



### What is Patent Ductus Arteriosus (PDA)?

The ductus arteriosus is a blood vessel that, during pregnancy, allows blood from the baby's heart to flow to the mother's placenta to get oxygen, bypassing the baby's lungs. After birth the ductus should close. However, in very premature babies it sometimes remains open, this is called a Patent Ductus Arteriosus or PDA.



### What is the Baby OSCAR trial?

The Baby-OSCAR trial is the largest study to investigate the early treatment within 72 hours of a large PDA (bigger than 1.5mm) with ibuprofen in extremely preterm infants born before 28 weeks.



## At birth

Ibuprofen helps to close the patent ductus arteriosus. In the group that received ibuprofen we found that the patent ductus arteriosus closed or became smaller for more babies when compared to the placebo group. However, this did not lead to any improvement in survival or breathing outcomes for babies.

Giving ibuprofen early, when a baby is first born, in the first 72 hours did not lead to any difference in these health outcomes.

## At 2 years

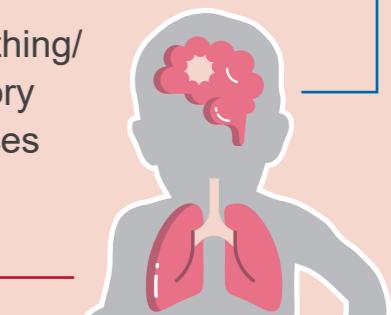
At 2 years of age, we looked at how children were getting on to understand if there were any differences in health, physical or mental development.

We found that there was:

- No difference in survival
- No difference in breathing outcomes
- No difference in terms of physical development and no difference in language or cognitive development, such as in thinking, memory or problem solving skills.

No developmental differences

No breathing/ respiratory differences



**Early ibuprofen treatment, within the first 72 hours, for large patent ductus arteriosus in extremely preterm infants did not improve survival, breathing or brain development either at birth or in the longer term at 2 years of age.**



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