

ISOLIGHT technology: Cytokines profiles in patients with Psoriasis and Psoriatic Arthritis. Determination of similarities and differences within serum from individual patients

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The Isolight instrument from Isoplexis has been designed to quantitate up to 32 cytokine analytes in either a single 5.5ul sample of serum or from individual cells within a population that are isolated and cultured in micro-fluidic chambers of the instrument. Here, we examine the cytokine secretome from psoriatic arthritic patients and compare these to psoriatic patient profiles. These comparisons were made using an 'adaptive immune secretome' profiling kit. Data suggests that a number of cytokines including IL-4, IL-8 and IP-10 were up-regulated in patients in addition to a significant elevation in Perforin, a glycoprotein responsible for pore formation in cell membranes of target cells. In psoriatic arthritis patients IL-8 and IP-10 were elevated in comparison with psoriatic patients. The Isolight technology allows for the investigation of secretome signatures between treated and untreated or disease and non-disease patient samples by analysis of either serum or cells within serum such as CD4+, CD8+ T-cells or serum from distinct patient treatment groups.