neutrophils, eosinophils and peripheral blood mononuclear cells (PBMCs) in bullous pemphigoid (BP)

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Methods: In an ex vivo skin model (Stains et al. 2012), PBMCs are incubated with purified granulocytes and/or EBNA antibodies to type VII collagen. Fissure formation is induced by IL-13 stimulation, followed by addition of BP or control sera. The effect of BP antibodies (BPs) on fissure formation is assessed by confocal microscopy.

Conclusion: These preliminary results show that neutrophils are able to induce fissures either in the presence or absence of BP antibodies upon activation by cytokines and complement factors. Eosinophils are not able to induce fissures solely in the presence of BP antibodies. PBMCs, and more specifically monocytes, are able to induce fissures upon BPs. Synergistic induction of fissures by monocytes and neutrophils is observed. These observations suggest an active role of these immune cells in fissure formation. Further investigations are needed to elucidate the mechanisms.

IV. PBMCs, mainly monocytes, induce fissures upon BPs

with BPs do not