replication evades the innate immune response and becomes latent remains unclear.

**Materials and methods**

RSV persistently infected HEp-2 cells were isolated and the clones were passaged. By using siRNA silence of RIG-I or TLR3, protein levels of SOCS1, SOCS3 and STAT1/2 in the viral persistent cells were checked by western blot, cytokines concentrations in the supernatant of were determined by ELISA, and antiviral genes expression was detected by RT-PCR.

**Results**

The RSV persistent cells always differentiated into two distinct populations characterised by viral permission or resistance respectively. The viral persistent cells produced a low viral titer, resisted wild-type RSV superinfection, and secreted high levels of IFN-γ, Mip-α, IL-8 and Rantes. TLR3, RIG-I and SOCS1 were found to be upregulated. The silence of TLR3 decreased the expression of SOCS1 and the secretion of cytokines.

**Conclusion**

RSV persistent cells are in an inflammatory state that the upregulation of SOCS1 is related to the TLR3 induced signalling pathway, which could be associated with viral persistence.

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**Preterm Brain Injury – Experimental**

**PS-331 SERIAL CRANIAL ULTRASONOGRAPHY OR EARLY MRI FOR DETECTING PRETERM BRAIN INJURY?**

**Background and aims**

Magnetic resonance imaging (MRI) is considered imaging method of choice for high-risk preterm infants to assess brain injury. However, MRI scanning in preterm infants is particularly challenging due to safety, logistical and quality issues that limit clinical feasibility. Meanwhile, due to ongoing technical developments and by using additional acoustic windows, advanced serial cranial ultrasonography (CUS) has acquired great clinical value. We hypothesised that dedicated serial CUS is equally effective in diagnosing preterm brain damage as a routine MRI scan at 30 weeks postmenstrual age and excels in clinical feasibility.

**Methods**

We prospectively collected data of 307 infants born <29 weeks gestational age. Serial CUS and MRI were performed according to standard clinical protocol. In case of instability, MRI was postponed or cancelled. Brain images were assessed by independent experts and compared between modalities.

**Results**

Serial CUS was performed in all infants, MRI was often postponed (n = 58) or cancelled (n = 127). Injury was found in 146 infants (47.6%). Clinical characteristics differed significantly between groups that were subdivided according to timing of MRI. 61 discrepant imaging findings were found. MRI was postponed or cancelled. Brain images were assessed by independent experts and compared between modalities.

**Conclusion**

Advanced serial CUS seems highly effective in diagnosing preterm brain injury, but may miss cerebellar haemorrhages.