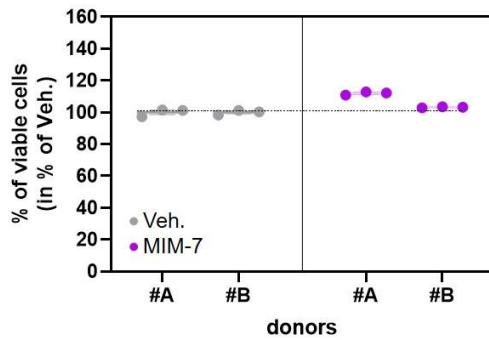
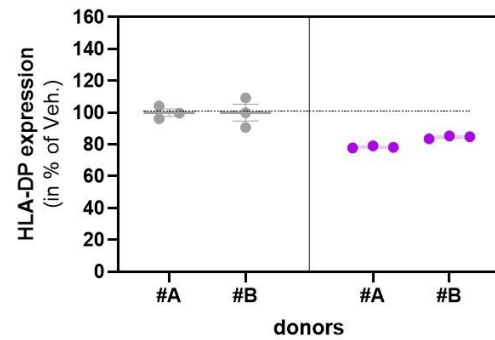
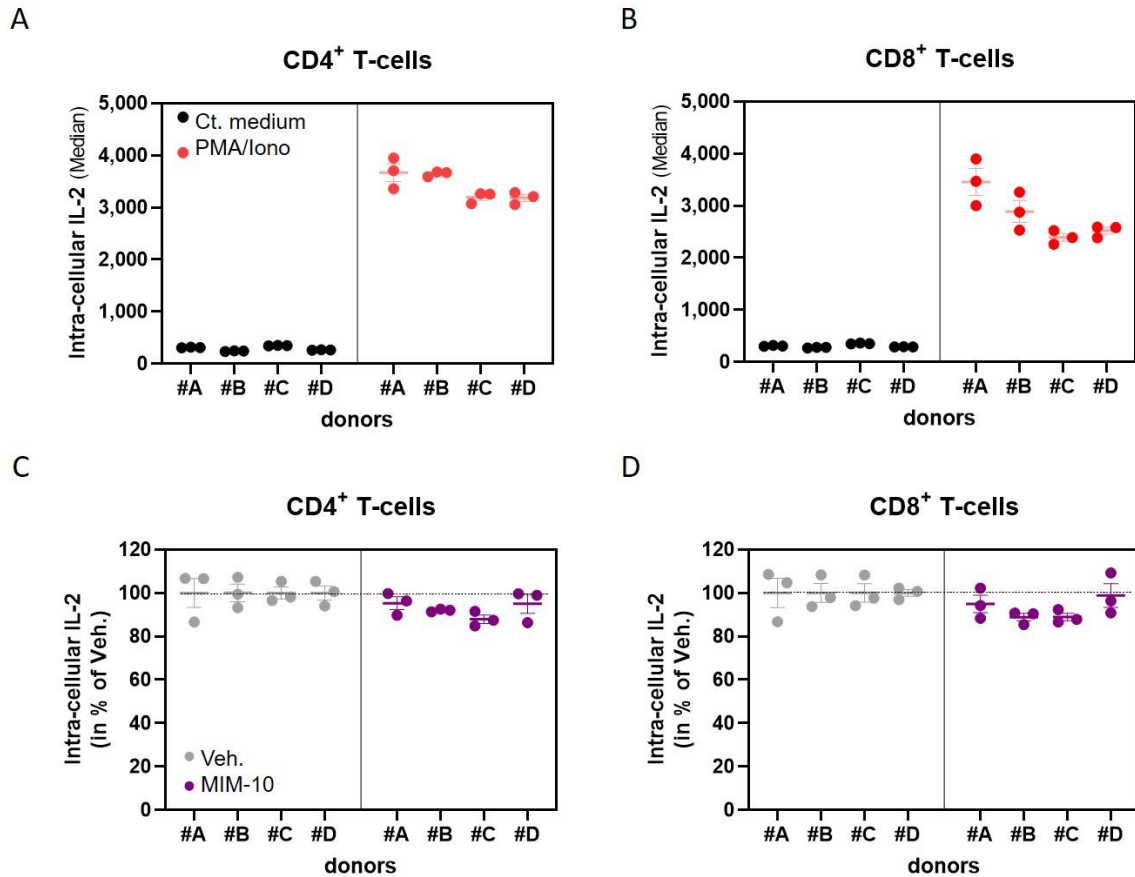
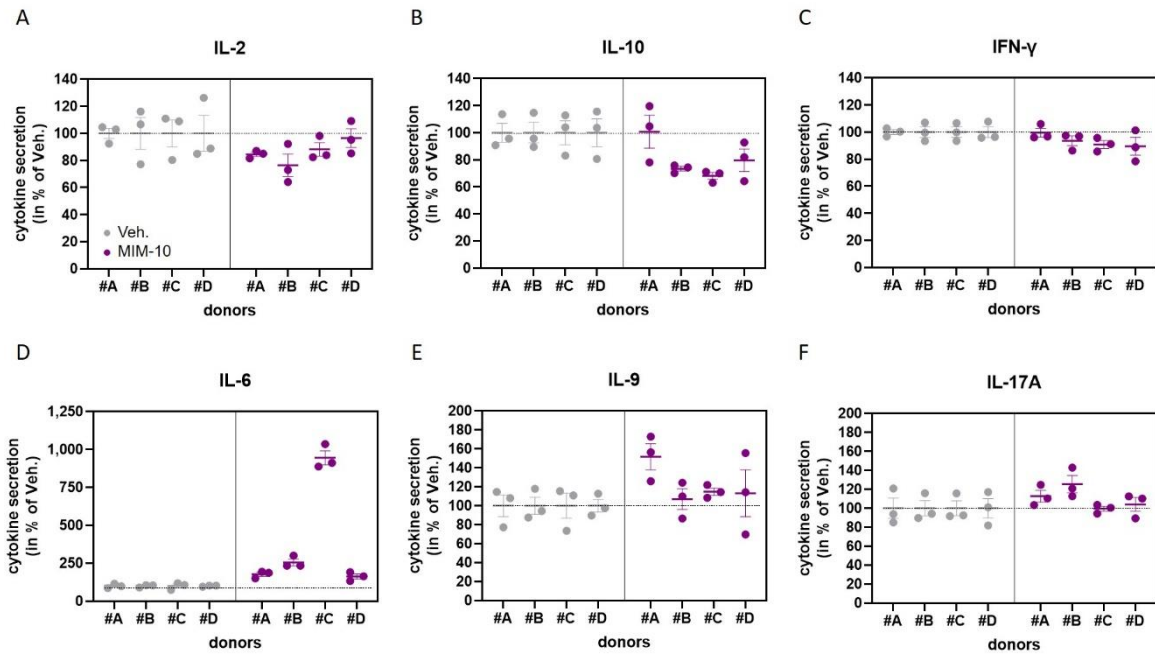


A**B**

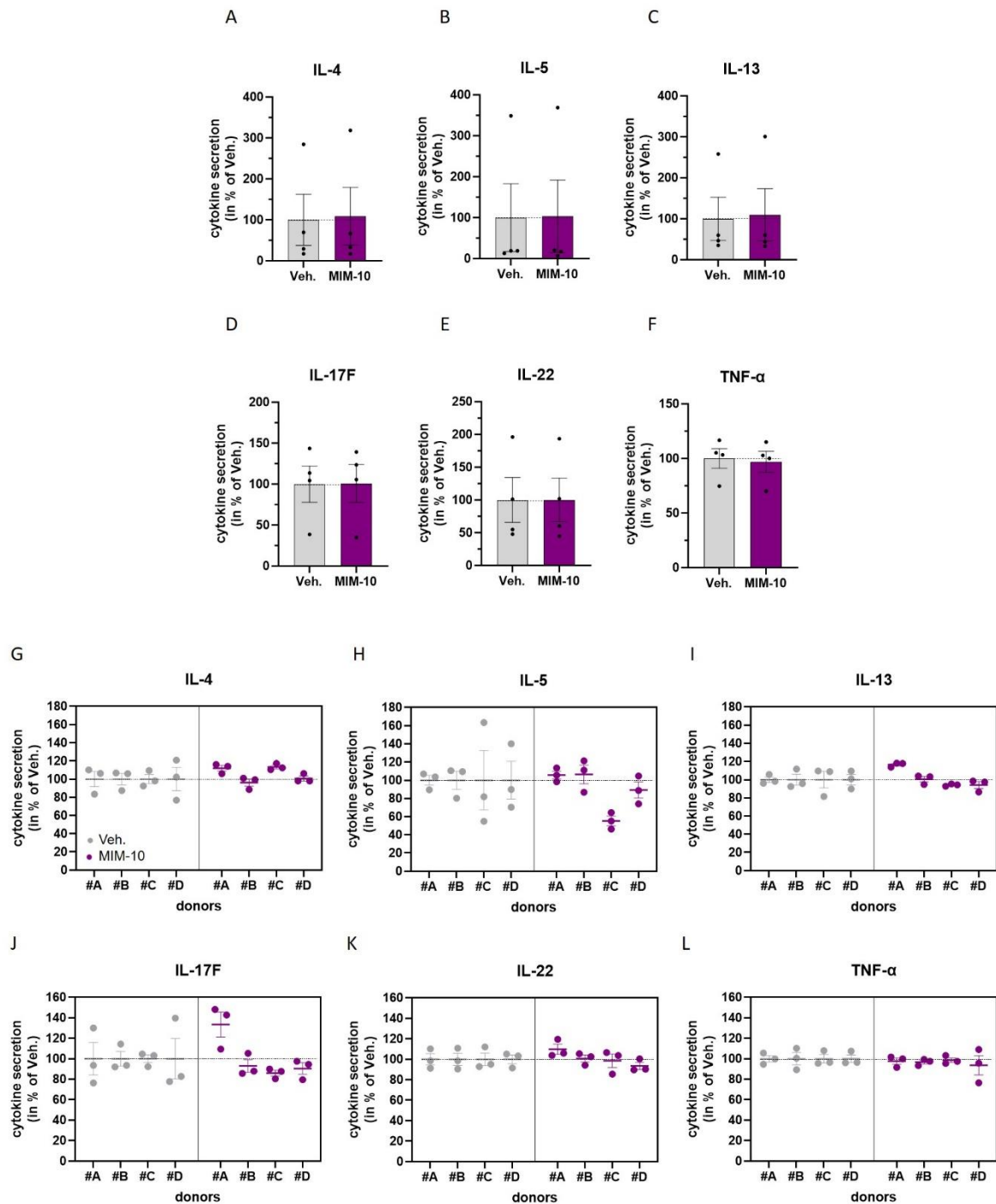
Supplementary Figure S1 Actives from the micro-immunotherapy medicine MIM-7 reduce the expression of HLA-II in human PBMCs-derived M1-macrophages. **(A)** Cell viability of human PBMCs-derived M1-macrophages isolated from two healthy donors (donor #A and #B), treated for 6 days with either the Veh. (grey dots), or MIM-7 (purple dots), in the presence of IFN- γ (20 ng/mL) and LPS (100 ng/mL) (see **Figure 1C** for the complete experimental scheme). The data are presented as the mean \pm S.E.M. of the percentage of viable cells, for $n = 3$ replicates per donor. The results are displayed as percentages of the Veh. condition, for the two individual donors (donor #A and #B). **(B)** Expression of the membrane-marker HLA-DP in human PBMCs-derived M1-macrophages isolated and treated as described in **(A)**. The data are presented as the mean \pm S.E.M. of HLA-DP expression for $n = 3$ replicates per donor. The results are displayed as percentages of the Veh. condition, for the two individual donors (donor #A and #B). The dotted lines highlight the effect of the actives from MIM-7 compared with the Veh.



Supplementary Figure S2 Actives from the micro-immunotherapy medicine MIM-10 slightly reduce the intracellular expression of IL-2 in PMA/Iono-stimulated human lymphocytes. **(A-B)** PBMCs from four healthy donors (#A, #B, #C and #D) were treated for 16 hours with 1X PMA/Iono and the intracellular expression of IL-2 was assessed by flow cytometry, after permeabilization and immune-staining with an anti-IL-2 antibody. The results are presented within the CD4⁺ and the CD8⁺ T-cells. **(C-D)** The same cells as mentioned in **(A-B)** were treated either with the Veh., or with MIM-10 for 48 hours, and were concomitantly stimulated with PMA/Iono during the last 16 hours of incubation. The data are presented as the mean \pm S.E.M. of IL-2 expression for $n = 3$ replicates per donor. The results are displayed as percentages of the Veh. condition, for the four individual donors (#A, #B, #C and #D). The dotted lines in **(C-D)** highlight the effect of the actives from MIM-10 compared with the Veh.



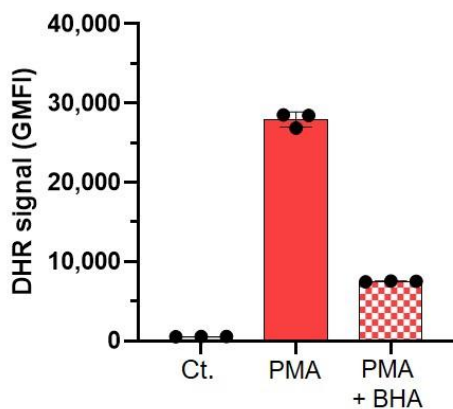
Supplementary Figure S3 Actives from the micro-immunotherapy medicine MIM-10 modulate the cytokine-secretion profile of PMA/Iono stimulated-PBMCs. PBMCs were treated for 48 hours with either the Veh. (grey dots) or MIM-10 (purple dots) and a PMA/Iono treatment was applied during the last 16 hours as a pro-inflammatory *stimulus*. The SN were harvested and the cytokine content was appraised by ELISA method. **(A-F)** The secretion of IL-2, IL-10, IFN- γ , IL-6, IL-9 and IL-17A was measured. The data are presented as the mean \pm S.E.M. of $n = 3$ replicates per donor. The results are displayed as percentages of the Veh. condition, for each of the four individual donor (donor #A, #B, #C, and #D). The dotted lines highlight the effect of the actives from MIM-10 compared with the Veh.



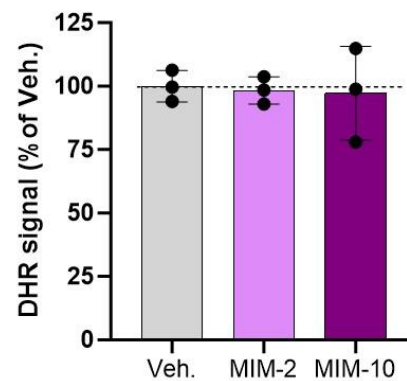
Supplementary Figure S4 Actives from the micro-immunotherapy medicine MIM-10 modulate the cytokine-secretion profile of PMA/Iono stimulated-PBMCs. PBMCs were treated for 48 hours with either the Veh. (grey histograms) or MIM-10 (purple histograms) and a PMA/Iono treatment was applied during the last 16 hours as a pro-inflammatory *stimulus*. The SN were harvested and the cytokine content was appraised by ELISA method. (A-F) The secretion of IL-4, IL-5, IL-13, IL-17F, IL-22 and TNF- α was measured. The data are presented as the mean \pm S.E.M. of $n = 4$ donors. The results are displayed as percentages of the Veh. condition, for each of the four individual donors, each dot representing the mean

value obtained for one donor ($n = 3$ replicates). (**G-L**) The results are displayed as percentages of the Veh. condition, for each of the four individual donors (donor #A, #B, #C, and #D). The data are presented as the mean \pm S.E.M. of $n = 3$ replicates per donor. The dotted lines highlight the effect of the actives from MIM-10 compared with the Veh.

A



B



Supplementary Figure S5 Actives from the tested MIM do not impact the PMA-induced ROS production in human neutrophils. (**A**) The ROS production was assessed by flow cytometry, in human neutrophils incubated with a DHR probe, either without stimulation (Ct.), in the presence of PMA alone (red histogram), or in the presence of PMA + butylated hydroxyanisole (BHA) treatment (squared red histogram). (**B**) PMA-induced ROS production in the presence of either the Veh., MIM-2, or MIM-10 capsules, when assessed at 11 mM of sucrose-lactose. The results are presented as the mean \pm S.D. of the geometric mean fluorescence intensity (GMFI) obtained for $n = 3$ replicate per condition (**A**), or as the mean \pm S.D. of the percentage of the GMFI obtained for $n = 3$ replicate per condition, the Veh. condition being set at 100% (**B**). The black dotted lines in (**B**) are drawn to highlight the effects of the tested capsules compared with the Veh.