

Question and answer session

Question: *On the basis of current data that indicate that synthetic surfactant is similarly effective to natural surfactant which one should be used?*

H. Halliday: If well designed trials show that synthetic surfactant is better than natural surfactant, this would probably be the preferred treatment option – however, this is a long way down the line.

Question: *What would be the endpoint of such a study?*

H. Halliday: Long-term follow-up trials evaluating children at age 2 and even 5 years are required. If survival benefits are demonstrated in these studies then that would influence treatment choice.

Question: *Surfactant dysfunction is associated with prolonged ventilation. Is there a role for surfactant in infants on long-term ventilation?*

H. Halliday: Observational studies in infants with early CLD show short-term acute benefits in lung function, although there are no randomised trials. We need to wait and see.

Question: *When lung function is assessed at the age of 10 years, how can environmental factors (e.g. smoking) be accounted for in order to determine the difference between the effects of preterm birth and environmental effects?*

J. Stocks: Studies must be designed with sufficient power, a large sample size and the use of multivariate analyses to account for this. It is impossible to get a ‘clean’ study cohort that does not include previous smokers or those with asthma. Therefore, modeling must be utilised.

Question: *Requirement for oxygen at 36 weeks is not a good predictor of BPD – preterm infants <32 weeks of gestational age should be considered to have mild BPD. Should this definition be applied in clinical trials so that there is consistency within the literature and these infants can be followed-up?*

J. Stocks: The cut off is frustrating and clinicians need to think in terms of a continuum. Infants should not be categorized but rather time to oxygen requirement should be noted and then modeled accordingly. Each infant should be assessed on an individual basis.

Question: *Is there a simple lung function test that can be used in a large cohort of children aged 5 to 8 years?*

J. Stocks: In school-age children there is a good range of tests – the biggest issue is availability of resources depending on where the study is being conducted. Spirometry is probably the easiest to transport and use and is less sensitive to changes in children.