**The risk of intussusception following monovalent rotavirus vaccination in England: A self-controlled case-series evaluation Ref. No: JVAC-D-16-01124**

Dear Editor

We agree with Dr Drysdale and Professor Pollard that the timing of the rotavirus vaccination is an important consideration when assessing the risk of intussusception, given the vaccination course needs to be completed before 24 weeks of age to avoid coinciding with the peak in the background incidence of intussusception. In Figure 1 of our paper we show how incidence increases with age within the cases in our study. What was not given in our paper was detail of the age at vaccination within our cases and within those who had their intussusception in the risk period after the first dose. Across all 82 vaccinated cases the mean age at dose one was 9 weeks (range 6-16 weeks) and dose two 14 weeks (10-38 weeks), which is similar to the age of vaccination in national data. Two infants did get vaccinated outside the recommended ages, one with a late first dose (16 weeks) and one with a late second dose (38 weeks). Both these infants had their intussusception episode prior to vaccination. The 15 cases with onset 1-7 days after the first dose received the vaccine at a slightly older age (average 3 days older) than other cases not in a vaccine risk period (69 days vs 66 days, p-value = 0.39).

In our study, numbers given the vaccine late were not sufficient to assess whether the increased relative incidence seen after the first dose differed by the age that dose was given. However, if we assume the elevated relative incidence seen after the first dose would also apply to any first dose given at an older age than occurred in our study (for example around the peak of intussusception of 14 to 42 weeks) then the attributable risk associated with these late vaccinations would be 2-3 times greater than the 1.91 per 100,000 seen in our study. The current recommendations therefore are a sensible approach to reducing the intussusception risk.

We agree that the question about the risk of intussusception in premature infants with regards to the strict timing of vaccination is important but as the authors have recognised the question of an increased risk in premature infants could not be addressed in this study.

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