



Additional file 3: In vitro exposure to cigarette smoke extract (CSE) modulate the secretion of cytokines by monocyte-derived dendritic cells (MDDC) from healthy subjects activated by (a) *S. pneumoniae* (Sp) or by (b-f) LPS. Levels of (a-b) CXCL8, (c) TNF alpha, (d) IL-6, (e) IL-12 and (f) IL-23 were quantified by ELISA in MDDC culture supernatants collected after 24 hours incubation with CSE and Sp or LPS. Data are reported as mean +/- S.E.M. of 12 experiments. *P<0.05, **P<0.01, ***P<0.001.