One of the most fiercely debated issues in anaesthesiology takes centre stage today, with a session devoted to rocuronium versus suxamethonium (succinylcholine) in obstetric anaesthesia. One of the perceived benefits of suxamethonium is that it wears off spontaneously, and, in the event of an anaesthetist failing to intubate the trachea and also struggling to ventilate the lungs of a woman at Caesarean section, suxamethonium affords what many regard as a 'bail-out' option: the mother can be woken up and will start breathing without administration of any other drugs.

Rocuronium has fewer undesirable side effects than suxamethonium, but data on placental transfer in humans are limited. A specific antidote to rocuronium— sugammadex—was introduced three years ago, and many anaesthesiologists regard the rocuronium-sugammadex combination as the way forward. In the event of airway problems, there is the option to reverse muscle paralysis, although the profound blockade of rocuronium might actually be more conducive to successful airway management, such as cricothyrotomy.

Session chair David Levy, Consultant Anaesthetist at Nottingham University Hospitals NHS Trust, is looking forward to thrashing out all the issues. “Suxamethonium has been used for muscle relaxation at Caesarean section for over 50 years. It is a time-honoured drug; every practising anaesthetist has been taught to use it,” says Levy. “Rocuronium has been around for less than 20 years. As a result, many stick to the age-old belief that suxamethonium should remain the standard of care. Hence the need for this debate!” he adds.

In the first of three presentations, Claude Meistelman (School of Medicine, Nancy, France) will discuss the pharmacokinetics of these two drugs in pregnancy. Thereafter, it’s a head-to-head debate, with Jan-Uwe Schreiber (Maastricht University, the Netherlands) representing the ‘pro suxamethonium’ camp, and Thierry Girard (University Hospital Basel, Switzerland) arguing in favour of rocuronium.