

sample for the extraction of cell-free DNA (cfDNA),^o which is analysed for the presence of the *RHD* gene. The literature search for this question aimed to establish whether targeted routine antenatal or sensitising event immunoprophylaxis to Rh D negative pregnant women with no preformed anti-D antibodies with an Rh D positive fetus increases the incidence of Rh D alloimmunisation compared with universal routine antenatal or sensitising event immunoprophylaxis. It also considered the diagnostic accuracy of NIPT to identify fetal Rh D status in Rh D negative pregnant women with no preformed anti-D antibodies.

3.3.1 Recommendations and Expert Opinion Points

Identifier	Guidance – recommendations
R6	The ERG recommends that antenatal Rh D immunoprophylaxis in Rh D negative pregnant women with no preformed anti-D antibodies be targeted to those predicted to be carrying an Rh D positive fetus, based on NIPT for fetal <i>RHD</i> . This applies to both routine and sensitising event immunoprophylaxis, if the result of fetal <i>RHD</i> genotyping is available. ^a <i>(Strong recommendation, low certainty of evidence about the size of effect)</i> ^a See EOP3 and EOP7
R7	If fetal Rh D status is not available or is uncertain, the ERG recommends that antenatal Rh D immunoprophylaxis be offered to Rh D negative pregnant women with no preformed anti-D antibodies. <i>(Strong recommendation, low certainty of evidence about the size of effect)</i>
R8	The ERG currently recommends that postnatal Rh D immunoprophylaxis (Rh D immunoglobulin 625 IU) continue to be administered to all Rh D negative women with no preformed anti-D antibodies who have a baby who is predicted to be Rh D positive based on NIPT for fetal <i>RHD</i> , or cord blood or neonatal Rh D typing. The cord blood or neonatal testing should be performed regardless of the results of NIPT for fetal <i>RHD</i> , but need not delay administration of Rh D immunoprophylaxis when the fetus has been shown to be <i>RHD</i> positive by NIPT testing. If the baby is Rh D positive, administer Rh D immunoglobulin even if the NIPT predicted an Rh D negative baby. <i>(Strong recommendation, high certainty of evidence)</i>
R9	The ERG recommends the testing of maternal blood to determine fetal <i>RHD</i> genotype in all Rh D negative pregnant women to enable targeted antenatal Rh D immunoprophylaxis. ^a <i>(Strong recommendation, high certainty of evidence about the accuracy of the test)</i> ^a The ERG's recommendation on the use of NIPT for fetal <i>RHD</i> is not a policy statement on funding and supply arrangements for the national provisions of NIPT for blood group genotyping to determine the Rh D status of the fetus.
R10	The ERG recommends that test sensitivity be at least 99% in order to minimise the number of Rh D positive fetuses being missed by the test. <i>(Strong recommendation, high certainty of evidence about the accuracy of the test)</i>
R11	The ERG recommends NIPT for fetal <i>RHD</i> from 11 ⁺⁰ weeks of pregnancy because of higher test accuracy than at earlier weeks. <i>(Strong recommendation, high certainty of evidence about the accuracy of the test)</i>

EOP: Expert Opinion Point; ERG: Expert Reference Group; IU: international units; NIPT: Non-invasive prenatal testing; R: recommendation

^o Cell-free DNA is colloquially known as cell-free fetal DNA (cffDNA).