



## Implementation of the sFlt-1/PIGF ratio in suspected preeclampsia

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### Objective

Optimization of antenatal care is the main modifiable prognostic factor to avoid or prevent complications related to preeclampsia (PE). The sFlt-1/PIGF ratio has been shown to be useful to establish the real risk of developing PE 1, 2. The main objective of this study was to assess the predictive value of this ratio in our clinical setting to predict PE diagnosis and complications in high-risk pregnancies.

### Methods

We performed a prospective, monocenter, observational analysis to evaluate sFlt-1/PIGF ratio for predicting PE in a group of 44 high-risk pregnant women (26w-40w), during the first 10 month of application of this ratio in our hospital (April 2017- January 2018). Two cases had more than one determination. We did not use the ratio to change our clinical decisions.

### Results

Among the 44 patients included, 13 had a sFlt-1/PIGF ratio lower than 38; two of them developed subsequent PE, leading to a negative predictive value of 85%. Overall, 27 patients developed clinical PE. Considering a cut-off ratio of 38, the positive predictive value (PPV) was 80%. When considering a cut-off ratio of 85, the PPV was 100%.

### Conclusion

The sFlt-1/PIGF ratio showed highly predictive performance for ruling out PE in high-risk pregnancies. Using these biomarkers in routine management of PE may improve clinical care and avoid inappropriate hospitalization, which has a significant economic impact. The ratio provides clinicians an objective and simple test to manage PE that may optimize medical care, which is the only modifiable prognostic factor for this disease. Moreover, the sFlt-1/PIGF ratio can also improve prediction of early-onset PE for women at risk of this condition. 1. -Zeisler H, Llurba E, Chantraine F. Predictive Value of the sFlt-1: PIGF Ratio in Women with Suspected Preeclampsia. N Engl J Med 2016 2. -Dragan I, Georgiou T, Prodan N. Screening for pre-eclampsia using sFlt-1/PIGF ratio cut-off of 38 at 30-37 weeks' gestation. Ultraasound Obstet Gynecol 2017.