SUPPLEMENTARY DATA

Supplementary Table 1. Association between skin iontophoretic responses to sodium nitroprusside (SNP) and acetylcholine (ACh) with diabetic retinopathy by persons with type 1 and type 2 diabetes

Groups	Range	DR (%)	Model 1*: OR (95%CI)	p-value	Model 2†: OR (95%CI)	p-value	Model 3‡: OR (95%CI)	p-value
Response to SNP (endothelium-independent)								
Persons with Type 1 diabetes								
Upper half	4.70 – 17.2	57.5%	1.0		1.0		1.0	
Lower half	1.46 – 4.67	70.4%	1.46 (0.50, 4.24)	0.49	1.30 (0.38, 4.43)	0.68	1.21 (0.34, 4.31)	0.77
Persons with Type 2 diabetes								
Upper half	4.70 – 17.2	44.7%	1.0		1.0		1.0	
Lower half	1.46 – 4.67	68.7%	**2.59 (1.17, 5.70)**	**0.02**	**3.60 (1.19, 10.9)**	**0.02**	**3.95 (1.16, 13.4)**	**0.03**
Response to ACh (endothelium-dependent)								
Persons with Type 1 diabetes								
Upper half	6.08 – 20.5	53.3%	1.0		1.0		1.0	
Lower half	1.26 – 6.06	75.9%	2.66 (0.92, 7.68)	0.07	1.82 (0.53, 6.30)	0.35	1.65 (0.46, 5.89)	0.44
Persons with Type 2 diabetes								
Upper half	6.08 – 20.5	49.0%	1.0		1.0		1.0	
Lower half	1.26 – 6.06	66.2%	1.86 (0.85, 4.06)	0.12	1.87 (0.68, 5.13)	0.23	1.62 (0.56, 4.68)	0.37
Response to both SNP and ACh§								
Persons with Type 1 diabetes								
Upper half of both SNP and ACh		50.0%	1.0		1.0			
Lower half of SNP, upper half of ACh		61.5%	1.28 (0.32, 5.15)	0.73	1.49 (0.28, 7.92)	0.64		

Upper half of SNP, lower half of ACh	73.3%	2.63 (0.68, 10.3)	0.16	2.13 (0.44, 10.3)	0.34		
Lower half of both SNP and ACh	78.6%	3.18 (0.70, 14.5)	0.13	1.84 (0.32, 10.7)	0.50		
Persons with Type 2 diabetes							
Upper half of both SNP and ACh	53.1%	1.0		1.0			
Lower half of SNP, upper half of ACh	41.2%	0.56 (0.16, 1.88)	0.35	1.23 (0.24, 6.25)	0.81		
Upper half of SNP, lower half of ACh	26.7%	0.26 (0.07, 1.05)	0.06	0.42 (0.08, 2.25)	0.31		
Lower half of both SNP and ACh	78.0%	**2.80 (1.03, 7.61)**	**0.04**	**3.90 (1.04, 14.7)**	**0.04**		

OR: odds ratio; 95%CI: 95% confidence interval.

*Model 1: Adjusted for age, gender.

†Model 2: Adjusted for covariates in model 1 plus diabetes duration, fasting glucose, total cholesterol and triglycerides levels, body mass index, systolic blood pressure, current smoking status, use of anti-hypertensive and lipid-lowering medications

‡ Model 3: Adjusted for covariates in model 2 plus ACh response with SNP response, or SNP response with ACh response

§Participants divided into four Groups according to response to SNP and ACh (see text)

Significant interaction between responses to sodium nitroprusside and acetylcholine (p for interaction term <0.05)