

P065 TLR independent recognition of viral nucleic acids in Mesangial cells

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Viral infections associated with glomerular nephritis. The molecular mechanisms are still unclear. Mesangial cells are the mainly affected cells. Previously it was hypothesised that viral nucleic acids can mediate through Toll like receptors (TLRs) but TLRs expression on kidney cells are restricted. Mesangial cells don't express CpG DNA receptor TLR9, It express Double stranded RNA receptor TLR3. Recent evidence shows that viral nucleic acids can also recognize by cytosolic receptors in TLR independent manner. Viral RNA recognized by RIG1 (retinoic acid inducible gene 1 protein) and MDA5 (melanoma differentiation associated gene 5), viral DNA can recognized by unidentified cytosolic DNA receptor and then induce type 1 interferon's in different pathways. Here we studied effects of 5' Tri phosphate and Non CpG DNA hypothesised as a RIG-1 and unidentified cytosolic DNA receptor agonists on murine primary Mesangial cells and we also analysed transcriptome induced by these ligands.