Preeclampsia is a syndrome defined by the new onset of hypertension (SBP >140 mmHg or DBP >90 mmHg) and proteinuria (24 hour urine protein >300 mg) after 20 weeks of gestation. 

• Affects 3-5% of all pregnancies can result in serious maternal and neonatal morbidity and mortality. 

Delivery of the neonate is the only definitive treatment, thus preeclampsia is a major cause of maternal and neonatal morbidity and mortality. 

A single-center prospective cohort study of 315 pregnant women who presented to GWUH Labor and Delivery service with a diagnosis of preeclampsia was conducted. Women who did not meet criteria for preeclampsia were included. 

Results: 

- Women with chronic hypertension had lower serum PlGF levels at presentation as compared to women who did not meet criteria for preeclampsia. 

Discussion: 

- Among a cohort of women presenting acutely with signs and symptoms suggestive of preeclampsia, women who eventually met diagnostic criteria for preeclampsia had lower serum PlGF levels at presentation as compared to women who did not meet preeclampsia criteria. 

- Serum PlGF may be a useful tool for risk stratification in women who present with signs/symptoms suggestive of preeclampsia. 

- This tool, rooted in the fundamental pathogenesis of preeclampsia, could arm clinicians with a significant advance in the identification of high-risk patients, ensuring that women with a high likelihood of developing severe preeclampsia complications receive aggressive monitoring and intervention, while allowing women at low risk of complications to be managed conservatively. 

- This is the first study to evaluate the utility of biomarkers for risk stratification in the triage setting. Larger studies are needed to confirm our result, and to establish the utility of PlGF for risk stratification in the clinical setting.