Supporting Information

Shaw et al. 10.1073/pnas.1121309109

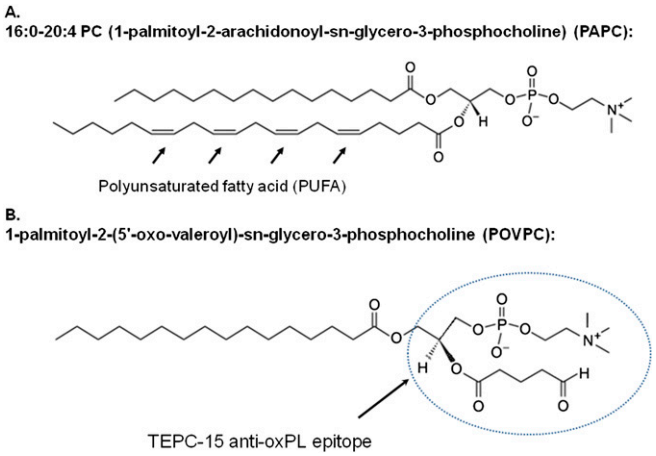

Fig. S1. Structures of native (*A*) and oxidized phosphatidylcholine (*B*). Polyunsaturated fatty acid chains in phosphatidylcholine, the most abundant phospholipids in the retina, are highly prone to oxidative stress that results in the breaking down of ethylene double bonds and changes the conformation of the molecules to generate oxidized phospholipids (oxPLs), which can be detected by TEPC-15 anti-oxPL.

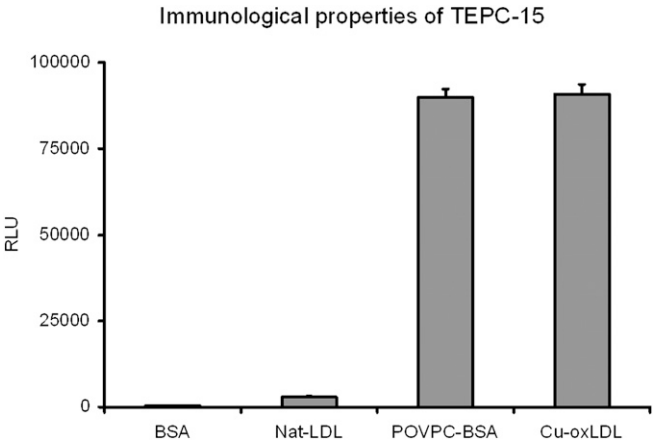

Fig. S2. Monoclonal anti-oxPL antibody TEPC-15 (T15; Sigma) binds to oxidation-epitope (POVPC) on oxidized ODL (oxLDL) but not to natural, unmodified LDL (Nat-LDL). Data are expressed in relative light units/100 milliseconds (RLU/100 ms) and as an average of triplicate data points. Cu-oxLDL, copper-oxidized LDL.

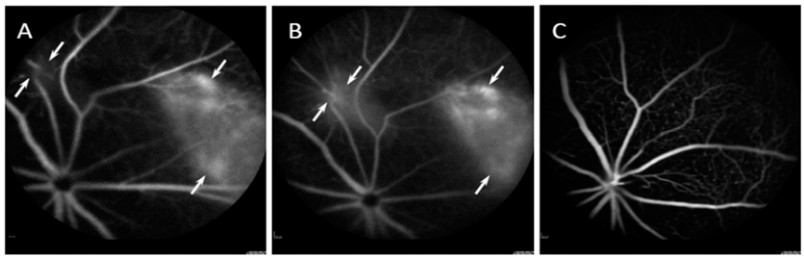

Fig. S3. Fundus fluorescein angiography in an early (*A*) or late (*B*) phase showing retina areas with leakage and choroidal neovascularization (arrows) in an oxLDL-injected eye. (*C*) Nat-LDL injected in the fellow eye served as a negative control. Overall, choroidal neovascularization developed in seven of eight mouse eyes injected with oxLDL, but none of the eight eyes injected with nat-LDL developed choroidal neovascularization. The difference in the areas of choroidal neovascularization in oxLDL-injected versus nat-LDL–injected eyes was significant ($P < 0.01$).

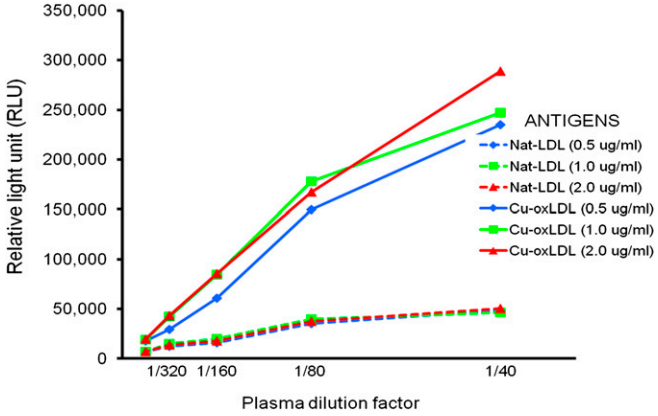

Fig. S4. ELISA for binding of plasma complement factor H (CFH) to the indicated coated antigens. Antigens were coated on the microtiter plate at the indicated concentrations. The serial dilutions of pooled human plasma (10 samples from blind genotypes) were added to the plate. The plasma CFH bound to the antigen was detected by biotinylated anti-CFH antibody followed by neutral avidin-alkaline phosphatase as described in *Materials and Methods*. The chemiluminescence was measured by GloMax Luminetor (Promega) and expressed as RLU. The RLU for CFH binding was in linear range between 1:80–1:320 plasma dilutions when antigen concentration was at 1.0 or 2.0 μg/mL. Cu-oxLDL, copper-oxidized LDL.

Table S1. Quantitative PCR primers used for gene expression ARPE19 or mouse J774 cell lines

Gene amplified	Forward sequence	Reverse sequence
Human *GAPDH*	GAGTCAACGGATTTGGTCGT	GACAAGCTTCCCGTTCTCAG
Human *CD36*	CAGAGGCTGACAACTTCACAG	AGGGTACGGAACCAAACTCAA
Human *MCP-1*	TCTGTGCCTGCTGCTCATAG	AGATCTCCTTGGCCACAATG
Human *CCR2*	AGAGGCATAGGGCAGTGAGA	GCAGTGAGTCATCCCAAGAG
Human *TNF*	ATCAGAGGGCCTGTACCTCA	GGAAGACCCCTCCCAGATAG
Human *VEGF*	TCCCGGTATAAGTCCTGGAG	ACAAATGCTTTCTCCGCTCT
Human *IL6*	AAATTCGGTACATCCTCGACGG	GGAAGGTTCAGGTTGTTTTCTGC
Human *IL8*	TCTGCAGCTCTGTGTGAAGG	AATTTCTGTGTTGGCGCAGT
Mouse *Gapdh*	gtcaaggccgagaatgggaa	ttggctccacccttcaagtg
Mouse *Cd36*	tgtgtttggaggcattctca	tgggttttgcacatcaaaga
Mouse *Mcp-1*	aggtccctgtcatgcttctg	tctggacccattccttcttg
Mouse *Ccr2*	attctccacaccctgtttcg	ctgcatggcctggtctaagt
Mouse *Tnf*	tcagccgatttgctatctca	cggactccgcaaagtctaag
Mouse *Vegfa*	ggtggacatcttccaggagt	tgatctgcatggtgatgttg
Mouse *Il6*	ggaccaagaccatccaattc	Accacagtgaggaatgtcca