**Supplemental digital content 9.** Correlation between cytokine levels and PD-1 expression in Effector memory CD4+ T and CD8+ T cells of HIV-infected patients with detectable viral load (HIV/DET), undetectable viral load (HIV/UND) and CONTROL groups

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **EFFECTOR MEMORY CD4+ T cells\*** | | | | | | **EFFECTOR MEMORY CD8+ T cells\*** | | | | | |
| **HIV/DET** | | **HIV/UND** | | **CONTROL** | | **HIV/DET** | | **HIV/UND** | | **CONTROL** | |
| **Cytokines** | **r** | **p** | **r** | **p** | **r** | **p** | **r** | **p** | **r** | **p** | **r** | **p** |
| ITAC | -0.126 | 0.700 | 0.018 | 0.945 | -0.089 | 0.638 | 0.073 | 0.838 | 0.017 | 0.964 | -0.225 | 0.231 |
| GM-CSF | 0.014 | 0.974 | 0.325 | 0.188 | -0.022 | 0.908 | -0.227 | 0.503 | 0.041 | 0.895 | 0.212 | 0.260 |
| Fractalkine | 0.056 | 0.869 | 0.007 | 0.977 | -0.172 | 0.364 | 0.109 | 0.755 | -0.302 | 0.315 | -0.184 | 0.329 |
| IFN gamma | -0.028 | 0.939 | 0.061 | 0.810 | -0.163 | 0.388 | -0.355 | 0.286 | 0.085 | 0.782 | 0.184 | 0.329 |
| IL-10 | -0.259 | 0.417 | 0.115 | 0.651 | -0.105 | 0.579 | -0.445 | 0.173 | 0.159 | 0.604 | 0.192 | 0.308 |
| MIP3 alpha | -0.266 | 0.404 | 0.443 | 0.066 | 0.069 | 0.718 | -0.173 | 0.615 | 0.165 | 0.591 | -0.036 | 0.851 |
| IL-12 | -0.193 | 0.545 | -0.017 | 0.948 | 0.030 | 0.874 | -0.333 | 0.314 | -0.331 | 0.268 | 0.110 | 0.564 |
| IL-13 | 0.123 | 0.703 | 0.165 | 0.512 | 0.080 | 0.675 | -0.150 | 0.658 | 0.058 | 0.852 | -0.022 | 0.906 |
| IL-17A | -0.210 | 0.509 | 0.280 | 0.261 | -0.105 | 0.581 | -0.670 | 0.028 | 0.011 | 0.978 | -0.035 | 0.855 |
| IL-1 beta | -0.228 | 0.474 | -0.102 | 0.686 | 0.009 | 0.962 | -0.369 | 0.263 | -0.331 | 0.268 | 0.273 | 0.145 |
| IL-2 | -0.336 | 0.287 | 0.060 | 0.812 | 0.095 | 0.619 | -0.282 | 0.402 | -0.062 | 0.842 | 0.237 | 0.208 |
| IL-21 | -0.573 | 0.056 | 0.432 | 0.074 | -0.056 | 0.768 | -0.373 | 0.261 | -0.137 | 0.656 | 0.002 | 0.992 |
| IL-4 | -0.408 | 0.189 | 0.127 | 0.615 | 0.085 | 0.654 | 0.037 | 0.924 | 0.410 | 0.164 | 0.291 | 0.119 |
| IL-23 | -0.448 | 0.147 | 0.088 | 0.729 | -0.281 | 0.132 | -0.336 | 0.313 | -0.088 | 0.778 | -0.166 | 0.381 |
| IL-5 | 0.063 | 0.851 | -0.026 | 0.919 | 0.222 | 0.239 | -0.336 | 0.313 | 0.099 | 0.751 | 0.059 | 0.755 |
| IL-6 | -0.105 | 0.749 | 0.065 | 0.798 | -0.095 | 0.618 | -0.345 | 0.299 | -0.300 | 0.317 | -0.001 | 0.997 |
| IL-7 | -0.175 | 0.588 | 0.232 | 0.354 | -0.231 | 0.218 | -0.009 | 0.989 | 0.137 | 0.656 | -0.063 | 0.739 |
| IL-8 | -0.371 | 0.237 | 0.065 | 0.798 | 0.008 | 0.966 | -0.091 | 0.796 | -0.014 | 0.968 | -0.043 | 0.823 |
| MIP-1 alpha | -0.007 | 0.991 | 0.125 | 0.622 | -0.061 | 0.749 | -0.218 | 0.521 | 0.176 | 0.566 | 0.140 | 0.461 |
| MIP-1 beta | -0.063 | 0.851 | 0.189 | 0.453 | 0.027 | 0.889 | -0.327 | 0.327 | 0.104 | 0.737 | 0.103 | 0.586 |
| TNF alpha | -0.095 | 0.770 | 0.119 | 0.639 | -0.195 | 0.301 | -0.150 | 0.658 | -0.066 | 0.835 | 0.189 | 0.317 |
| **\***Spearman´s rank correlation | | | | | | | | | | | | |