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# IP OPPORTUNITY

## Predicting the onset of labour

### The University of Newcastle

The University of Newcastle is one of Australia's leading research Universities. Research at the University is of the highest quality with dedicated research facilities, buildings and Institutes devoted to rigorous experimentation and quality outputs.

Newcastle Innovation facilitates the transfer of knowledge, technology and research from the University to industry and commercial partners.

### Invention Description

Development is now under way for a new diagnostic test that will predict when a woman will go into labour. It follows the discovery that the ratio of two hormones in the blood is likely to be a very significant factor contributing to the onset of labour.

This test could potentially improve the health outcomes for mothers and premature babies by allowing better preparation for, and possibly prevention of, their early delivery.

The major benefit of this potential product is that it will enable doctors to make better informed decisions about their patient's care. This will lead to cost savings in the healthcare system, such as reducing the costs associated with caring for premature babies, and also saving the cost of an induction of labour which may be unnecessary if a woman is already close to giving birth.

### Inventors

Prof. Roger Smith  
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### Potential Application and Market Opportunities

In Australia alone around 300,000 babies are born each year, with approximately 7% born prematurely, before 37 weeks gestation. This product would be applicable worldwide as a way to improve healthcare for expecting mothers and unborn babies. Ideally, in time this test will be used by all women as part of their routine obstetrics check-up to identify women at risk of preterm labour.

In the future there is the potential for a inexpensive home test kit to become available, based upon the research conducted in this project.

### Development Stage

The technology is currently at the proof of concept stage and so far over 500 women from the John Hunter Hospital have participated in the initial research. Starting in July 2010 a more advanced series of studies will begin with volunteers recruited from the John Hunter Hospital and further validating the diagnostic assay.

### Commercialisation

The Intellectual Property surrounding the technology is protected through a patent application currently in the PCT stage. Titled "Methods and kits for predicting the onset of labour", it has the application number PCT/AU2009/000949 and a priority date of 25th July 2007. National Phase entry is expected shortly.

The commercialisation of the technology is progressing with the help of Newcastle Innovation and Hunter Medical Research Institute, and with secured funding from the Medical Research Commercialisation Fund and Commercialisation Australia.

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