

Maternity

Pre-Eclampsia and Placental Growth Factor Ratio Testing

A blood test to help rule out Pre-Eclampsia

Pre-eclampsia is a condition that usually happens after 20 weeks of pregnancy. It is a combination of raised blood pressure (hypertension) and protein in your urine (proteinuria). The exact cause of pre-eclampsia is not understood. Often there are no symptoms and it may be picked up at your routine antenatal appointments when you have your blood pressure checked and urine tested.

Pre-eclampsia is common, affecting 2-8 in 100 women during pregnancy. It is usually mild but if severe, pre-eclampsia can be life-threatening for both mother and baby. The symptoms include:

- Raised blood pressure
- Protein in urine
- Headache
- Swollen hands, feet or face
- Visual disturbances i.e. blurred vision or flashing lights
- Upper abdominal pain or rib pain
- Feeling unwell

During the midwife's assessment, routine bloods can be taken to investigate any serious effect on liver or kidneys and blood clotting. One of the tests available is called **Placental Growth Factor** which presents as a ratio and indicates health of the placenta.



Patient Information

The test is eligible to women between 20 and 34+6 weeks gestation with any suspicion of pre-eclampsia, as listed above. Placental Growth Factor or PIGF is a value that can measure the health of the placenta through maternal blood. This blood test can be taken by the health professional seeing you in Antenatal Clinic, Fetal Well-Being Unit or Labour Ward Triage alongside other clinical tests. It should take around two hours for the laboratory to give results. You may be asked to wait for the result before discharge or be phoned with the result should you go home straight after the blood test.

Research has proved that this test is more accurate when **ruling out** pre-eclampsia rather than as a diagnostic test. The results are interpreted as low risk, moderate risk and high risk of pre-eclampsia. If the result is 'low risk' it is 99% accurate at confirming pre-eclampsia is **not** your diagnosis on that day and within 28 days the risk is still very low. Should your results be moderate or high risk, you will have a discussion with an Obstetrician regarding staying overnight for further observation, monitoring and sometimes more blood tests and a scan of the baby's wellbeing.

The test can be repeated 14 days after the previous test was taken; this will create a trend in results and a comparison can be made. If your result noted an increase from low risk to moderate risk, your pregnancy may be impacted with increased fetal monitoring and a referral to a Consultant in Antenatal Clinic.

The test cannot be performed if you are above 35 weeks gestation. Other clinical tests are sufficient at this later stage.

It is important to tell your clinician about any secondary concern to the pre-eclampsia symptoms. These could include reduced fetal movements, vaginal bleeding or lower abdominal pain. The midwife or doctor can then perform a full examination of all these symptoms together.

If you have any questions or concerns about this blood test, please ask the health professional looking after you or call Labour Ward Triage on 024 7696 7333.

Patient Information

We may contact you after this test via text message to ask you to complete a short survey to help us evaluate this new service.

The Trust has access to interpreting and translation services. If you need this Information in another language or format please contact 024 7696 7333 and we will do our best to meet your needs.

The Trust operates a smoke free policy.

To give feedback on this leaflet please email feedback@uhcw.nhs.uk.

Document History

Department:	Maternity
Contact:	27333
Updated:	July 2022
Review:	July 2025
Version:	1
Reference:	HIC/LFT/2651/22