

Supplementary Material

Supplementary Table 1. Mean GSRS scores of IBS patients (MIBS cohort) and healthy subjects (MIBS cohort and biopsy study).

	IBS patients (MIBS)			Healthy subjects (MIBS)			Healthy subjects (biopsy study)	
	Young adults	Middle-aged	Elderly	Young adults	Middle-aged	Elderly	Young adults	Elderly
N	191	209	63	90	84	43	52	48
Abdominal pain (mean \pm SD)	3.64 \pm 1.22***	3.19 \pm 1.18	2.91 \pm 1.18	1.93 \pm 0.81***	1.49 \pm 0.62	1.37 \pm 0.42	2.03 \pm 0.70***	1.43 \pm 0.61
Reflux (mean \pm SD)	2.16 \pm 1.36	2.23 \pm 1.44	1.98 \pm 1.34	1.24 \pm 0.51	1.20 \pm 0.57	1.22 \pm 0.48	1.29 \pm 0.60	1.19 \pm 0.60
Diarrhoea (mean \pm SD)	3.83 \pm 1.54**	3.16 \pm 1.51	3.07 \pm 1.51	1.51 \pm 0.74	1.32 \pm 0.50	1.36 \pm 0.59	1.54 \pm 0.79	1.46 \pm 0.66
Indigestion (mean \pm SD)	4.21 \pm 1.26	3.99 \pm 1.32	3.75 \pm 1.48	2.22 \pm 0.85*	1.94 \pm 0.91	1.75 \pm 0.85	2.26 \pm 0.79***	1.67 \pm 0.78
Constipation (mean \pm SD)	3.49 \pm 1.42	3.12 \pm 1.39	3.03 \pm 1.22	1.66 \pm 0.91	1.58 \pm 0.79	1.57 \pm 0.82	1.62 \pm 0.72	1.49 \pm 0.73

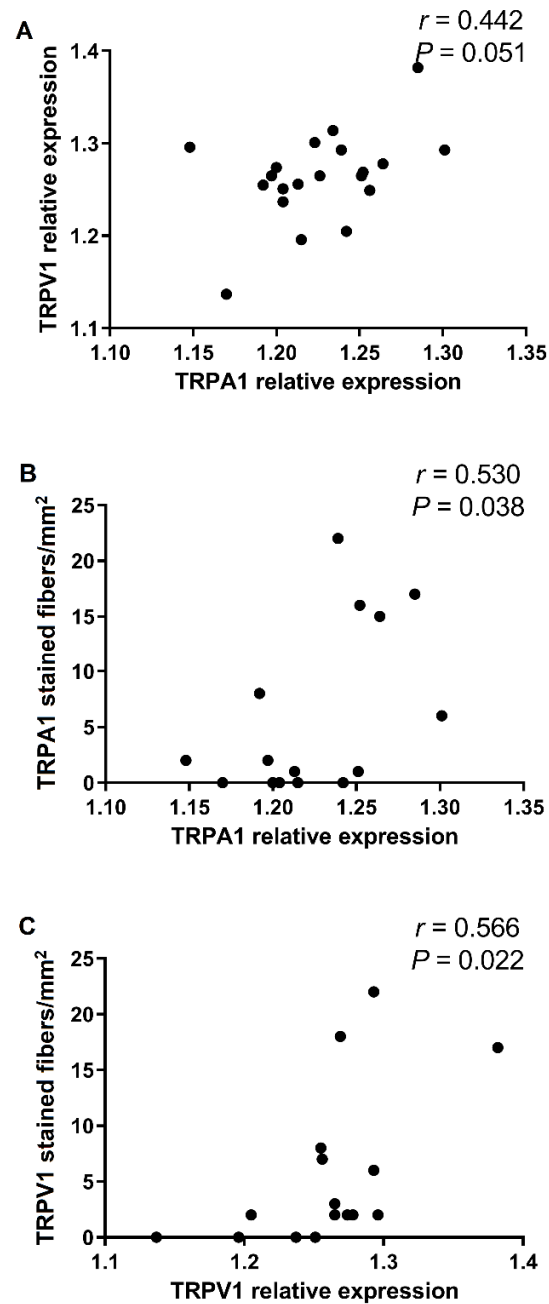
* $P < 0.05$ ** $P < 0.01$ *** $P < 0.001$ (vs elderly for MIBS cohort)

SD = standard deviation

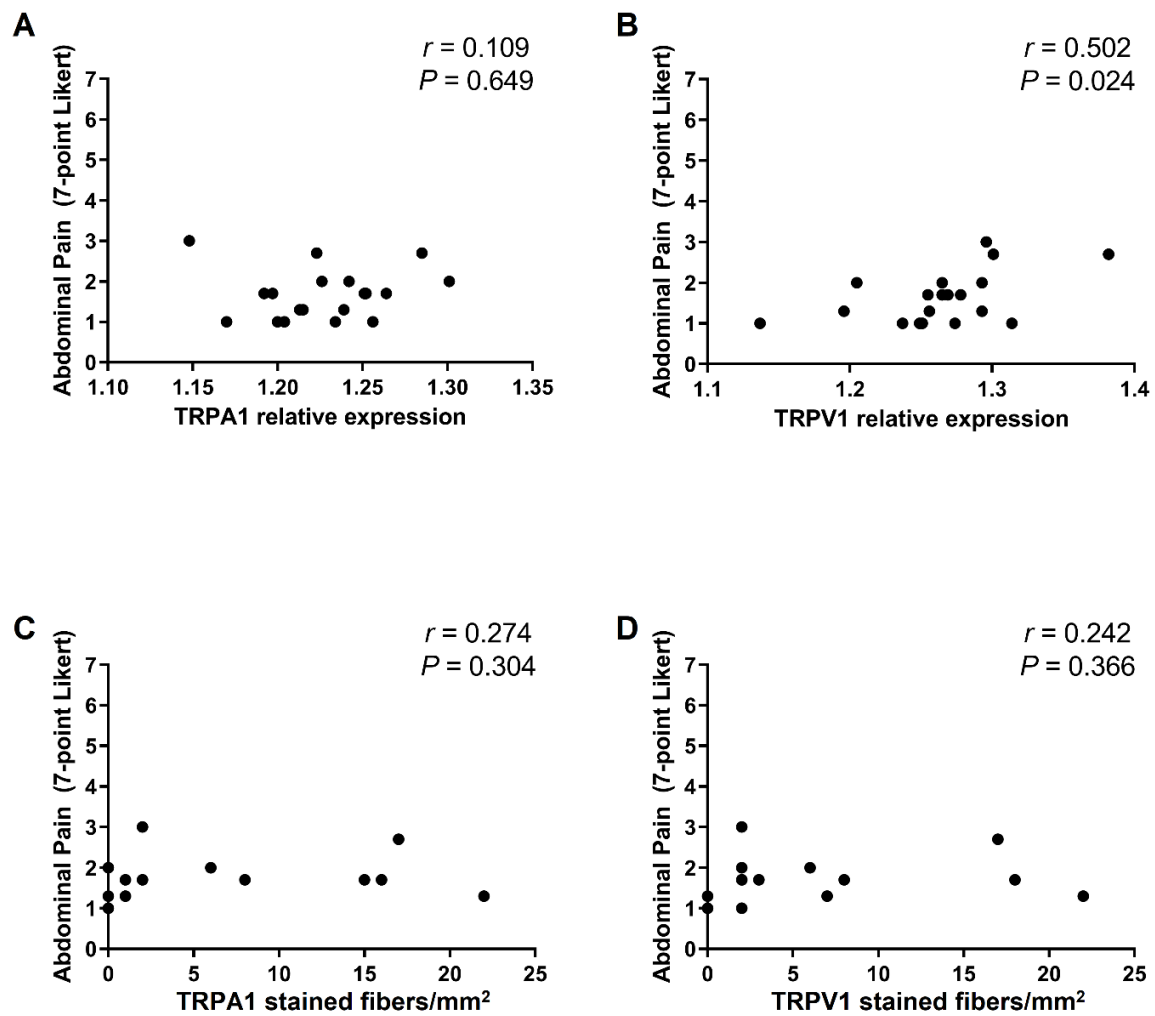
Independent t-tests were used for comparison of mean GSRS scores per age group

MIBS age groups: 18-39 years (young adults), 40-64 years (middle-aged adults), 65-75 years (elderly)

Biopsy study age groups: 40-64 years (middle-aged adults), 65-75 years (elderly)



Supplementary Figure 1 (panel A-C). Panel A: Correlation between TRPA1 relative expression and TRPV1 relative expression. Panel B: Correlation between TRPA1 immunoreactivity (mean number of stained fibers per mm² of lamina propria) and TRPV1 relative expression. Panel C: Correlation between TRPV1 immunoreactivity and TRPV1 relative expression.



Supplementary Figure 2 (panel A-D). Correlation between abdominal pain and A) TRPA1 relative expression, B) TRPV1 relative expression, C) TRPA1 immunoreactivity (mean number of stained fibers per mm² of lamina propria) and D) TRPV1 immunoreactivity.