**Supplementary Table 1. Cytokines and chemokines levels in control conjunctival sac fluids and blood samples**

| Cytokines and chemokines | | Conjunctival sac fluid levels (pg/ml) [a] | Serum levels (pg/ml) [a] |
|---|---|---|---|
| **EGF** | Endothelial growth factor | 105.0 (125.8±72.9) | 242 (301.5±147.7) |
| **Eotaxin** | C-C motif chemokine 11; eosinophil chemotactic protein | 4.4 (6.3±5.1) | 85.7 (92.9±45.8) |
| **G-CSF** | Granulocyte colony-stimulating factor | 38.9 (50.2±32.4) | 21.6 (24.7±13.1) |
| **GM-CSF** | Granulocyte-Macrophage Colony Stimulating Factor | 1.3 (1.5±0.8) | 5.2 (4.9±1) |
| **IFN-α2** | Interferon, alpha2 | 40.5 (53.6±40.0) | 5.7 (5.1±1.8) |
| **IFN-γ** | Interferon, gamma | 3.1 (3.3±1.2) | 2.5 (5.5±9) |
| **IL-10** | Interleukin 10 | 2.0 (2.3±1.3) | <OOR |
| **IL-12 (p40)** | Interleukin-12 subunit p40 | 5.4 (6.5±3.4) | <OOR |
| **IL-12 (p70)** | Interleukin-12 subunit p70 | 3.2 (3.3±1.0) | 2.1 (2.4±0.7) |
| **IL-13** | Interleukin 13 | 23.1 (27.5±16.3) | <OOR |
| **IL-15** | Interleukin 15 | 2.3 (2.2±0.5) | <OOR |
| **IL-17A** | Interleukin 17 | <OOR | <OOR |
| **IL-1RA** | Interleukin-1 receptor antagonist | 970.0 (1056.2±687.5) | 10.6 (10.3±3.1) |
| **IL-1α** | Interleukin 1, alpha | 16.5 (18.9±7.8) | <OOR |
| **IL-1β** | Interleukin 1, beta | 2.2 (2.4±0.9) | <OOR |
| **IL-2** | Interleukin 2 | 1.0 (1.1±0.4) | <OOR |
| **IL-3** | Interleukin 3 | <OOR | <OOR |
| **IL-4** | Interleukin 4 | 6.1 (12.6±20.0) | <OOR |
| **IL-5** | Interleukin 5 | 1.6 (2.8±3.8) | <OOR |
| **IL-6** | Interleukin 6 | 2.7 (2.9±1.6) | <OOR |
| **IL-7** | Interleukin-7 | 27.3 (26.8±10.9) | 2.5 (2.8±0.9) |
| **IL-8** | Interleukin 8 | 19.9 (23.9±8.8) | 4.9 (5.9±2.5) |
| **IP-10** | CXCL10 | 2891.0 (3413.2±1793.8) | 198 (234.7±90.4) |
| **MCP-1** | CCL2 | 76.2 (113.9±97.4) | 407 (407.8±187) |
| **MIP-1α** | CCL3 | 6.3 (7.5±3.9) | 0 (2.1±3.2) |
| **MIP-1β** | CCL4 | 5.6 (6.3±1.9) | 36.9 (42.7±23.5) |
| **TNF-α** | Tumor necrosis factor, alpha | 0.6 (0.5±0.4) | 7.6 (7.6±2.9) |
| **TNF-β** | Tumor necrosis factor, beta | 0.0 (0.7±0.8) | <OOR |
| **VEGF** | Vascular endothelial growth factor | 52.6 (55.3±26.1) | 79.3 (96±49.7) |

[a]Values are expressed as Median (Mean±SD); OOR<: out (below) of detection range

**Supplementary Table 2. Identified Networks linking molecules showing kinetic Profile I and Profile II**

| Profile | Network ID | Molecules in the Network | Score | Focus molecules | Top functions |
|---|---|---|---|---|---|
| **I** | 1 | **MIP-1α**, **MIP-1β**, **CCL11/Eotaxin**, Cpla2, **GM-CSF**, **G-CSF**, **CXCL10/IP10**, Eotaxin, Fcer1, Fcgr3, Ggt, Gm-csf, Gsk3, HLA-DQ, HLA-DR, Ifn gamma, Iga, Ige, **IL-4**, **IL-5**, **IL-10**, IL-15, **IL-12(complex)/IL-12(p70)**, **IL-12(p40)**, Immunoglobulin, Interferon alpha, lymphotoxin-alpha-beta2, MHC Class II (complex), Nr1h, PI3K (complex), STAT5a/b, Tlr, **TNF**, Tnf receptor, U1 snRNP | 25 | 12 | Cell-to-cell Signalling and Interaction, Cellular Movement, Immune Cell Trafficking |
| | 2 | Akt, Ap1, BCR (complex), CD3, Creb, Cyclin E, **EGF**, ERK, ERK1/2, Hsp27, Hsp90, IFN Beta, **IFN-γ**, IgG, Igm, **IL-2**, **IL-7**, **IL-13**, IL-23, **IL-1α**, **IL-1RA**, JnK, **TNF**, Mapk, Nfat (family), NFkB (complex), P38 MAPK, PI3K (family) Ras, SAA, SRC (family), TCR, Vegf, **VEGF-A**, **VEGF-B** | 20 | 10 | Cell-to-cell Signalling and Interaction, Cellular Growth and Proliferation, Inflammatory Response |
| **II** | 3 | Ap1, BAI1, **MCP-1**, Cdk, CLEC11A, **IL-8**, DGKH, ECE1, ERK, ERK1/2, Fcer1, FXN, GNA14, Histone h3, IL-1, **IL-6**, IL-36A, Jnk, LDL, LPAR3, MARVELD3, MYO1E, NFkB (complex), NOD1, P38 MAPK, PDGF-BB, PI3K (family), Pkc(s), PLA2G7, STAB2, TFF2, Tlr, TMEM9B, TRIO, VRK2 | 8 | 3 | Inflammatory Disease, Connective tissue Disorders |

Network-eligible molecules/proteins that interact with other molecules in the Ingenuity Knowledge Database.
In bold: focus molecules belonging to the panel of cytokines/chemokines analysed.