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Supplemental Table 1: Clinical characteristics of diabetic individuals according to quartiles of carbamylated LDL

Quartiles of carbamylated LDL	Q1	Q2	Q3	Q4
Age (years)	54 ± 9	53 ± 10	57 ± 10	58 ± 10
M/F (%)	54/46	53/47	54/46	53/47
Duration of diabetes (years)	13 ± 7	11 ± 7	13 ± 8	15 ± 8
BMI (kg/m <sup>2</sup> )	26 ± 5	26 ± 4	27 ± 4	26 ± 4
Smoker (%)	10	11	8	10
Hypertension (%)	66	64	75	82
Normo/micro/macroalbuminuria (%)	56/28/16	53/37/10	46/34/20	45/30/25
Retinopathy (%)	43	41	48	50
Cardiovascular disease (%)	14	12	13	16
ACEI/ARB (%)	41	50	48	53
Lipid lowering therapy (%)	28	31	28	32
Systolic BP (mmHg)	130 ± 21	131 ± 19	137 ± 20	133 ± 24
Diastolic BP (mmHg)	77 ± 9	76 ± 10	77 ± 9	77 ± 9
Fasting glucose (mg/dl)	160 ± 50	153 ± 49	146 ± 45	162 ± 58
HbA1c (%)	8.7 ± 1.7	8.3 ± 1.6	8.3 ± 1.4	8.7 ± 1.6
eGFR (ml/min/1.73 m <sup>2</sup> )	78 ± 21	80 ± 18	68 ± 22	68 ± 23
Total cholesterol (mg/dl)	174 ± 31	193 ± 43	197 ± 46	189 ± 39
Triglyceride (mg/dl)	106 (80 - 168)	115 (80 - 177)	142 (96 - 186)	124 (89 - 186)
LDL-cholesterol (mg/dl)	97 ± 27	116 ± 39	116 ± 39	116 ± 35
HDL-cholesterol (mg/dl)	50 ± 12	46 ± 12	46 ± 15	46 ± 12

Data are expressed as mean ± SD or median (interquartile range).

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Supplemental Table 2: Clinical characteristics of diabetic individuals according to quartiles of carbamylated HDL

Quartiles of carbamylated HDL	Q1	Q2	Q3	Q4
Age (years)	55 ± 10	53 ± 10	55 ± 10	58 ± 9
M/F (%)	48/52	52/48	52/48	59/41
Duration of diabetes (years)	13 ± 7	12 ± 8	13 ± 8	14 ± 8
BMI (kg/m <sup>2</sup> )	27 ± 5	26 ± 4	26 ± 4	26 ± 4
Smoker (%)	11	10	8	9
Hypertension (%)	66	57	70	77
Normo/micro/macroalbuminuria (%)	58/31/11	62/28/10	49/36/15	32/38/30
Retinopathy (%)	41	45	43	52
Cardiovascular disease (%)	13	10	13	19
ACEI/ARB (%)	40	49	52	50
Lipid lowering therapy (%)	26	27	30	35
Systolic BP (mmHg)	130 ± 22	129 ± 18	133 ± 22	137 ± 23
Diastolic BP (mmHg)	77 ± 9	76 ± 10	78 ± 9	76 ± 10
Fasting glucose (mg/dl)	157 ± 49	155 ± 49	157 ± 45	157 ± 59
HbA1c (%)	8.6 ± 1.6	8.5 ± 1.6	8.5 ± 1.5	8.5 ± 1.6
eGFR (ml/min/1.73 m <sup>2</sup> )	78 ± 18	80 ± 18	74 ± 22	64 ± 23
Total cholesterol (mg/dl)	182 ± 35	189 ± 39	193 ± 43	189 ± 43
Triglyceride (mg/dl)	115 (80 - 177)	124 (80 - 177)	115 (80 - 177)	124 (80 - 186)
LDL-cholesterol (mg/dl)	104 ± 35	112 ± 35	116 ± 39	112 ± 35
HDL-cholesterol (mg/dl)	46 ± 12	46 ± 15	46 ± 13	46 ± 12

Data are expressed as mean ± SD or median (interquartile range).

Supplemental Table 3: Association between plasma carbamylated LDL and primary kidney outcome (doubling of serum creatinine)

	Model 1		Model 2	
	Hazard ratio (95% CI)	p value	Hazard ratio (95% CI)	p value
Carbamylated LDL ( $\mu\text{g/ml}$ )	1.05 (0.93, 1.19)	0.43	1.04 (0.91, 1.19)	0.55
Age (years)	1.35 (1.13, 1.60)	0.001	1.34 (1.12, 1.60)	0.001
Sex (M/F)	0.65 (0.50, 0.85)	0.001	0.66 (0.50, 0.87)	0.003
BMI ( $\text{kg}/\text{m}^2$ )	1.29 (1.13, 1.46)	<0.001	1.27 (1.11, 1.45)	<0.001
Duration of diabetes (years)	0.95 (0.84, 1.08)	0.46	0.96 (0.85, 1.09)	0.56
Smoker (N/Y)	1.11 (0.72, 1.72)	0.63	1.11 (0.71, 1.72)	0.65
Systolic BP (mmHg)	1.15 (1.01, 1.30)	0.03	1.15 (1.02, 1.31)	0.03
HbA <sub>1c</sub> (%)	1.27 (1.12, 1.43)	<0.001	1.27 (1.11, 1.44)	<0.001
Baseline eGFR (ml/min/1.73 m <sup>2</sup> )	0.42 (0.35, 0.51)	<0.001	0.42 (0.35, 0.51)	<0.001
Normoalbuminuria	Reference	<0.001	Reference	<0.001
Microalbuminuria	2.89 (2.03, 4.11)	<0.001	2.91 (2.04, 4.16)	<0.001
Macroalbuminuria	8.14 (5.53, 11.98)	<0.001	8.36 (5.65, 12.37)	<0.001
ACEI/ARB(N/Y)	1.06 (0.82, 1.38)	0.66	1.07 (0.82, 1.40)	0.61
Lipid lowering therapy(N/Y)	1.28 (0.92, 1.61)	0.10	1.31 (0.92, 1.62)	0.08
LDL-cholesterol (mg/dl)	-		1.08 (0.95, 1.23)	0.26
HDL-cholesterol (mg/dl)	-		0.93 (0.81, 1.07)	0.31

The given hazard ratio is for 1-SD change in plasma carbamylated LDL and continuous covariates at baseline. Model 1: adjusted for carbamylated LDL, age, sex, BMI, duration of diabetes, smoking, systolic BP, HbA<sub>1c</sub>, baseline eGFR, albuminuria status, ACEI/ARB therapy and lipid lowering therapy. Model 2: further adjusted for LDL-cholesterol and HDL-cholesterol.