

Table 1 Study sites PREG study

Site	Examinations
<b>Tübingen</b> Institute for Diabetes Research and Metabolic Diseases (IDM) at the Eberhard Karls University Tübingen	<b>Pregnancy:</b> OGTT, liver sonography <b>Delivery:</b> Birth outcome, cord blood, placenta <b>Follow up mothers:</b> OGTT, spiroergometry, whole body MRI, MRS <b>Follow up offspring:</b> Developmental tests, intelligence test, heart rate variability, fasted blood, urine, whole body MRI, MRS, continuous glucose measurement
<b>Düsseldorf</b> German Diabetes Center (DDZ), Leibniz Center for Diabetes Research at Heinrich Heine University Düsseldorf	<b>Pregnancy:</b> OGTT <b>Delivery:</b> Birth outcome <b>Follow up mothers:</b> OGTT, spiroergometry, whole body MRI, MRS
<b>Leipzig</b> University of Leipzig Medical Center, IFB Adiposity Diseases, University of Leipzig,	<b>Pregnancy:</b> OGTT <b>Delivery:</b> Birth outcome <b>Follow up mothers:</b> OGTT, spiroergometry, whole body MRI, MRS
<b>Dresden</b> Department of Medicine, University of Dresden	<b>Pregnancy:</b> OGTT <b>Delivery:</b> Birth outcome <b>Follow up mothers:</b> OGTT, spiroergometry, abdominal MRI

Table 2 LOINC codes for routinely measured analytes

System	Analyte	Logical Observation Identifiers Names and Codes (LOINC)	Assessed in Mother (M) Child (C)
Serum/Plasma	Glucose	2345-7	M/C
	Insulin	25447-4	M/C
	C-peptide	14633-2	M/C
	Proinsulin	27882-0	M/C
	Non-esterified fatty acids	1769-9	M/C
	Leukocytes	60026-2	M/C
	Thrombocytes	777-3	M/C
	Erythrocytes	789-8	M/C
	Hematocrit	4544-3	M/C
	Hemoglobin	718-7	M/C
	Erythrocyte mean corpuscular hemoglobin (HBE)	785-6	M/C
	Erythrocyte mean corpuscular hemoglobin concentration (MCHC)	786-4	M/C
	Erythrocyte mean corpuscular volume (MCV)	787-2	M/C
	Albumin	61152-5	M
	Total protein	2885-2	M
	Triglycerides	2571-8	M/C
	Cholesterol	2093-3	M/C
	High density lipoprotein cholesterol (HDL-C)	2085-9	M/C
	Low density lipoprotein cholesterol (LDL-C)	2089-1	M/C
	Uric acid	3084-1	M
	Urea	3091-6	M
	Creatinine	2160-0	M
	Lipoprotein (a)	10835-7	M
	Apolipoprotein A-I	1869-7	M
	Apolipoprotein B	1884-6	M
	Homocysteine	13965-9	M
	Aspartate aminotransferase	1920-8	M
	Gamma glutamyl transferase	2324-2	M
	Alanine aminotransferase	1742-6	M
	HbA1c	17856-6	M/C
	Glutamate decarboxylase 65 Ab (GAD-AB)	56540-8	M
	Potassium	2823-3	M
	Sodium	2951-2	M
	Calcium	2000-8	M
	Chloride	2075-0	M
	Phosphate	14879-1	M
	Magnesium	2601-3	M

System	Analyte	Logical Observation Identifiers Names and Codes (LOINC)	Assessed in Mother (M) Child (C)
	Iron	2498-4	M
	Transferrin	3034-6	M
	C reactive protein (CRP)	1988-5	M/C
	Interleukin-6 (IL-6)	26881-3	M
	Thyrotropin (TSH)	3016-3	M
	Cortisol	14675-3	M
	$\beta$ -human chorionic gonadotropin ( $\beta$ -HCG)	19180-9	M
	Prolactin	2842-3	M
	Estradiol	14715-7	M
	Progesterone	14890-8	M
	Testosterone	14913-8	M
	Sex hormone binding protein (SHBG)	13967-5	M
Urine	Albumin	1754-1	M/C
	Creatinine	2161-8	M/C
	Urea	3092-4	M/C
	Total protein	2888-6	M/C
	Leukocytes	33052-2	M/C
	Nitrit	50558-6	M/C
	pH	50560-2	M/C

Table 3 Grading of hepatic steatosis

Grade	Echogenicity	Sound attenuation	Vessels
I	+	-	Normal
II	++	(+)	Normal
III	+++	+	Rarified