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Back in 1997, researchers at the University of Oxford (Professor Dennis Lo) and the John Radcliffe Hospital (Professor James Wainscoat) discovered that cell-free foetal nucleic acids can be detected in maternal plasma or serum during pregnancy. The findings have significant implications in the area of non-invasive prenatal diagnosis for a broad range of indications including Rhesus D blood typing.

Rhesus D blood group incompatibility between the pregnant woman and her foetus is a significant problem due to the possibility of maternal alloimmunization and consequent haemolytic disease of the new born.

Around 15% of white females and 3-5% of black Africans have a Rhesus D negative blood type. Pregnant Rhesus D negative women who may be carrying a Rhesus D positive foetus receive anti-D antibodies at 28 weeks of pregnancy, regardless of the actual genotype of the foetus. With growing fears relating to plasma-derived products, fuelled by concerns over new variant CJD, there is significant pressure to reduce the use

of human blood products where at all possible. The prenatal determination of foetal Rhesus D genotype avoids the unnecessary risk and expense of administering anti-D antibodies when they are not required. The money saved in avoiding unnecessary administration of Rhesus immune globulin could pay for the testing. In addition, this practise would conserve Rhesus immune globulin and help prevent supply shortages.

Institut de Biotechnologies have taken an exclusive licence for the manufacture and sales of kits for non-invasive prenatal diagnosis of Rhesus D blood typing using a Real Time Polymerase Chain Reaction (RT-PCR) platform for the test in the territory of Europe.

Tom Hockaday, Executive Director of Isis Innovation Ltd commented: "We are delighted to have concluded this licence with Institut de Biotechnologies. The Oxford technology has a wide range of applications and we are very pleased that Institut de Biotechnologies are investing in taking this use of the technology to market."

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