, 6-8, 11-16, 18, 28]	15	NC
IL-13	1 (16%) [1]	0	5 (84%) [6-9, 13-15]	6	Down
Th1					
IL-2	2 (14%) [11, 13]	0	12 (86%) [1, 4, 7-9, 13-15, 18, 21, 25, 34]	14	Down
IL-12	3 (30%) [1, 7, 11]	0	7 (70%) [6, 8, 9, 13-15, 18]	10	NC
IFN γ	2 (13%) [1, 11]	1 (6%) [2]	12 (81%) [6-10, 13-15, 22, 23, 25, 28]	15	Down to 0
Th2					
IL-5	1 (14%) [7]	1 (14%) [1]	5 (72%) [8, 9, 11, 13, 14]	7	NC
IL-4	2 (18%) [1, 7]	0	9 (82%) [8, 9, 11-16, 21]	11	Down
Th17					
IL-17	0	2 (33%) [1, 9]	4 (66%) [7, 8, 13, 14]	6	Down
NK-cell attractant					
IL-8	3 (23%) [2, 6, 14]	3 (23%) [1, 7, 9]	7 (54%) [8, 11-13, 15, 16, 29]	13	Down to 0

1 Adapted from Blundell *et al.* 2015[35]. There is no agreement regarding changes in cytokine
2 levels associated with ME/CFS. Although studies that do report changes tend to report
3 cytokines as being upregulated in ME/CFS as compared to our long-COVID cytokine data
4 showing significant decreases in cytokine levels.

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6 Supplemental References:
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