



# Pregnancy Timeline of Laboratory Tests

<b>WEEK 4 - 12</b>	<b>HCG</b>	HCG usually positive by 10 - 14 days post conception, or 4 weeks after last menstrual period. If negative repeat in 2 - 3 days.
	<b>FBE</b>	Baseline Haematology and screening haemoglobinopathy. If results suggestive of alpha thalassaemia contact laboratory Haematologist to discuss further testing on baby's father.
	<b>Hb Electrophoresis</b>	Recommended unless previously performed. If any abnormality contact laboratory Haematologist to discuss further testing on baby's father.
	<b>Iron Studies</b>	
	<b>Blood Group &amp; Antibody Screen</b>	If patient is Rh negative see over "Complications in Pregnancy".
	<b>HepBsAg, Treponemal and Rubella Serology</b>	
	+/- Hep C	If clinically indicated.
	+/- MSU	If clinically indicated (and as a screen for asymptomatic bacteriuria).
	<b>TSH</b>	For women with personal or family history of thyroid disease.
	<b>HIV</b>	Consent mandatory.
	<b>Chlamydia &amp; Gonorrhoeae Screen(PCR)</b>	For teenage pregnancies or multiple partners (first pass urine PCR).
	<b>Vitamin D</b>	Suggested for dark skinned individuals, or those wearing covering clothing.
<b>WEEK 9 - 13</b>	<b>First Trimester Screen (Free beta hCG, PAPP-A)</b>	
	Blood test at 10 weeks gestation Ultrasound at 12 weeks gestation	Results combined with foetal ultrasound to provide assessment of Down Syndrome risk.
	<b>Chorionic Villus Sampling (CVS)</b>	Foetal Karyotyping may be offered for follow up of high risk results or for other clinical indications. Allow 2 - 3 weeks for foetal karyotype result. Discuss with O & G specialist.
	<b>Generation NIPT (Non Invasive Prenatal Testing)</b>	Foetal genetic testing using maternal serum for trisomies 21, 18 and 13 and a micro deletion panel is available at an additional cost.
<b>WEEK 14 - 20</b>	<b>Second Trimester test (AFP, Estriol, Total HCG)</b>	For Down Syndrome, Trisomy 18 and Neural Tube Defect (NTD) risk.
	<b>Amniocentesis</b>	Offer for follow up of high risk first or second trimester screen results for other clinical indications. Allow 2 - 3 weeks for foetal karyotype result.
	<b>Amniocentesis with FISH (Fluorescence in Situ Hybridisation)</b>	Offer for very high risk/anxious patient for fast screen of common chromosome abnormalities. Allow 2 working days. Note: No Medicare rebate. Foetal Karyotype is also complicated. Discuss these with O & G specialist.

<b>WEEK 18 - 19</b>	Anatomy Scan	Important for follow up of high risk Neural Tube Defect (NTD) results.
<b>WEEK 24 - 28</b>	Glucose Tolerance Test (GTT)	Gestational Diabetes is diagnosed on the basis of fasting glucose >5.0; 1 hour >9.9 and 2 hour > 8.4 mmol/L. If diagnosed with Gestational Diabetes suggest repeat at 6 - 12 weeks post partum.
	Blood group & Antibody Screen	See "Complications in Pregnancy" for RhD -ve women.
	Iron Studies	If clinically indicated.
<b>WEEK 28</b>	Rh D -ve Anti D prophylaxis if antibody negative. (See below)	
<b>WEEK 34</b>	Blood Group & Antibody Screen	See "Complications in Pregnancy" for RhD -ve women.
	Rh D -ve Anti D prophylaxis if antibody negative. (See below)	
<b>WEEK 35 - 37</b>	High Vaginal Swab	For Group B Strep +/- Rectal Swab.
	Chlamydia & Gonorrhoeae Screen	Consider (FPU for PCR).
	Herpes Simplex Virus	Consider PCR if lesion present.
<b>WEEK 38</b>	FBE	
	Blood Group & Antibody Screen	
<b>Post Partum</b>	Rh Negative	Fetomaternal haemorrhage test and Anti D.
	TSH, Iron Studies, FBE	Consider these if there is a history of excessive fatigue.
	GTT	Repeat at 6 - 12 weeks if patient tested positive to Gestational Diabetes.

## Complications in pregnancy

### Threatened Miscarriage:

- Perform serial HCGs at 2-3 day intervals. Levels normally double each 2-3 days with a peak at approximately 8 weeks after the last menstrual period. Discuss with Chemical Pathologist if required.

### Query ectopic pregnancy

- HCG insufficient rise or fall in HCG
- Progesterone
- Ultrasound

### Recurrent pregnancy loss:

- Products of conception for foetal karyotype
- Parental chromosomes
- Haematological/Immunological Tests: Thrombophilia Screen (ATIII, Protein C and S, aPCR, ANA, Lupus Anticoagulant, Anti Cardiolipin antibodies, Homocysteine, Factor V Leiden gene, Prothrombin Gene. Discuss results with Obstetrician or Clinical Haematologist.

### Rhesus D negative Women:

- All patients undergo Blood group & Rh type, together with antibody screen at initial pregnancy testing
- If previous pregnancy affected by Rhesus disease/ haemolytic disease of the newborn, or presence of anti-D antibodies, consult with a specialist obstetrician.
- Check antibody screen at 28 & 34 weeks.
- If antibody screen is negative give 625 IU (125ug) of RhD Immunoglobulin at 28 & 34 weeks intramuscular in all pregnancies.
- Post partum: 625 IU (125ug) minimum of anti-D intramuscular RhD Immunoglobulin post partum within 72 hours, together with testing for fetomaternal haemorrhage (Kleihauer test) if cord blood is Rh positive.
- For possible fetomaternal haemorrhage – RhD Immunoglobulin within 72 hours intravenous, together with testing for fetomaternal haemorrhage (Kleihauer test). 1st trimester 250 IU (50ug); beyond 1st trimester 625 IU (125ug).

Further advice regarding investigations and management should be sought from a:

Haematologist 9244 0384  
Chemical Pathologist 9244 0380  
Microbiologist 9244 0298