



20 April 2018

Dear Doctor,

**RE: Changes in combined first trimester aneuploidy and pre-eclampsia screening and provision of non-invasive prenatal testing (NIPT) at Royal Prince Alfred Hospital**

We would like to take this opportunity to highlight some changes in our aneuploidy / pre-eclampsia screening program:

1. We have added a third biochemical marker for combined first trimester screening – placental growth factor. This is of value for both aneuploidy and pre-eclampsia screening.
2. In order to be able to provide women with risk results when they attend for the scan, we would like women to come for their first trimester serology (BhCG, PAPP-A and PLGF) anytime after 10 weeks but at least three days prior to their NT appointment.
3. Please could you either request ‘first trimester combined screening’ on an RPA blood request form at the same time as writing an ultrasound referral for a NT scan *or* advise your patient to come and collect a blood request form from the Ultrasound and Fetal Medicine Department at least three days before their NT scan. It is important, for quality control that the bloods are done on the RPAH campus.
4. On the day of NT appointment, the risk calculation for Down syndrome and early onset pre-eclampsia will be performed after the ultrasound scan and the patient will be informed of the results. Copy of the results will be sent to you by post.
5. We currently use a ‘contingent’ model for NIPT screening. The risk cut-offs will change to improve overall detection rates for Down syndrome. The new cut-offs will be:  
  
1:2 to 1:50: ‘high risk’ – should have a CVS or amniocentesis  
1: 51 to 1:300: ‘intermediate/high’ risk *should* have either CVS or NIPT  
1:301 to 1:2500 ‘intermediate/low’ risk could have NIPT for further reassurance  
<1:2500 ‘low’ risk - women will be reassured, no further screening will be advised
6. We are able to offer NIPT testing within the hospital although patients have to pay. We use two providers and tests currently range in price from \$250-400. Payment is to the test provider.

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7. We can also facilitate NIPT done prior to combined first trimester screening (i.e. at 10 weeks gestation) – although we feel that having cFTS before NIPT is a more appropriate approach to the use of these tests. Patients coming for 'pre-cFTS NIPT' need to have had a dating scan before they attend – and we are not able to offer this ultrasound service. The ultrasound should have been performed within two weeks and they need to bring the ultrasound report with them.
  
8. Following publication of the ASPRE study (Rolnik et al. NEJM 2017) which confirms the value of pre-eclampsia prediction and prevention up to 37 weeks gestation, we will change PET risk assessment to reflect this time point rather than 34 weeks (the current advice). The risk cut-off (1 in 100) will remain the same.

Updated information sheets for cFTS and NIPT are attached together with a copy of the RPA blood request form and a patient information sheet on First Trimester Combined Screening.

We hope you (and your patients) are able to continue to use this service. We would be happy to answer any outstanding questions you have.

Best wishes,

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Head of O&G Ultrasound

Clinical Professor Jon Hyett  
Head of High Risk Obstetrics