SUMMARY: KEY CYTOKINES

Key Cytokines	Main Cell source	Major functions
Interferon-γ	Th1, NK, NKT cells	M/M* activation, inhibits Th17
Interleukin 1	M/M, epithelial cells and other cells M/M (Monocytes & Macrophages)	Pro-inflammatory
Interleukin 2	Th1 cells	T cell proliferation, T reg survival
Interleukin 4	Th2 cells	Antibody immunity, inhibits Th17
Interleukin 5	T cells, mast cells, Innate lymphoid cell type 2	Eosinophil growth and differentiation
Interleukin 6	M/M, epithelial cells and other cells	Innate immunity, B cell growth, induction Th17
Interleukin 7	Stromal cells from bone marrow and thymus, keratinocytes, DC and other cells	Growth factor for lymphoid cells and lymphoid progenitor cells
Interleukin 8	M/M, other cells	Pro-inflammatory, major neutrophil chemokine
Interleukin 10	DC, M/M, Th2, T regs	Suppression of some inflammatory pathways
Interleukin 12	M/M, DC	Induction of Th1
Interleukin 15	Intraepithelial cells	Dendritic and T cell activation
Interleukin 17	Th17	Inflammation
Interleukin 21	Th1, Th2, Th17	Proliferation of B, Th1, Th2 & Th17
Interleukin 22	Th17	Proliferation of epithelial cells
Interleukin 23	DC, M/M	Th17 expansion and stabilization
TNF-α	DC, M/M	Pro-inflammatory
TGF-β	Many cells	Induction of T regs or Th17