

SUPPLEMENTAL MATERIAL

Table 1. An overview of health information variables in the CopPreg database from the MFR

Category	Variables
<i>Mother, child and father descriptive characteristics</i>	Maternal and paternal age, Maternal residence area, child sex.
<i>Mother anthropometry, lifestyle, health care service use and previous pregnancies.</i>	Mother's BMI, height and weight. Maternal smoking status. Visits to mid-wife, doctor and specialized doctor. Parity, previous abortions (spontaneous and provoked), previous deliveries and previous C-sections in Denmark.
<i>Child anthropometry and health status.</i>	Weight, length, head and abdominal circumference of child. Child apgar score, malformations and having been in neonatal care with CPAP. Birth place, date and time and child number in multiple pregnancies.
<i>Delivery outcomes and complications.</i>	Live or stillborn, death date of child, placenta weight and cord blood analysis. Delivery complications and C-section delivery.
<i>Pregnancy description, condition and health status.</i>	Pregnancy complications, haemoperitoneum, cardiomyopathy, infections, intrauterine asphyxi and other medical diseases. Multiple pregnancy and gestational age in days.

Table 2. Population characteristics; children of pregnancies with requisitions

<i>Child characteristic</i>		<i>Children of pregnancies with requisitions (N= 207.509)</i>	
<i>Gender N (%)</i>	<i>Missing</i>	127	0.1
	<i>Male</i>	106.673	51.4
	<i>Female</i>	100.709	48.5
<i>Live or still-born N (%)</i>	<i>Missing</i>	None	0.0
	<i>Stillborn[§]</i>	722	0.3
	<i>Live-born</i>	206.787	99.7
<i>Birth weight (g) N (%)</i>	<i>Missing</i>	1.929	0.9
	<i>Low birth weight*</i>	10.821	5.2
	<i>Normal birth weight</i>	194.759	93.9
<i>Gestational age N (%)</i>	<i>Missing</i>	38	0.0
	<i>Preterm born[¥]</i>	15.314	7.4
	<i>Term born</i>	192.157	92.6

[§]Until April 2004, the birth of a dead fetus before gestational week 28 + 0 was considered a miscarriage and therefore not registered in the MBR. From 1st April 2004: delivery of a dead fetus after 22nd completed week of pregnancy (Bliddal et al., 2018).

*Low birth weight defined as < 2500 g

¥ Preterm born defined as < 260 gestation days

Table 3. Population characteristics; fathers related to pregnancies with requisitions

<i>Father characteristic</i>		<i>Related fathers to pregnancies with requisitions (N=143.169 related to 203.054 pregnancies)</i>	
<i>Age in years N (%) Mean= 34 years</i>	<i>Missing</i>	4.499	2.2
	< 20	408	0.2
	20-45	191.620	94.4
	> 45	6.527	3.2

Table 4. Clinical tests and test results in children of pregnancies with requisitions

Clinical test name (IUPAC code), unit (ordered by highest to lowest number of children)	N (%) of children of 40.156		Test results					
			N (%) of 953.014		N above reference (%)		N below reference (%)	
Hemoglobin ⁱ (NPU02319), mmol/L	27349	68.1	40527	4.3	502	1.2	1355	3.3
Erythrocytes mean corpuscular volume ⁱ (NPU01944), fL	27349	68.1	40527	4.3	98	0.2	3237	8.0
Leukocytes ⁱ (NPU02593), 10 ⁹ /L	27349	68.1	40527	4.3	1598	3.9	836	2.1
Erythrocytes volume, relative distribution width ⁱ (NPU18162), %	27348	68.1	40526	4.3	4789	11.8	0	0.0
Thrombocytes ⁱ (NPU03568), 10 ⁹ /L	27342	68.1	40508	4.3	10939	27.0	181	0.4
Eosinophilocytes ⁱ (NPU01933), 10 ⁹ /L	22904	57.0	32048	3.4	3485	10.9	1156	3.6
Monocytes ⁱ (NPU02840), 10 ⁹ /L	22904	57.0	32049	3.4	725	2.3	30	0.1
Lymphocytes ⁱ (NPU02636), 10 ⁹ /L	22904	57.0	32049	3.4	702	2.2	1766	5.5
Basophilocytes ⁱ (NPU01349), 10 ⁹ /L	22895	57.0	32037	3.4	142	0.4	0	0.0
Neutrophilocytes ⁱ (NPU02902), 10 ⁹ /L	22788	56.7	31798	3.3	1630	5.1	1871	5.9
C-reactive protein ^{iv} (NPU19748), mg/L	22125	55.1	30305	3.2	3954	13.0	0	0.0
Alanine transaminase ^{iv} (NPU19651), U/L	19322	48.1	26025	2.7	1043	4.0	454	1.7
Creatininium ^{iv} (NPU18016), µmol/L	18534	46.2	24501	2.6	87	0.4	8883	36.3
Alkaline phosphatase ^{iv} (NPU19655), U/L	17238	42.9	23274	2.4	1175	5.0	540	2.3
Thyrotropin ⁱⁱ	14997	37.3	19166	2.0	621	3.2	27	0.1

(NPU03577), 10^{-3} IU/L								
Sodium ion ^{iv} (NPU03429), mmol/L	14651	36.5	18472	1.9	41	0.2	393	2.1
Potassium ion ^{iv} (NPU03230), mmol/L	14357	35.8	18033	1.9	1570	8.7	61	0.3
Vitamin D ⁱⁱⁱ (NPU10267), nmol/L	12441	31.0	17297	1.8	60	0.3	6635	38.4
Immunoglobulin A ^{xiii} (NPU19795), g/L	9556	23.8	10994	1.2	174	1.6	181	1.6
Bilirubin ^{iv} (NPU01370), μ mol/L	8883	22.1	11887	1.2	6350	53.4	1045	8.8
Calcium ^{iv} (NPU01443), mmol/L	8379	20.9	10416	1.1	788	7.6	43	0.4
Albumin ^{vii} (NPU19673), g/L	7731	19.3	9243	1.0	1883	20.4	74	0.8
Ferritin ^v (NPU19763), μ g/L	7410	18.5	9176	1.0	711	7.7	336	3.7
Glucose concentration, patient fasting status unknown ^{iv} (NPU02192), mmol/L	6234	15.5	7145	0.7	52	0.7	762	10.7
Transglutaminase antibody, Immunoglobulin A ^{xiv} (NPU14566), kiu/L	5563	13.9	6038	0.6	98	1.6	0	0.0
Hemoglobin, MCHC ⁱ (NPU02321), mmol/L	5560	13.8	6523	0.7	2016	30.9	46	0.7
Hæmoglobin A1c ^{vi} (NPU27300), mmol/mol	5428	13.5	12208	1.3	76	0.6	1052	8.6
Immunoglobulin G ^{xiii} (NPU19814), g/L	5291	13.2	5933	0.6	311	5.2	106	1.8
Immunoglobulin M ^{xiii} (NPU19825), g/L	5276	13.1	5902	0.6	153	2.6	246	4.2
Iron ^{iv} (NPU02508), μ mol/L	4203	10.5	4973	0.5	38	0.8	735	14.8
Gamma glutamyltransferase ^{iv} (NPU19657), U/L	4164	10.4	4970	0.5	76	1.5	1705	34.3

<i>Cobalaminⁱⁱ</i> (NPU01700), pmol/L	3909	9.7	4527	0.5	0	0.0	13	0.3
<i>Amylase^{iv}</i> (NPU19652), U/L	3874	9.6	4387	0.5	244	5.6	4	0.1
<i>Parathyrin^{ix}</i> (NPU03028), pmol/L	3109	7.7	3875	0.4	417	10.8	180	4.6
<i>Immunoglobulin E^v</i> (NPU02482), kiu/L	2830	7.0	3113	0.3	914	29.4	0	0.0
<i>Transferrin^{xiii}</i> (NPU03607), µmol/L	2550	6.4	3001	0.3	107	3.6	10	0.3
<i>Sedimentation reaction^x</i> (NPU17589), p.d.u	2347	5.8	2651	0.3	440	16.6	2	0.1
<i>Neutrophilocytes, segmented^{xiv}</i> (NPU03982), 10 ⁹ /L	2332	5.8	2598	0.3	123	4.7	328	12.6
<i>Neutrophilocytes, band^{xiv}</i> (NPU03980), 10 ⁹ /L	2332	5.8	2598	0.3	41	1.6	0	0.0
<i>Carbamide^{iv}</i> (NPU01459), mmol/L	2214	5.5	2582	0.3	81	3.1	23	0.9
<i>Thyroxine, freeⁱⁱ</i> (NPU03579), pmol/L	2159	5.4	2523	0.3	17	0.7	11	0.4
<i>Glucose concentration, fasting patient^{iv}</i> (NPU02195), mmol/L	1997	5.0	2846	0.3	57	2.0	135	4.7
<i>Lactatedehydrogenase^{iv}</i> (NPU19658), U/L	1894	4.7	2281	0.2	26	1.1	5	0.2
<i>Cholesterol+ ester^{iv}</i> (NPU01566), mmol/L	1626	4.0	2282	0.2	29	1.3	70	3.1
<i>Phosphate^{iv}</i> (NPU03096), mmol/L	1561	3.9	1854	0.2	20	1.1	7	0.4
<i>Reticulocytes, totalⁱ</i> (NPU08694), 10 ⁹ /L	1537	3.8	1712	0.2	27	1.6	59	3.4
<i>Reticulocyte-hemoglobinⁱ</i> (NPU17007), fmol	1530	3.8	1703	0.2	1	0.1	603	35.4
<i>Urine dip stick test, Bacterium, nitrite producing^{viii}</i> (NPU10506), arb.conc	1422	3.5	1610	0.2	31	1.9	0	0.0

Urine dip stick test, Protein ^{viii} (NPU17167), g/L	1422	3.5	1610	0.2	23	1.4	0	0.0
Urine dip stick test, Glucose ^{viii} (NPU02194), mmol/L	1422	3.5	1610	0.2	9	0.6	0	0.0
Urine dip stick test, Acetoacetate ^{viii} (NPU01012), mmol/L	1422	3.5	1610	0.2	117	7.3	0	0.0
Urine dip stick test, Leukocytes ^{viii} (NPU20198), 10 ⁶ /L	1420	3.5	1607	0.2	351	21.8	0	0.0
Urine dip stick test, Erythrocytes ^{viii} (NPU20197), 10 ⁶ /L	1363	3.4	1539	0.2	115	7.5	0	0.0
Cholesterol+ester, in HDL ^{iv} (NPU01567), mmol/L	1290	3.2	1723	0.2	22	1.3	155	9.0
Uric acid ^{iv} (NPU03688), mmol/L	1273	3.2	1504	0.2	209	13.9	46	3.1
Triiodothyronine, total ⁱⁱ (NPU03624), nmol/L	1143	2.8	1283	0.1	263	20.5	1	0.1
Deamidated gliadin peptide antibody(IgA) ^{xiv} (NPU28173), 10 ³ U/L	1083	2.7	1129	0.1	16	1.4	0	0.0
Deamidated gliadin peptide antibody(IgG) ^{xiv} (NPU28161), 10 ³ U/L	1083	2.7	1129	0.1	46	4.1	0	0.0

Table 5. Detailed numbers of clinical test results in fathers related to pregnancies with requisitions

Clinical test name (IUPAC code), unit (ordered by most to least prevalent)	<i>N</i> (%) of fathers of 101.617		Test results					
			<i>N</i> (%) of 5.647.881		<i>N</i> above reference (%)		<i>N</i> below reference (%)	
Erythrocytes volume, relative distribution width ⁱ (NPU18162), %	80228	79.0	215954	3.8	3676	1.7	4	0.0
Hemoglobin ⁱ (NPU02319), mmol/L	80228	79.0	215956	3.8	494	0.2	5228	2.4
Erythrocytes mean corpuscular volume ⁱ (NPU01944), fL	80228	79.0	215956	3.8	1581	0.7	5733	2.7
Leukocytes ⁱ (NPU02593), 10 ⁹ /L	80228	79.0	215957	3.8	33800	15.7	541	0.3
Thrombocytes ⁱ (NPU03568), 10 ⁹ /L	80203	78.9	215796	3.8	5466	2.5	3683	1.7
Alanine transaminase ^{iv} (NPU19651), U/L	73792	72.6	198478	3.5	19688	9.9	457	0.2
Creatininium ^{iv} (NPU18016), μmol/L	73778	72.6	197439	3.5	3612	1.8	3877	2.0
Alkaline phosphatase ^{iv} (NPU19655), U/L	65904	64.9	165069	2.9	12603	7.6	1109	0.7
C-reactive protein ^{iv} (NPU19748), mg/L	65810	64.8	149810	2.7	20139	13.4	0	0.0
Thyrotropin ⁱⁱ (NPU03577), 10 ⁻³ IU/L	65054	64.0	143657	2.5	3811	2.7	1510	1.1
Sodium ion ^{iv} (NPU03429), mmol/L	60101	59.1	139098	2.5	1364	1.0	1612	1.2

<i>Lymphocytesⁱ</i> (NPU02636), 10 ⁹ /L	60049	59.1	127718	2.3	1248	1.0	651	0.5
<i>Eosinophilocytesⁱ</i> (NPU01933), 10 ⁹ /L	60033	59.1	127678	2.3	8611	6.7	0	0.0
<i>Monocytesⁱ</i> (NPU02840), 10 ⁹ /L	60032	59.1	127677	2.3	1120	0.9	0	0.0
<i>Basophilocytesⁱ</i> (NPU01349), 10 ⁹ /L	60017	59.1	127607	2.3	77	0.1	0	0.0
<i>Neutrophilocytesⁱ</i> (NPU02902), 10 ⁹ /L	59834	58.9	127062	2.2	7551	5.9	3742	2.9
<i>Potassium ion^{iv}</i> (NPU03230), mmol/L	59278	58.3	135994	2.4	14427	10.6	603	0.4
<i>Triglycerides, fasting patient^{iv}</i> (NPU03620), mmol/L	58638	57.7	91550	1.6	17256	18.8	1416	1.5
<i>Cholesterol+ ester^{iv}</i> (NPU01566), mmol/L	58543	57.6	147559	2.6	6506	4.4	8914	6.0
<i>Cholesterol+ester, in HDL^{iv}</i> (NPU01567), mmol/L	52521	51.7	125571	2.2	1849	1.5	7323	5.8
<i>Vitamin Dⁱⁱⁱ</i> (NPU10267), nmol/L	42788	42.1	90694	1.6	253	0.3	43153	47.6
<i>Cholesterol+ester, in LDL, fasting patient^{iv}</i> (NPU10171), mmol/L	38466	37.9	81083	1.4	3870	4.8	3906	4.8
<i>Calcium^{iv}</i> (NPU01443), mmol/L	36879	36.3	66827	1.2	1651	2.5	776	1.2
<i>Hæmoglobin A1c^{vi}</i> (NPU27300), mmol/mol	36708	36.1	140733	2.5	24304	17.3	6666	4.7

<i>Gamma glutamyltransferase</i> ^{iv} (NPU19657), U/L	35414	34.9	62864	1.1	4531	7.2	3685	5.9
<i>Glucose concentration, patient fasting status unknown</i> ^{iv} (NPU02192), mmol/L	31033	30.5	48361	0.9	2266	4.7	2489	5.1
<i>Glucose concentration, fasting patient</i> ^{iv} (NPU02195), mmol/L	30373	29.9	60194	1.1	10466	17.4	794	1.3
<i>Bilirubin</i> ^{iv} (NPU01370), µmol/L	30313	29.8	52540	0.9	3695	7.0	656	1.2
<i>Amylase</i> ^{iv} (NPU19652), U/L	28389	27.9	46888	0.8	2034	4.3	582	1.2
<i>Albumin</i> ^{vii} (NPU19673), g/L	25466	25.1	41109	0.7	4778	11.6	406	1.0
<i>Triglycerides, patient fasting status unknown</i> ^{iv} (NPU04094), mmol/L	23582	23.2	36786	0.7	7331	19.9	284	0.8
<i>Cobalamin</i> ⁱⁱ (NPU01700), pmol/L	22666	22.3	36549	0.6	0	0.0	775	2.1
<i>Cholesterol+ester, in LDL, patient fasting status unknown</i> ^{iv} (NPU01568), mmol/L	22569	22.2	33908	0.6	1125	3.3	1384	4.1
<i>Hemoglobin, MCHC</i> ⁱ (NPU02321), mmol/L	21739	21.4	32643	0.6	1483	4.5	279	0.9
<i>Uric acid</i> ^{iv} (NPU03688), mmol/L	16431	16.2	26239	0.5	2887	11.0	391	1.5
<i>Ferritin</i> ^v (NPU19763), µg/L	16172	15.9	25036	0.4	3085	12.3	335	1.3

<i>Sedimentation reaction^x</i> (NPU17589), p.d.u	14700	14.5	21696	0.4	1967	9.1	486	2.2
<i>Prostate specific antigen^v</i> (NPU08669), µg/L	13555	13.3	21906	0.4	582	2.7	0	0.0
<i>Iron^{iv}</i> (NPU02508), µmol/L	11706	11.5	16575	0.3	256	1.5	1522	9.2
<i>Immunoglobulin A^{xiii}</i> (NPU19795), g/L	11667	11.5	14471	0.3	685	4.7	166	1.1
<i>Parathyrin^{ix}</i> (NPU03028), pmol/L	8947	8.8	13600	0.2	2414	17.8	156	1.1
<i>Immunoglobulin G^{xiii}</i> (NPU19814), g/L	8415	8.3	10261	0.2	655	6.4	74	0.7
<i>Immunoglobulin M^{xiii}</i> (NPU19825), g/L	8385	8.3	10233	0.2	217	2.1	395	3.9
<i>Urine dip stick test, Glucose^{viii}</i> (NPU02194), mmol/L	7286	7.2	10438	0.2	229	2.2	0	0.0
<i>Urine dip stick test, Acetoacetate^{viii}</i> (NPU01012), mmol/L	7286	7.2	10438	0.2	541	5.2	0	0.0
<i>Urine dip stick test, Protein^{viii}</i> (NPU17167), g/L	7286	7.2	10438	0.2	227	2.2	0	0.0
<i>Urine dip stick test, Leukocytes^{viii}</i> (NPU20198), 10 ⁶ /L	7286	7.2	10438	0.2	666	6.4	0	0.0
<i>Urine dip stick test, Bacterium, nitrite producing^{viii}</i> (NPU10506), arb.conc	7286	7.2	10438	0.2	220	2.1	1	0.0

<i>Transferrin</i> ^{xiii} (NPU03607), µmol/L	6559	6.5	8934	0.2	244	2.7	211	2.4
<i>Thyroxine, free</i> ⁱⁱ (NPU03579), pmol/L	6492	6.4	13499	0.2	755	5.6	302	2.2
<i>Urine dip stick test, Erythrocytes</i> ^{viii} (NPU20197), 10 ⁶ /L	5552	5.5	7901	0.1	874	11.1	0	0.0
<i>Coagulation factor II+VII+X</i> ^{xii} (NPU18878), p.d.u	5282	5.2	6865	0.1	0	0.0	301	4.4
<i>Immunoglobulin E</i> ^v (NPU02482), kiu/L	4554	4.5	4989	0.1	1871	37.5	0	0.0
<i>Transglutaminase antibody, Immunoglobulin A</i> ^{xiv} (NPU14566), kiu/L	3816	3.8	4192	0.1	48	1.1	0	0.0
<i>Lactatedehydrogenase</i> ^{iv} (NPU19658), U/L	3419	3.4	4445	0.1	549	12.4	14	0.3
<i>Reticulocytes, total</i> ⁱ (NPU08694), 10 ⁹ /L	2973	2.9	3979	0.1	217	5.5	44	1.1
<i>Triiodothyronine, total</i> ⁱⁱ (NPU03624), nmol/L	2803	2.8	4519	0.1	380	8.4	40	0.9
<i>Reticulocyte-hemoglobin</i> ⁱ (NPU17007), fmol	2774	2.7	3737	0.1	68	1.8	591	15.8
<i>Folate</i> ⁱⁱ (NPU02070), nmol/L	2639	2.6	3218	0.1	0	0.0	118	3.7
<i>Creatine kinase</i> ^{iv} (NPU19656), U/L	2506	2.5	3702	0.1	306	8.3	63	1.7
<i>Thyroxine, total</i> ⁱⁱ (NPU03578), nmol/L	2480	2.4	3705	0.1	294	7.9	83	2.2
<i>Brain Natriuretic Peptide</i> ^{ix} (NPU17181), pmol/L	2233	2.2	2605	0.1	38	1.5	0	0.0

<i>Carbamide</i> ^{iv} (NPU01459), mmol/L	2188	2.2	2532	0.0	139	5.5	19	0.8
<i>Orosmuroid</i> ^{xiii} (NPU19873), g/L	2147	2.1	2404	0.0	364	15.1	32	1.3
<i>Cyclic Citrullinated Peptide Antibody IgG</i> ^{xiv} (NPU19947), arb.conc	1722	1.7	1895	0.0	57	3.0	0	0.0
<i>Follicle-stimulating hormone</i> ⁱⁱ (NPU04014), IU/L	1716	1.7	2026	0.0	69	3.4	138	6.8
<i>Aspartate aminotransferase</i> ^{iv} (NPU19654), U/L	1564	1.5	2277	0.0	157	6.9	187	8.2
<i>Thyroid peroxidase antibody</i> ^{xi} (NPU20041), 10 ³ IU/L	1527	1.5	2285	0.0	1210	53.0	0	0.0
<i>Coagulation, tissue factor- induced</i> ^{xii} (NPU01685), ratio	1503	1.5	5708	0.1	731	12.8	2629	46.1
<i>Prolactin</i> ⁱⁱ (NPU18247), 10 ⁻³ IU/L	1448	1.4	1654	0.0	84	5.1	6	0.4
<i>Lutropin</i> ⁱⁱ (NPU02618), IU/L	1359	1.3	1633	0.0	29	1.8	45	2.8
<i>Neutrophilocytes, segmented</i> ^{xiv} (NPU03982), 10 ⁹ /L	1311	1.3	1510	0.0	91	6.0	310	20.5
<i>Neutrophilocytes, band</i> ^{xiv} (NPU03980), 10 ⁹ /L	1308	1.3	1507	0.0	194	12.9	0	0.0
<i>Erythrocytes</i> ⁱ (NPU01960), 10 ¹² /L	1083	1.1	1268	0.0	95	7.5	10	0.8

Table 6. Detailed numbers of clinical test results in pregnancies with requisitions

Clinical test name (IUPAC code), unit (ordered by highest to lowest number of pregnancies with the test result)	N (%) of pregnancies of 191.413		Test results					
			N (%) of 2.244.397		N above reference (%)		N below reference (%)	
Erythrocytes volume, relative distribution width ⁱ (NPU18162), %	112828	58.9	143982	6.4	8518	5.9	4	0.0
Hemoglobin ⁱ (NPU02319), mmol/L	112819	58.9	143971	6.4	25	0.0	16614	11.5
Erythrocytes mean corpuscular volume ⁱ (NPU01944), fL	112819	58.9	143970	6.4	1683	1.2	6366	4.4
Leukocytes ⁱ (NPU02593), 10 ⁹ /L	112816	58.9	143967	6.4	50856	35.3	236	0.2
Thrombocytes ⁱ (NPU03568), 10 ⁹ /L	112773	58.9	143891	6.4	4296	3.0	1793	1.2
Thyrotropin ⁱⁱ (NPU03577), 10 ⁻³ IU/L	47450	24.8	59337	2.6	2172	3.7	2321	3.9
Eosinophilocytes ⁱ (NPU01933), 10 ⁹ /L	39247	20.5	47642	2.1	1413	3.0	0	0.0
Monocytes ⁱ (NPU02840), 10 ⁹ /L	39247	20.5	47641	2.1	177	0.4	0	0.0
Lymphocytes ⁱ (NPU02636), 10 ⁹ /L	39247	20.5	47641	2.1	54	0.1	307	0.6
Basophilocytes ⁱ (NPU01349), 10 ⁹ /L	39230	20.5	47618	2.1	9	0.0	0	0.0

<i>Neutrophilocytesⁱ</i> (NPU02902), 10 ⁹ /L	39204	20.5	47574	2.1	9700	20.4	581	1.2
<i>Vitamin Dⁱⁱⁱ</i> (NPU10267), nmol/L	38555	20.1	48006	2.1	61	0.1	22791	47.5
<i>Alanine transaminase^{iv}</i> (NPU19651), U/L	35705	18.7	43457	1.9	3299	7.6	1665	3.8
<i>Alkaline phosphatase^{iv}</i> (NPU19655), U/L	34927	18.2	42814	1.9	6719	15.7	1152	2.7
<i>Creatininium^{iv}</i> (NPU18016), μmol/L	34544	18.0	40872	1.8	83	0.2	6892	16.9
<i>C-reactive protein^{iv}</i> (NPU19748), mg/L	33686	17.6	40554	1.8	6400	15.8	0	0.0
<i>Ferritin^v</i> (NPU19763), μg /L	32192	16.8	36956	1.6	101	0.3	4621	12.5
<i>Sodium ion^{iv}</i> (NPU03429), mmol/L	24205	12.6	28313	1.3	39	0.1	2875	10.2
<i>Iron^{iv}</i> (NPU02508), μmol/L	23645	12.4	26429	1.2	323	1.2	4457	16.9
<i>Potassium ion^{iv}</i> (NPU03230), mmol/L	23473	12.3	27351	1.2	824	3.0	287	1.0
<i>Calcium^{iv}</i> (NPU01443), mmol/L	17558	9.2	20652	0.9	131	0.6	1872	9.1
<i>Human chorionic gonadotropinⁱⁱ</i> (NPU19579), IU/L	15421	8.1	23804	1.1	18476	77.6	0	0.0
<i>Glucose concentration, patient fasting status unknown^{iv}</i> (NPU02192), mmol/L	14698	7.7	15970	0.7	228	1.4	2220	13.9
<i>Hemoglobin, MCHC^j</i> (NPU02321), mmol/L	14571	7.6	17060	0.8	362	2.1	407	2.4

<i>Bilirubin</i> ^{iv} (NPU01370), $\mu\text{mol/L}$	13622	7.1	15846	0.7	258	1.6	915	5.8
<i>Follicle-stimulating hormone</i> ⁱⁱ (NPU04014), IU/L	12543	6.6	14737	0.7	0	0.0	0	0.0
<i>Erythrocytes</i> ⁱ (NPU01960), $10^{12}/\text{L}$	12121	6.3	12340	0.5	89	0.7	801	6.5
<i>Lutropin</i> ⁱⁱ (NPU02618), IU/L	11793	6.2	14733	0.7	0	0.0	0	0.0
<i>Progesterone</i> ⁱⁱ (NPU03242), nmol/L	11727	6.1	14599	0.7	0	0.0	0	0.0
<i>Gamma glutamyltransferase</i> ^{iv} (NPU19657), U/L	10666	5.6	12225	0.5	400	3.3	4248	34.7
<i>Prolactin</i> ⁱⁱ (NPU18247), 10^{-3} IU/L	10451	5.5	11260	0.5	563	5.0	29	0.3
<i>Estradio</i> ⁱⁱ (NPU01972), nmol/L	10161	5.3	11572	0.5	0	0.0	0	0.0
<i>Cholesterol+ ester</i> ^{iv} (NPU01566), mmol/L	9846	5.1	10662	0.5	704	6.6	520	4.9
<i>Hæmoglobin A1c</i> ^{vi} (NPU27300), mmol/mol	9833	5.1	20287	0.9	536	2.6	3342	16.5
<i>Albumin</i> ^{vii} (NPU19673), g/L	9068	4.7	10556	0.5	79	0.7	2846	27.0
<i>Cobalamin</i> ⁱⁱ (NPU01700), pmol/L	9038	4.7	10275	0.5	0	0.0	652	6.3
<i>Amylase</i> ^{iv} (NPU19652), U/L	8766	4.6	9940	0.4	391	3.9	80	0.8
<i>Glucose concentration, fasting patient</i> ^{iv} (NPU02195), mmol/L	8692	4.5	10272	0.5	393	3.8	872	8.5

<i>Cholesterol+ester, in HDL^{iv}</i> (NPU01567), mmol/L	8028	4.2	8671	0.4	215	2.5	387	4.5
<i>Thyroxine, freeⁱⁱ</i> (NPU03579), pmol/L	7566	4.0	11735	0.5	456	3.9	295	2.5
<i>Transferrin^{xiii}</i> (NPU03607), μ mol/L	7268	3.8	8191	0.4	2340	28.6	64	0.8
<i>Triglycerides, fasting patient^{iv}</i> (NPU03620), mmol/L	5545	2.9	6021	0.3	446	7.4	403	6.7
<i>Cholesterol+ester, in LDL, fasting patient^{iv}</i> (NPU10171), mmol/L	5332	2.8	5773	0.3	201	3.5	247	4.3
<i>Urine dip stick test, Glucose^{viii}</i> (NPU02194), mmol/L	4754	2.5	5337	0.2	79	1.5	0	0.0
<i>Urine dip stick test, Acetoacetate^{viii}</i> (NPU01012), mmol/L	4754	2.5	5337	0.2	417	7.8	0	0.0
<i>Urine dip stick test, Protein^{viii}</i> (NPU17167), g/L	4754	2.5	5337	0.2	73	1.4	0	0.0
<i>Urine dip stick test, Leukocytes^{viii}</i> (NPU20198), 10^6 /L	4754	2.5	5337	0.2	2529	47.4	0	0.0
<i>Urine dip stick test, Bacterium, nitrite producing^{viii}</i> (NPU10506), arb.conc.	4754	2.5	5337	0.2	140	2.6	0	0.0
<i>Reticulocytes, totalⁱ</i> (NPU08694), 10^9 /L	3867	2.0	4618	0.2	126	2.7	34	0.7
<i>Parathyrin^x</i> (NPU03028), pmol/L	3804	2.0	4379	0.2	427	9.8	604	13.8
<i>Reticulocyte-hemoglobinⁱ</i> (NPU17007), fmol	3738	2.0	4480	0.2	45	1.0	902	20.1
<i>Triiodothyronine, totalⁱⁱ</i> (NPU03624), nmol/L	3617	1.9	5302	0.2	1341	25.3	25	0.5

<i>Urine dip stick test, Erythrocytes^{viii}</i> (NPU20197), 10 ⁶ /L	3353	1.8	3787	0.2	540	14.3	0	0.0
<i>Uric acid^{iv}</i> (NPU03688), mmol/L	2726	1.4	2948	0.1	119	4.0	131	4.4
<i>Sedimentation reaction^x</i> (NPU17589), p.d.u	2635	1.4	2938	0.1	845	28.8	4	0.1
<i>Thyroxine, totalⁱⁱ</i> (NPU03578), nmol/L	2569	1.3	3960	0.2	756	19.1	37	0.9
<i>Thyroid peroxidase antibody^{xi}</i> (NPU20041), 10 ³ IU/L	2341	1.2	2662	0.1	1025	38.5	0	0.0
<i>Coagulation factor II+VII+X^{xii}</i> (NPU18878), p.d.u	2262	1.2	2451	0.1	0	0.0	45	1.8
<i>Triglycerides, patient fasting status unknown^{iv}</i> (NPU04094), mmol/L	2133	1.1	2258	0.1	119	5.3	85	3.8
<i>Cholesterol+ester, in LDL, patient fasting status unknown^{iv}</i> (NPU01568), mmol/L	2045	1.1	2152	0.1	49	2.3	77	3.6
<i>Immunoglobulin A^{xiii}</i> (NPU19795), g/L	1990	1.0	2095	0.1	31	1.5	26	1.2
<i>Folateⁱⁱ</i> (NPU02070), nmol/L	1304	0.7	1416	0.1	0	0.0	39	2.8
<i>Immunoglobulin M^{xiii}</i> (NPU19825), g/L	1282	0.7	1356	0.1	93	6.9	24	1.8
<i>Immunoglobulin G^{xiii}</i> (NPU19814), g/L	1266	0.7	1338	0.1	82	6.1	11	0.8
<i>Lactate dehydrogenase^{iv}</i> (NPU19658), U/L	1001	0.5	1093	0.0	87	8.0	3	0.3

Table 7. Detailed numbers of clinical test results in children with requisitions

Clinical test name (IUPAC code), unit (ordered by highest to lowest number of children)	N (%) of children of 61.733		Test results					
			N (%) of 1.511.597		N above reference (%)		N below reference (%)	
Hemoglobin ⁱ (NPU02319), mmol/L	42745	69.2	63913	4.2	712	1.1	1997	3.1
Erythrocytes mean corpuscular volume ⁱ (NPU01944), fL	42745	69.2	63913	4.2	177	0.3	4599	7.2
Leukocytes ⁱ (NPU02593), 10 ⁹ /L	42745	69.2	63913	4.2	2585	4.0	1326	2.1
Erythrocytes volume, relative distribution width ⁱ (NPU18162), %	42743	69.2	63911	4.2	6593	10.3	0	0.0
Thrombocytes ⁱ (NPU03568), 10 ⁹ /L	42736	69.2	63882	4.2	15599	24.4	345	0.5
Eosinophilocytes ⁱ (NPU01933), 10 ⁹ /L	35681	57.8	50322	3.3	5459	10.8	1578	3.1
Monocytes ⁱ (NPU02840), 10 ⁹ /L	35681	57.8	50323	3.3	1065	2.1	39	0.1
Lymphocytes ⁱ (NPU02636), 10 ⁹ /L	35681	57.8	50323	3.3	1018	2.0	2584	5.1
Basophilocytes ⁱ (NPU01349), 10 ⁹ /L	35668	57.8	50306	3.3	184	0.4	0	0.0
Neutrophilocytes ⁱ (NPU02902), 10 ⁹ /L	35384	57.3	49718	3.3	2559	5.1	2853	5.7
C-reactive protein ^{iv} (NPU19748), mg/L	34285	55.5	47124	3.1	6040	12.8	0	0.0
Alanine transaminase ^{iv}	30276	49.0	41558	2.7	1554	3.7	804	1.9

(NPU19651), U/L								
Creatininium ^{iv} (NPU18016), µmol/L	29230	47.3	39217	2.6	147	0.4	12114	30.9
Alkaline phosphatase ^{iv} (NPU19655), U/L	26931	43.6	36916	2.4	1737	4.7	945	2.6
Thyrotropin ⁱⁱ (NPU03577), 10 ⁻³ IU/L	23765	38.5	30595	2.0	980	3.2	38	0.1
Sodium ion ^{iv} (NPU03429), mmol/L	22998	37.3	29166	1.9	75	0.3	569	2.0
Potassium ion ^{iv} (NPU03230), mmol/L	22542	36.5	28482	1.9	2423	8.5	84	0.3
Vitamin D ⁱⁱⁱ (NPU10267), nmol/L	19244	31.2	26818	1.8	79	0.3	10 610	39.6
Immunoglobulin A ^{xiii} (NPU19795), g/L	14611	23.7	16822	1.1	298	1.8	276	1.6
Calcium ^{iv} (NPU01443), mmol/L	13199	21.4	16485	1.1	1113	6.8	83	0.5
Bilirubin ^{iv} (NPU01370), µmol/L	12224	19.8	16161	1.1	7520	46.5	1474	9.1
Albumin ^{vii} (NPU19673), g/L	11865	19.2	14171	0.9	2403	17.0	128	0.9
Ferritin ^v (NPU19763), µg/L	11324	18.3	14067	0.9	955	6.8	578	4.1
Glucose concentration, patient fasting status unknown ^{iv} (NPU02192), mmol/L	9927	16.1	11454	0.8	89	0.8	1 159	10.1
Hæmoglobin A1c ^{vi} (NPU27300), mmol/mol	8889	14.4	20172	1.3	128	0.6	1750	8.7

Hemoglobin, MCHC ^j (NPU02321), mmol/L	8791	14.2	10313	0.7	2682	26.0	84	0.8
Transglutaminase antibody, Immunoglobulin A ^{xiv} (NPU14566), kiu/L	8485	13.7	9219	0.6	155	1.7	0	0.0
Immunoglobulin G ^{xiii} (NPU19814), g/L	8006	13.0	8965	0.6	507	5.7	156	1.7
Immunoglobulin M ^{xiii} (NPU19825), g/L	7987	12.9	8926	0.6	257	2.9	405	4.5
Gamma glutamyltransferase ^{iv} (NPU19657), U/L	6735	10.9	8057	0.5	121	1.5	2632	32.7
Amylase ^{iv} (NPU19652), U/L	6320	10.2	7224	0.5	401	5.6	5	0.1
Iron ^{iv} (NPU02508), μmol/L	6494	10.5	7681	0.5	60	0.8	1128	14.7
Cobalamin ⁱⁱ (NPU01700), pmol/L	6316	10.2	7367	0.5	0	0.0	25	0.3
Immunoglobulin E ^v (NPU02482), kiu/L	4613	7.5	5100	0.3	1522	29.8	0	0.0
Parathyrin ^{ix} (NPU03028), pmol/L	4602	7.5	5767	0.4	657	11.4	249	4.3
Transferrin ^{xiii} (NPU03607), μmol/L	3788	6.1	4455	0.3	198	4.4	20	0.4
Sedimentation reaction ^x (NPU17589), p.d.u	3690	6.0	4162	0.3	678	16.3	3	0.1
Neutrophilocytes, segmented ^{xiv} (NPU03982), 10 ⁹ /L	3450	5.6	3814	0.3	198	5.2	466	12.2
Neutrophilocytes, band ^{xiv} (NPU03980), 10 ⁹ /L	3449	5.6	3813	0.3	75	2.0	0	0.0

Thyroxine, free ⁱⁱ (NPU03579), pmol/L	3309	5.4	3907	0.3	26	0.7	26	0.7
Glucose concentration, fasting patient ^{iv} (NPU02195), mmol/L	3303	5.4	4781	0.3	100	2.1	220	4.6
Carbamide ^{iv} (NPU01459), mmol/L	3283	5.3	3824	0.3	102	2.7	32	0.8
Cholesterol+ ester ^{iv} (NPU01566), mmol/L	2989	4.8	4621	0.3	93	2.0	136	2.9
Lactatedehydrogenase ^{iv} (NPU19658), U/L	2856	4.6	3420	0.2	36	1.1	6	0.2
Reticulocytes, total ⁱ (NPU08694), 10 ⁹ /L	2315	3.8	2582	0.2	39	1.5	77	3.0
Cholesterol+ester, in HDL ^{iv} (NPU01567), mmol/L	2309	3.7	3175	0.2	45	1.4	293	9.2
Reticulocyte-hemoglobin ⁱ (NPU17007), fmol	2290	3.7	2554	0.2	1	0.0	852	33.4
Phosphate ^{iv} (NPU03096), mmol/L	2261	3.7	2693	0.2	47	1.7	7	0.3
Urine dip stick test, Glucose ^{viii} (NPU02194), mmol/L	2246	3.6	2545	0.2	17	0.7	0	0.0
Urine dip stick test, Acetoacetate ^{viii} (NPU01012), mmol/L	2246	3.6	2545	0.2	182	7.2	0	0.0
Urine dip stick test, Protein ^{viii} (NPU17167), g/L	2246	3.6	2545	0.2	36	1.4	0	0.0
Urine dip stick test, Bacterium, nitrite producing ^{viii} (NPU10506), arb.conc.	2246	3.6	2545	0.2	50	2.0	0	0.0
Urine dip stick test, Leukocytes ^{viii} (NPU20198), 10 ⁶ /L	2244	3.6	2542	0.2	540	21.2	0	0.0

<i>Urine dip stick test, Erythrocytes^{viii}</i> (NPU20197), 10 ⁶ /L	2111	3.4	2385	0.2	182	7.6	0	0.0
<i>Uric acid^{iv}</i> (NPU03688), mmol/L	2027	3.3	2393	0.2	349	14.6	83	3.5
<i>Triiodothyronine, totalⁱⁱ</i> (NPU03624), nmol/L	1704	2.8	1935	0.1	384	19.8	1	0.1
<i>Triglycerides, fasting patient^{iv}</i> (NPU03620), mmol/L	1676	2.7	2 586	0.2	66	2.6	215	8.3
<i>Orosmucoïd^{xiii}</i> (NPU19873), g/L	1583	2.6	1682	0.1	308	18.3	66	3.9
<i>Cholesterol+ester, in LDL, fasting patient^{iv}</i> (NPU10171), mmol/L	1512	2.4	2083	0.1	107	5.1	204	9.8
<i>Coagulation factor II+VII+X^{xii}</i> (NPU18878), p.d.u	1419	2.3	1603	0.1	0	0.0	102	6.4
<i>Deamidated gliadin peptide antibody(IgG)^{xiv}</i> (NPU28161), 10 ³ U/L	1346	2.2	1399	0.1	54	3.9	0	0.0
<i>Deamidated gliadin peptide antibody(IgA)^{xiv}</i> (NPU28173), 10 ³ U/L	1346	2.2	1399	0.1	18	1.3	0	0.0
<i>Thyroxine, totalⁱⁱ</i> (NPU03578), nmol/L	1310	2.1	1651	0.1	65	3.9	13	0.8
<i>Follicle-stimulating hormoneⁱⁱ</i> (NPU04014), IU/L	1020	1.7	1142	0.1	182	15.9	140	12.3
<i>Triglycerides, patient fasting status unknown^{iv}</i> (NPU04094), mmol/L	1019	1.7	1601	0.1	62	3.9	113	7.1

Table 8. Detailed numbers of clinical test results in fathers with periconception requisitions

Clinical test name (IUPAC code), unit (ordered by most to least prevalent)	N (%) of fathers of 33.074		Test results					
			N (%) of 639.394		N above reference (%)		N below reference (%)	
Erythrocytes volume, relative distribution width ⁱ (NPU18162), %	17790	53.8	21240	3.3	287	1.4	0	0.0
Erythrocytes mean corpuscular volume ⁱ (NPU01944), fL	17790	53.8	21240	3.3	104	0.5	571	2.7
Leukocytes ⁱ (NPU02593), 10 ⁹ /L	17790	53.8	21240	3.3	3052	14.4	43	0.2
Hemoglobin ⁱ (NPU02319), mmol/L	17789	53.8	21239	3.3	38	0.2	423	2.0
Thrombocytes ⁱ (NPU03568), 10 ⁹ /L	17780	53.8	21227	3.3	475	2.2	400	1.9
Creatininium ^{iv} (NPU18016), µmol/L	15575	47.1	18410	2.9	255	1.4	299	1.6
Alanine transaminase ^{iv} (NPU19651), U/L	15395	46.5	18613	2.9	2165	11.6	40	0.2
Alkaline phosphatase ^{iv} (NPU19655), U/L	13035	39.4	15649	2.4	1127	7.2	89	0.6
C-reactive protein ^{iv} (NPU19748), mg/L	12811	38.7	14859	2.3	1916	12.9	0	0.0
Thyrotropin ⁱⁱ (NPU03577), 10E-3 IU/L	12575	38.0	14121	2.2	384	2.7	139	1.0
Cholesterol+ ester ^{iv} (NPU01566), mmol/L	11190	33.8	13278	2.1	648	4.9	599	4.5
Sodium ion ^{iv} (NPU03429), mmol/L	11048	33.4	12630	2.0	135	1.1	85	0.7

<i>Lymphocytesⁱ</i> (NPU02636), 10 ⁹ /L	10988	33.2	12689	2.0	116	0.9	59	0.5
<i>Monocytesⁱ</i> (NPU02840), 10 ⁹ /L	10987	33.2	12687	2.0	81	0.6	0	0.0
<i>Eosinophilocytesⁱ</i> (NPU01933), 10 ⁹ /L	10987	33.2	12687	2.0	805	6.3	0	0.0
<i>Basophilocytesⁱ</i> (NPU01349), 10 ⁹ /L	10980	33.2	12676	2.0	3	0.0	0	0.0
<i>Neutrophilocytesⁱ</i> (NPU02902), 10 ⁹ /L	10954	33.1	12637	2.0	640	5.1	382	3.0
<i>Potassium ion^{iv}</i> (NPU03230), mmol/L	10826	32.7	12338	1.9	1108	9.0	38	0.3
<i>Cholesterol+ester, in HDL^{iv}</i> (NPU01567), mmol/L	9524	28.8	11131	1.7	158	1.4	607	5.5
<i>Vitamin Dⁱⁱⁱ</i> (NPU10267), nmol/L	7817	23.6	9014	1.4	21	0.2	4158	46.1
<i>Triglycerides, fasting patient^{iv}</i> (NPU03620), mmol/L	7275	22.0	8245	1.3	1579	19.2	150	1.8
<i>Cholesterol+ester, in LDL, fasting patient^{iv}</i> (NPU10171), mmol/L	6533	19.8	7521	1.2	428	5.7	254	3.4
<i>Calcium^{iv}</i> (NPU01443), mmol/L	5728	17.3	6353	1.0	185	2.9	47	0.7
<i>Gamma glutamyltransferase^{iv}</i> (NPU19657), U/L	5377	16.3	5980	0.9	397	6.6	275	4.6
<i>Hæmoglobin A1c^{vi}</i> (NPU27300), mmol/mol	5042	15.2	10896	1.7	1266	11.6	720	6.6

Glucose concentration, patient fasting status unknown ^{iv} (NPU02192), mmol/L	4507	13.6	4785	0.7	148	3.1	294	6.1
Glucose concentration, fasting patient ^{iv} (NPU02195), mmol/L	4769	14.4	5608	0.9	707	12.6	94	1.7
Bilirubin ^{iv} (NPU01370), µmol/L	4615	14.0	5257	0.8	383	7.3	51	1.0
Amylase ^{iv} (NPU19652), U/L	4224	12.8	4703	0.7	212	4.5	48	1.0
Albumin ^{vii} (NPU19673), g/L	3589	10.9	3918	0.6	272	6.9	37	0.9
Triglycerides, patient fasting status unknown ^{iv} (NPU04094), mmol/L	2492	7.5	2737	0.4	456	16.7	27	1.0
Cobalamin ⁱⁱ (NPU01700), pmol/L	3011	9.1	3232	0.5	0	0.0	65	2.0
Hemoglobin, MCHC ^j (NPU02321), mmol/L	2898	8.8	3103	0.5	130	4.2	18	0.6
Cholesterol+ester, in LDL, patient fasting status unknown ^{iv} (NPU01568), mmol/L	2351	7.1	2523	0.4	90	3.6	44	1.7
Ferritin ^v (NPU19763), µg/L	2277	6.9	2450	0.4	237	9.7	29	1.2
Uric acid ^{iv} (NPU03688), mmol/L	2223	6.7	2402	0.4	285	11.9	28	1.2
Sedimentation reaction ^x (NPU17589), p.d.u	2022	6.1	2224	0.3	182	8.2	48	2.2
Iron ^{iv} (NPU02508), µmol/L	1758	5.3	1876	0.3	27	1.4	149	7.9

Prostate specific antigen ^v (NPU08669), µg/L	1458	4.4	1540	0.2	31	2.0	0	0.0
Immunoglobulin A ^{xiii} (NPU19795), g/L	1448	4.4	1510	0.2	78	5.2	16	1.1
Parathyrin ^{ix} (NPU03028), pmol/L	1132	3.4	1235	0.2	188	15.2	22	1.8

Abbreviations: **arb.conc**, arbitrary concentration; **IUPAC**, International Union of Pure and Applied Chemistry; **N**, Number; **NPU**, Nomenclature for Properties and Units; **p.d.u**, procedure defined unit

ⁱ Hematological blood samples were measured on Siemens (Bayer/Technicon, Munich, Germany) hematology systems as described (Andersen et al., 2014).

ⁱⁱ The component was measured in serum by the commercially available chemiluminescence immunoassay on the Centaur/Centaur XP platform (Bayer, Siemens, Healthcare Diagnostics, Tarrytown, NY, USA) according to the instructions of the manufacturers. The results are valid from November 2000 except for Folate (only valid from March 2005).

ⁱⁱⁱ 25-hydroxy Vitamin D [25(OH)] was measured in serum by three commercially available immunoassays, OCEIA 25(OH)D3 and 25(OH)D2 (Immunodiagnostic Systems, Ltd., Boldon, UK), LIAISON 25(OH)D assay (Diasorin, Saluggia, Italy) and Centaur XP (Bayer, Siemens, Healthcare Diagnostics, Tarrytown, NY, USA) according to the instructions of the manufacturers. All three assays determine the sum of 25(OH)D3 and 25(OH)D2. The OCEIA and Liaison assays were used from May 5, 2004 until May 6, 2012 and are described in detail by Durup D et al 2012 (Durup D, Jørgensen HL, Christensen J, Schwarz P, Heegaard AM, 2012). The Centaur XP was used from May 7, 2012. The 25(OH) results are valid from May 5, 2004.

^{iv} The component was measured in serum by two commercially available assays, Olympus AU600 (Olympus Danmark A/S, Ballerup, Denmark) and Advia 1650/Advia 2400 (Bayer, Siemens, Healthcare Diagnostics, Tarrytown, NY, USA) according to the instructions of the manufacturers. The Olympus was used until December 1, 2002 and the Advia from December 2, 2002. For each component the basic analytical principles in the two assays were similar. Briefly the components (analytical principals) were: Alanine transaminase, Alkaline phosphatase, Aspartate transaminase, Amylase, Creatine kinase, Gamma glutamyltransferase and Lactatedehydrogenase (modified IFCC methods), Bilirubin (colorimetric Diazo-based method according to Jendrassik & Grofs procedure), C-reactive protein (immunoturbidimetric method), Carbamide (urease-glutamase dehydrogenase method), Cholesterol (cholesterolesterase – cholesteroloxidase reactions and colorimetric detection of peroxidase activity), Cholesterol, in HDL (direct method using cholesterolesterase – cholesteroloxidase reactions and colorimetric detection of peroxidase activity), Cholesterol, in LDL (calculated by Friedwalds formula), Iron (colorimetric ferrozine-based method), Phosphate (phosphomolybdate method), Potassium ion and Sodium ion (ion selective electrode (ISE) method), Triglycerid (glycerolkinase – phosphateoxidase reactions and colorimetric detection of peroxidase activity), Uric acid (uricase reaction and colorimetric detection of peroxidase activity), Calcium (colorimetric Arsenazo-based method as described (Durup D, Jørgensen HL, Christensen J, Schwarz P, Heegaard AM, 2012), Creatinine (Jaffe reaction as described for the Advia 1659/2400 system (Borg et al., 2018)) and Glucose (measured in serum or plasma by the Hexokinase method as described for the Advia 1650/2400 system (Borg et al., 2018)). For C-reactive protein, around 60% of test results are alphanumeric. Low results were reported as < 3 mg/L (until December 1, 2002), < 5 mg/L (between December 2, 2002 and May 28, 2008) and < 4 (from May 29, 2008). High results were reported as > 300 mg/L (until December 1, 2002).

^v The component was measured in serum by two commercially available assays, enzyme immunoassay, Cobas Core II (Roche Diagnostics A/S, Hvidovre, Denmark) and chemiluminescence immunoassay, Centaur/Centaur XP (Bayer, Siemens, Healthcare Diagnostics, Tarrytown, NY, USA) according to the instructions of the manufacturers. The Cobas Core was used until December 1, 2002 and the Centaur/Centaur XP from December 2, 2002.

^{vi} HbA1c was measured in blood HbA1C in blood using three commercially available assays as described by the manufacturers. The immunoassay Tina-quant Hemoglobin A1c II on Roche Hitachi 911 Chemistry Analyzer (Roche Diagnostics A/S, Hvidovre, Denmark) used until December 1, 2002, the immunoassay Advia 1650 (Bayer, Siemens, Healthcare Diagnostics, Tarrytown, NY, USA) used from December 2, 2002 until January 25, 2010 and the high-performance liquid chromatography-based assay Tosoh G7 and G8 (Tosoh Bioscience, Tokyo, Japan) used from January 26, 2010. All three assays were standardized according to the National Glycohaemoglobin Standardization Program (NGSP). The Advia and Tosoh assays are described in detail by Borg et al (2018)(Borg et al., 2018).

^{vii} Albumin was measured in serum by two commercially available colorimetric assays (both based on bromocresol green), Roche Hitachi 911 Chemistry Analyzer (Roche Diagnostics A/S, Hvidovre, Denmark) and Advia 1650/Advia 2400 (Bayer, Siemens, Healthcare Diagnostics, Tarrytown, NY, USA) according to the instructions of the manufacturers. The Hitachi was used until December 1, 2002 and the Advia from December 2, 2002.

^{viii} Acetoacetate, Bacterium nitrite, Erythrocytes, Glucose, Leukocytes and Protein in urine were measured by Combur 10 TestM analyzed on MeditronM, URILUXS and URISYS1100 (Roche Diagnostics A/S, Hvidovre, Denmark) according to the instruction of the manufacturer. Results are all semi-quantitative.

^{ix} The component was measured in serum by the commercially available chemiluminescence immunoassay on the Centaur/Centaur XP platform (Bayer, Siemens, Healthcare Diagnostics, Tarrytown, NY, USA) according to the instruction of the manufacturer as described (for Parathyrin(Durup D, Jørgensen HL, Christensen J, Schwarz P, Heegaard AM, 2012) for Brain natriuretic peptide(Hejl et al., 2018)). The results are valid from April 1, 2004 (Parathyrin) and October 7, 2006 (Brain natriuretic peptide).

^x The erythrocyte sedimentation reaction was measured in blood by the Terumo Monitor model V100 (Terumo Denmark, Herlev, Denmark) according to the instruction of the manufacturer.

^{xi} Thyroid peroxidase antibody was measured in serum by the commercially available chemiluminescence immunoassay on the Centaur/Centaur XP platform (Bayer, Siemens, Healthcare Diagnostics, Tarrytown, NY, USA) according to the instructions of the manufacturer. The results are valid from November 28, 2006.

^{xii} Coagulation, tissue factor-induced (Coagulation factor II+VII+X) was measured in sodium-citrate-stabilized plasma by Stago Prothombin-complex Assay (Diagnostica Stago, Asnières, France) on Thrombolyzer (Behnk Elektronik, Norderstedt, Germany) and on STA-R (Diagnostica Stago). The Thrombolyzer was used until December 7, 2003 and the STA-R from December 8, 2003.

^{xiii} The component was measured in serum by two commercially available, immunoturbidimetric assays, Roche Hitachi 911 Chemistry Analyzer (Roche Diagnostics A/S, Hvidovre, Denmark) and Advia 1650/Advia 2400 (Bayer, Siemens, Healthcare Diagnostics, Tarrytown, NY, USA) according to the instructions of the manufacturers. The Hitachi was used until December 1, 2002 and the Advia from December 2, 2002.

^{xiv} The components were measured in serum by the fluorescence enzyme immunoassay (EIA) on the UniCAP 100 and ImmunoCAP 250 platforms (Phadia Laboratory Systems, Thermo Fisher Scientific, Hvidovre Denmark) according to the instruction of the manufacturer. The results are valid from July 13, 2006 (Transglutaminase Antibody IgA), January 26, 2010 (Cyclic citrullinated peptide antibody (IgG)) and July 1, 2013 (Deamidated gliadin peptide antibody IgA and Deamidated gliadin peptide antibody IgG).

Reference list:

- Andersen, C.L., Siersma, V., Karlsund, W., Hasselbalch, H., Felding, P., Bjerrum, O., de Fine Olivarius, N., 2014. The Copenhagen Primary Care Differential Count (CopDiff) database. *Clin. Epidemiol.* 6, 199. <https://doi.org/10.2147/CLEP.S60991>
- Bliddal, M., Broe, A., Pottegård, A., Olsen, J., Langhoff-Roos, J., 2018. The Danish Medical Birth Register, *European Journal of Epidemiology*. <https://doi.org/10.1007/s10654-018-0356-1>
- Borg, R., Persson, F., Siersma, V., Lind, B., Olivarius, N.D.F., 2018. Research : Epidemiology Interpretation of HbA 1c in primary care and potential influence of anaemia and chronic kidney disease : an analysis from the Copenhagen Primary Care Laboratory (CopLab) Database. *Diabet Med.* 35, 1700–1706. <https://doi.org/10.1111/dme.13776>
- Durup D, Jørgensen HL, Christensen J, Schwarz P, Heegaard AM, L.B., 2012. A Reverse J-Shaped Association of All-Cause Mortality with Serum 25-Hydroxyvitamin D in General Practice : The CopD Study. *J Clin Endocrinol Metab* 25, 2644–2652. <https://doi.org/10.1210/jc.2012-1176>
- Hejl, J.L., Grand, M.K., Siersma, V., Goetze, J.P., Olivarius, N.D.F., Andersen, C.L., Lind, B., 2018. Brain Natriuretic Peptide in Plasma as Predictor of All-Cause Mortality in a Large Danish Primary Health Care Population Suspected of Heart Failure. *Clin Chem* 64, 1723–1731. <https://doi.org/10.1373/clinchem.2018.293480>