

# Preeclampsia Screening

## Global Statistics



1 in 12 women could develop preeclampsia at some time during their pregnancy



As many as 1 out of every 6 maternal deaths are related to preeclampsia



1 in every 5 babies are born prematurely due to preeclampsia in the mother

## Risk Factors

Some risk factors could predispose a woman to develop preeclampsia during pregnancy.

- 1 Mums in their first pregnancy
- 2 Mums who get pregnant at a later age
- 3 Mums who have a higher BMIs

## Preeclampsia Treatment

The mainstay of treatment for preeclampsia is delivery of the baby and placenta. In many cases, the severity of the condition may make it necessary for the delivery to take place before the expected due date, resulting in premature birth.

1. Steegers EA, van Duijn S, Duvekot JJ, Pijnenborg R. Pre-eclampsia. *Lancet*. 2010;376(9741):631-644. doi:10.1016/S0140-6736(10)60279-6  
2. Duley L. The global impact of pre-eclampsia and eclampsia. *Semin Perinatol*. 2009 Jun;33(3):130-7. doi: 10.1053/j.semperi.2009.02.010. PMID: 19464502.  
3. Goldenberg RL, Culhane JF, Iams JD, Romero R. Epidemiology and causes of preterm birth. *Lancet*. 2008;371(9606):75-84. doi:10.1016/S0140-6736(08)60074-4

## Reminder

Screening for preeclampsia during the first trimester, and appropriate management with low dose aspirin can reduce the risk of severe preeclampsia that could begin in the preterm period.



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# Preeclampsia Screening

**Preeclampsia** is a serious medical condition that can affect your health and wellbeing after the 20th week of pregnancy, and also the health and wellbeing of your baby.

## iGene Laboratory®

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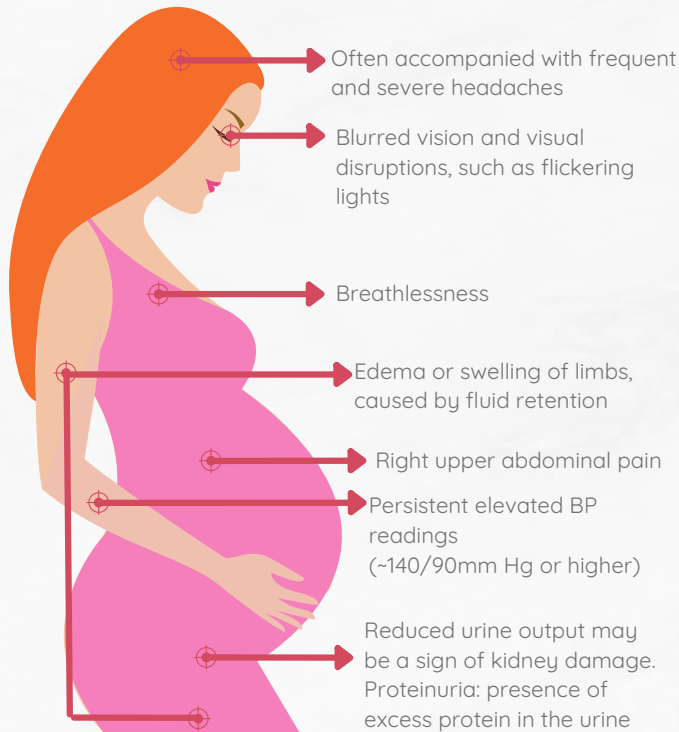
# What Are The Risks Of Preeclampsia?

During pregnancy, the placenta plays a central role by supplying nutrients and oxygen to the baby, and any issues with its development and function can contribute to preeclampsia. Abnormalities in blood vessels can lead to restricted blood flow to the placenta, triggering the onset of preeclampsia.

Risk factors may include:

- First pregnancies or multi-pregnancies
- Obesity
- Chronic hypertension
- Restricted growth for the baby
- Premature birth
- Organ damage to the mother

## SOME COMMON SIGNS AND SYMPTOMS OF PREECLAMPSIA:



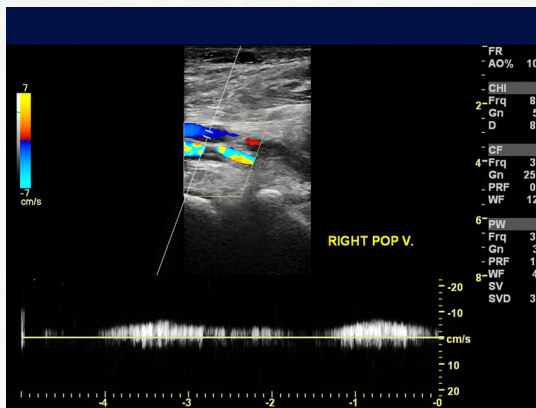
# Managing Your Risks

PIGF measurement and Uterine Artery Doppler Assessment are combined to provide a comprehensive assessment of your pregnancy's health, including **preeclampsia**.



### PIGF measurement:

- **Placental Growth Factor (PIGF)** is a protein produced by the placenta during pregnancy.
- Measures the levels of PIGF in the mother's blood
- Low levels of PIGF early in pregnancy have been linked to an increased risk of preeclampsia.
- **Sample Requirement:** 6 ml of maternal blood

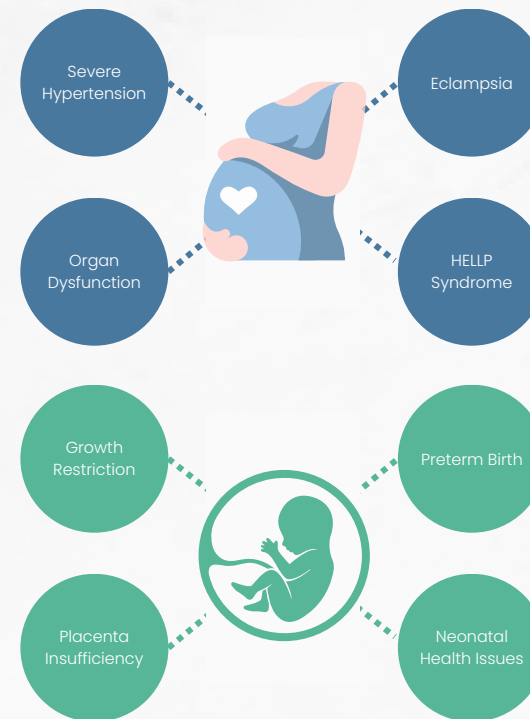


### Uterine Artery Doppler Assessment:

- **First Trimester Uterine Artery Assessment** is performed in early pregnancies (around 10-14 weeks).
- It uses an ultrasound machine equipped with Doppler technology to visualize and measure blood flow in the uterine arteries.
- The blood flow patterns within the uterine arteries are then analyzed for any abnormalities.
- **Method:** Doppler Ultrasound sound waves are picked up by placing a ultrasound probe onto the mother's abdomen where the uterine arteries are located.

# Risk Of Developing Preterm Preeclampsia

Developing preterm preeclampsia, a condition that can occur before the 37th week of pregnancy, poses significant risks to both the pregnant mother and the baby.



## Risk Reduction With Low-Dose Aspirin

- Low-dose aspirin has been shown to help reduce the risk of preeclampsia and its complications.
- It can improve blood flow to the placenta and reduce inflammation, preventing preeclampsia development.
- Lower dose than a typical aspirin tablet which is considered safe for most pregnant women.