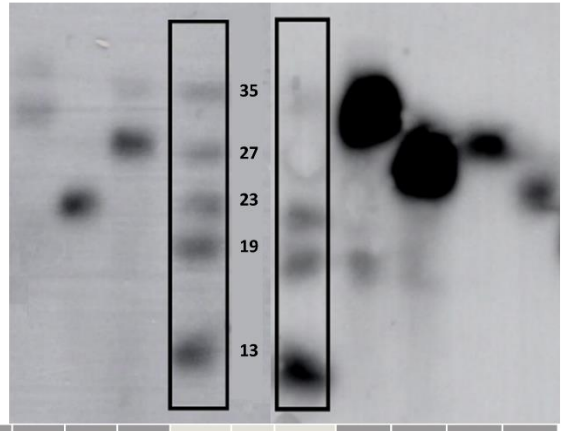
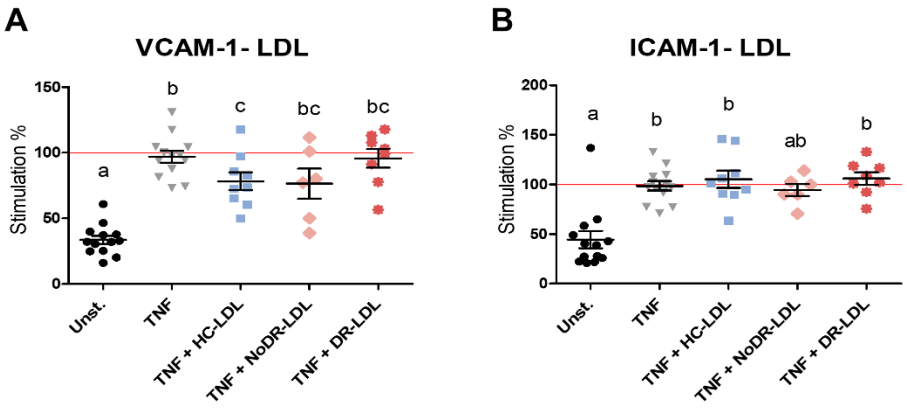
Supplementary Figure S1.



Lane	1	2	3				4	5	6	7
Smallest kringle IV-2 #	35	24	32				19	18	31	26
Disease status	HC	HC	DR	Marker		Marker	NoDR	DR	HC	DR

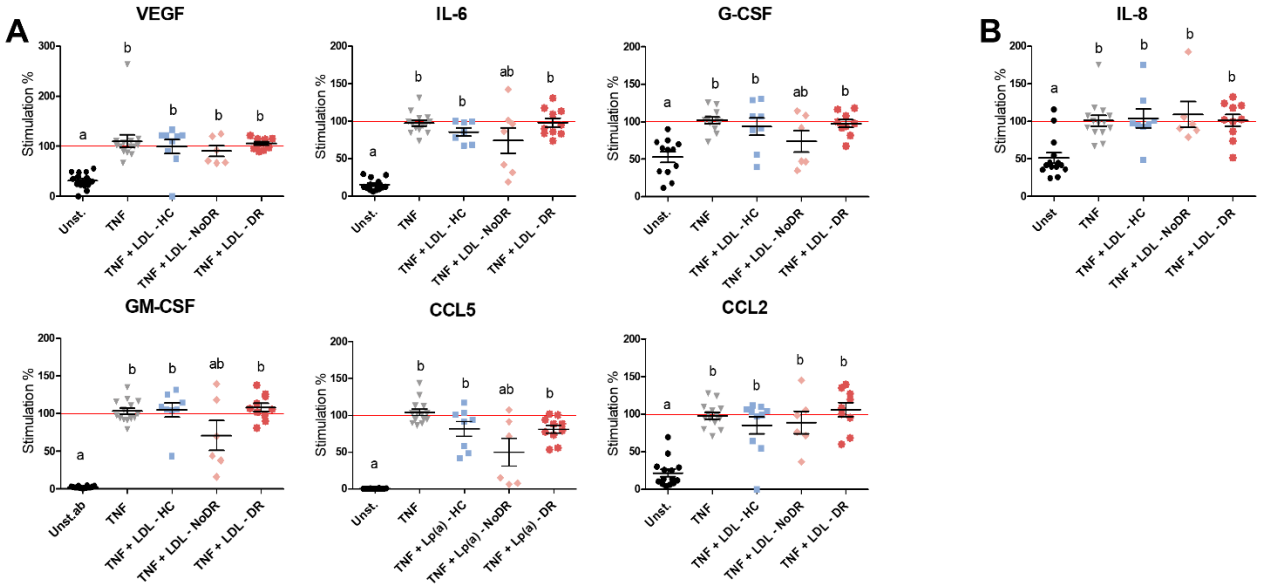
Supplementary Fig. S1: Determination of the apolipoprotein(a) [apo(a)] size. Representative immunoblot of Lp(a) of a few healthy controls and patients. In this particular blot, the number of KIV-2 repeats ranged from 13 to 35, which corresponds to approximately 160 to 450 kDa. When two apo(a) bands were present, the repeat number of the smallest band was used for statistical analysis. HC = healthy control, NoDR = patients with T2DM without diabetic retinopathy, DR = patients with T2DM with non-proliferative or proliferative diabetic retinopathy.

Supplementary Figure S2.



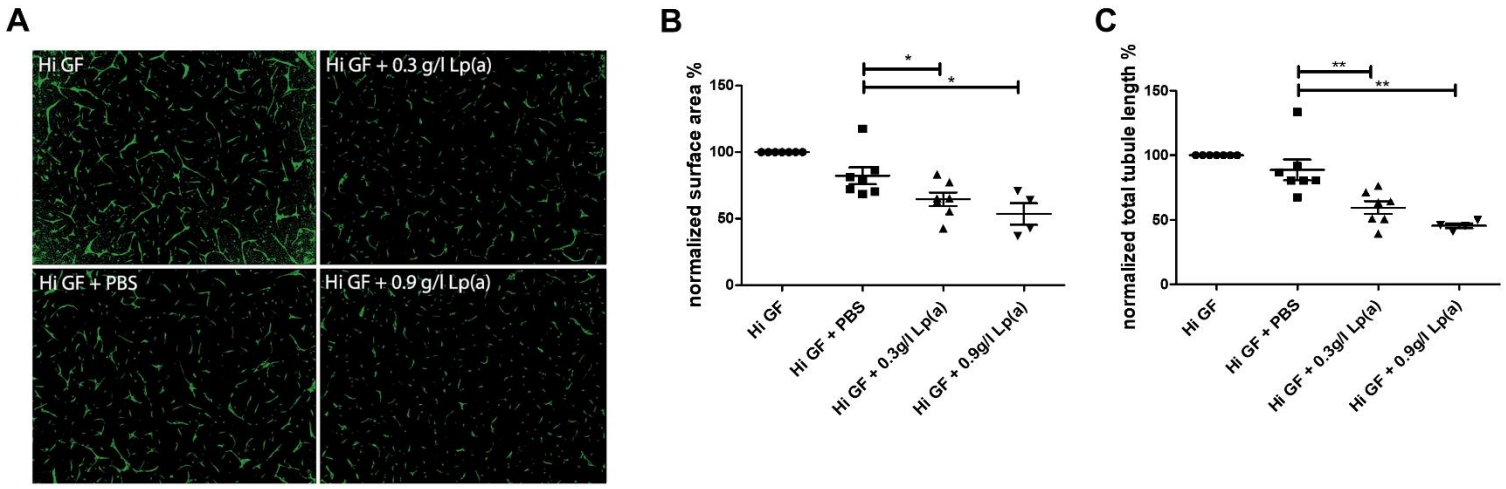
Supplementary Fig. S2: LDL does not affect TNF-alpha-induced expression of adhesion molecules in REC. Experiments were performed in parallel to those shown in Fig. 2, except that cholesterol-matched LDL was used instead of Lp(a). Details are as described in the legends of Fig. 2.

Supplementary Figure S3.



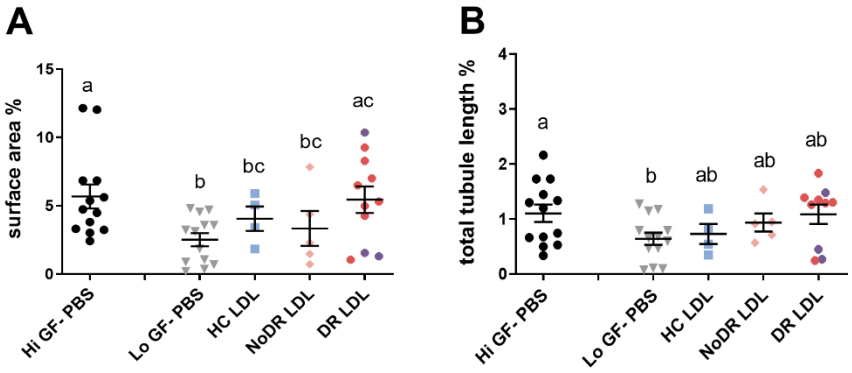
Supplementary Fig. S3: Effect of LDL on TNF-alpha- induced release of cytokines by REC. Experiments were performed in parallel to those shown in Fig. 3, except that cholesterol-matched LDL was used instead of Lp(a). Details are as described in the legends of Fig. 3.

Supplementary Figure S4.



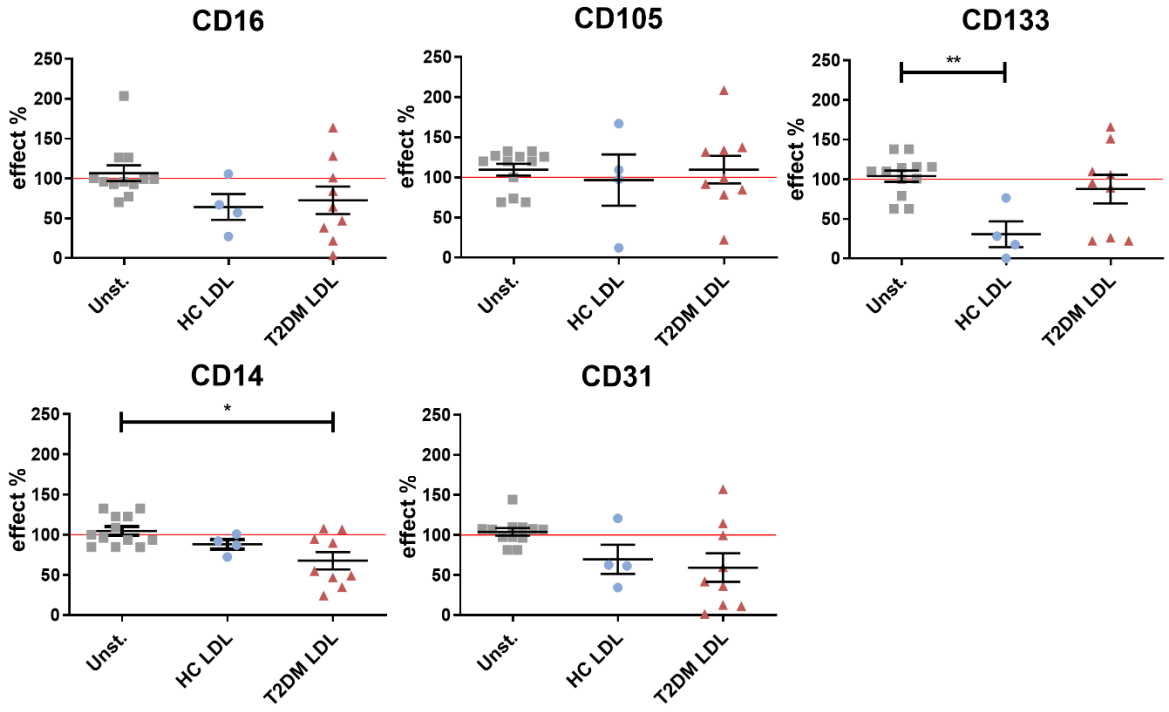
Supplementary Fig. S4: Lipoprotein(a) [Lp(a)] from a non-T2DM donor differently affects retinal endothelial cell (REC) tubule formation in vitro. Tubule formation was determined with an optimal concentration of angiogenic growth factors (Hi GF) (**A**) The co-cultures was imaged using a fluorescence microscope Quantification of in vitro angiogenesis is represented as (**B**) total surface area percentage and (**C**) total tubule length percentage, both normalized to the Hi GF control. Data are means ± SEM of 4-7 independent experiments, each including 4-8 technical replicates per condition. Significance was calculated using Mann Whitney U T-test. The coefficient of variation between different experiments was 8 - 30%. * $p < 0.05$, ** $p < 0.01$.

Supplementary Figure S5.



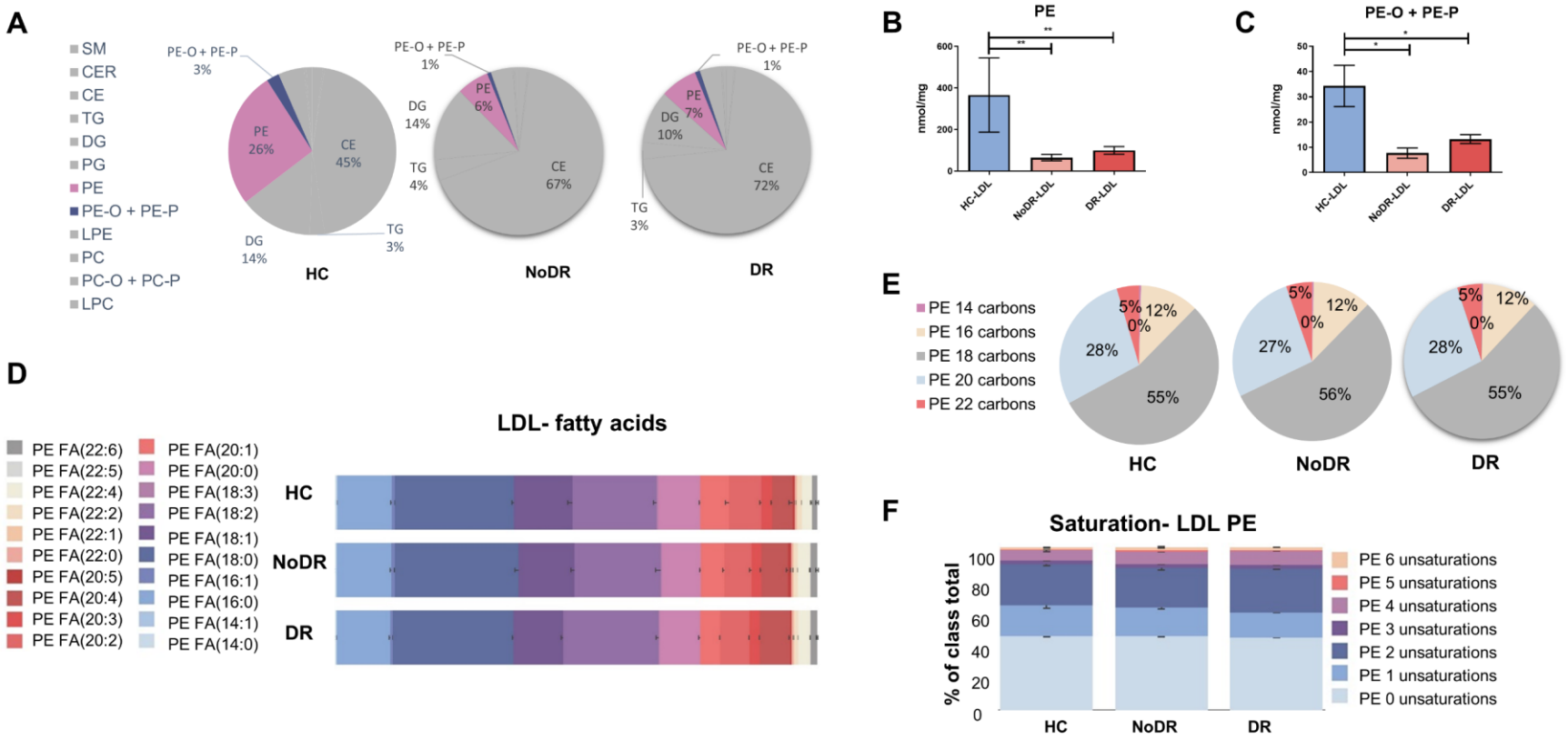
Supplementary Fig. S5: LDL from patients with diabetic retinopathy (DR) increase REC in vitro angiogenesis. Experiments were performed as described for Fig. 4, except that cholesterol-matched LDL was used instead of Lp(a). Details are as specified in the legends of Fig. 4.

Supplementary Figure S6.



Supplementary Fig. S6: LDL from healthy controls (HC) and patients with T2DM has only limited effect on myeloid-derived pro-angiogenic cell (PAC) differentiation. Experiments were performed as described for Fig. 5, except that cholesterol-matched LDL was used instead of Lp(a). Details are as specified in the legends of Fig. 5.

Supplementary Figure S7.



Supplementary Fig. S7: LDL from healthy controls (HC) and patients with T2DM without diabetic retinopathy (NoDR) and T2DM with diabetic retinopathy (DR) show compositional differences. Data are as described for Fig. 6, except that LDL was analyzed instead of Lp(a). Details are as described in the legends of Fig. 6.