

Anti-D Immunoglobulin Administration following potentially sensitising events in D Negative women - Summary

Gestation LESS than 12+0 weeks	
Samples required	Group and Save*
For the following PSEs	<p>Administer 500 IU anti-D as soon as possible and always within 72 hours of event**</p> <p>Termination of pregnancy</p> <ul style="list-style-type: none"> • Anti-D required for women having a termination of pregnancy after 10+0 weeks gestation. • Anti-D required for women having a surgical termination of pregnancy/manual vacuum aspiration of pregnancy up to and including 10+0 weeks' gestation. • Anti-D NOT required for women who are having a medical termination of pregnancy up to and including 10+0 weeks' gestation. <p>Ectopic pregnancy, miscarriage or molar pregnancy:</p> <ul style="list-style-type: none"> • Anti-D required for women who have a surgical procedure to manage ectopic pregnancy, miscarriage or molar pregnancy. • Anti-D NOT required for women who receive solely medical management for miscarriage/ ectopic pregnancy. • Anti-D NOT required for threatened miscarriage or complete miscarriage or pregnancy of unknown location. <p>Threatened miscarriage:</p> <ul style="list-style-type: none"> • Consider anti-D Ig in non-sensitised D negative women if PV bleeding is recurrent, heavy and/or associated with severe abdominal pain
Gestation 12+0 to 19+6 weeks	
Samples required	Group and Save*
For any PSE (see Appendix 1)	<p>Administer 500 IU anti-D as soon as possible and always within 72 hours of event**</p> <p>For continual uterine bleeding which is clinically judged to represent the same sensitising event, with no features suggestive of new presentation or significant change in pattern or severity of bleeding, minimum dose of 500 IU anti-D given at 6 weekly intervals.</p>
Gestation 20+0 weeks to term	
Samples required	Kleihauer Test and Group and Save*
For any PSE (see Appendix 1)	<p>Administer 500 IU anti-D as soon as possible and always within 72 hours of event (Irrespective of whether RAADP given) **</p> <p>As above for continual uterine bleeding but also must have 2 weekly Kleihauer testing.</p>
Does the Kleihauer test indicate further anti-D is required (>4 mLs)?	Administer further anti-D following discussion with Blood Bank. Send follow up Kleihauer test after 72hrs of additional dose if given IM and 48hrs if IV until all fetal cells cleared
Routine antenatal anti-D Ig prophylaxis (RAADP)	
Samples required	Group and Save* - must be taken prior to anti-D administration Do not wait for results of Group and Save before administering anti-D
Administration of RAADP	Administer 1500 IU anti-D at 28 – 30 weeks (Irrespective of whether anti-D has already been given for PSE)**
At birth ≥ 20+0 weeks	
Samples required	<p>Maternal samples - Kleihauer Test***, Group and Save*</p> <p>Cord samples - using the CHI generated for the baby, a newborn group would be requested</p> <p>If cord samples cannot be obtained document on maternal request form and the neonatologist must be contacted to obtain a newborn group sample from the baby. Every effort should be made to obtain cord blood to avoid unnecessary invasive sampling of baby.</p>
Is the baby's group confirmed as D-positive?	Administer 500 IU anti-D within 72 hours of birth**

Does the Kleihauer Test indicate further anti-D required (>4 mLs)?	Administer further anti-D following discussion with Blood Bank. Send follow up Kleihauer test after 72hrs of additional dose if given IM and 48hrs if IV until all fetal cells cleared
Intrauterine death ≥ 20+0 weeks	
Samples required at diagnosis and following birth	Kleihauer Test***, Group and Save*
Administration of anti-D at diagnosis and following birth	Administer 500 IU anti-D at diagnosis unless women present in advanced labour Administer 500 IU anti-D within 72 hours of birth** Note: Diagnosis AND birth of IUD are 2 separate sensitising events - anti-D should be given at diagnosis and a further dose given after birth, as there could be variable and significant delay between the two events****
Does the Kleihauer Test indicate further anti-D required (>4 mLs)?	Administer further anti-D following discussion with Blood Bank. Send follow up Kleihauer test after 72hrs of additional dose if given IM and 48hrs if IV until all fetal cells cleared

*Ensure that request form has full details of the PSE including gestation.
**Confirm correct product batch number/expiry date, IU dose and women’s ID with the compatibility report. Document date and time given.
*** The Kleihauer sample should be taken when sufficient time has elapsed to allow fetal cells to be distributed within the maternal circulation following birth or manual removal of placenta. A period of 30-45 minutes is considered adequate
**** At point of diagnosis of IUD ≥ 20 weeks, Blood Bank would aim to process the request for anti-D request urgently upon receipt of a phone call about the woman

Other important points:

- Women who are confirmed to have immune (allo) anti-D do not require anti-D Ig
- Following PSE (see appendix 1), anti-D should be administered as soon as possible and always within 72 hours of the event. If this deadline has not been met some protection may be offered if anti-D is given up to 10 days after the sensitising event. After 10 days, discuss with Consultant Obstetrician
- Each new sensitising event should be managed with an appropriate additional dose of anti-D regardless of timing or dose of anti-D administered for a previous event
- RAADP is a separate entity and should be always be given between 28 -30 weeks, regardless of other doses given for PSE
- Cell Salvage guidance – a minimum dose of 1500 IU after reinfusion. Kleihauer test 30 -45 mins after reinfusion, may require further anti-D as per guidelines. **It is important that clinicians inform the transfusion lab if intra-operative cell salvage is being planned. An anti-D request should be submitted pre-operatively.**
- If the presence of **immune anti-D** is suspected by the Blood Bank this must be discussed with a Consultant Obstetrician to ensure appropriate follow-up
- Women who decline anti-D or were not given anti-D must be documented in BadgerNet and discussed with an Obstetric Consultant. Blood Bank should be informed that the dose of anti-D is no longer required.
- Women with anomalous or indeterminate D typing results should be treated as D negative until confirmatory testing is complete.

Appendix 1- Potentially sensitising events in pregnancy		
Evacuation of molar pregnancy	Vaginal bleeding with associated severe pain	Surgical management of ectopic pregnancy
Antepartum haemorrhage/ Uterine (PV) bleeding	Miscarriage, threatened miscarriage	Amniocentesis, chorionic villus biopsy and cordocentesis
External cephalic version	Intrauterine death and stillbirth	In-utero therapeutic interventions (transfusion, surgery, insertion of shunts, laser therapy for TTTS)
Abdominal trauma (sharp/blunt, open/closed, RTA)	Therapeutic termination of pregnancy	All modes of birth
Cell Salvage	Abdominal Cerclage	Evacuation of retained products of conception (ERPC) / instrumentation of uterus/ Manual Vacuum Aspiration

