Additional file 3:

Supplement table 3: Likelihood-ratio test (LRT) to check the assumption of proportional odds by comparing the proportional odds model with a multinomial model.

| Cytokine | Log Likelihood | | LRT | p-value |
| --- | --- | --- | --- | --- |
| M1 | M2 |
| BDNF | -145.394 | -140.8061 | 9.1757 | **0.0102** |
| EGF | -145.2106 | -141.2928 | 7.8357 | **0.0199** |
| Eotaxin | -144.8607 | -140.3148 | 9.0918 | **0.0106** |
| GMCSF | -145.2246 | -141.0904 | 8.2684 | **0.016** |
| GROa | -144.9565 | -140.7072 | 8.4986 | **0.0143** |
| HGF | -129.1737 | -122.0511 | 14.2452 | **0.0008** |
| IFNa | -144.782 | -140.8383 | 7.8875 | **0.0194** |
| IFNg | -145.2699 | -140.5105 | 9.5188 | **0.0086** |
| IL1a | -143.556 | -139.3312 | 8.4497 | **0.0146** |
| IL1b | -144.7608 | -140.877 | 7.7676 | **0.0206** |
| IL10 | -145.2825 | -141.6318 | 7.3014 | **0.0260** |
| IL13 | -145.2908 | -140.2268 | 10.1281 | **0.0063** |
| IL15 | -143.1028 | -138.9887 | 8.2282 | **0.0163** |
| IL17a | -145.0937 | -140.9091 | 8.3692 | **0.0152** |
| IL18 | -144.856 | -138.6082 | 12.4957 | **0.0019** |
| IL1RA | -145.333 | -141.7225 | 7.221 | **0.0270** |
| IL2 | -144.2746 | -139.8474 | 8.8544 | **0.0119** |
| IL22 | -144.9003 | -140.172 | 9.4566 | **0.0088** |
| IL27 | -145.2467 | -139.8769 | 10.7395 | **0.0047** |
| IL4 | -145.4409 | -140.766 | 9.3498 | **0.0093** |
| IL5 | -145.428 | -139.3138 | 12.2284 | **0.0022** |
| IL6 | -145.4587 | -140.0344 | 10.8487 | **0.0044** |
| IL7 | -145.4341 | -141.7656 | 7.3371 | **0.0255** |
| IL8 | -145.2873 | -141.1431 | 8.2884 | **0.0159** |
| IP1b | -145.2169 | -141.375 | 7.6837 | **0.0215** |
| IP10 | -145.396 | -140.8723 | 9.0474 | **0.0108** |
| LIF | -145.4514 | -140.6877 | 9.5273 | **0.0085** |
| MCP1 | -143.782 | -136.9834 | 13.5972 | **0.0011** |
| MIP1a | -145.458 | -141.5284 | 7.8591 | **0.0197** |
| PDGFBB | -142.6643 | -136.623 | 12.0826 | **0.0024** |
| PIGF1 | -142.0374 | -137.6666 | 8.7416 | **0.0126** |
| RANTES | -145.2314 | -140.8309 | 8.8009 | **0.0123** |
| SCF | -145.1679 | -141.3803 | 7.5753 | **0.0226** |
| SDF1a | -145.0041 | -140.804 | 8.4002 | **0.0150** |
| TNFa | -145.3963 | -141.73 | 7.3326 | **0.0256** |
| VEGFA | -143.154 | -139.2963 | 7.7154 | **0.0211** |
| VEGFD | -144.9091 | -141.1052 | 7.6079 | **0.0223** |