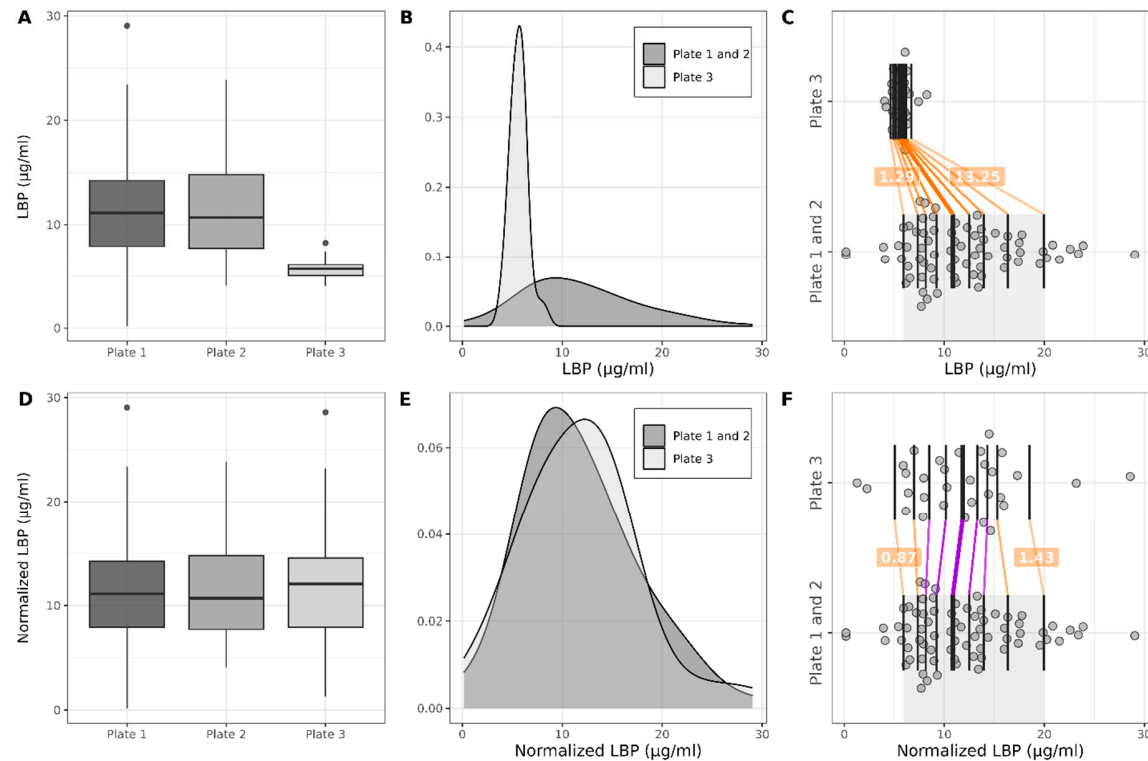


# Supplementary materials for “Association of endotoxaemia with low grade inflammation, metabolic syndrome and distinct response to LPS in type 1 diabetes”



**Supplemental Figure 1.** Illustrations for LBP before and after the normalization. Boxplots by plates, density plots, and scatterplots with deciles for LBP raw data (upper panels) and after normalization using location-scale transformation between pooled plates 1 and 2 and plate 3 (lower panels), location parameter  $\hat{\mu} = -24.83$ , scale parameter  $\hat{\sigma} = 6.475$  are used for transformation of plate 3.

**Supplemental Table 1.** Characteristics of subjects T1D and controls

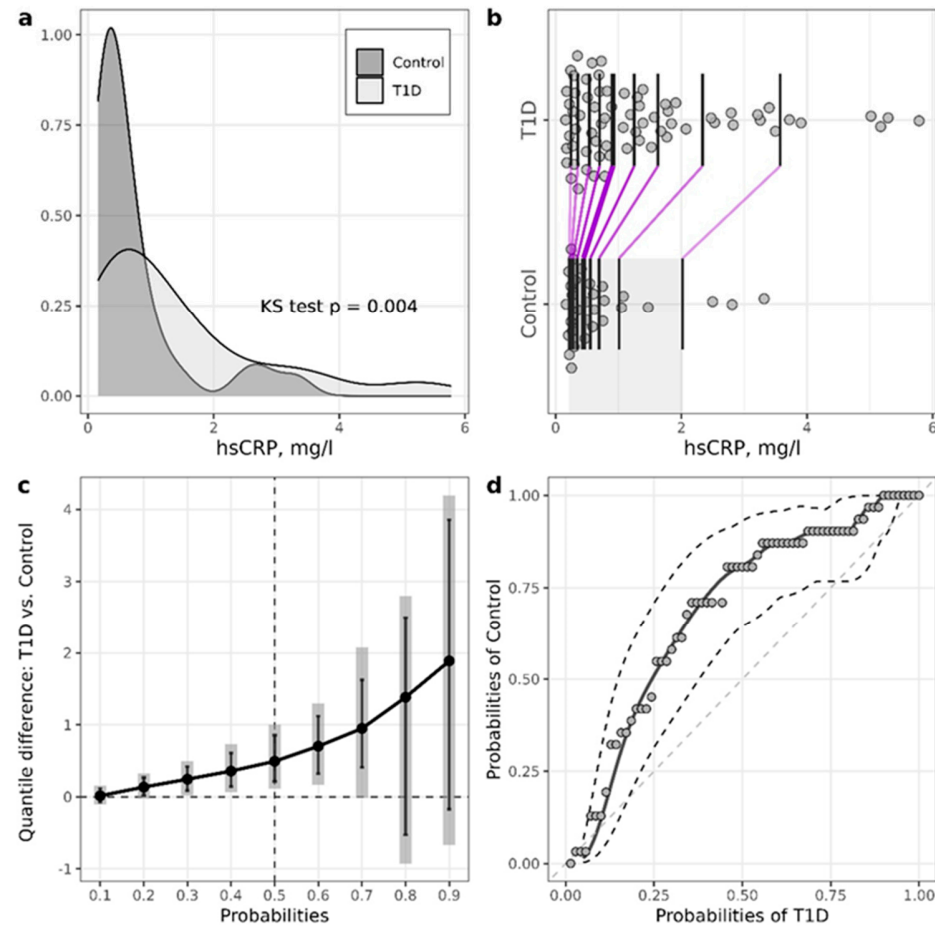
Phenotype	Control (N=33)	T1D (N=74)	p
Male gender, N (%)	14 (42.4 %)	28 (37.8 %)	0.81
Age, years	35 (30 - 44)	43 (34 - 51)	0.013
BMI, kg/m <sup>2</sup>	24.3 (22.3 - 27.9)	24.9 (22.6 - 28.4)	0.39
Waist/height ratio	0.47 (0.44 - 0.51)	0.49 (0.44 - 0.56)	0.16
Metabolic syndrome	4 (12.1 %)	31 (41.9 %)	0.005
Smokers, N (%)	9 (27.3 %)	20 (27.0 %)	1.00
Hypertension, N (%)	7 (21.2 %)	35 (47.3 %)	0.019
Length of diabetes, Years	-	21 (13 - 32)	-
Retinopathy, N (%)	-	32 (43.2 %)	-
CVD, N (%)	0 (0 %)	9 (12.2 %)	NS
On ACEI/ARB, N (%)	0 (0 %)	15 (20.3 %)	NS
On lipid lowering medication, N (%)	2 (6.1 %)	17 (23.0 %)	0.066
Autoimmune thyroid disease, N (%)	1 (3 %)	19 (25.7 %)	0.012
Hemoglobin A1C, %	5.2 (5.0 - 5.5)	7.7 (6.9 - 9.3)	<0.001
Hemoglobin A1C mmol/mol	31.4 (29.3 – 34.5)	56.5 (49.1 – 73.6)	<0.001
Estimated glomerular filtration rate, ml/min/1.73m <sup>2</sup>	106 (94 - 113)	108 (91 - 117)	0.39
Albumin/creatinine ratio in urine, mg/mmol	0.32 (0.11 - 0.76)	0.57 (0.23 - 1.84)	0.013
Total cholesterol, mmol/l	4.7 (4.5 - 5.1)	5.0 (4.5 - 5.8)	0.14
Low density lipoproteins, mmol/l	2.8 (2.4 - 3.2)	3.0 (2.3 - 3.4)	0.77
High density lipoproteins, mmol/l	1.43 (1.27 - 1.61)	1.5 (1.3 - 1.9)	0.05
Triglycerides, mmol/l	0.98 (0.79 - 1.65)	1.2 (0.9 - 1.5)	0.21
Alanine aminotransaminase, U/l	21 (17 - 29)	19 (15 - 28)	0.18
Aspartate aminotransferase, U/l	25 (22 - 29)	22 (19 - 31)	0.13
Gamma-glutamyltransferase, U/l	16 (14 - 22)	16 (13 - 23)	0.93
Bilirubin, µmol/l	10.5 (7.1 – 15.0)	9.3 (7.0 – 12.0)	0.37
CRP, mg/l	0.5 (0.5 - 0.5)	0.9 (0.5 - 2.9)	<0.001
Haemoglobin, g/l	140 (127 - 152)	140 (132 - 149)	0.84

Erythrocytes, 10x12/L	4.6 (4.2 - 5.1)	4.7 (4.4 - 5.0)	0.62
Leukocytes, 10x9/L	6.2 (5.2 - 6.9)	6.2 (5.1 - 7.3)	0.90
Thrombocytes, 10x9/L	269 (225 - 301)	260 (230 - 288)	0.86
eGDR	7.1 (5.5 - 7.7)	3.3 (1.6 - 5.7)	<0.001
FLI	17.8 (6.6 - 34.6)	21.7 (9.9 - 48.2)	0.19
HSI	34.3 (30.8 - 40.2)	33.4 (29.9 - 39.5)	0.30

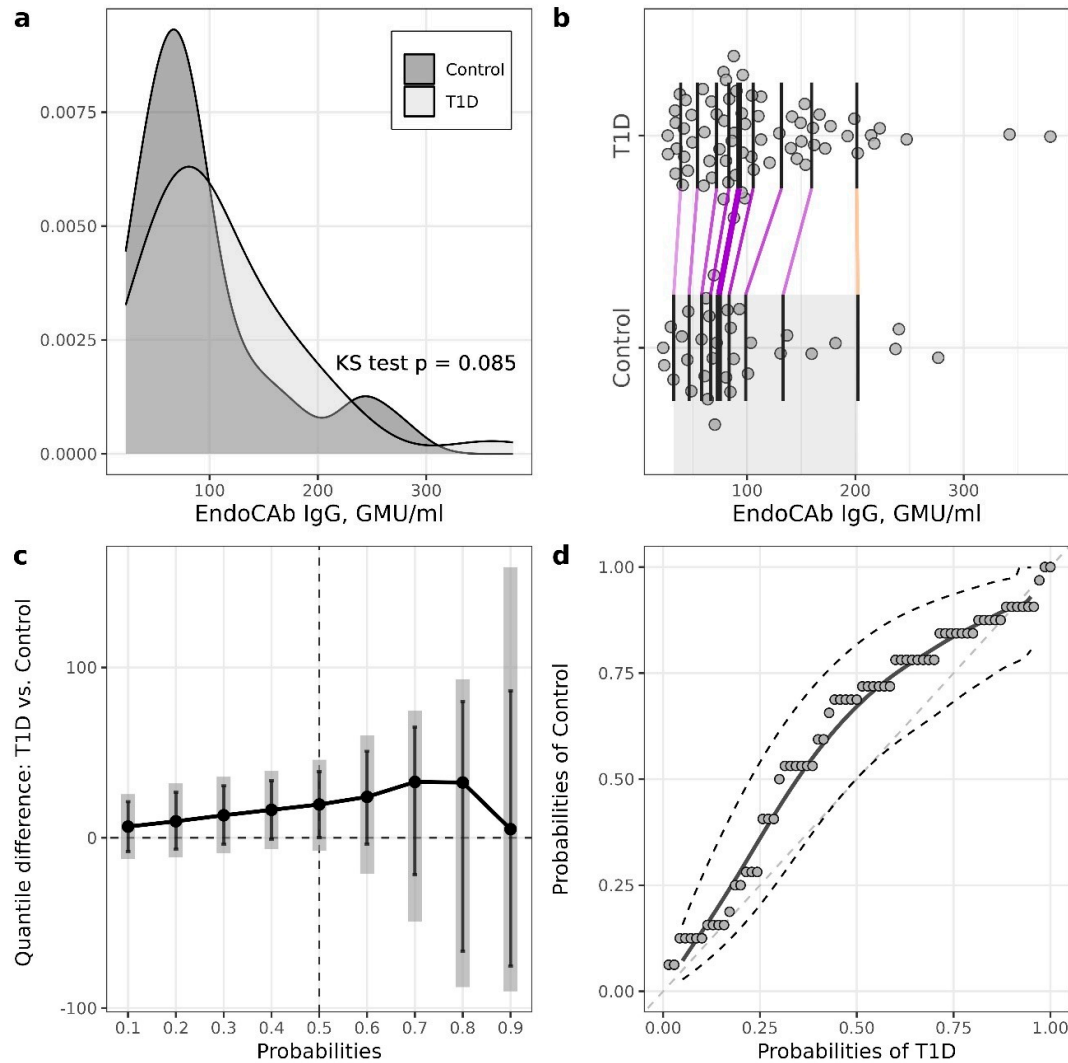
**Supplemental Table 2.** Comparisons of deciles of inflammatory markers in T1D patients stratified according to the presence of metabolic syndrome.

Variable	n	m	Decile 1 (10%)	Decile 2 (20%)	Decile 3 (30%)	Decile 4 (40%)	Decile 5 (50%)	Decile 6 (60%)	Decile 7 (70%)	Decile 8 (80%)	Decile 9 (90%)
hsCRP, mg/l	42	28	-0.09 (-0.28,0.15), p=0.44	0 (-0.24,0.33), p=0.971	0.09 (-0.22,0.53), p=0.595	0.2 (-0.21,0.76), p=0.371	0.34 (-0.22,1.01), p=0.25	0.48 (-0.22,1.34), p=0.182	0.62 (-0.29,1.67), p=0.159	0.78 (-1.24,2.49), p=0.414	0 (-2.14,2.83), p=0.998
LPS, EU/ml	42	29	0.01 (-0.03,0.05), p=0.78	0.03 (-0.01,0.08), p=0.193	0.05 (0,0.1), p=0.044	0.07 (0.02,0.13), p=0.01	0.09 (0.03,0.17), p=0.002	0.11 (0.04,0.21), p=0.002	0.15 (0.05,0.24), p=0.004	0.17 (0.05,0.26), p=0.013	0.16 (-0.02,0.27), p=0.091
EndoCAb IgG, GMU/ml	41	29	-11.74 (-30.66,7.65), p=0.232	-8.35 (-29.38,14.77), p=0.472	-5.21 (-27.25,19.49), p=0.666	-1.08 (-24.89,24.83), p=0.931	3.4 (-24.59,31.71), p=0.804	6.61 (-37.38,39.49), p=0.701	0.76 (-47.83,47.57), p=0.978	-8.9 (-55.47,50.36), p=0.72	-5.56 (-151.01,130.5), p=0.869
EndoCAb IgM, MMU/ml	42	28	1.37 (-8.72,11.15), p=0.791	-0.23 (-10.52,9.65), p=0.964	-1.78 (-12.92,8.83), p=0.738	-3.67 (-18.01,8.55), p=0.555	-6.77 (-25.8,7.96), p=0.391	-12.6 (-33.33,5.95), p=0.206	-19.83 (-41.22,1.08), p=0.063	-27.32 (-54.53,14.25), p=0.15	-25 (-141.55,75.6), p=0.281
LBP, µg/ml	42	29	2.45 (0.56,4.99), p=0.01	1.49 (-0.45,3.71), p=0.134	0.92 (-1.25,3.11), p=0.404	0.43 (-2.02,2.7), p=0.722	-0.14 (-2.9,2.28), p=0.914	-0.91 (-4.18,1.79), p=0.523	-2.02 (-5.84,1.34), p=0.233	-3.54 (-7.34,2.49), p=0.16	-3.64 (-9.13,4.79), p=0.395
LPS/HDL ratio	42	29	0.04 (0,0.08), p=0.079	0.05 (0,0.09), p=0.037	0.06 (0.01,0.1), p=0.018	0.06 (0.02,0.11), p=0.007	0.07 (0.02,0.13), p=0.003	0.08 (0.03,0.17), p=0.001	0.1 (0.03,0.3), p=0.002	0.19 (0.04,0.35), p=0.004	0.28 (0.09,0.48), p=0.004
Calprotectin, µg/g	35	27	-0.88 (-2.77,1.58), p=0.441	0.61 (-1.73,4.13), p=0.656	2.22 (-0.78,7.25), p=0.172	4.3 (0.23,9.98), p=0.036	6.9 (1.24,11.81), p=0.014	8.72 (2.47,13.13), p=0.011	9.39 (-13.65,13.98), p=0.18	5.35 (-18.29,14.99), p=1	-9.99 (-21.82,25.46), p=0.218

n – complete cases in T1D patients without metabolic syndrome; m – complete cases in T1D patients with metabolic syndrome.



**Figure 2.** Illustrations for comparison of hsCRP levels between control and T1D groups. a – plots of densities in control and T1D, p-value of Kolmogorov-Smirnov (KS) test for the equality of distributions; b – one-dimensional scatterplots for control and T1D, vertical bars represents deciles of both groups (R library rognme); c – quantile difference (T1D - control) plot constructed at deciles, estimates obtained using two-sample smoothed empirical likelihood method (R library EL), error bars represent 95% pointwise CI's, shaded bars representing 95% simultaneous confidence bands for 9 deciles; d – probabilities of T1D versus probabilities of control (PP-plot) with estimate and 95% pointwise CI's obtained by two-sample smoothed empirical likelihood method (R library EL). Bandwidths for kernel estimation in c and d were selected using the method by Sheather and Jones (function bw.SJ in R).



**Supplemental Figure 3.** Illustrations for comparison of EndoCAB IgG levels between control and T1D groups. a – plots of densities in control and T1D, p-value of Kolmogorov-Smirnov (KS) test for the equality of distributions; b – one-dimensional scatterplots for control and T1D, vertical bars represent deciles of both groups (R library `rogme`); c – quantile difference (T1D - control) plot constructed at deciles, estimates obtained using two-sample smoothed empirical likelihood method (R library `EL`), error bars represent 95% pointwise CI's, shaded bars representing 95% simultaneous confidence bands for 9 deciles; d – probabilities of T1D versus probabilities of control (PP-plot) with an estimate and 95% pointwise CI's obtained by two-sample smoothed empirical likelihood method (R library `EL`). Bandwidths for kernel estimation in c and d were selected using the method by Sheather and Jones (function `bw.SJ` in R).

**Supplemental Table 3.** Inflammatory marker analysis in patients with T1D stratified by metabolic syndrome.

Variable	No metabolic syndrome (N = 43)	Metabolic syndrome (N = 31)	P Wilcoxon	P ANCOVA	P Lepage	P KS test
hsCRP, mg/l	0.80 (0.49 - 1.53)	1.23 (0.38 - 2.17)	0.41	0.99	0.55	0.39
LPS, EU/ml	0.34 (0.30 - 0.40)	0.42 (0.35 - 0.56)	0.009	0.020	0.018	0.009
EndoCAB IgG, GMU/ml	89.5 (67.1 - 150.2)	96.0 (59.1 - 141.6)	0.84	0.54	0.88	0.85
Endo CAB IgM, MMU/ml	46.6 (34.2 - 85.2)	43.7 (31.3 - 60.4)	0.33	0.31	0.24	0.18
LBP, µg/ml	11.1 (7.9 - 16.3)	11.1 (7.9 - 13.3)	0.89	0.66	0.20	0.54
LPS/HDL	0.22 (0.17 - 0.26)	0.28 (0.24 - 0.38)	0.001	<0.001	0.004	0.003
Calprotectin, µg/g	3.8 (2.7 - 8.6)	12.5 (3.2 - 18.4)	0.18	0.23	0.40	0.057

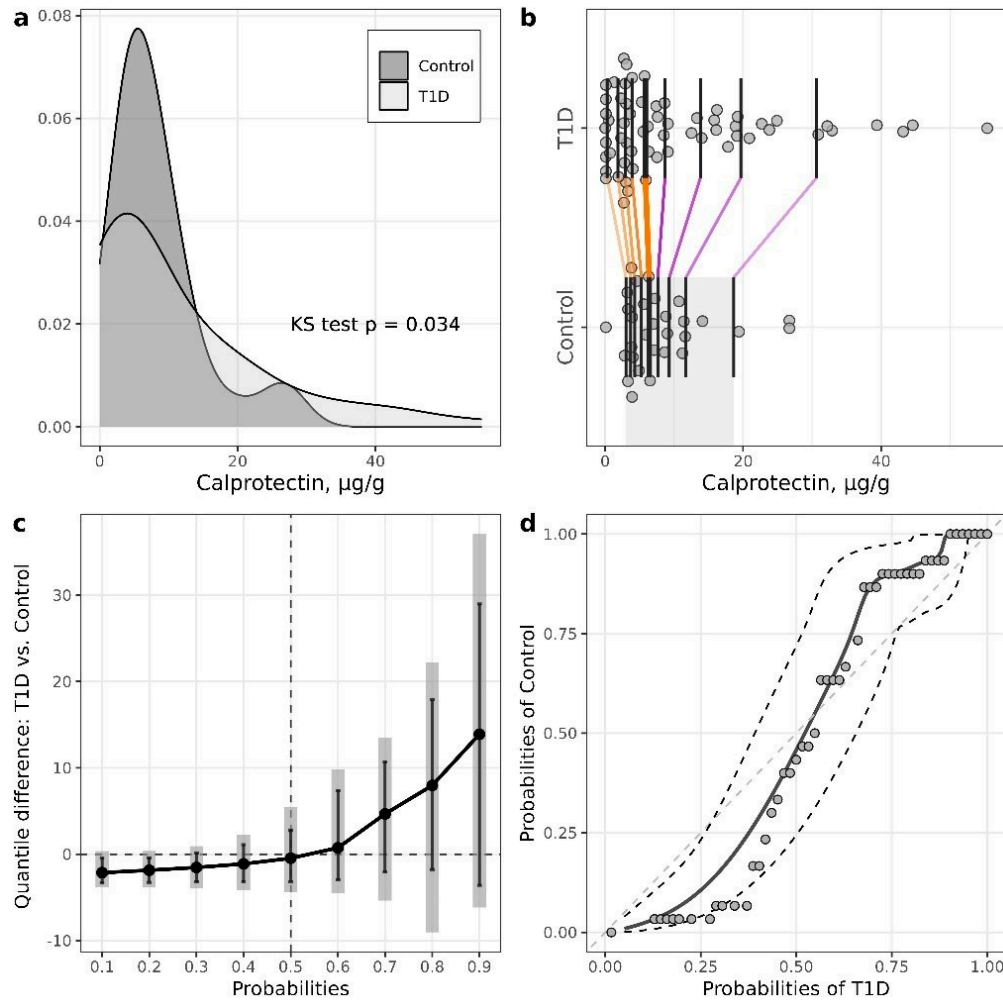
KS – Kolmogorov-Smirnov test for equality of two distributions. ANCOVA on rank-transformed data with covariates: sex, diabetes duration, age, and BMI

**Supplemental Table 4.** Markers of endotoxaemia and inflammation in the study groups.

Phenotype	Control		Type 1 diabetes		P			Difference of deciles: T1D - Control								
	Median (IQR)	N	Median (IQR)	N	Wilcoxon	ANCOVA	Lepage	10%	20%	30%	40%	50%	60%	70%	80%	90%
hsCRP, mg/l	0.47 (0.26 - 0.75)	31	0.84 (0.49 - 1.78)	70	0.002	0.042	0.008	0.01 (-0.07, 0.11), p=0.76	0.13 (0.02, 0.27), p=0.024	0.24 (0.09, 0.42), p=0.004	0.36 (0.14, 0.61), p=0.001	0.49 (0.21, 0.86), p=0.001	0.7 (0.32, 1.12), p=0.002	0.95 (0.41, 1.63), p=0.008	1.38 (-0.53, 2.5), p=0.12	1.89 (-0.17, 3.86), p=0.08
LPS, EU/ml	0.39 (0.31 - 0.49)	31	0.36 (0.31 - 0.45)	71	0.49	0.25	0.74	0.01 (-0.02, 0.04), p=0.47	0 (-0.04, 0.04), p=0.99	-0.01 (-0.06, 0.03), p=0.64	-0.02 (-0.07, 0.03), p=0.44	-0.03 (-0.09, 0.03), p=0.34	-0.03 (-0.12, 0.03), p=0.31	-0.04 (-0.16, 0.05), p=0.33	-0.05 (-0.19, 0.09), p=0.48	-0.04 (-0.17, 0.08), p=0.55
EndoCAB IgG, GMU/ml	71.1 (55.7 - 101.5)	32	92.6 (65.8 - 148.6)	70	0.091	0.32	0.23	6.55 (-8.1, 21.18), p=0.39	9.67 (-6.78, 26.8), p=0.26	13.22 (-3.88, 30.46), p=0.13	16.4 (-0.9, 33.6), p=0.063	19.5 (0.2, 38.8), p=0.048	24.0 (-3.8, 50.7), p=0.075	32.8 (-21.6, 65.1), p=0.17	32.5 (-66.6, 79.9), p=0.37	5.1 (-75.2, 86.2), p=0.95

EndoCAb IgM, MMU/ml	48.3 (27.4 - 69.6)	32	45.8 (33.4 - 69.5)	70	0.64	0.093	0.60	1.71 (- 5.66, 8.62), p=0.64	3.02 (- 5.54, 10.31), p=0.46	3.26 (- 7.68, 11.71), p=0.51	2.65 (- 10.82, 13.5), p=0.68	1.58 (- 13.71, 16.02), p=0.84	1.62 (- 19.48, 18.49), p=0.85	2.22 (- 33.0, 22.8), p=0.85	-4.34 (- 46.67, 31.85), p=0.85	-9.44 (- 74.85, - 37.13), p=0.69
LBP, µg/ml	10.1 (7.0 - 14.2)	32	11.1 (7.9 - 14.0)	71	0.60	0.84	0.72	0.49 (- 1.7, 4.81), p=0.64	0.67 (- 1.13, 2.59), p=0.44	0.73 (- 1.41, 2.62), p=0.48	0.77 (- 2.64, 2.99), p=0.54	0.53 (- 2.84, 3.18), p=0.81	-0.42 (- 2.45, 3.22), p=0.78	-0.03 (- 1.89, 2.73), p=0.98	1.6 (- 1.07, 5.37), p=0.29	4.84 (1.39, 7.94), p=0.006
LPS/HDL ratio	0.24 (0.20 – 0.36)	31	0.24 (0.19 – 0.30)	71	0.27	0.087	0.48	-0.04 (- 0.06, - 0.01), p=0.018	-0.02 (- 0.05, 0.01), p=0.11	-0.01 (- 0.05, 0.02), p=0.46	0 (-0.07, 0.03), p=0.82	-0.01 (- 0.09, 0.03), p=0.81	-0.04 (- 0.13, 0.04), p=0.45	-0.05 (- 0.25, 0.03), p=0.15	-0.18 (- 0.26, 0.03), p=0.19	-0.13 (- 0.39, 0.06), p=0.23
Calprotecti n, µg/g	6.4 (3.9 – 10.3)	30	5.8 (2.7 – 16.2)	62	0.59	0.56	0.002	-2.14 (- 3.34, - 0.44), p=0.017	-1.86 (- 3.26, - 0.40), p=0.016	-1.54 (- 3.21, 0.14), p=0.071	-1.12 (- 3.2, 1.11), p=0.30	-0.47 (- 3.18, 2.81), p=0.74	0.7 (-3.0, 7.4), p=0.71	4.7 (-2.1, 10.7), p=0.24	8.0 (-1.8, 17.9), p=0.083	13.9 (- 3.6, 29.0), p=0.24

ANCOVA on rank-transformed data with covariates: sex, diabetes duration, age, and BMI



**Supplemental Figure 4.** Illustrations for comparison of calprotectin levels between control and T1D groups. a – plots of densities in control and T1D, a p-value of Kolmogorov-Smirnov (KS) test for the equality of distributions; b – one-dimensional scatterplots for control and T1D, vertical bars represents deciles of both groups (R library *rogme*); c – quantile difference (T1D - control) plot constructed at deciles, estimates obtained using two-sample smoothed empirical likelihood method (R library *EL*), error bars represent 95% pointwise CI's, shaded bars representing 95% simultaneous confidence bands for 9 deciles; d – probabilities of T1D versus probabilities of control (PP-plot) with estimate and 95% pointwise CI's obtained by two-sample smoothed empirical likelihood method (R library *EL*). Bandwidths for kernel estimation in c and d were selected using the method by Sheather and Jones (function *bw.SJ* in R).



**Supplemental Table 5.** Correlations in the type 1 diabetes group. Spearman correlation coefficient (95% CI) was calculated.

Variable	CRO, mg/l	hsCRP, mg/l	LPS, EU/ml	endoCab IgG, GMU/ml	endoCab IgM, MMU/ml	LBP, µg/ml	LPS/HDL	Calprotectin, µg/g
Serum glucose	0.03, (-0.2, 0.26), p=0.786	0.12, (-0.12, 0.34), p=0.337	0.04, (-0.2, 0.27), p=0.742	0, (-0.23, 0.24), p=0.976	-0.08, (-0.31, 0.16), p=0.512	0.12, (-0.12, 0.34), p=0.336	0.19, (-0.05, 0.41), p=0.109	0.08, (-0.16, 0.32), p=0.496
HbA1c	0.03, (-0.2, 0.25), p=0.825	0.11, (-0.13, 0.34), p=0.368	-0.03, (-0.26, 0.21), p=0.833	0.27, (0.03, 0.47), p=0.026	0.11, (-0.13, 0.34), p=0.366	0.05, (-0.19, 0.28), p=0.707	0.05, (-0.19, 0.28), p=0.706	0.03, (-0.21, 0.27), p=0.783
eGFR	-0.24, (-0.45, -0.01), p=0.038	-0.02, (-0.26, 0.21), p=0.861	-0.06, (-0.29, 0.18), p=0.614	-0.1, (-0.33, 0.13), p=0.391	-0.21, (-0.43, 0.03), p=0.079	0.07, (-0.17, 0.29), p=0.584	0.08, (-0.16, 0.31), p=0.5	0.11, (-0.13, 0.34), p=0.377
Albumin/creatinine ratio in urine	0.13, (-0.11, 0.35), p=0.277	0.12, (-0.13, 0.35), p=0.342	-0.19, (-0.41, 0.06), p=0.128	-0.03, (-0.27, 0.21), p=0.809	-0.07, (-0.31, 0.17), p=0.544	-0.03, (-0.26, 0.21), p=0.807	-0.11, (-0.34, 0.13), p=0.352	0.1, (-0.15, 0.33), p=0.436
Weight	0.38, (0.16, 0.57), p=0.001	0.07, (-0.17, 0.3), p=0.568	0.04, (-0.2, 0.27), p=0.751	-0.08, (-0.31, 0.16), p=0.496	0.02, (-0.21, 0.25), p=0.862	-0.01, (-0.25, 0.22), p=0.916	0.06, (-0.18, 0.29), p=0.617	-0.07, (-0.3, 0.18), p=0.595
Body mass index	0.55, (0.35, 0.7), p=0	0.17, (-0.07, 0.39), p=0.155	0.14, (-0.09, 0.37), p=0.23	0.01, (-0.22, 0.25), p=0.917	0.01, (-0.22, 0.25), p=0.918	0.05, (-0.19, 0.28), p=0.697	0.1, (-0.14, 0.33), p=0.412	-0.01, (-0.25, 0.23), p=0.916
Waist/height ratio	0.47, (0.26, 0.64), p=0	0.23, (-0.01, 0.44), p=0.057	0.14, (-0.1, 0.36), p=0.243	-0.08, (-0.31, 0.16), p=0.508	-0.11, (-0.34, 0.12), p=0.345	0.03, (-0.2, 0.26), p=0.781	0.16, (-0.08, 0.38), p=0.193	-0.09, (-0.32, 0.15), p=0.473
eGDR	-0.26, (-0.46, -0.03), p=0.027	-0.28, (-0.48, -0.04), p=0.02	0.01, (-0.23, 0.24), p=0.967	-0.05, (-0.28, 0.18), p=0.664	0.07, (-0.17, 0.3), p=0.572	0.06, (-0.18, 0.29), p=0.632	-0.06, (-0.29, 0.18), p=0.63	0.04, (-0.2, 0.28), p=0.743
HSI	0.52, (0.31, 0.68), p=0	0.21, (-0.03, 0.43), p=0.088	0.13, (-0.11, 0.36), p=0.283	0.04, (-0.21, 0.27), p=0.77	0.04, (-0.2, 0.28), p=0.728	-0.03, (-0.26, 0.21), p=0.832	0.14, (-0.1, 0.37), p=0.25	-0.06, (-0.3, 0.19), p=0.624
FLI	0.48, (0.27, 0.64), p=0	0.22, (-0.02, 0.43), p=0.07	0.24, (0.01, 0.45), p=0.04	-0.08, (-0.31, 0.16), p=0.514	-0.06, (-0.29, 0.17), p=0.603	0.06, (-0.18, 0.29), p=0.63	0.23, (-0.01, 0.44), p=0.053	-0.06, (-0.29, 0.18), p=0.641
ALT	0.02, (-0.21, 0.25), p=0.859	-0.04, (-0.27, 0.2), p=0.742	-0.07, (-0.3, 0.17), p=0.575	-0.09, (-0.32, 0.15), p=0.445	-0.07, (-0.3, 0.16), p=0.543	-0.07, (-0.29, 0.17), p=0.585	-0.04, (-0.27, 0.19), p=0.726	-0.02, (-0.26, 0.22), p=0.883
AST	0, (-0.23, 0.23), p=0.996	-0.07, (-0.31, 0.17), p=0.568	-0.1, (-0.33, 0.14), p=0.424	0, (-0.24, 0.24), p=0.976	-0.14, (-0.37, 0.1), p=0.257	0.03, (-0.21, 0.27), p=0.789	-0.19, (-0.41, 0.05), p=0.115	0.07, (-0.17, 0.32), p=0.556
GGT	0.14, (-0.09, 0.36), p=0.239	0.05, (-0.19, 0.28), p=0.689	-0.04, (-0.27, 0.2), p=0.771	-0.21, (-0.43, 0.03), p=0.076	-0.06, (-0.29, 0.17), p=0.6	-0.01, (-0.24, 0.23), p=0.954	-0.07, (-0.3, 0.17), p=0.568	-0.05, (-0.29, 0.19), p=0.659
Transglutaminase IgA	-0.04, (-0.27, 0.19), p=0.738	-0.21, (-0.43, 0.03), p=0.081	0.07, (-0.16, 0.3), p=0.541	0.01, (-0.22, 0.25), p=0.913	0.11, (-0.13, 0.34), p=0.379	0.04, (-0.19, 0.28), p=0.717	0.05, (-0.18, 0.28), p=0.666	-0.28, (-0.49, -0.04), p=0.022
Total bilirubin	-0.18, (-0.4, 0.05), p=0.117	-0.16, (-0.38, 0.08), p=0.182	0, (-0.24, 0.23), p=0.968	-0.1, (-0.33, 0.14), p=0.399	0.03, (-0.2, 0.27), p=0.779	0, (-0.24, 0.23), p=0.967	-0.06, (-0.28, 0.18), p=0.648	-0.14, (-0.37, 0.1), p=0.251
Erythrocytes	-0.03, (-0.25, 0.2), p=0.816	0, (-0.24, 0.23), p=0.991	0.2, (-0.03, 0.42), p=0.091	-0.04, (-0.27, 0.2), p=0.765	0.1, (-0.14, 0.33), p=0.393	-0.01, (-0.24, 0.22), p=0.92	0.26, (0.02, 0.47), p=0.03	0.09, (-0.16, 0.32), p=0.494
Hemoglobin	-0.15, (-0.37, 0.08), p=0.207	-0.06, (-0.29, 0.18), p=0.623	0.18, (-0.06, 0.4), p=0.14	-0.2, (-0.42, 0.04), p=0.1	0.04, (-0.19, 0.28), p=0.715	-0.07, (-0.3, 0.16), p=0.549	0.33, (0.1, 0.53), p=0.005	0.03, (-0.21, 0.27), p=0.792
Leukocytes	0.1, (-0.13, 0.32), p=0.391	0.18, (-0.06, 0.4), p=0.13	-0.06, (-0.29, 0.18), p=0.62	-0.07, (-0.3, 0.17), p=0.589	-0.06, (-0.29, 0.17), p=0.605	0.15, (-0.09, 0.37), p=0.211	0.04, (-0.19, 0.27), p=0.723	-0.07, (-0.3, 0.18), p=0.588
Total cholesterol	0.29, (0.06, 0.49), p=0.013	0.13, (-0.11, 0.36), p=0.276	0.04, (-0.2, 0.27), p=0.746	0.18, (-0.06, 0.4), p=0.137	0.07, (-0.17, 0.3), p=0.555	0.2, (-0.04, 0.42), p=0.092	-0.18, (-0.39, 0.06), p=0.142	0.14, (-0.11, 0.37), p=0.263
High-density cholesterol	0.16, (-0.07, 0.38), p=0.171	0.13, (-0.1, 0.36), p=0.267	-0.17, (-0.39, 0.06), p=0.146	0.32, (0.09, 0.52), p=0.006	0.26, (0.02, 0.47), p=0.028	0.12, (-0.12, 0.34), p=0.324	-0.7, (-0.81, -0.54), p=0	-0.06, (-0.3, 0.18), p=0.614
Low-density cholesterol	0.21, (-0.02, 0.42), p=0.075	0.04, (-0.19, 0.28), p=0.723	-0.08, (-0.31, 0.15), p=0.48	0.04, (-0.19, 0.27), p=0.729	-0.05, (-0.28, 0.19), p=0.683	0.17, (-0.07, 0.39), p=0.164	-0.01, (-0.24, 0.23), p=0.95	0.22, (-0.03, 0.44), p=0.08
Tryglicerides	0.12, (-0.11, 0.34), p=0.312	0.13, (-0.11, 0.36), p=0.282	0.49, (0.28, 0.66), p=0	-0.08, (-0.31, 0.16), p=0.537	0, (-0.23, 0.24), p=0.982	-0.01, (-0.24, 0.22), p=0.929	0.52, (0.31, 0.68), p=0	0.04, (-0.21, 0.27), p=0.776

<b>Diabetes duration</b>	0.14, (-0.09, 0.36), p=0.224	0.15, (-0.09, 0.37), p=0.226	-0.09, (-0.32, 0.15), p=0.463	-0.07, (-0.3, 0.17), p=0.576	0.11, (-0.13, 0.34), p=0.354	-0.09, (-0.31, 0.15), p=0.478	-0.22, (-0.43, 0.02), p=0.069	0.02, (-0.22, 0.26), p=0.845
<b>CRP</b>	-	0.61, (0.42, 0.75), p=0	0.13, (-0.11, 0.35), p=0.296	0.16, (-0.08, 0.38), p=0.192	0.01, (-0.23, 0.24), p=0.951	0.18, (-0.06, 0.4), p=0.137	-0.04, (-0.27, 0.2), p=0.767	-0.16, (-0.39, 0.09), p=0.197
<b>hsCRP</b>	0.61, (0.42, 0.75), p=0	-	0.18, (-0.06, 0.4), p=0.14	0.22, (-0.02, 0.44), p=0.07	0, (-0.24, 0.23), p=0.972	0.36, (0.13, 0.55), p=0.002	0.01, (-0.23, 0.24), p=0.932	-0.15, (-0.38, 0.11), p=0.256
<b>LPS</b>	0.13, (-0.11, 0.35), p=0.296	0.18, (-0.06, 0.4), p=0.14	-	0.07, (-0.17, 0.3), p=0.566	0.13, (-0.11, 0.36), p=0.268	0.04, (-0.2, 0.27), p=0.771	0.78, (0.64, 0.86), p=0	-0.02, (-0.27, 0.22), p=0.853
<b>EndoCAb IgG</b>	0.16, (-0.08, 0.38), p=0.192	0.22, (-0.02, 0.44), p=0.07	0.07, (-0.17, 0.3), p=0.566	-	0.23, (-0.01, 0.45), p=0.052	0.23, (-0.01, 0.45), p=0.054	-0.14, (-0.36, 0.1), p=0.258	0.13, (-0.12, 0.37), p=0.296
<b>EndoCAb IgM</b>	0.01, (-0.23, 0.24), p=0.951	0, (-0.24, 0.23), p=0.972	0.13, (-0.11, 0.36), p=0.268	0.23, (-0.01, 0.45), p=0.052	-	-0.14, (-0.36, 0.1), p=0.263	-0.14, (-0.37, 0.09), p=0.231	-0.05, (-0.29, 0.2), p=0.695
<b>LBP</b>	0.18, (-0.06, 0.4), p=0.137	0.36, (0.13, 0.55), p=0.002	0.04, (-0.2, 0.27), p=0.771	0.23, (-0.01, 0.45), p=0.054	-0.14, (-0.36, 0.1), p=0.263	-	-0.02, (-0.25, 0.21), p=0.854	-0.05, (-0.29, 0.2), p=0.721
<b>LPS/HDL</b>	-0.04, (-0.27, 0.2), p=0.767	0.01, (-0.23, 0.24), p=0.932	0.78, (0.64, 0.86), p=0	-0.14, (-0.36, 0.1), p=0.258	-0.14, (-0.37, 0.09), p=0.231	-0.02, (-0.25, 0.21), p=0.854	-	-0.04, (-0.29, 0.2), p=0.733
<b>Calprotectin</b>	-0.16, (-0.39, 0.09), p=0.197	-0.15, (-0.38, 0.11), p=0.256	-0.02, (-0.27, 0.22), p=0.853	0.13, (-0.12, 0.37), p=0.296	-0.05, (-0.29, 0.2), p=0.695	-0.05, (-0.29, 0.2), p=0.721	-0.04, (-0.29, 0.2), p=0.733	-

**Supplemental Table 6.** Correlations in the control group. Spearman correlation coefficient (95% CI) was calculated.

<b>Variable</b>	<b>CRO, mg/l</b>	<b>hsCRP, mg/l</b>	<b>LPS, EU/ml</b>	<b>endoCAb IgG, GMU/ml</b>	<b>endoCAb IgM, MMU/ml</b>	<b>LBP, µg/ml</b>	<b>LPS/HDL</b>	<b>Calprotectin, µg/g</b>
<b>Serum glucose</b>	0.2, (-0.15, 0.51), p=0.256	-0.05, (-0.4, 0.31), p=0.778	-0.13, (-0.46, 0.23), p=0.48	-0.28, (-0.58, 0.08), p=0.119	-0.24, (-0.55, 0.12), p=0.183	0.17, (-0.19, 0.49), p=0.343	-0.21, (-0.52, 0.16), p=0.255	-0.14, (-0.48, 0.23), p=0.449
<b>HbA1c</b>	0.34, (-0.02, 0.62), p=0.056	0.5, (0.16, 0.74), p=0.004	-0.13, (-0.46, 0.23), p=0.483	0.15, (-0.21, 0.48), p=0.404	0.24, (-0.12, 0.55), p=0.183	0.18, (-0.18, 0.5), p=0.318	-0.13, (-0.46, 0.23), p=0.487	0.17, (-0.21, 0.5), p=0.373
<b>eGFR</b>	-0.22, (-0.53, 0.13), p=0.208	-0.21, (-0.53, 0.16), p=0.249	-0.11, (-0.44, 0.25), p=0.538	0.09, (-0.27, 0.43), p=0.619	0.06, (-0.29, 0.4), p=0.737	-0.21, (-0.52, 0.15), p=0.248	-0.09, (-0.43, 0.27), p=0.624	-0.06, (-0.41, 0.31), p=0.772
<b>Albumin/creatinine ratio in urine</b>	-0.26, (-0.56, 0.09), p=0.138	-0.32, (-0.61, 0.05), p=0.081	0.02, (-0.33, 0.36), p=0.925	0.1, (-0.26, 0.44), p=0.578	-0.19, (-0.51, 0.17), p=0.287	-0.03, (-0.38, 0.32), p=0.865	-0.02, (-0.37, 0.33), p=0.898	0.2, (-0.18, 0.52), p=0.298
<b>Weight</b>	0.39, (0.04, 0.65), p=0.026	0.19, (-0.18, 0.52), p=0.296	0.23, (-0.14, 0.54), p=0.211	0.04, (-0.31, 0.39), p=0.811	-0.44, (-0.69, -0.09), p=0.012	0.12, (-0.24, 0.45), p=0.498	0.35, (-0.01, 0.63), p=0.05	-0.02, (-0.38, 0.34), p=0.904
<b>Body mass index</b>	0.42, (0.07, 0.67), p=0.016	0.38, (0.02, 0.66), p=0.034	0.13, (-0.23, 0.46), p=0.476	0.08, (-0.27, 0.42), p=0.654	-0.15, (-0.48, 0.21), p=0.405	0.16, (-0.2, 0.48), p=0.387	0.27, (-0.09, 0.57), p=0.136	-0.1, (-0.45, 0.27), p=0.586
<b>Waist/height ratio</b>	0.37, (0.02, 0.64), p=0.034	0.33, (-0.04, 0.62), p=0.074	0.19, (-0.18, 0.5), p=0.309	0.08, (-0.28, 0.42), p=0.661	-0.2, (-0.52, 0.16), p=0.267	0.27, (-0.1, 0.57), p=0.141	0.23, (-0.14, 0.54), p=0.21	-0.15, (-0.49, 0.22), p=0.422
<b>eGDR</b>	-0.34, (-0.62, 0.01), p=0.051	-0.26, (-0.57, 0.11), p=0.16	-0.25, (-0.56, 0.11), p=0.16	-0.1, (-0.44, 0.26), p=0.574	0.14, (-0.22, 0.47), p=0.444	-0.13, (-0.46, 0.23), p=0.479	-0.32, (-0.61, 0.04), p=0.077	-0.12, (-0.46, 0.25), p=0.534
<b>HSI</b>	0.46, (0.12, 0.7), p=0.007	0.43, (0.07, 0.69), p=0.016	0.09, (-0.26, 0.43), p=0.605	0.07, (-0.28, 0.41), p=0.697	-0.08, (-0.42, 0.28), p=0.671	0.14, (-0.22, 0.46), p=0.456	0.24, (-0.12, 0.55), p=0.178	-0.2, (-0.52, 0.18), p=0.3
<b>FLI</b>	0.38, (0.02, 0.64), p=0.031	0.24, (-0.13, 0.55), p=0.198	0.49, (0.16, 0.73), p=0.004	0.01, (-0.34, 0.36), p=0.958	-0.42, (-0.68, -0.07), p=0.017	0.27, (-0.1, 0.57), p=0.14	0.54, (0.21, 0.76), p=0.002	0.01, (-0.35, 0.37), p=0.953
<b>ALT</b>	0.49, (0.16, 0.73), p=0.003	0.32, (-0.04, 0.61), p=0.076	0.12, (-0.24, 0.45), p=0.524	0.06, (-0.3, 0.4), p=0.764	-0.1, (-0.43, 0.26), p=0.605	0.23, (-0.14, 0.54), p=0.215	0.31, (-0.06, 0.6), p=0.087	-0.13, (-0.47, 0.24), p=0.48
<b>AST</b>	0.31, (-0.05, 0.59), p=0.081	-0.02, (-0.38, 0.33), p=0.895	0, (-0.35, 0.35), p=0.986	0.33, (-0.03, 0.62), p=0.063	-0.04, (-0.39, 0.31), p=0.819	0.18, (-0.18, 0.5), p=0.311	0.13, (-0.23, 0.46), p=0.493	-0.13, (-0.47, 0.25), p=0.506

<b>GGT</b>	0.36, (0.01, 0.64), p=0.037	0.29, (-0.08, 0.59), p=0.119	0.16, (-0.2, 0.49), p=0.368	0.41, (0.05, 0.67), p=0.021	0.13, (-0.23, 0.46), p=0.486	0.21, (-0.15, 0.53), p=0.238	0.3, (-0.06, 0.59), p=0.097	-0.02, (-0.38, 0.34), p=0.901
<b>Transglutaminase IgA</b>	-0.4, (-0.66, -0.05), p=0.021	-0.33, (-0.62, 0.04), p=0.07	-0.11, (-0.44, 0.25), p=0.557	0.22, (-0.15, 0.53), p=0.235	0.07, (-0.28, 0.41), p=0.696	-0.12, (-0.45, 0.24), p=0.518	-0.02, (-0.37, 0.33), p=0.907	0.37, (0, 0.65), p=0.041
<b>Total bilirubin</b>	-0.24, (-0.55, 0.11), p=0.173	0.04, (-0.32, 0.39), p=0.84	0.09, (-0.26, 0.43), p=0.609	0.35, (-0.01, 0.63), p=0.052	0.03, (-0.32, 0.38), p=0.863	-0.13, (-0.46, 0.23), p=0.484	-0.02, (-0.36, 0.33), p=0.921	-0.19, (-0.52, 0.19), p=0.318
<b>Erythrocytes</b>	0.12, (-0.24, 0.44), p=0.511	0.02, (-0.33, 0.38), p=0.899	0.45, (0.1, 0.7), p=0.01	0.03, (-0.32, 0.38), p=0.855	-0.37, (-0.64, -0.01), p=0.039	0.31, (-0.05, 0.6), p=0.084	0.5, (0.16, 0.73), p=0.004	0.17, (-0.2, 0.51), p=0.355
<b>Hemoglobin</b>	-0.04, (-0.38, 0.31), p=0.839	-0.19, (-0.51, 0.18), p=0.312	0.43, (0.08, 0.69), p=0.014	-0.1, (-0.44, 0.26), p=0.579	-0.4, (-0.67, -0.05), p=0.022	0.32, (-0.04, 0.61), p=0.074	0.51, (0.18, 0.74), p=0.003	0.21, (-0.16, 0.53), p=0.26
<b>Leukocytes</b>	-0.2, (-0.51, 0.16), p=0.276	-0.09, (-0.43, 0.27), p=0.614	0.32, (-0.04, 0.61), p=0.075	-0.2, (-0.52, 0.16), p=0.273	-0.05, (-0.4, 0.3), p=0.77	0.34, (-0.02, 0.62), p=0.057	0.33, (-0.03, 0.62), p=0.062	0.3, (-0.07, 0.6), p=0.103
<b>Total cholesterol</b>	-0.06, (-0.39, 0.29), p=0.746	-0.23, (-0.54, 0.14), p=0.221	0.07, (-0.29, 0.41), p=0.721	-0.12, (-0.45, 0.24), p=0.515	-0.17, (-0.5, 0.19), p=0.339	0.01, (-0.34, 0.36), p=0.95	-0.12, (-0.45, 0.24), p=0.505	-0.1, (-0.44, 0.27), p=0.615
<b>High-density cholesterol</b>	-0.24, (-0.55, 0.11), p=0.17	-0.15, (-0.48, 0.21), p=0.409	-0.32, (-0.61, 0.04), p=0.073	-0.19, (-0.51, 0.17), p=0.302	0.18, (-0.19, 0.5), p=0.336	-0.21, (-0.52, 0.15), p=0.245	-0.68, (-0.84, -0.4), p=0	-0.27, (-0.58, 0.1), p=0.144
<b>Low-density cholesterol</b>	-0.09, (-0.42, 0.27), p=0.637	-0.21, (-0.52, 0.16), p=0.267	-0.04, (-0.38, 0.31), p=0.836	-0.05, (-0.4, 0.3), p=0.77	-0.18, (-0.5, 0.18), p=0.322	-0.01, (-0.36, 0.34), p=0.951	-0.03, (-0.37, 0.32), p=0.872	0.16, (-0.21, 0.49), p=0.395
<b>Tryglicerides</b>	0.28, (-0.07, 0.57), p=0.112	0.06, (-0.31, 0.4), p=0.767	0.79, (0.57, 0.9), p=0	-0.09, (-0.43, 0.27), p=0.614	-0.6, (-0.8, -0.29), p=0	0.28, (-0.08, 0.58), p=0.118	0.67, (0.39, 0.84), p=0	0.17, (-0.2, 0.5), p=0.363
<b>CRP</b>	-	0.42, (0.06, 0.68), p=0.018	0.05, (-0.31, 0.39), p=0.796	-0.02, (-0.37, 0.33), p=0.895	-0.01, (-0.35, 0.34), p=0.973	-0.02, (-0.36, 0.33), p=0.92	0.14, (-0.22, 0.46), p=0.455	-0.22, (-0.54, 0.16), p=0.241
<b>hsCRP</b>	0.42, (0.06, 0.68), p=0.018	-	0.23, (-0.14, 0.54), p=0.217	0.1, (-0.26, 0.44), p=0.584	0.19, (-0.18, 0.51), p=0.308	0.21, (-0.16, 0.53), p=0.254	0.2, (-0.17, 0.52), p=0.269	-0.22, (-0.55, 0.17), p=0.252
<b>LPS</b>	0.05, (-0.31, 0.39), p=0.796	0.23, (-0.14, 0.54), p=0.217	-	-0.09, (-0.43, 0.27), p=0.627	-0.41, (-0.67, -0.06), p=0.021	0.36, (0, 0.64), p=0.045	0.86, (0.71, 0.94), p=0	0.15, (-0.23, 0.49), p=0.432
<b>EndoCab IgG</b>	-0.02, (-0.37, 0.33), p=0.895	0.1, (-0.26, 0.44), p=0.584	-0.09, (-0.43, 0.27), p=0.627	-	0.11, (-0.25, 0.44), p=0.565	-0.29, (-0.59, 0.07), p=0.103	-0.02, (-0.37, 0.33), p=0.897	0, (-0.36, 0.37), p=0.984
<b>EndoCab IgM</b>	-0.01, (-0.35, 0.34), p=0.973	0.19, (-0.18, 0.51), p=0.308	-0.41, (-0.67, -0.06), p=0.021	0.11, (-0.25, 0.44), p=0.565	-	-0.05, (-0.39, 0.3), p=0.775	-0.28, (-0.58, 0.08), p=0.117	-0.21, (-0.54, 0.17), p=0.267
<b>LBP</b>	-0.02, (-0.36, 0.33), p=0.92	0.21, (-0.16, 0.53), p=0.254	0.36, (0, 0.64), p=0.045	-0.29, (-0.59, 0.07), p=0.103	-0.05, (-0.39, 0.3), p=0.775	-	0.39, (0.03, 0.66), p=0.03	-0.08, (-0.44, 0.29), p=0.673
<b>LPS/HDL</b>	0.14, (-0.22, 0.46), p=0.455	0.2, (-0.17, 0.52), p=0.269	0.86, (0.71, 0.94), p=0	-0.02, (-0.37, 0.33), p=0.897	-0.28, (-0.58, 0.08), p=0.117	0.39, (0.03, 0.66), p=0.03	-	0.21, (-0.18, 0.54), p=0.284
<b>Calprotectin</b>	-0.22, (-0.54, 0.16), p=0.241	-0.22, (-0.55, 0.17), p=0.252	0.15, (-0.23, 0.49), p=0.432	0, (-0.36, 0.37), p=0.984	-0.21, (-0.54, 0.17), p=0.267	-0.08, (-0.44, 0.29), p=0.673	0.21, (-0.18, 0.54), p=0.284	-