### Supplemental Information

#### Inhibition of Vascular Inflammation by Apolipoprotein A-IV

Kate Shearston<sup>1</sup>, Joanne T.M. Tan<sup>2,3</sup>, Blake J. Cochran<sup>1</sup>, Kerry-Anne Rye<sup>1\*</sup>.

<sup>1</sup>Lipid Research Group, School of Medical Sciences, Faculty of Medicine, University of New South Wales, Sydney, NSW, Australia; <sup>2</sup>Vascular Research Centre, Lifelong Health Theme, South Australian Health and Medical Research Institute, Adelaide, Australia, <sup>3</sup> Adelaide Medical School, The University of Adelaide, Adelaide, SA, Australia.

**Corresponding Author**: Kerry-Anne Rye, Level 4E, Wallace Wurth Building, School of Medical Sciences ,Faculty of Medicine, University of New South Wales Sydney, Australia 2052.

### **Supplementary Table 1: Real-time PCR Primers**

Gene	Direction	Primer sequence		
Human ICAM-1	Sense	5' CCA TCT ACA GCT TTC CGG CGC 3'		
	Antisense	5' CTC TGG GGT GGC CTT CAG CA 3'		
Human VCAM-1	Sense	5' ATG TAG TGT CAT GGG CTG TG 3'		
	Antisense	5' GGA ATG AGT AGA GCT CCA CC 3'		
Human MCP-1	Sense	5' TCC ACA ACC CAA GAA CAC A 3'		
	Antisense	5' TCC ACA ACC CAA GAA CAC A 3'		
Human DHCR24	Sense	5' CTC CTG CCG CTC TCG CTT ATC 3'		
	Antisense	5' GTC TTG CTA CCC TGC TCC TTC C 3'		
Human HRPT-1	Sense	5' TGA CAC TGG CAA AAC AAT GCA 3'		
	Antisense	5' GGT CCT TTT CAC CAG CAA GCT 3'		
Human B2M	Sense	5' CAT CCA GCG TAC TCC AAA GA 3'		
	Antisense	5' GAC AAG TCT GAA TGC TCC AC 3'		

# Supplementary Table 2: A single apoA-IV infusion does not affect plasma lipid, apoA-I or apoA-IV levels in NZW rabbits

Plasma Lipids	Treatment	Baseline (T=0 h)	Collar insertion (24 h)	Euthanasia (48 h)
Apolipoprotein (µmol/L)	Saline	417.5 ± 35	412.2 ± 28	488.4 ± 35
	ApoA-I	415.6 ± 52	444.6 ± 61	448.5 ± 80
	ApoA-IV	359.6 ± 15	372.2 ± 26	456.9 ± 31
Phospholipid (µmol/L)	Saline	842.3 ± 37	856.7 ± 126	789.0 ± 36
	ApoA-l	904.0 ± 80	853.2 ± 87	887.8 ± 76
	ApoA-IV	843.0 ± 70	819.6 ± 87	887.4 ± 73
Unesterified Cholesterol (µmol/L)	Saline	144.7 ± 17	123.4 ± 10	135.5 ± 11
	ApoA-I	145.2 ± 8	155.2 ± 25	144.2 ± 6
	ApoA-IV	146.7 ± 11	147.4 ± 24	162.7 ± 14
Total Cholesterol (μmol/L)	Saline	769.1 ± 66	635.8 ± 50	704.5 ± 50
	ApoA-l	699.1 ± 74	727.3 ± 99	635.3 ± 83
	ApoA-IV	685.5 ± 75	685.5 ± 75	755.1 ± 68

NZW rabbits (n=6/group) were randomised to receive iv saline, lipid-free apoA-I (8 mg/kg), or lipid-free apoA-IV (1 mg/kg) at 24 h prior to placement of a non-occlusive, peri-arterial collar around the left common carotid artery. The animals were euthanised 24 h after collar placement and plasma lipid, apoA-I and apoA-IV levels were quantified as described in Materials and Methods.

# Supplementary Table 3: A single apoA-IV infusion does not affect HDL composition or size in NZW rabbits

Treatment	PL/UC/CE/apoA-I) ( <i>mol/mol</i> )	Particle Diameter ( <i>nm</i> )
Saline	17.6±4.0/1.5±0.8/13.6±0.3/1.0	8.9
ApoA-I	21.8±3.0/1.6±0.5/11.0±2.0/1.0	9.0
ApoA-IV	19.5±6.0/1.8±0.2/10.6.0/1.0	9.2

NZW rabbits (n=6/group) were randomised to receive iv saline, lipid-free apoA-I (8 mg/kg iv), or lipid-free apoA-IV (1 mg/kg iv) at 24 h prior to placement of a non-occlusive, peri-arterial collar around the left common carotid artery. The animals were euthanised 24 h after collar placement, the HDLs were isolated by ultracentrifugation and their composition and size were quantified as described in Materials and Methods.