

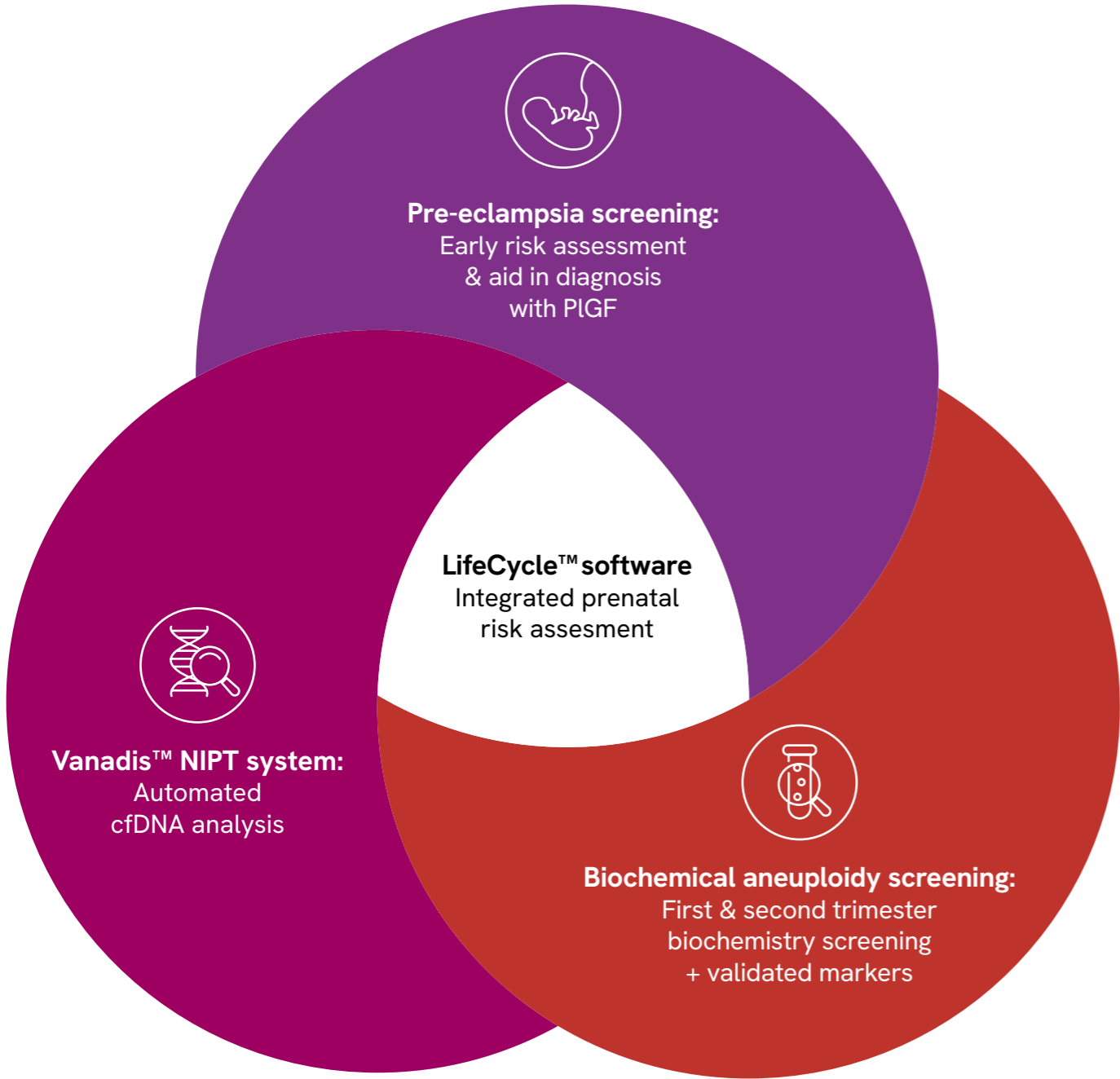
# Integrated pre-eclampsia screening and risk assessment.



revvity

Pre-eclampsia screening and management  
with LifeCycle™ software

# Decades of dedication to better outcomes.

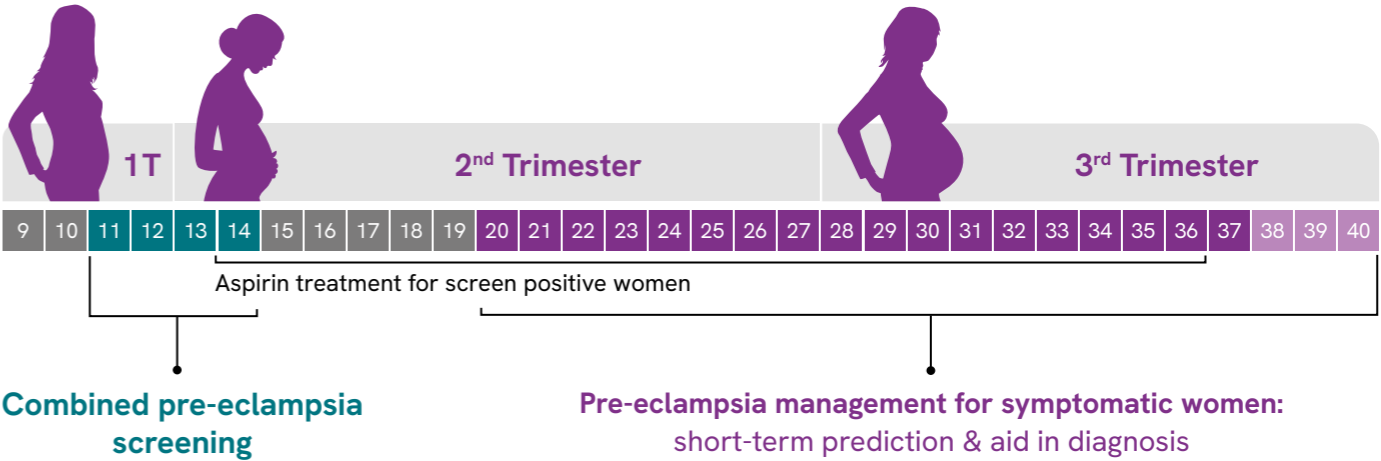


With 40 years of experience in prenatal screening technologies, Revvity has pioneered solutions that help healthcare providers deliver precise and reliable care throughout pregnancy.

# Pre-eclampsia management for optimal patient care

Pre-eclampsia is a serious pregnancy complication that affects blood flow to the placenta, often resulting in growth-restricted or premature births. If left untreated, it can pose life-threatening risks to both mother and baby. Early prediction and timely intervention are key—identifying women at high risk as early as possible significantly improves outcomes and supports better maternal and fetal health.

- **10 million** women around the world develop pre-eclampsia annually.
- **46,000** pregnant women die each year from pre-eclampsia
- Pre-eclampsia alone is responsible for up to **20% of the total 13 million** preterm births
- Globally around **500,000** babies die from hypertension disorders each year



## What is the role of angiogenic factors?

PLGF (placental growth factor) and sFlt-1 (soluble fms-like tyrosine kinase 1) are key factors in the pathophysiology of pre-eclampsia. Biomarker levels helps to identify high risk women that are likely to develop preterm pre-eclampsia later in their pregnancy and to predict the onset of pre-eclampsia. Biomarker levels correlate with severity of disease. During the 1st trimester sFlt-1 levels are not predictive for the onset of preterm pre-eclampsia.

PLGF provides additional advantages as decreased serum levels effectively identify pregnancies with placental insufficiency, including fetal growth restriction and/or stillbirth. <sup>[1,2,3]</sup>

1st trimester:

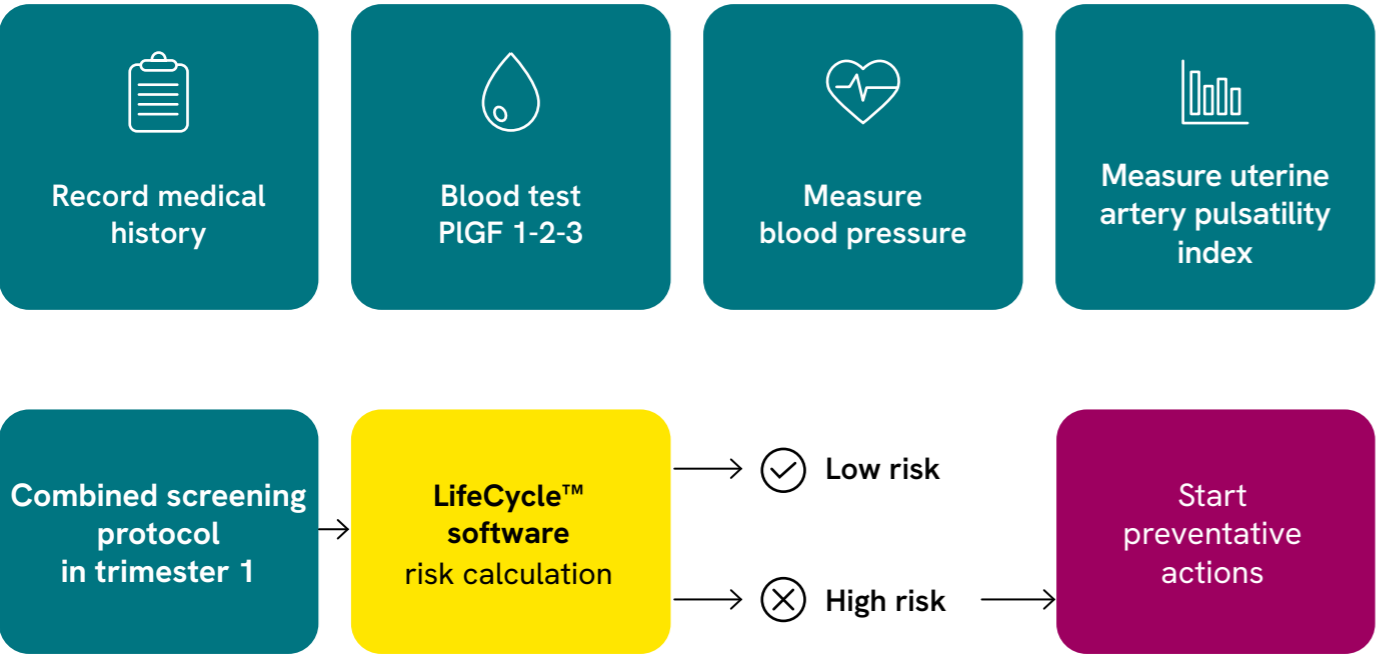
Screening and prevention of preterm pre-eclampsia

While traditional risk assessment using maternal factors alone provides a foundation for pre-eclampsia screening, incorporating additional biomarkers significantly enhances detection capabilities. The use of multiple markers leads to substantially improved sensitivity and specificity. Revvity's PlGF assay offers high sensitivity, providing clinicians with superior performance for pre-eclampsia assessment. Enhanced detection can be achieved through PlGF testing combined with clinical parameters including maternal history, mean arterial pressure, and uterine artery pulsatility index. With decreased PlGF levels there is a higher possibility of future development of preterm pre-eclampsia. [4,5]

Clinical benefit: Early identification of high-risk patients enables timely aspirin prophylaxis, shown to reduce the incidence of preterm pre-eclampsia incidence by up to 62%. [6]



The 1st trimester combined screening protocol



2nd & 3rd trimester:

Short term prediction and aid in diagnosis

Not all symptomatic patients develop pre-eclampsia. Angiogenic biomarkers provide crucial risk stratification for women presenting with unspecific symptoms.

It has been shown that PlGF or sFlt-1/PlGF ratio can predict the subsequent onset of pre-eclampsia, and improve the clinical management and decision making (risk stratification) with symptomatic women. [7]

Two biomarker options in 2T & 3T

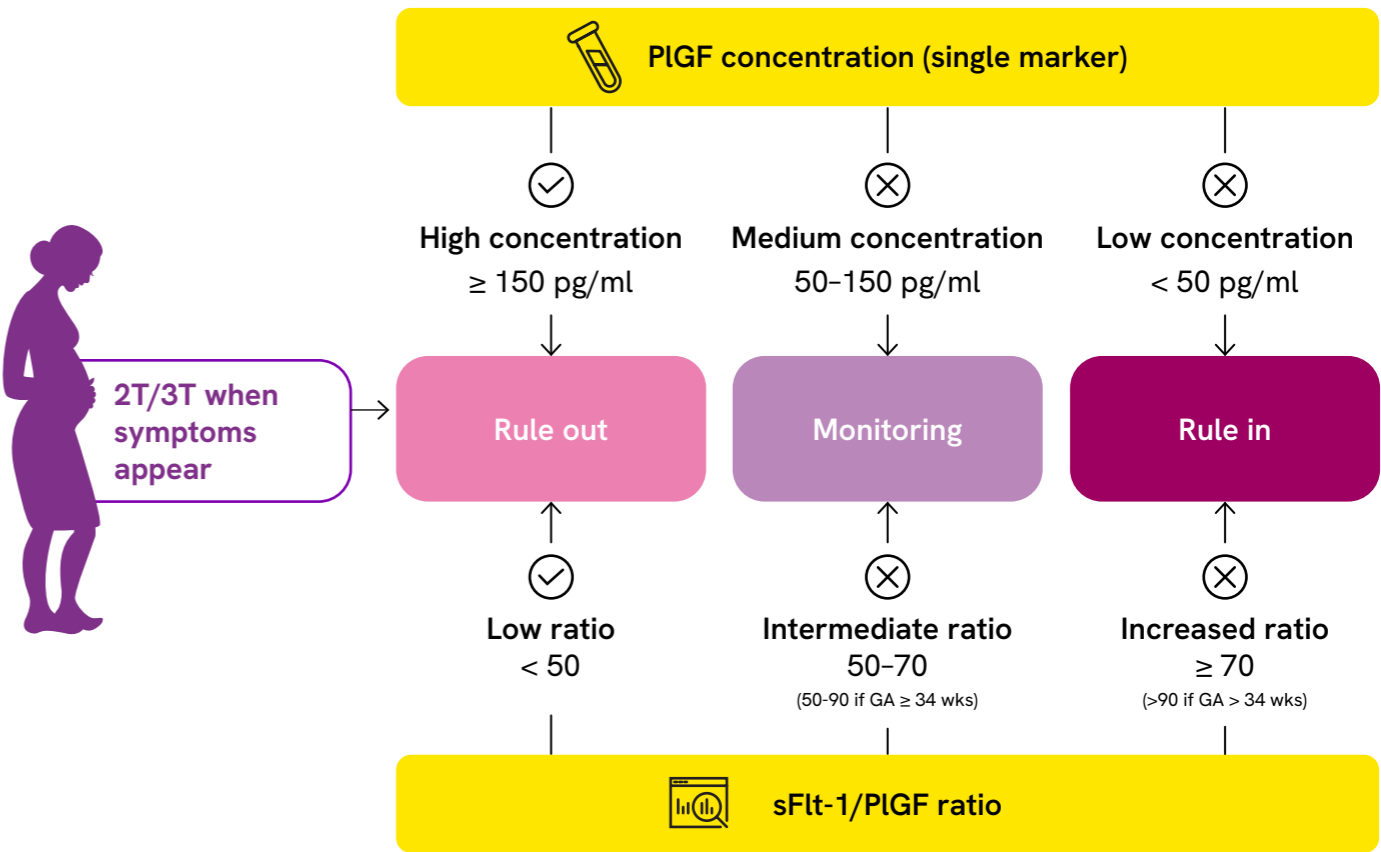
PlGF alone performs comparably to sFlt-1/PlGF ratio for pre-eclampsia rule-in and rule-out, with both equally recommended clinically. PlGF alone with concentration-based cut-offs offers a simpler, more affordable alternative to dual biomarker testing. [8,9,10]

Benefits of PlGF-based Testing

- Enhances maternal and neonatal outcomes through timely intervention
- Reduces unnecessary hospitalizations with associated cost savings
- Improves risk stratification for symptomatic patients

Diagnosis of pre-eclampsia is made in context of all clinical signs and symptoms.

Cut-offs for PlGF and sFlt-1/PlGF in 2nd & 3rd trimester



LifeCycle™ software:

Your smart assistant for better patient care

Streamlined pre-eclampsia care

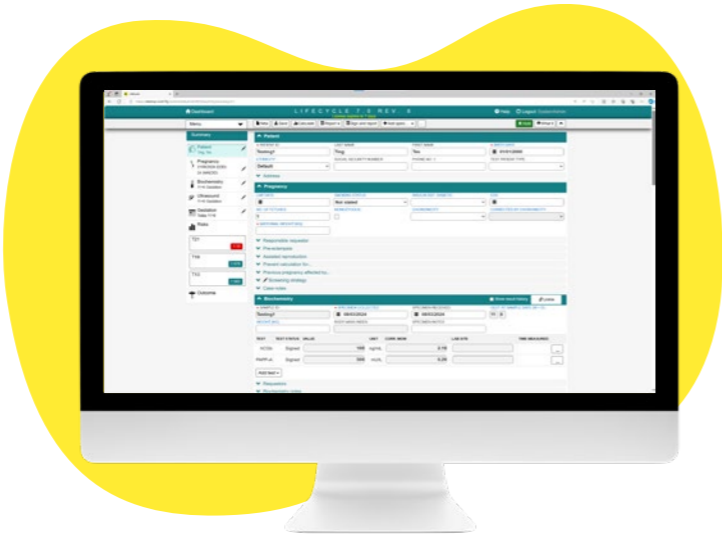
LifeCycle™ supports full pre-eclampsia management—from first trimester screening to ongoing monitoring—without disrupting your workflow. It seamlessly integrates with your LIMS and external systems, automatically retrieving sFIt-1 and PIGF results to eliminate manual data entry and free up time for patient care.

Flexible risk assessment

LifeCycle™ generates personalized risk profiles using available clinical data and biomarkers—no need for complete datasets. This flexibility enables consistent, reliable assessments, and individualized patient reports, even with limited information.

Complete patient management

LifeCycle™ centralizes all your patients’ pre-eclampsia data in one place, while tracking biomarker trends over time. Compare current PIGF or sFIt-1/PIGF ratio results with previous visits for confident clinical decisions. LifeCycle™ also uses population-based MoMs to provide accurate risk assessments tailored to your local patient demographics.



Ideal solution for all screening laboratories

✓ Versatile screening	Determine risks for pre-eclampsia and aneuploidies utilizing demographics, biomarkers, and Vanadis NIPT results
✓ Fully configurable	Tailor entry screens, workflows, searches, and reports to fit your lab’s setup
✓ Population-tailored	Optimize risk calculations via MoM and factor adjustments, with expert support from our statistical team
✓ Universal connectivity	Connect to your LIMS or ultrasound systems and provide remote access outside

All biomarker results should be interpreted within the complete clinical context, including symptoms, blood pressure trends, and other diagnostic findings.

DELFIATM Xpress:

Dedicated random access prenatal screening platform from the world leader in prenatal testing

DELFIATM Xpress streamlines workflows in laboratories and clinics providing prenatal screening services. Already in use in more than 50 countries, DELFIATM Xpress offers a range of benefits critical for operational efficiency.

- The speed and flexibility of random access
- Simplicity and ease of use with up-to-date software design
- The security associated with barcoded reagents and samples to ensure positive identification
- The reassurance from using reliable, proven DELFIA chemistry
- Smart connectivity to Revvity’s clinically validated LifeCycle™ prenatal screening software with MFH risk calculation engine and statistical analysis tool
- The flexibility to support connections to 3rd party software such as Viewpoint and Astraia

Leaders in prenatal screening for over 40 years

Revvity provides state-of-the-art solutions to benefit maternal and fetal health. Our solutions comprise instruments, reagents and screening management software, all based on our broad-ranging expertise and understanding of today’s needs.

We are the global leader in products for detecting fetal anomalies during pregnancy, and our platforms are used in more than 50 countries to perform some 10 million prenatal risk assessments per year. DELFIATM Xpress has become the platform of choice in many parts of the world.

The DELFIATM Xpress instrument and first trimester assays meet the requirements of the Fetal Medicine Foundation (FMF).



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