

**P007** The humoral pattern recognition receptor PTX3 is stored in neutrophil granules and acts as an opsonin through complement activation.

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The long pentraxin PTX3 is produced by macrophages and myeloid dendritic cells in response to TLR agonists and represents a non-redundant component of humoral innate immunity against selected pathogens. We recently observed that PTX3 is stored in neutrophil specific granules and undergoes release in response to microbial recognition and inflammatory signals. Released PTX3 localizes in neutrophil extracellular traps formed by extruded DNA. PTX3-deficient neutrophils have defective microbial recognition and phagocytosis, and PTX3 is non-redundant for neutrophil-mediated resistance against *Aspergillus fumigatus*. To identify the mechanisms underlying PTX3 opsonic activity, we performed phagocytic assays in the presence of normal serum or sera depleted of specific complement components. Results suggest that PTX3 opsonic activity is serum and complement dependent. In the presence of C3 depleted serum PTX3 does not play opsonic activity. Moreover, PTX3 activity is C1q independent, C4 independent but Factor B dependent. Thus, neutrophils serve as a reservoir, ready for rapid release, of the long PTX3 which acts as an opsonin acting through complement activation.