January 2016

UK NSC non-invasive prenatal testing (NIPT) recommendation

The UK NSC recommended an evaluative implementation of NIPT to assess what impact it would have on the existing NHS Fetal Anomaly Screening Programme.

Pregnant women are already offered a screening test for Down's syndrome, Edwards' syndrome and Patau's syndrome from 10-14 weeks of pregnancy (the combined test, involving an ultrasound scan and blood test), or a screening test for Down's syndrome only (the quadruple test, involving a blood test alone) if booking between 14-20 weeks.

If the screening test shows that the chance of having a baby with Down's, Edwards' and Patau's syndromes is higher than 1 in 150, this is called a higher-risk result. Currently, women who have a higher risk result have the option of having an invasive diagnostic test (amniocentesis or CVS).

The proposed change is for Non-Invasive Prenatal Testing to be offered to women who are deemed at higher risk following the current primary screen. NIPT is not diagnostic and an invasive diagnostic test is still required to receive a definitive diagnosis.

Key findings supporting the UK NSC recommendation

- an invasive diagnostic test carries a small risk of miscarriage. The evidence suggests that NIPT will reduce the number of women being offered an invasive test
- however, while we know that the accuracy of NIPT is very good, we don't yet know how it will perform in an NHS screening programme pathway
- for women who choose to have NIPT, this will add in an extra step in the screening programme. The impact of this, and the choices women make at different points in the pathway, is something that we hope to gain a better understanding of through further research
- a recommendation has therefore been made to evaluate the introduction of non-invasive prenatal testing (NIPT) to Down's syndrome screening. This will include scientific, ethical and user input to better understand the impact on women, their partners and the screening programme around the offer of cfDNA or invasive testing following a screening test result where:
 - » the screening test risk score for trisomy 21 (T21) is greater than or equal to 1 in 150
 - » the combined test risk score for trisomy 18 (T18) and trisomy 13 (T13) is greater than or equal to 1 in 150

The UK NSC regularly reviews its recommendations on screening for different conditions in the light of new research evidence becoming available.

To find out more about the UK NSC's NIPT recommendation, please visit:

legacy.screening.nhs.uk/fetalanomalies

The UK National Screening Committee (UK NSC) advises ministers and the NHS in the 4 UK countries about all aspects of screening and supports implementation of screening programmes.

Find out more about the UK National Screening Committee at

www.gov.uk/government/groups/uk-national-screening-committee-uk-nsc. The UK NSC evidence review process is described at www.gov.uk/government/publications/uk-nsc-evidence-review-process and a list of all UK NSC recommendations can be found at legacy.screening.nhs.uk/recommendations

The UK NSC secretariat is hosted by Public Health England (www.gov.uk/phe).