A86 **NEGATIVE REGULATION OF BIK BY THE MICRO RNA-125B INTERFERES WITH MACROPHAGE APOPTOSIS IN RHEUMATOID ARTHRITIS**

J Presumey, I Duroux-Richard, S Fabre, Y-M Pers, G Courties, C Jorgensen, F Apparailly *INSERM, U844, University of Montpellier, CHU Lapeyronie, France*

10.1136/ard.2010.129619t

Cells from the mononuclear phagocyte system (MPS) act as systemic and local amplifiers that contribute to the progression of chronic inflammatory disorders such as rheumatoid arthritis (RA). Among the pathogenetic hallmarks of the inflammatory response, the balance between pro-apoptotic and anti-apoptotic molecules plays an important role and has been shown to be deregulated in the MPS from patients with RA. Micro-RNAs are an important class of endogenous short non-coding negative gene regulators that have been associated with various cellular processes including apoptosis. The authors have identified miR-125b, whose expression was highly correlated with patients with RA, as a post-transcriptional regulator of the pro-apoptotic BH3-like protein BIK. Moreover, enforced expression of miR-125b in human macrophages promoted apoptosis by targeting BIK in a dose-dependent manner, and broadly impacted apoptosis-related genes as assessed by transcriptomic analysis.