

P057 Role of TLR2 in *Salmonella enterica* serovar Typhimurium infection

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TLR4 in association with MD2 and CD14 recognises the main component of the *Salmonella* cell wall, LPS, leading to the production of inflammatory mediators such as tumour necrosis factor- α and inducible nitric oxide synthase (iNOS). Signalling through TLR4 is essential to control *Salmonella* infection *in vivo*. TLR2 recognises bacterial lipoproteins and lipoteichoic acid, the first being an abundant component of the Gram-negative cell wall, and TLR9 mediates the response to bacterial DNA. We show that in TLR2^{-/-} BMDM, mRNA expression of TLR4 and TLR9 is increased and the expression in response to *Salmonella* infection is altered. *In vivo* TLR4 and iNOS mRNA expression is more variable in TLR2^{-/-} mice than wt however, mRNA expression are increased to the same level in response to *Salmonella* infection in both mouse strains. Serum levels of some inflammatory mediators are increased in TLR2^{-/-} mice in response to LPS challenge compared to C57BL/6 wt mice, however, *in vivo* infections with *S. Typhimurium* results in identical bacterial loads in spleen and liver of both mouse strains.