

## SUPPLEMENTARY DATA

**Supplementary Table 1.** CCM and other assessments of neuropathy in a sub group of controls and age matched participants with type 2 diabetes. All data presented as mean  $\pm$  SEM. CNFD – corneal nerve fibre density, CNBD – corneal nerve fibre branch density, CNFL – corneal nerve fibre length, IENFD – intraepidermal nerve fibre density, NDS – neuropathy disability score, VPT – vibration perception threshold, CPT – cold perception threshold, WPT – warm perception threshold, CIP – cold induced pain, HIP – heat induced pain, SNCV – sural nerve conduction velocity, SNAP – sural nerve amplitude, PMNCV – peroneal motor nerve conduction velocity, PMNAP – peroneal motor nerve amplitude.

Parameters	Control (n=43)	Type 2 diabetes (n=199)	P value
CNFD (no./mm <sup>2</sup> )	35.92 $\pm$ 1.16	25.33 $\pm$ 0.53	<0.0001
CNBD (no./mm <sup>2</sup> )	87.64 $\pm$ 5.78	63.28 $\pm$ 2.87	<0.0001
CNFL (mm/mm <sup>2</sup> )	26.16 $\pm$ 0.9	22.19 $\pm$ 0.53	0.001
IENFD (no./mm)	7.91 $\pm$ 0.77	5.00 $\pm$ 1.00	<0.0001
NDS (0-10)	0.67 $\pm$ 0.14	3.20 $\pm$ 0.19	<0.0001
VPT (V)	7.13 $\pm$ 0.82	14.47 $\pm$ 0.67	<0.0001
CPT (°C)	28.25 $\pm$ 0.27	25.81 $\pm$ 0.28	<0.0001
WPT (°C)	37.13 $\pm$ 0.45	40.94 $\pm$ 0.30	<0.0001
CIP (°C)	11.36 $\pm$ 1.3	5.16 $\pm$ 0.60	<0.0001
HIP (°C)	45.17 $\pm$ 0.45	47.97 $\pm$ 0.19	<0.0001
SSNCV (m/s)	49.77 $\pm$ 0.69	45.22 $\pm$ 0.45	<0.0001
SNAP ( $\mu$ V)	16.25 $\pm$ 1.2	10.20 $\pm$ 0.50	<0.0001
PMNCV (m/s)	47.65 $\pm$ 0.57	43.60 $\pm$ 0.40	<0.0001
PMNAP (mV)	5.02 $\pm$ 0.25	3.60 $\pm$ 0.20	<0.0001

**Supplementary Table 2.** Performance of CCM parameters to diagnose diabetic peripheral neuropathy. CNFD – corneal nerve fibre density, CNBD – corneal nerve fibre branch density, CNFL – corneal nerve fibre length

Area under the curve (AUC)	Area	P value	95% Confidence Interval	Cut off point	Sensitivity	Specificity
CNFD	0.81	<0.0001	0.76-0.85	29.40	73.5%	74.4%
CNBD	0.74	<0.0001	0.69-0.79	64.58	66.7%	66.7%
CNFL	0.73	<0.0001	0.68-0.78	24.00	66.7%	66.4%

**Supplementary Table 3.** Multivariable regression analysis for CNFL and risk factors

	Type 2 diabetes (95% CI)	Type 1 diabetes (95% CI)
Age	$\beta=-0.27(-0.41; -0.13)$ , P=0.007	$\beta=0.01 (-0.1; 0.13)$ , P=0.8
Duration of diabetes	$\beta=-0.05(-0.12; 0.23)$ , P=0.5	$\beta=-0.13 (-0.25; -0.01)$ , P=0.02
HbA1c	$\beta=-1.1 (-2.18; -0.2)$ , P=0.01	$\beta=-0.22 (-1.11; 0.65)$ , P=0.6
LDL cholesterol	$\beta=-0.46(-2.04; 1.12)$ , P=0.5	$\beta=1.8 (0.08; 3.5)$ , P=0.04
HDL cholesterol	$\beta=0.1 (-4.01; 4.3)$ , P=0.9	$\beta=-1.7 (-5.1; 1.6)$ , P=0.3
Triglycerides	$\beta=-0.4 (-1.6; 0.73)$ , P=0.4	$\beta=-2.87 (-5.04; -0.7)$ , P=0.009
Weight	$\beta=-0.14 (-0.27; -0.008)$ , P=0.03	$\beta=0.07(-0.07; 0.22)$ , P=0.3
Height	$\beta=0.04(-0.1; 0.19)$ , P=0.3	$\beta=0.04 (-0.12; 0.21)$ , P=0.6
Waist Circumference	$\beta=0.1(-0.003; 0.25)$ , P=0.1	$\beta=0.009(-0.13; 0.15)$ , P=0.9