

## **Title**

Proinsulin in the Diagnosis and Risk Stratification of Gestational Diabetes Mellitus

## **Acronym**

Proinsulin in GDM

## **Principal/Lead Investigator**

Dr Raj Peter

## **Participating Sites**

Joint Clinical Research Facility

## **Study Summary**

In pregnancy, some women's bodies are unable to process glucose (sugar) properly- this is referred to as gestational diabetes mellitus. It is a condition that is present only in pregnancy and glucose levels usually normalise after the birth of the baby. Gestational diabetes mellitus is associated with an increased risk of complications to both the baby (large baby, shoulder getting stuck in the birth canal and still birth) and the mother (prolonged labour). Hence, it is important to screen and diagnose the condition. We would like to do the same test (oral glucose tolerance test) but with an additional blood sample for proinsulin, insulin and C-peptide earlier at 16-18 weeks, in addition to the recommended test at 24-28 weeks to see if this new test is able to diagnose the condition at an earlier stage in pregnancy. This project will aim to establish if measurement of the concentration of proinsulin will provide an earlier and accurate means of identifying gestational diabetes mellitus.

## **UKCTG Number**

N/A

## **Study Sponsor**

Abertawe Bro Morgannwg University Health Board