

## Special Issue on

## New Markers in the Prediction and Prevention of Diabetes Related Complications in Pregnancy

According to recent epidemiological data, the prevalence of gestational diabetes mellitus (GDM) and pre-gestational diabetes mellitus (PGDM) in the population of pregnant women is estimated at 5.8-12.9% and 0.4-1%, respectively. It is widely accepted that both maternal conditions are associated with multiple obstetric and neonatal complications. Maternal nephro and retinopathy, pregnancy-induced hypertension, preeclampsia, preterm delivery, stillbirth, congenital fetal anomalies, as well as fetal growth disorders, are examples of complications typical of hyperglycemia in pregnancy, which ultimately lead to an increased morbidity and mortality rates among women and neonates in gestations with concomitant GDM/PGDM.

For years, the attention of clinicians interested in the topic of GDM and PGDM has focused on detecting alterations in the maternal-fetal diabetic environment, as early as possible, which would allow adequate preventive measures. For this purpose, new markers are constantly being searched, starting from the molecular level, through biochemistry, and finally by application of the biophysical methods, such as ultrasound. More recently, the use of artificial intelligence techniques significantly enhanced the efficacy of the available diagnostic tools. At the same time, some of the already detected markers and developed techniques lack validity in larger and properly selected populations of diabetic women.

The aim of this Special Issue is to highlight and discuss the application of new markers in the diagnosis and prevention of diabetes-related complications in pregnancy. Original and review manuscripts in the areas of basic, clinical, and, in particular, translational research are welcome.

Potential topics include but are not limited to the following:

- ▶ Biomarkers in the diagnosis and management of maternal complications in pregnancies with concomitant GDM/PGDM
- Ultrasound diagnosis of congenital fetal anomalies in pregnancies with concomitant GDM/PGDM
- Novel diagnostic tools in the prediction and management of fetal growth disorders in pregnancies complicated by GDM/PGDM
- ► The use of artificial intelligence in the prediction and prevention of diabetes-related complications in pregnancy
- Novel interventional strategies in the prevention of complications associated with GDM/PGDM

Authors can submit their manuscripts through the Manuscript Tracking System at https://review.wiley.com/submit?specialIssue=687318.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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