

Table S1. Summary of neonatal assessment of infected neonates.

| SampleID | Fetal gender | GA amniocentesis | VL amniotic fluid (log) | GA cordocentesis | VL fetal blood | Fetal platelets | Prenatal imaging | Pregnancy outcome | BW <3rd percentile | TF-US | AABR | FE | Symptomatic asymptomatic newborn |
|----------|--------------|------------------|-------------------------|------------------|----------------|-----------------|---|-------------------|--------------------|--|------------|--------|----------------------------------|
| 7 | 1 | 23.57 | 7 | 24.57 | 3.9 | 139000 | HEB | LB | no | normal | normal | normal | asymptomatic |
| 25 | 1 | 22.29 | 6.2 | 23.86 | 3 | 196000 | normal | LB | no | normal | normal | normal | asymptomatic |
| 27 | 1 | 20.71 | 6.3 | 23 | 4.4 | 195000 | normal | LB | no | normal | normal | normal | asymptomatic |
| 35 | 2 | 20.29 | 7.1 | 22 | 6.3 | 171000 | PIMG, SMG, HEB | LB | no | normal | normal | normal | asymptomatic |
| 37 | 1 | 21.57 | 6.1 | 22.43 | 5 | 132000 | SMG, HMG, HEB | LB | no | normal | normal | normal | asymptomatic |
| 41 | 2 | 20.29 | 7 | 21 | 6.9 | 131000 | HEB, SEC, PIMG | LB | no | unilateral SEC | normal | normal | asymptomatic |
| 47 | 1 | 20.71 | 5.3 | 24.43 | 3.7 | 138000 | normal | LB | no | normal | normal | normal | asymptomatic |
| 51 | 2 | 24 | 6.4 | 25 | 4.9 | 166000 | normal | LB | no | normal | normal | normal | asymptomatic |
| 97 | 2 | 20.29 | 6.4 | 22.14 | 5.5 | 192000 | normal | LB | no | normal | normal | normal | asymptomatic |
| 1 | 1 | 27.43 | 5.04 | 29 | 4.3 | 156000 | HEB, severe IUGR | LB | yes | normal | normal | normal | symptomatic |
| 9 | 2 | 33.14 | 7.7 | 34.86 | 2.9 | 286000 | HEB, SMG, LSC, SEC | LB | no | bilateral SEC, asymmetry of LV | normal | normal | symptomatic |
| 11 | 2 | 32.86 | 7.5 | 35.71 | 3.1 | 199000 | TC, HSWM, IVS, HMG, SMG | LB | no | mild VMG, bilateral SEC, bilateral LSC | normal | normal | symptomatic |
| 13 | 1 | 21.86 | 7.2 | 22.86 | 5.7 | 196000 | normal | LB | no | normal | normal | normal | symptomatic |
| 33 | 1 | 24.86 | 7.7 | 32.57 | 3 | 254000 | PIMG, HEB, LSC | LB | no | bilateral LSC | normal | normal | symptomatic |
| 43 | 2 | 20.71 | 7.3 | 21.71 | 5.8 | 199000 | HEB | LB | no | normal | bilateral | normal | symptomatic |
| 45 | 2 | 27 | 7.3 | 28 | 5.5 | 110000 | HEB, HSWM | LB | no | normal | bilateral | normal | symptomatic |
| 49 | 1 | 23.14 | 8.1 | 24.86 | 4.3 | 109000 | HSWM, HEB, SMG | LB | no | bilateral SEC, abnormal WM | bilateral | normal | symptomatic |
| 55 | 1 | 23 | 8.4 | 25 | 5.7 | 55000 | normal | LB | no | normal | bilateral | normal | symptomatic |
| 57 | 2 | 19.86 | 6.8 | 20.57 | 4.7 | 231000 | HEB | LB | no | normal | unilateral | normal | symptomatic |
| 59 | 2 | 25 | 7.4 | 25.57 | 7 | 119000 | normal | LB | no | normal | unilateral | normal | symptomatic |
| 61 | 1 | 23.57 | 8.07 | 24.57 | 5.9 | 140000 | HSWM | LB | no | normal | bilateral | normal | symptomatic |
| 63 | 1 | 21.29 | 6 | 22.29 | 5.2 | 145000 | normal | LB | no | bilateral LSC and SEC | bilateral | normal | symptomatic |
| 53 | 2 | 34.57 | 7.4 | 36.71 | 5.9 | NP | severe IUGR, severe MIC, HMG, SMG, SEC, LSC | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 65 | NA | 32 | 7.9 | NA | NA | NP | mild bilateral VMG, PMG | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 67 | 1 | 22 | 6.95 | NA | NA | NP | severe IUGR, severe MIC, PIMG, bilat VMG | ND | NA | NA | NA | NA | Symptomatic and severe |
| 69 | 1 | 25.14 | 6.6 | 25.14 | 6.1 | 35000 | bilateral VMG, LSC, hydrops, HMG | IUFD | NA | NA | NA | NA | Symptomatic and severe |
| 71 | 2 | 17.14 | 6.7 | 21.14 | 3.6 | 11000 | MIC, VMG, HEB, ASC, HMG, IUGR | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 73 | 2 | 22 | 6 | 26.86 | 5 | NP | PMG, IVS, TC, HSWM, HMG, SMG | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 75 | 2 | 24.86 | 6.8 | 25.14 | 6.2 | 122000 | IVS, TC, PMG | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 77 | 1 | 18 | 5.3 | 19.71 | 6.2 | 81000 | MIC, VMG, HEB, PIMG, severe IUGR, ASC, PMG | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 79 | 2 | 24.71 | 7.1 | 26.71 | 4.4 | 119000 | IUGR, HEB, HMG, HSWM, bilateral SEC and TC | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 81 | 1 | 17.86 | 6.3 | NA | NA | NP | HEB, SEC | IUFD | NA | NA | NA | NA | Symptomatic and severe |
| 83 | 2 | 21.29 | 5.8 | 23 | 4.8 | 100000 | MIC, IEB | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 85 | 1 | 27.57 | 8.6 | 28.14 | 5.34 | 107000 | HEB, MIC | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 87 | NA | 18.43 | 5 | 18.43 | 5 | 13000 | HEB, ASC, hydrops, VMG | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 89 | NA | 20 | NA | NA | NA | NP | Severe IUGR, MIC, LSC, cortical abnormalities | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 91 | 2 | 17.14 | 5.8 | 20.14 | 5 | 81000 | IUGR, HEB, PMB, LSC | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 93 | 2 | 22 | 7.2 | NA | NA | NP | ???? | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 95 | 1 | 23.57 | 6.5 | 25.14 | 4.3 | 129000 | IUGR, VMG, IVS, PMG | TOP | NA | NA | NA | NA | Symptomatic and severe |
| 99 | 2 | 27.29 | 7.7 | 29.71 | 5.5 | NP | IUGR, SMG, HEB, MIC, VMG, LSC, HSWM | TOP | NA | NA | NA | NA | Symptomatic and severe |

Table S2. Concentrations of all cytokines according to fetal in-fection, symptomatic status at birth, and severity (median and interquartile).

| | Controls N=40 | Infected fetuses N=40 | Asymptomatic (c) infected fetuses N=9 | Symptomatic infected fetuses N=31 | Symptomatic and non-severe infection N=13 | Symptomatic and severe infection N=8 | P-value infected vs. non-infected | P-value symptomatic vs. asymptomatic | Pre-processing filter |
|----------------|------------------------------|------------------------------|---------------------------------------|-----------------------------------|---|--------------------------------------|-----------------------------------|--------------------------------------|-----------------------|
| IL1a interne | 0 (0, 0) | 0 (0, 0.0275) | 0 (0, 0) | 0 (0, 0.1) | 0 (0, 0) | 0 (0, 0.3275) | 0.825 | 0.5126 | |
| IL1b interne | 0.295 (0, 0.6) | 0.35 (0, 1.25) | 0 (0, 1.2) | 0 (0, 1.1) | 0.0 (0, 1.1) | 0.35 (0, 0.7) | 0.2041 | 0.3107 | |
| IL2 interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0.49) | 0 (0, 0) | 0.3599 | 0.5403 | |
| IL4 interne | 0 (0, 0.925) | 0 (0, 1.25) | 0 (0, 0) | 0 (0, 1.4) | 0.6 (0, 4.1) | 0 (0, 0) | 0.9662 | 0.9662 | x |
| IL6 interne | 0 (0, 0) | 0 (0, 0.0099) | 0 (0, 0) | 0 (0, 0.02) | 0 (0, 0.19) | 0 (0, 0.0099) | 0.0566 | 0.0110 | |
| IL8 interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.4666 | 0.3193 | |
| IL10 interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.3868 | 0.4117 | |
| IL13 interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.3204 | 0.3748 | |
| IL15 interne | 32.75 (0, 8.785) | 4.545 (0.8975, 8.425) | 4.79 (3.22, 8.4) | 4.14 (0.535, 8.405) | 3 (1.63, 9.94) | 3.915 (0, 8.0475) | 0.3575 | 0.2976 | x |
| IL16 interne | 0 (0, 18.575) | 0.35 (0, 1.255) | 0.25 (0, 0.79) | 0.44 (0, 1.39) | 0.6 (0.2, 1.02) | 0.18 (0, 2.59) | 0.2943 | 0.2018 | |
| IL18 interne | 0 (0, 0.97) | 0.35 (0, 1.0525) | 0 (0, 0) | 0.44 (0, 1.175) | 0 (0, 0) | 0.155 (0, 16.235) | 0.9409 | 0.0672 | x |
| IL23 interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 5.11-9 | 3.3 (0, 9.725) | 0.3041 | 0.4902 | |
| GM-CSF interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0.4812) | 0.0941 | 0.0937 | |
| GM-CSF interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.777 | 0.774 | |
| GM-CSF interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0.1) | 0 (0, 0) | 0.0059 | 0.3303 | |
| GM-CSF interne | 0 (0, 0.21) | 0 (0, 6.7625) | 0 (0, 0) | 0 (0, 3.165) | 0 (0, 0) | 0 (0, 12.6575) | 0.3170 | 0.4657 | x |
| GM-CSF interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | NA | NA | |
| IFN-γ interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.5103 | 0.5126 | |
| IFN-γ interne | 135.945 (54.1875, 272.7225) | 451.405 (79.335, 956.49) | 118.04 (49.58, 605.312) | 505.33 (84.27, 1342.97) | 717.53 (84.06, 1170.79) | 315.52 (84.975, 1419.735) | 0.0037 | 0.0066 | x |
| IFN-γ interne | 0 (0, 71.1825) | 0 (0, 60.1925) | 0 (0, 60.8) | 0 (0, 53.1) | 0 (0, 59.99) | 0 (0, 45.4725) | 0.3464 | 0.3464 | x |
| IFN-γ interne | 0 (0, 0) | 0 (0, 0.6375) | 0.35 (0, 0.3) | 0 (0, 0.63) | 0.67 (0, 1.1) | 0 (0, 0) | 0.3098 | 0.6702 | |
| IFN-γ interne | 0 (0, 2.39) | 0.375 (0, 5.415) | 0.37 (0, 2.57) | 0.73 (0, 3.52) | 0.75 (0, 3.66) | 2.13 (0, 3.625) | 0.0056 | 0.0156 | x |
| IFN-γ interne | 0 (0, 9.7825) | 0.975 (0, 17.695) | 0 (0, 0) | 3.7 (0, 18.655) | 10.10 (0, 17.49) | 10.05 (0, 18.8275) | 0.1480 | 0.0390 | x |
| IFN-γ interne | 0 (0, 0.0325) | 0 (0, 0.795) | 0 (0, 0) | 0 (0, 0.67) | 0 (0, 0.28) | 0.305 (0, 1.625) | 0.3493 | 0.1648 | x |
| IFN-γ interne | 0 (0, 0) | 0 (0, 0.5025) | 0 (0, 0.96) | 0 (0, 0.44) | 0 (0, 0) | 0.1 (0, 0.455) | 0.5587 | 0.2572 | x |
| IFN-γ interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 1.9) | 0 (0, 0) | 0 (0, 2.3) | 0 (0, 0) | 0.4146 | 0.9438 | |
| IFN-γ interne | 0 (0, 1.8625) | 1.65 (0, 5.65) | 0 (0, 2.89) | 2.08 (0, 5.29) | 0 (0, 1.58) | 5.505 (1.81, 11.0875) | 0.0585 | 0.0046 | x |
| IFN-γ interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.5127 | 0.7202 | |
| IFN-γ interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.5813 | 0.7060 | |
| IFN-γ interne | 0 (0, 58.8599) | 0 (0, 256.995) | 149.65 (0, 367.21) | 0 (0, 219.925) | 200.31 (0, 283.93) | 0 (0, 0) | 0.3882 | 0.6579 | x |
| IFN-γ interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.8990 | 0.8990 | |
| IFN-γ interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.8545 | 0.7765 | |
| IFN-γ interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.1961 | 0.2485 | |
| IFN-γ interne | 70.14 (4.84525, 112.3987) | 71.997 (43.4525, 123.2492) | 97.789 (43.2904, 135.68) | 70.762 (43.1595, 105.6775) | 95.667 (85.048, 154.972) | 55.455 (40.0892, 71.9237) | 0.3382 | 0.8890 | x |
| IFN-γ interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.6177 | 0.2707 | |
| IFN-γ interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | NA | NA | |
| IFN-γ interne | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.3204 | 0.3748 | |
| IL1a surface | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0.25) | 0 (0, 0.61) | 0 (0, 0) | 0.782 | 0.2448 | |
| IL1b surface | 0.6 (0.15, 1.6975) | 0.7 (0, 1.725) | 0 (0, 1.48) | 0 (0, 1.75) | 12 (0, 3.18) | 0.3 (0, 1.5) | 0.0002 | 0.3632 | x |
| IL2 surface | 0 (0, 0.09) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 1.7) | 0 (0, 0) | 0.475 | 0.8693 | |
| IL4 surface | 0.65 (0, 2.075) | 0 (0, 1.2) | 0 (0, 2.2) | 0 (0, 1.45) | 1 (0, 2.2) | 0 (0, 0.375) | 0.7242 | 0.3821 | x |
| IL6 surface | 1.095 (0, 285.5125) | 1.51 (0, 95.23) | 1.664 (0.8, 1.8) | 1.5 (0.825, 2.3) | 1.11 (0.72, 2.64) | 1.53 (0.92, 2.252) | 0.4305 | 0.1550 | |
| IL8 surface | 0.32 (0, 39.75, 17.49) | 15.375 (8.34, 25.475) | 15.89 (8.6, 15.57) | 14.79 (8.64, 25.495) | 10 (6.4, 26.5) | 14.687 (7.4, 22.855) | 0.289 | 0.2380 | x |
| IL10 surface | 0 (0, 0.2) | 0 (0, 0.725) | 0.46 (0, 1) | 0 (0, 0.635) | 0.57 (0, 0.86) | 0 (0, 0.35) | 0.7080 | 0.6580 | x |
| IL13 surface | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.2958 | 0.6105 | |
| IL15 surface | 2.875 (0, 6.09) | 2.38 (0, 5.95) | 1.85 (0, 7.04) | 2.59 (0, 6.2) | 1.85 (0, 3.32) | 3.925 (0, 9.25) | 0.612 | 0.1895 | x |
| IL16 surface | 6.5 (0, 44.2) | 15.245 (0, 44.07) | 14.5 (2.31, 81.53) | 15.99 (0, 37.35) | 14 (0.92, 43.86) | 17.555 (0, 29.29) | 0.7923 | 0.6597 | |
| IL18 surface | 0.865 (0, 42.5, 1.54) | 1 (0.455, 1.3175) | 1.03 (0.75, 1.2) | 1 (0.44, 1.565) | 1 (0.47, 1.43) | 0.915 (0.4275, 2.1875) | 0.936 | 0.9794 | x |
| IL23 surface | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.5053 | 0.8215 | |
| GM-CSF surface | 2.25 (0, 5.15) | 2.15 (0, 6.025) | 1.12 (1, 1.8) | 1.6 (0, 4.1) | 3.1 (1.5, 7.8) | 0 (0, 2.125) | 0.112 | 0.4588 | |
| GM-CSF surface | 0 (0, 0) | 0.05 (0, 5.3075) | 0 (0, 20.61) | 0 (0, 5.23) | 0 (0, 11.76) | 0 (0, 3.22) | 0.286 | 0.474 | x |
| GM-CSF surface | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.576 | 0.7457 | |
| GM-CSF surface | 0 (0, 0) | 0 (0, 0.85) | 0 (0, 0.8) | 0 (0, 0.9) | 0 (0, 0) | 0 (0, 0) | 0.0694 | 0.6023 | x |
| GM-CSF surface | 0.345 (0, 27.2825) | 17.72 (0, 35.245) | 31.87 (18.85, 41.08) | 13.25 (0, 24.95) | 15.5 (9.99, 63.78) | 10.675 (0, 23.975) | 0.1099 | 0.3307 | x |
| GM-CSF surface | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.8278 | 0.5517 | |
| GM-CSF surface | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 1.4) | 0 (0, 0) | 0.6026 | 0.7579 | |
| IFN-γ surface | 216.47 (1.6525, 393.6525) | 75.625 (30.0, 34.1680, 205) | 264.38 (18.194, 704.448) | 832.91 (56.7, 43.2036, 44) | 740.69 (56.64, 892.91) | 1374.01 (62.9, 3813.8825) | 0.0138 | 0.0065 | x |
| IFN-γ surface | 65.89 (1.6075, 33.3325) | 24.4 (0, 13.83, 4.3) | 50.1 (0, 23.063) | 58.1 (0, 23.063) | 58.1 (0, 23.063) | 99.0 (0, 23.063) | 0.750 | 0.750 | x |
| IFN-γ surface | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 1.1) | 0.2 (0, 0.5) | 0.3105 | 0.410 | x |
| IFN-γ surface | 0 (0, 0) | 0 (0, 1.13) | 0.1 (0, 1.97) | 0.2 (0, 0.7) | 0.6 (0, 1.3) | 0.2 (0, 0.5) | 0.106 | 0.610 | x |
| IFN-γ surface | 33.65 (0, 13.95) | 8.725 (3.2, 25.0475) | 7.84 (3.89, 9.15) | 10.34 (3.825, 27.545) | 5.91 (1.51, 32.8) | 16.545 (5.3475, 26.1125) | 0.826 | 0.610 | x |
| IFN-γ surface | 5.75 (0, 13.1075) | 12.11 (4.075, 28.7625) | 4.67 (0, 19.7) | 12.42 (5, 15.35) | 12.42 (5, 15.35) | 13.785 (5.6675, 26.1125) | 0.215 | 0.098 | x |
| IFN-γ surface | 0.37 (0, 2.5) | 0.25 (0, 2.04) | 0.94 (0, 1.858) | 0 (0, 2.735) | 0 (0, 3.01) | 0.3 (0, 2.395) | 0.6574 | 0.7688 | x |
| IFN-γ surface | 0.59 (0, 2.3825) | 0.81 (0, 2.2075) | 0.94 (0, 2.258) | 0.8 (0, 2.615) | 2.1 (0, 3.23) | 0.63 (0, 1.885) | 0.3291 | 0.4797 | x |
| IFN-γ surface | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.2163 | 0.3943 | |
| IFN-γ surface | 3.35 (0, 18.605) | 15.16 (7.2425, 36.72) | 15.16 (7.2425, 36.72) | 15.16 (7.2425, 36.72) | 15.16 (7.2425, 36.72) | 23.15 (9.9525, 38.92) | 0.4618 | 0.571 | x |
| IFN-γ surface | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.006 | 0.207 | x |
| IFN-γ surface | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0.2) | 0 (0, 0) | 0.3007 | 0.207 | x |
| IFN-γ surface | 2993.57 (1385.58, 5824.6725) | 3253.165 (2054.665, 6279.77) | 2893.28 (123.97, 3241.92) | 3319.65 (2196.535, 7297.78) | 6088.58 (344.9625, 14667.88) | 6088.58 (344.9625, 14667.88) | 0.388 | 0.0035 | x |
| IFN-γ surface | 77.839 (36.0288, 206.202) | 90.6635 (21.82725, 218.6225) | 25.688 (7.6784, 101.64) | 125.625 (27.66375, 229.948) | 89.695 (21.015, 131.802) | 220.6135 (62.4187, 410.7662) | 0.3280 | 0.0302 | x |

| | | | | | | | | | |
|----------------------|---------------------------------|-----------------------------------|----------------------------------|---------------------------------|-----------------------------------|-----------------------------------|---------------|---------------|---|
| CCCL6 surface | 3.0905 (0.24,0825) | 6.2535 (0.18,9689) | 7.403 (6.024, 12.118) | 5.21 (0.19,166) | 0.10, 12, 495) | 6.507 (0.21,9962) | 0.2277 | 0.2115 | |
| CCCL3 surface | 5.5545 (0.4972, 16.1912) | 5.014 (0.4972, 16.1912) | 4.81 (0.032, 9.604) | 5.228 (3.4395, 20.9185) | 4.045 (2.887, 11.555) | 7.505 (4.2222, 40.366) | 0.2347 | 0.0964 | x |
| MF1 surface | 24.0035 (19.1287, 35.0095) | 32.12985 (16.9355, 49.349) | 52.644 (0.033, 60.083) | 24.592 (14.7275, 44.1495) | 31.37 (20.6, 49.231) | 19.454 (11.0702, 37.0332) | 0.2872 | 0.0661 | x |
| IF Na surface | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.3466 | 0.9789 | x |
| IF Na surface | 4.4765 (0.13, 777) | 5.542 (0.2325, 22.14625) | 18.033 (4.946, 22.744) | 4.351 (0.18, 789) | 15.61 (6.534, 32.629) | 0.155 (0.0705) | 0.4846 | 0.8466 | x |
| IF Nimbda surface | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.356 | 0.4606 | x |
| IL13 soluble | 2.592 (0.8, 8.944) | 6.67 (1.536, 21.96) | 3.48 (0.36, 6.516) | 7.86 (2.332, 34.674) | 10.92 (2.4, 63.768) | 5.398 (2.283, 24.12) | 0.1818 | 0.2031 | x |
| IL2 soluble | 2.27 (0.57, 10.81) | 2.106 (0.96, 3.387) | 1.36 (0.096, 3.84) | 2.16 (0.96, 3.252) | 10.92 (1.752, 4.132) | 1.962 (0.96, 2.526) | 0.4703 | 0.7137 | x |
| IL2 soluble | 0 (0, 0.93) | 0 (0, 1.644) | 0 (0, 1.896) | 0 (0, 1.896) | 1.392 (0.3, 3.24) | 0 (0, 0) | 0.5884 | 0.9861 | x |
| IL6 soluble | 4.13 (0.9, 9.0) | 2.76 (0.7, 5.9) | 2.4 (0.10, 3.3) | 2.76 (0.7, 5) | 6.56 (0.8, 9.6) | 2.28 (0.4, 5.9) | 0.7296 | 0.7296 | x |
| IL6 soluble | 42.492 (20.535, 75.915) | 83.424 (41.553, 145.968) | 119.932 (62.346, 157.092) | 83.392 (39.506, 138.708) | 96.561 (54.684, 135.648) | 58.098 (23.286, 147.744) | 0.0066 | 0.2769 | x |
| IL8 soluble | 403.842 (248.019, 828.872) | 771.18 (387.147, 1121.802) | 1043.796 (901.004, 1157.904) | 554.148 (350.796, 1112.064) | 776.48 (498.48, 1118.628) | 396.088 (177.504, 897.813) | 0.489 | 0.9703 | x |
| IL10 soluble | 0.96 (0, 2.16) | 1.26 (0, 2.31) | 1.2 (0, 2.4) | 1.32 (0, 2.22) | 1.8 (1.2, 1.92) | 1.26 (0, 2.37) | 0.8463 | 0.6952 | x |
| IL13 soluble | 0 (0, 8.49) | 0 (0, 5.445) | 0 (0, 7.08) | 0 (0, 0) | 0 (0, 23.64) | 0 (0, 0) | 0.4741 | 0.7128 | x |
| IL15 soluble | 47.766 (30.033, 86.601) | 52.092 (44.058, 84.81) | 46.644 (40.44, 53.868) | 57.594 (45.702, 59.644) | 49.164 (44.988, 83.04) | 69.648 (48.702, 97.647) | 0.3239 | 0.1297 | x |
| IL18 soluble | 276.66 (128.862, 635.307) | 264.024 (120.266, 443.604) | 257.88 (173.256, 546.548) | 270.168 (168.066, 433.5) | 358.82 (256.8, 480.552) | 179.64 (149.307, 412.449) | 0.7468 | 0.9240 | x |
| IL18 soluble | 4.705 (1.099, 7.05) | 7.416 (4.129, 10.698) | 6.48 (4.48, 9.74) | 8.124 (4.26, 11.562) | 5.16 (4.2, 7.2) | 10.308 (7.395, 11.85) | 0.0234 | 0.0060 | x |
| IL33 soluble | 29.196 (0, 248.751) | 0 (0, 200.427) | 0 (0, 32.889) | 0 (0, 220.680) | 0 (0, 0) | 11.412 (0, 25.163) | 0.4166 | 0.8533 | x |
| Grignatinfuc soluble | 24.9 (12.996, 47.25) | 12.3 (0.09, 46.14) | 11.76 (11.28, 25.56) | 13.68 (8.46, 59.46) | 35.16 (8.57, 78.56) | 11.46 (7.89, 53.199) | 0.1060 | 0.4673 | x |
| Grignatinfuc soluble | 75.24 (37.506, 116.208) | 54.526 (30.232, 105.816) | 54.264 (30.523, 247.2956) | 54.7812 (25.3536, 94.1216) | 69.4032 (20.218, 106.104) | 48.1092 (31.1811, 76.0539) | 0.3783 | 0.5952 | x |
| Excan soluble | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 8.508) | 0 (0, 298.32) | 0 (0, 0) | 0.8109 | 0.5262 | x |
| GMCSF soluble | 0 (0, 5.754) | 3.3 (0, 8.454) | 6.132 (2.82, 8.316) | 259.596 (127.224, 453.066) | 6.6 (0, 11.664) | 164.85 (106.071, 250.467) | 0.5483 | 0.6260 | x |
| GMCSF soluble | 239.778 (163.338, 449.448) | 300.192 (167.295, 681.591) | 660.06 (368.352, 2956.212) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.8986 | 0.6555 | x |
| HMGB1 soluble | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.6023 | 0.7241 | x |
| IFNg soluble | 0 (0, 0) | 0 (0, 9.66) | 0 (0, 0) | 0 (0, 10.16) | 5.04 (0, 9.94) | 0 (0, 9.045) | 0.0073 | 0.7241 | x |
| IFNg soluble | 108.92.986 (73.947, 159.795.96) | 24155.274 (13.6712.78, 31171.639) | 13415.462 (7.824.686, 28769.988) | 24195.876 (1.646.94, 50399.329) | 27967.932 (1.8816.576, 35977.848) | 24155.274 (15.066.275, 28695.609) | 0.0048 | 0.0001 | x |
| IFNOCCL11 soluble | 548.298 (384.462, 831.096) | 838.956 (588.57, 1682.418) | 822.924 (546.864, 1233.608) | 1015.44 (609.666, 1809.716) | 1015.44 (628.452, 1651.2) | 967.158 (601.602, 1825.788) | 0.0418 | 0.0547 | x |
| IFNOCCL11 soluble | 0 (0, 6.639) | 2.88 (0.096, 10.659) | 3.36 (2.4, 17.28) | 2.4 (0.918, 7.812) | 6 (4.92, 12.636) | 1.242 (0.669, 3.39) | 0.2978 | 0.4957 | x |
| MCP soluble | 657.264 (404.613, 1345.818) | 1068.272 (770.006, 2085.813) | 1472.644 (981.768, 2190.672) | 973.164 (656.324, 1398.594) | 1135.886 (948.036, 1358.016) | 739.41 (463.266, 2458.623) | 0.1303 | 0.3403 | x |
| MCP soluble | 384.33 (213.141, 518.274) | 804.144 (567.321, 1407.342) | 581.1 (480.096, 870.42) | 833.58 (596.754, 1564.182) | 794.748 (601.728, 2640.036) | 972.624 (470.157, 1407.978) | 0.1183 | 0.0519 | x |
| MIPA soluble | 16.17 (9.12, 23.94) | 14.64 (10.437, 22.632) | 16.44 (11.64, 24.36) | 14.4 (19.2, 21.828) | 15.12 (10.8, 24.36) | 15.12 (10.8, 24.36) | 0.3749 | 0.5665 | x |
| MIPA soluble | 26.57 (8.57, 58.05) | 18.84 (10.33, 45.05) | 44.64 (13.96, 90.12) | 16.44 (10.3, 30.846) | 16.44 (12.36, 36.64) | 16.02 (8.37, 36.139) | 0.5332 | 0.8859 | x |
| MIP2 soluble | 128.32 (97.08, 213.686) | 159.806 (92.07, 272.025) | 210.57 (157.764, 283.172) | 150.62 (80.016, 271.512) | 164.692 (150.042, 310.464) | 102.71 (64.846, 172.53) | 0.3086 | 0.5441 | x |
| MIP3 soluble | 58.446 (32.901, 91.235) | 79.614 (59.928, 131.268) | 86.856 (79.764, 126.432) | 71.292 (57.246, 135.69) | 70.812 (61.8, 101.112) | 75.378 (51.87, 166.944) | 0.3631 | 0.5440 | x |
| NAF1S soluble | 0 (0, 14.7) | 0 (0, 13.43) | 9 (8.16, 21.12) | 0 (0, 12.18) | 0 (0, 22.56) | 0 (0, 6.18) | 0.8011 | 0.5399 | x |
| TFE soluble | 1.44 (0, 3.429) | 1.224 (0.84, 2.619) | 1.56 (1.2, 4.2) | 1.2 (0.84, 2.82) | 1.2 (0.84, 3.6) | 1.194 (0.87, 1.587) | 0.673 | 0.6333 | x |
| TFE soluble | 725.232 (196.254, 1356.666) | 757.836 (352.305, 2831.577) | 6462 (1356.676, 772.752) | 888.992 (374.388, 2997.594) | 699.528 (168.756, 898.992) | 2841.414 (675.408, 7620.282) | 0.0987 | 0.0044 | x |
| TRAIL soluble | 180.4938 (98.5061, 346.6263) | 299.2086 (141.0222, 802.9308) | 174.888 (141.1776, 224.6172) | 415.3464 (155.9106, 888.8652) | 245.2572 (140.556, 509.3052) | 589.3542 (119.0777, 1995.1194) | 0.0123 | 0.0004 | x |
| CCCL6 soluble | 20.2402 (0.63, 27.63) | 31.014 (0, 54.4239) | 30.934 (8.0186, 51.4464) | 31.1284 (0, 56.0728) | 30.7288 (0, 34.6032) | 34.4466 (0, 57.7317) | 0.2920 | 0.4356 | x |
| CCCL3 soluble | 96.5662 (49.771, 112.0435) | 92.1534 (47.1810, 162.3532) | 102.7059 (61.9366, 170.6032) | 90.1884 (43.3586, 157.977) | 82.26 (33.36, 149.432) | 95.428 (64.5236, 167.844) | 0.7265 | 0.3749 | x |
| MIP1 soluble | 485.5264 (32.756, 658.4703) | 503.1714 (406.1358, 785.7092) | 521.886 (446.208, 600.8464) | 494.0052 (370.6656, 803.7602) | 541.5804 (339.2356, 1353.872) | 472.695 (310.9098, 679.3071) | 0.0963 | 0.3385 | x |
| IFNa soluble | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0 (0, 0) | 0.555 | 0.5948 | x |
| IFNa soluble | 25.734 (3.8958, 65.4315) | 29.4576 (3.6126, 94.3128) | 31.4477 (12.2596, 64.9956) | 29.406 (2.6574, 98.6832) | 46.224 (15.1368, 150.6192) | 21.396 (2.1384, 36.5508) | 0.7712 | 0.8165 | x |
| IF Nimbda soluble | 3.45 (0, 109.911) | 2.73 (0, 103.23) | 31.4477 (12.2596, 64.9956) | 6.3 (0, 236.491) | 5.46 (0, 15.21) | 106.089 (0, 147.0435) | 0.3819 | 0.4653 | x |

Table S3. Prediction analysis based on principal component analysis. Contribution of each PC for infection and se-verity.

| | Total variance explained | Infection | | | Severity | | |
|------|--------------------------|-----------|---------|---------|----------|---------|----------|
| | | Beta | Se | p | Beta | Se | p |
| PC1 | 65.62% | 8.8E-05 | 2.3E-05 | 0.00010 | 3.2E-05 | 7.7E-06 | 8.06E-05 |
| PC2 | 22.73% | -3.5E-05 | 2.9E-05 | 0.23 | -4.3E-05 | 1.4E-05 | 0.0019 |
| PC3 | 4.98% | -5.6E-05 | 6.6E-05 | 0.40 | -2.6E-05 | 3.0E-05 | 0.40 |
| PC4 | 2.12% | -3.9E-05 | 8.0E-05 | 0.62 | 1.0E-05 | 4.7E-05 | 0.83 |
| PC5 | 1.43% | 3.3E-05 | 9.7E-05 | 0.73 | 9.4E-05 | 5.6E-05 | 0.10 |
| PC6 | 1.09% | 6.1E-06 | 1.1E-04 | 0.96 | -4.7E-05 | 6.5E-05 | 0.47 |
| PC7 | 0.52% | 6.6E-05 | 1.6E-04 | 0.68 | 1.2E-04 | 9.4E-05 | 0.22 |
| PC8 | 0.43% | -6.3E-05 | 1.8E-04 | 0.72 | 7.8E-06 | 1.0E-04 | 0.94 |
| PC9 | 0.28% | 3.4E-04 | 2.2E-04 | 0.13 | 2.5E-04 | 1.3E-04 | 0.050 |
| PC10 | 0.22% | -1.7E-04 | 2.5E-04 | 0.49 | -8.2E-05 | 1.5E-04 | 0.58 |
| PC11 | 0.14% | 4.2E-04 | 3.3E-04 | 0.21 | 2.7E-04 | 1.8E-04 | 0.14 |
| PC12 | 0.11% | -5.0E-04 | 3.7E-04 | 0.17 | -2.9E-04 | 2.0E-04 | 0.15 |
| PC13 | 0.09% | -8.2E-06 | 3.9E-04 | 0.98 | 1.1E-04 | 2.3E-04 | 0.63 |
| PC14 | 0.07% | -4.4E-04 | 4.6E-04 | 0.34 | -5.8E-04 | 2.5E-04 | 0.022 |
| PC15 | 0.05% | 4.6E-04 | 5.6E-04 | 0.41 | 2.1E-04 | 2.9E-04 | 0.47 |
| PC16 | 0.03% | -3.4E-04 | 6.4E-04 | 0.60 | -2.7E-04 | 3.7E-04 | 0.46 |
| PC17 | 0.03% | -1.1E-03 | 7.3E-04 | 0.12 | -5.1E-04 | 3.8E-04 | 0.18 |
| PC18 | 0.01% | 1.1E-03 | 1.0E-03 | 0.29 | 3.4E-04 | 5.5E-04 | 0.54 |
| PC19 | 0.01% | -7.4E-04 | 1.4E-03 | 0.59 | -1.3E-04 | 8.1E-04 | 0.88 |
| PC20 | 0.01% | 1.2E-03 | 1.6E-03 | 0.45 | 1.4E-04 | 8.8E-04 | 0.88 |
| PC21 | 0.00% | 2.4E-03 | 1.7E-03 | 0.16 | 9.2E-04 | 9.6E-04 | 0.34 |
| PC22 | 0.00% | -1.5E-03 | 1.9E-03 | 0.42 | -1.0E-03 | 1.1E-03 | 0.34 |
| PC23 | 0.00% | 2.8E-03 | 2.4E-03 | 0.25 | 9.7E-04 | 1.4E-03 | 0.48 |
| PC24 | 0.00% | -2.7E-03 | 2.6E-03 | 0.30 | -2.5E-03 | 1.5E-03 | 0.10 |
| PC25 | 0.00% | 3.2E-03 | 2.8E-03 | 0.25 | 6.4E-04 | 1.6E-03 | 0.70 |
| PC26 | 0.00% | -1.4E-03 | 3.3E-03 | 0.67 | -8.3E-04 | 2.0E-03 | 0.67 |
| PC27 | 0.00% | -3.2E-04 | 3.6E-03 | 0.93 | -1.8E-04 | 2.2E-03 | 0.93 |
| PC28 | 0.00% | -2.0E-02 | 8.0E-03 | 0.01 | -5.4E-03 | 2.3E-03 | 0.021 |
| PC29 | 0.00% | -1.2E-03 | 4.4E-03 | 0.79 | -1.0E-03 | 2.6E-03 | 0.70 |
| PC30 | 0.00% | -2.9E-03 | 4.8E-03 | 0.55 | 6.6E-04 | 2.9E-03 | 0.82 |
| PC31 | 0.00% | 1.7E-04 | 5.3E-03 | 0.97 | 1.1E-04 | 3.2E-03 | 0.97 |
| PC32 | 0.00% | -5.8E-03 | 6.5E-03 | 0.37 | -2.6E-03 | 3.8E-03 | 0.49 |
| PC33 | 0.00% | 4.1E-03 | 6.6E-03 | 0.53 | 3.8E-03 | 3.9E-03 | 0.33 |
| PC34 | 0.00% | -2.8E-03 | 7.0E-03 | 0.68 | -1.2E-03 | 4.1E-03 | 0.76 |
| PC35 | 0.00% | -4.2E-03 | 7.5E-03 | 0.58 | -2.7E-03 | 4.5E-03 | 0.55 |
| PC36 | 0.00% | -6.3E-03 | 7.9E-03 | 0.43 | -2.5E-03 | 4.6E-03 | 0.59 |
| PC37 | 0.00% | 1.4E-02 | 9.5E-03 | 0.13 | 7.4E-03 | 5.3E-03 | 0.17 |
| PC38 | 0.00% | -8.6E-03 | 1.0E-02 | 0.39 | -1.9E-03 | 5.9E-03 | 0.74 |
| PC39 | 0.00% | 1.0E-03 | 1.1E-02 | 0.93 | 1.6E-04 | 6.5E-03 | 0.98 |
| PC40 | 0.00% | -5.4E-03 | 1.3E-02 | 0.68 | -2.3E-03 | 7.7E-03 | 0.76 |
| PC41 | 0.00% | 9.4E-04 | 1.4E-02 | 0.95 | -3.1E-03 | 8.4E-03 | 0.71 |
| PC42 | 0.00% | -2.1E-02 | 1.6E-02 | 0.19 | -1.6E-02 | 9.3E-03 | 0.09 |
| PC43 | 0.00% | -5.4E-03 | 1.8E-02 | 0.76 | -2.5E-03 | 1.1E-02 | 0.81 |
| PC44 | 0.00% | 1.1E-02 | 1.9E-02 | 0.55 | 1.1E-02 | 1.1E-02 | 0.31 |
| PC45 | 0.00% | 4.2E-02 | 2.2E-02 | 0.058 | 1.9E-02 | 1.2E-02 | 0.12 |
| PC46 | 0.00% | 2.4E-02 | 2.2E-02 | 0.28 | 9.6E-03 | 1.3E-02 | 0.46 |
| PC47 | 0.00% | 3.3E-02 | 2.4E-02 | 0.17 | 1.5E-02 | 1.4E-02 | 0.26 |
| PC48 | 0.00% | 2.7E-03 | 2.6E-02 | 0.92 | 1.2E-04 | 1.5E-02 | 0.99 |
| PC49 | 0.00% | 4.5E-02 | 2.9E-02 | 0.12 | 1.5E-02 | 1.7E-02 | 0.36 |
| PC50 | 0.00% | 2.6E-02 | 3.0E-02 | 0.39 | 3.0E-02 | 1.7E-02 | 0.08 |
| PC51 | 0.00% | -2.5E-02 | 3.4E-02 | 0.45 | -4.5E-03 | 2.0E-02 | 0.82 |
| PC52 | 0.00% | -3.3E-02 | 3.7E-02 | 0.38 | -1.6E-02 | 2.2E-02 | 0.46 |
| PC53 | 0.00% | 4.5E-02 | 4.0E-02 | 0.26 | 2.8E-02 | 2.3E-02 | 0.22 |
| PC54 | 0.00% | 1.3E-02 | 4.3E-02 | 0.77 | 1.4E-02 | 2.6E-02 | 0.59 |
| PC55 | 0.00% | -6.1E-02 | 4.7E-02 | 0.19 | -2.2E-02 | 2.6E-02 | 0.41 |

| | | | | | | | |
|------|-------|----------|---------|-------|----------|---------|------|
| PC56 | 0.00% | -3.2E-02 | 5.0E-02 | 0.52 | -1.6E-02 | 2.9E-02 | 0.59 |
| PC57 | 0.00% | 6.4E-02 | 6.0E-02 | 0.29 | -6.6E-03 | 3.5E-02 | 0.85 |
| PC58 | 0.00% | 1.1E-01 | 6.7E-02 | 0.08 | 3.8E-02 | 3.7E-02 | 0.31 |
| PC59 | 0.00% | -6.9E-02 | 6.8E-02 | 0.31 | -1.4E-02 | 4.0E-02 | 0.73 |
| PC60 | 0.00% | -5.0E-03 | 7.4E-02 | 0.95 | 2.0E-02 | 4.4E-02 | 0.65 |
| PC61 | 0.00% | -1.2E-02 | 8.0E-02 | 0.88 | 2.0E-02 | 4.8E-02 | 0.67 |
| PC62 | 0.00% | -1.5E-01 | 8.8E-02 | 0.08 | -6.3E-02 | 5.0E-02 | 0.21 |
| PC63 | 0.00% | 3.5E-02 | 9.7E-02 | 0.71 | 2.0E-02 | 5.7E-02 | 0.73 |
| PC64 | 0.00% | 2.2E-01 | 1.2E-01 | 0.059 | 7.3E-02 | 6.6E-02 | 0.27 |
| PC65 | 0.00% | 5.2E-02 | 1.4E-01 | 0.70 | 4.1E-02 | 8.0E-02 | 0.61 |
| PC66 | 0.00% | 7.8E-02 | 1.5E-01 | 0.59 | -1.4E-05 | 8.7E-02 | 1.00 |
| PC67 | 0.00% | 9.1E-02 | 1.8E-01 | 0.61 | -1.9E-02 | 1.1E-01 | 0.86 |
| PC68 | 0.00% | 1.9E-02 | 2.0E-01 | 0.93 | 2.3E-02 | 1.2E-01 | 0.85 |
| PC69 | 0.00% | -4.0E-03 | 2.3E-01 | 0.99 | -2.4E-02 | 1.3E-01 | 0.86 |
| PC70 | 0.00% | -1.9E-01 | 2.6E-01 | 0.46 | -9.5E-02 | 1.5E-01 | 0.53 |
| PC71 | 0.00% | -6.1E-02 | 2.8E-01 | 0.83 | -3.0E-02 | 1.7E-01 | 0.86 |
| PC72 | 0.00% | 3.2E-02 | 3.1E-01 | 0.92 | -1.9E-02 | 1.9E-01 | 0.92 |
| PC73 | 0.00% | -2.5E-03 | 3.5E-01 | 0.99 | 6.4E-02 | 2.1E-01 | 0.76 |
| PC74 | 0.00% | 4.5E-01 | 4.1E-01 | 0.27 | 2.7E-01 | 2.4E-01 | 0.27 |
| PC75 | 0.00% | 1.8E-01 | 4.8E-01 | 0.71 | 1.0E-01 | 2.9E-01 | 0.73 |
| PC76 | 0.00% | -1.6E-01 | 5.4E-01 | 0.76 | -9.8E-02 | 3.2E-01 | 0.76 |
| PC77 | 0.00% | 6.5E-01 | 6.4E-01 | 0.31 | 3.3E-01 | 3.7E-01 | 0.37 |
| PC78 | 0.00% | 9.9E-01 | 7.4E-01 | 0.19 | 4.5E-01 | 4.3E-01 | 0.30 |
| PC79 | 0.00% | 6.4E-01 | 7.8E-01 | 0.41 | 2.2E-01 | 4.6E-01 | 0.64 |
| PC80 | 0.00% | 3.6E-01 | 9.2E-01 | 0.70 | 3.5E-01 | 5.4E-01 | 0.52 |
| PC81 | 0.00% | 5.2E-01 | 1.1E+00 | 0.63 | -5.1E-01 | 6.4E-01 | 0.43 |
| PC82 | 0.00% | -2.0E+00 | 1.7E+00 | 0.24 | -1.2E+00 | 9.8E-01 | 0.21 |
| PC83 | 0.00% | -5.1E-01 | 1.7E+00 | 0.77 | -6.8E-02 | 1.0E+00 | 0.95 |

Figure S1. Pre-processing. (A) Distributions of all proteins (variance). (B) Proportion of non-zero values.

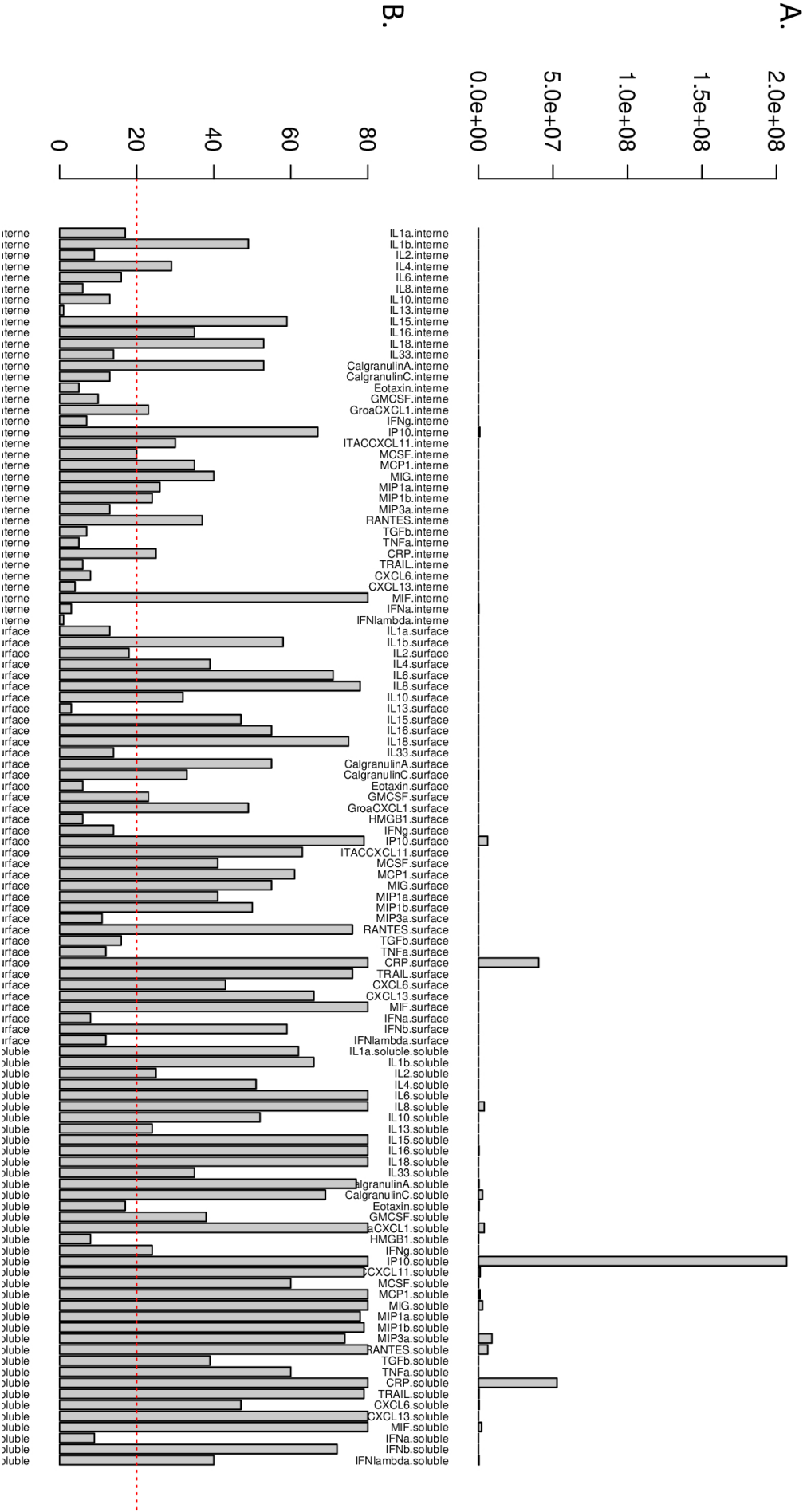


Figure S2. Data dimension reduction based on principal component analysis (PCA): cu-mulative variance explained by cellular classes are provided. (A) Internal cytokines. (B) Sur-face-linked cytokines. (C) Soluble cytokines. (D) Overall cytokines.

