**A106 IDENTIFICATION OF CITRULLINATED FIBRINOGEN
PEPTIDES AS T CELL EPITOPES IN HUMANISED HLA-DR4
TRANSGENIC MICE**

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Background Antibodies directed against citrullinated proteins (ACPAs) are highly specific for rheumatoid arthritis (RA). The production of ACPAs is most likely dependent on the presence of T cells, since ACPAs undergo isotype switching and are associated with the shared epitope-containing HLA-DRB1 alleles. Fibrinogen is a likely candidate protein for T cell recognition, since a large subset of patients is positive for ACPAs that are reactive with (peptides derived from) citrullinated fibrinogen.

Objectives The aim of this study was to identify citrullinated fibrinogen peptides that are presented to HLA-DRB1*0401-restricted T cells.

Methods HLA-DR4-transgenic mice were immunised with citrullinated fibrinogen and T cell proliferation against all possible citrullinated fibrinogen peptides derived from the α , β , γ chain was analysed.

Results T cell reactivity against several different citrullinated fibrinogen peptides was observed.

Discussion Ongoing research is aimed at determining whether these responses are citrulline-specific and whether there is reactivity against the identified citrullinated peptides in PBMCs of RA patients.