**Table 3. Genes of Interest over Time** Table showing the significant fold changes of selected genes from complicated and uncomplicated patients at day 7 and day 14 after severe blunt traumatic injury in individual leukocyte cell subpopulations (T-cell, monocyte, and neutrophils (PMN)) as compared to healthy human controls (p<0.001).

|  |  |
| --- | --- |
| **Day 7** | **Day 14** |
| **Gene** | **Complicated Patients** | **Uncomplicated** **Patients** | **Gene** | **Complicated Patients** | **Uncomplicated Patients** |
| **Chemotaxis** |
| **PMN** | **PMN** |
|  *CCL3* | **-1.5** | **-1.1** |   |  |  |
| **Monocyte** | **Monocyte** |
|  |  |  |  *CXCL10* | **-1.8** | **-1.7** |
| **T-Cell** | **T-Cell** |
|  *GNLY* | **-1.6** | **-1.4** |  |  |  |
| **Inflammation Related Peptides/Proteins**  |
| **PMN** | **PMN** |
|  *MMP8* | **19.9** | **8.6** |  *MMP8* | **12.4** | **12.9** |
|  *HP* | **9.9** | **4.8** |  *CCR3* | **-1.7** | **-2.3** |
|  *CD177* | **23** | **7** |  |  |  |
|  *HERC5* | **-7.1** | **-3.1** |  |  |  |
| **Monocyte** | **Monocyte** |
|  *MMP8* | **5.7** | **1.5** |  *MMP9* | **3.1** | **2.4** |
|  *HP* | **4.5** | **2.7** |  *CCR2* | **1.9** | **-1.1** |
|  *HERC5* | **-2.2** | **-1.5** |  |  |  |
| **T-Cell** | **T-Cell** |
|  |  |  |   *MMP8* | **2.7** | **1.5** |
| **Pathogen-associated Molecular Pattern (PAMP) Detection** |
| **PMN** | **PMN** |
|  *TLR1* | **-2.2** | **-1.6** |  |  |  |
| **Monocyte** | **Monocyte** |
|   *TLR7* | **-2.2** | **-1.6** |  *TLR7* | **-1.8** | **-1.7** |
| **T-Cell** | **T-Cell** |
|  *TLR3* | **-1.5** | **-1.4** |  |  |  |
| **Immune Related Genes/Antigen Presentation/Co-Stimulatory Molecules** |
| **PMN** | **PMN** |
|  *PMAIP1* | **-3** | **-1.8** |  *PMAIP1* | -1.5 | -2.2 |
|  *HLA-DMB* | **-1.5** | **-1.2** |  |  |  |
|  *HLA-DRA* | **-1.8** | **-1** |  |  |  |
|  *FLT3* | **1.3** | **1.2** |  *FLT3* | **1.2** | **1.3** |
|  *CD86* | **-1.7** | **-1.4** |  *BTLA* | **-1** | **-1.3** |
|  *CD24* | **4.6** | **3.5** |  *IFIT1* | **-1.6** | **-2.4** |
|  *CEACAMB* | **-1.9** | **-1.4** |  *IL1R1* | **1.5** | **1.5** |
|  *LCN2* | **3.7** | **2.4** |  *LCN2* | **3** | **3.3** |
|  *LTF* | **3.9** | **2.7** |  *LTF* | **3.6** | **3.9** |
|  *LRG1* | **1.4** | **1.2** |  *LRG1* | **1** | **1.2** |
|  *VNN1* | **8.9** | **4** |  *VNN1* | **2.8** | **3.6** |
| **Monocyte** | **Monocyte** |
|  *HLA-DMA* | **-2.8** | **-1.7** |  *CD24* | **1.9** | **1.3** |
|  *HLA-DMB* | **-3.2** | **-2** |  *HLA-DMB* | **-2.1** | **-1.9** |
|  *HLA-DOA* | **-1.8** | **-1.6** |  *HLA-DOA* | **-1.8** | **-1.5** |
|  *HLA-DPA1* | **-3.6** | **-2.2** |  *HLA-DAPA1* | **-2.3** | **-2** |
|  *HLA-DPB1* | **-3.7** | **-2.4** |  *HLA-DPB1* | **-2.6** | **-1.9** |
|  *HLA-DQA* | **-2.9** | **-2.1** |  |  |  |
|  *HLA-DQB* | **-1.3** | **-1.1** |  |  |  |
|  *HLA-DRA* | **-3.1** | **-2** |  *HLA-DRA* | **-2.9** | **-1.7** |
|  *HLA-DRB* | **-1.9** | **-1.5** |  |  |  |
|  *CD86* | **-1.7** | **-1.4** |  |  |  |
|  *FLT3* | **1.7** | **-1.2** |  |  |  |
|  *CD24* | **2.2** | **1.3** |  |  |  |
|  *CEACAM8* | **1.3** | **-1** |  *CEACAM8* | **2.1** | **1.2** |
|  *ILI44* | **-2.2** | **-1.5** |  |  |  |
|  *IFIT1* | **-2.9** | **-1.5** |  |  |  |
|  *IL1R1* | **1.6** | **1.2** |  |  |  |
|  *LCN2* | **1.7** | **1.6** |  *LCN2* | **1.8** | **1.7** |
|  *LTF* | **1.9** | **1.1** |  |  |  |
|  *LARG1* | **1.5** | **1.3** |  |  |  |
|  *VNN1* | **3.3** | **1.8** |  *VNN1* | **2.3** | **1.5** |
| **T-Cell** | **T-Cell** |
|  *IL4* | **-1.8** | **-1.4** |  *CD24* | **1.6** | **1** |
|  *FOXP3* | **1.5** | **1.4** |  |  |  |
|  *ILIT1* | **-1.8** | **-1.4** |  |  |  |
|  *IFIT2* | **-1.6** | **-1.3** |  |  |  |
|  *IFIT3* | **-1.3** | **-1.2** |  |  |  |
|  *LCN2* | **2.5** | **1.8** |  |  |  |
|  *LTF* | **1.9** | **1.3** |  |  |  |
|  *LRG1* | **1.2** | **1.1** |  |  |  |
|  *VNN1* | **2.1** | **1.1** |  |  |  |
| **Up Regulation of Myeloid Derived Suppressor Cells (MDSCs)** |
| **PMN** | **PMN** |
|  *CSF1* | **-1.1** | **1.2** |  *ARG1* | **3.3** | **4.9** |
|  *HGF* | **2.6** | **1.3** |  *IL4R* | **1.7** | **1.3** |
| **Monocyte** | **Monocyte** |
|  *ARG1* | **4.8** | **2.5** |  *ARG1* | **3.3** | **2.4** |
|  *IL4R* | **1.7** | **1.4** |  |  |  |
| **T-Cell** | **T-Cell** |
|  *IL1R2* | **-1.8** | **-1.4** |  |  |  |