

APPENDIX: Correlations between corneal nerve parameters and tear film inflammatory mediators and neuropeptides. Highlighted bold italics represent significant associations. P values presented are unadjusted. All p-values were greater than 0.05 after adjustment for multiple comparisons.

		CNFD ave	CNFD Max	CNFD Min	CNBD ave	CNBD Max	CNBD Min	CNFL ave	CNFL Max	CNFL Min	CTBD ave	CTBD Max	CTBD Min	CNFA ave	CNFA Max	CNFA Min	CNFW ave	CNFW Max	CNFW Min	CNFrac ave	CNFrac Max	CNFrac Min
Tear flow rate	r	-0.01	0.17	0.09	0.19	0.12	0.19	-0.08	0.23	0.04	0.06	0.12	0.11	0.20	0.34	0.23	-0.05	-0.25	-0.05	-0.04	-0.13	0.01
	p	0.96	0.47	0.71	0.41	0.62	0.42	0.73	0.32	0.85	0.79	0.60	0.64	0.38	0.13	0.32	0.82	0.27	0.84	0.88	0.58	0.96
TPC	r	-0.01	-0.25	-0.07	-0.23	-0.27	-0.21	-0.17	-0.01	-0.11	-0.20	-0.21	-0.20	-0.02	-0.06	-0.10	-0.21	-0.55	-0.33	-0.30	-0.41	-0.19
	p	0.98	0.30	0.78	0.35	0.26	0.40	0.48	0.97	0.65	0.41	0.40	0.41	0.94	0.81	0.68	0.40	0.01	0.16	0.21	0.08	0.44
Substance P	r	-0.01	-0.37	-0.21	-0.16	-0.31	-0.23	-0.19	-0.09	-0.17	-0.24	-0.22	-0.23	-0.08	-0.03	-0.12	-0.20	-0.52	-0.31	-0.41	-0.48	-0.32
	p	0.98	0.10	0.36	0.48	0.17	0.31	0.40	0.70	0.45	0.30	0.35	0.32	0.72	0.91	0.61	0.37	0.02	0.17	0.06	0.03	0.16
MMP-9	r	0.20	0.22	0.23	0.18	0.13	0.15	0.14	0.18	0.15	0.22	0.02	0.13	0.20	0.07	0.09	0.17	0.14	0.14	0.24	0.38	0.20
	p	0.48	0.44	0.41	0.53	0.64	0.60	0.61	0.53	0.59	0.43	0.95	0.65	0.47	0.80	0.76	0.53	0.62	0.61	0.38	0.16	0.48
TIMP-1	r	-0.40	-0.55	-0.53	-0.14	-0.32	-0.29	-0.41	-0.38	-0.49	-0.23	-0.20	-0.21	-0.18	-0.20	-0.19	-0.12	-0.37	-0.16	-0.44	-0.49	-0.32
	p	0.12	0.02	0.03	0.59	0.21	0.27	0.10	0.13	0.05	0.37	0.44	0.42	0.49	0.44	0.47	0.66	0.14	0.55	0.07	0.05	0.21
TNF- α	r	-0.23	-0.24	-0.31	-0.11	-0.18	-0.14	-0.18	-0.32	-0.25	0.03	-0.12	-0.07	0.06	-0.18	-0.05	0.27	0.15	0.32	-0.24	-0.11	-0.20
	p	0.38	0.36	0.23	0.68	0.48	0.58	0.49	0.21	0.34	0.91	0.65	0.78	0.83	0.49	0.86	0.29	0.58	0.21	0.35	0.67	0.44
IL6	r	-0.25	-0.27	-0.24	-0.06	-0.12	-0.08	-0.50	-0.15	-0.34	-0.17	-0.08	-0.12	-0.15	-0.12	-0.16	-0.33	-0.55	-0.49	-0.36	-0.50	-0.29
	p	0.33	0.29	0.35	0.82	0.66	0.76	0.04	0.57	0.18	0.52	0.76	0.64	0.56	0.64	0.54	0.19	0.02	0.05	0.15	0.04	0.25
SP as a % of TPC	r	0.09	-0.47	-0.23	-0.09	-0.25	-0.16	-0.18	-0.07	-0.14	-0.16	-0.15	-0.15	0.01	-0.04	-0.08	-0.33	-0.39	-0.45	-0.39	-0.47	-0.25
	p	0.71	0.05	0.37	0.72	0.32	0.54	0.47	0.78	0.58	0.53	0.56	0.54	0.98	0.88	0.74	0.19	0.11	0.06	0.11	0.05	0.31
MMP-9 as a % of TPC	r	0.38	0.15	0.30	0.19	0.14	0.16	0.16	0.27	0.23	0.19	0.13	0.19	0.25	0.32	0.32	0.01	0.18	0.13	0.34	0.27	0.30
	p	0.14	0.57	0.27	0.48	0.61	0.55	0.55	0.32	0.38	0.49	0.64	0.47	0.35	0.23	0.23	0.96	0.51	0.63	0.20	0.31	0.26
TIMP-1 as a % of TPC	r	0.19	0.33	0.19	0.25	0.18	0.17	0.23	0.12	0.20	0.16	0.15	0.16	0.08	0.09	0.11	0.10	0.24	0.22	0.35	0.44	0.25
	p	0.44	0.19	0.45	0.31	0.47	0.49	0.36	0.64	0.42	0.51	0.56	0.54	0.76	0.71	0.66	0.70	0.33	0.39	0.15	0.07	0.32
MMP- 9:TIMP-1 ratio	r	0.15	0.22	0.21	0.16	0.13	0.14	0.14	0.14	0.14	0.20	0.00	0.10	0.17	0.00	0.02	0.20	0.11	0.13	0.21	0.38	0.16
	p	0.58	0.42	0.45	0.58	0.65	0.63	0.61	0.61	0.62	0.47	0.99	0.72	0.55	0.99	0.95	0.48	0.70	0.65	0.46	0.16	0.57
TNF- α as a % of TPC	r	-0.16	-0.16	-0.25	-0.06	-0.14	-0.10	-0.11	-0.26	-0.18	0.06	-0.09	-0.04	0.10	-0.14	-0.01	0.29	0.17	0.34	-0.17	0.00	-0.14
	p	0.53	0.53	0.31	0.81	0.59	0.70	0.65	0.30	0.49	0.81	0.72	0.89	0.70	0.58	0.97	0.24	0.51	0.17	0.51	0.99	0.58
IL6 as a % of TPC	r	-0.10	-0.16	-0.12	-0.02	-0.03	-0.03	-0.37	-0.09	-0.23	-0.13	-0.03	-0.08	-0.15	-0.09	-0.13	-0.29	-0.43	-0.40	-0.25	-0.34	-0.22
	p	0.69	0.53	0.64	0.94	0.89	0.91	0.13	0.72	0.36	0.62	0.89	0.76	0.56	0.73	0.60	0.24	0.08	0.10	0.31	0.17	0.39

CNFD = corneal nerve fiber density, CNFL = corneal nerve fiber length, CNBD = corneal nerve branch density, CTBD = corneal total branch density, CNFA = corneal nerve fiber area, CNFW = corneal nerve fiber width, CNFrac = corneal nerve fractal dimension. For each individual the image with the highest value (max) for each parameter and the image with the lowest value (min) was identified in order to capture the variability in corneal nerve distribution between the 8 images. The means across the sample population were then used for analysis.