

KEY FACTS

First trimester pre-eclampsia screening with PIGF and PAPP-A

Pre-eclampsia

- Multisystem, life-threatening pregnancy related disorder
- Incidence: 2-8% of pregnancies¹
- Definition: **New** onset of hypertension and proteinuria >20 weeks of gestation
- Short-term complications: HELPP-syndrome, eclampsia
- Long-term complications: Increased risk for cardiac and other complications later in life

Cause

The cause of pre-eclampsia is unknown, but the placenta has been identified as is the central organ in pathogenesis.

Classification

Early-onset pre-eclampsia²

- ▶ Clinical onset of disease <34 weeks of gestation
- ▶ Rapid progression, multiple complications

Late-onset pre-eclampsia²

- ▶ Clinical onset of disease >37 weeks of gestation
- ▶ Impact on fetus less severe

Intervention with low dose aspirin

Study results^{3,4}

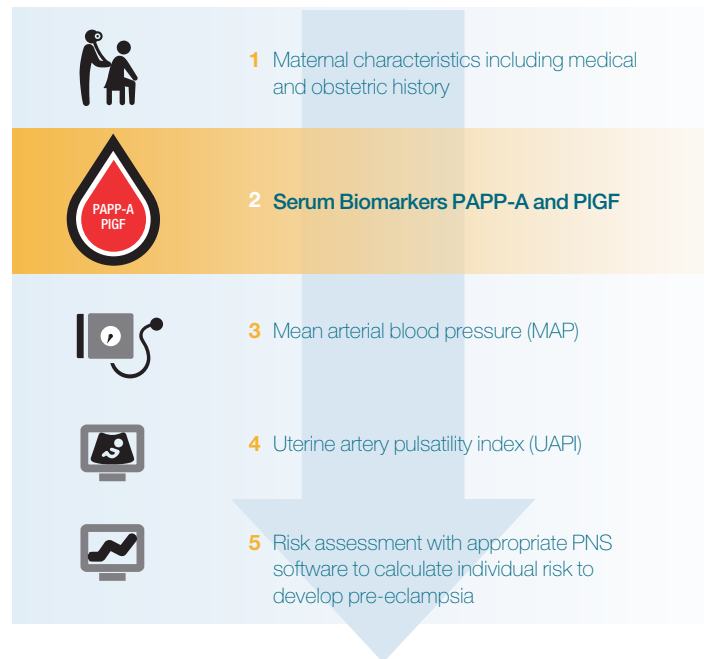
- Use of low dose aspirin can reduce incidence of pre-eclampsia by 50-90%
- Low dose aspirin: 75-150 mg/day
- Start of aspirin therapy: **<16 weeks of gestation**

Benefits of early pre-eclampsia screening (weeks 11-13+6)

- Early identification of women at risk for pre-eclampsia allows for timely intervention with low dose aspirin (<16 weeks) to significantly reduce the incidence of pre-eclampsia
- Early screening allows for closer monitoring of high risk patients for optimal patient care

Pre-eclampsia screening strategy

Combination of multiple biophysical and biochemical measurements as well as maternal risk factors:



- Pre-eclampsia screening performance achieves a **detection rate > 90%** at a false positive rate of 10%⁵
- Risk assessment for **fetal trisomies** and **maternal pre-eclampsia** can be performed at the **same time**

High-sensitive biomarkers to improve early pre-eclampsia screening

B·R·A·H·M·S PIGF plus KRYPTOR

Thermo Scientific™ B·R·A·H·M·S™ PIGF plus KRYPTOR™ is an automated immunofluorescent assay for the quantitative determination of the concentration of PIGF-1 in human serum and EDTA plasma.

- CE mark for trisomy and pre-eclampsia first trimester screening
- FAS: 6.7 pg/mL – reliably measuring very low clinical values in first trimester
- Very low cross-reactivity to PIGF-2 (13%) and PIGF-3 (4%)
- Onboard stability: 29 days
- Short incubation time: 29 minutes

B·R·A·H·M·S PAPP-A KRYPTOR

Thermo Scientific B·R·A·H·M·S PAPP-A KRYPTOR is an automated immunofluorescent assay for the determination of pregnancy associated plasma protein-A (PAPP-A) in human serum and heparin plasma.

- CE mark for trisomy and pre-eclampsia first trimester screening
- FAS: 0.01 IU/L
- Outstanding precision: UK NEQAS data 2003-2016 prove a mean CV of only 3.1%
- Onboard stability: 29 days
- Short incubation time: 19 minutes

Software based on the FMF algorithm for first trimester pre-eclampsia risk calculation

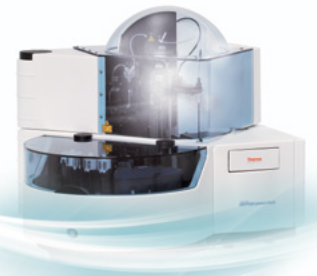
- **B·R·A·H·M·S Fast Screen pre I plus 3.0**
- B·R·A·H·M·S PIGF plus KRYPTOR and B·R·A·H·M·S PAPP-A KRYPTOR medians are integrated in Astraia (V 1.23.5 or higher) and View Point (V 5.6.20 or higher) software

A software based on the FMF algorithms fulfills the highest quality standards for an effective and reliable risk calculation.

Benefits of B·R·A·H·M·S PIGF plus and PAPP-A KRYPTOR

- Highest assay sensitivity and quality for reliably predicting pre-eclampsia and fetal trisomy 21 in first trimester of pregnancy
- Indicated to be used in first trimester screening for pre-eclampsia and trisomy 21

B·R·A·H·M·S KRYPTOR compact PLUS
Art. no.: 106172



References 1. The World Health Report 2005; p62 2. Akolekar R et al. Prenat Diagn 2011; 31: 66-74 3. Bujold E et al. J Obstet Gynaecol 2010; 116: 402-14 4. Park et al. Ultrasound Obstet Gynecol 2015; 46(4): 419-23 5. Poon LCY et al. Hypertension 2009; 53: 812-818

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