Supplemental Table 2a. *p* values for all statistical tests on cell density and %. Dark grey highlights significant effects ($p \leq 0.05$). Light grey highlights indicate trends ($0.05 < p \leq 0.1$).

ARC					PERI				
	Shapiro-Wilk Normality test	**Levene's Equality of Variance Test**				**Shapiro-Wilk Normality test**	**Levene's Equality of Variance Test**		
		Age	Treatment	Group			Age	Treatment	Group
Total Cells	***0.02***	0.55	0.38	0.80	Total Cells	0.36	0.78	0.85	0.83
Density GPER	0.27	0.62	0.29	0.63	Density GPER	0.62	0.96	0.77	0.94
Density ERα	0.63	0.91	0.80	0.41	Density ERα	0.15	0.85	0.58	0.67
Density PR	0.64	0.30	0.52	0.59	Density PR	***0.01***	0.79	0.58	0.90
% GPER	***0.01***	0.97	0.12	0.47	% GPER	***0.03***	0.22	0.89	0.69
% ERα	***0.04***	0.76	0.22	0.46	% ERα	***0.03***	0.58	0.85	0.55
% PR	0.19	0.30	0.59	0.74	% PR	***0.00***	0.33	0.78	0.60

ARC									
	Kruskal-Wallis Rank Sum test			**Pairwise Wilcoxon Rank Sum with Benjamini and Hochberg Adjustment**					
	Age	Treatment	Group	YV vs. AV	YE vs. AE	YV vs. YE	AV vs. AE	YV vs. AE	YE vs. AV
Total Cells	0.64	0.89	0.96	-	-	-	-	-	-
Density GPER	***0.07***	0.95	0.35	0.23	0.34	0.75	0.94	0.38	0.11
Density ERα	0.44	***0.08***	0.24	0.39	0.78	***0.05***	0.65	0.13	0.42
Density PR	0.11	0.24	0.29	-	-	-	-	-	-
% GPER	0.25	0.55	0.60	-	-	-	-	-	-
% ERα	0.76	0.90	0.96	-	-	-	-	-	-
% PR	0.11	0.19	0.31	-	-	-	-	-	-

PERI									
	Kruskal-Wallis rank sum test			**Pairwise Wilcoxon Rank Sum with Benjamini and Hochberg Adjustment**					
	Age	Treatment	Group	YV vs. AV	YE vs. AE	YV vs. YE	AV vs. AE	YV vs. AE	YE vs. AV
Total Cells	0.46	0.35	0.68	-	-	-	-	-	-
Density GPER	***0.01***	0.62	***0.04***	0.40	***0.01***	0.40	0.22	***0.10***	0.21
Density ERα	0.30	0.47	0.44	-	-	-	-	-	-
Density PR	0.98	0.13	0.47	-	-	-	-	-	-
% GPER	***0.06***	0.74	0.16	0.83	***0.03***	0.53	0.42	0.19	0.30
% ERα	0.28	0.41	0.57	-	-	-	-	-	-
% PR	0.54	***0.10***	0.42	0.93	1.00	0.46	0.39	0.51	***0.08***

Supplemental Table 2b. *p* values for all statistical tests on GPER cell size. Dark grey highlights significant effects ($p \leq 0.05$). Light grey highlights indicate trends ($0.05 < p < 0.1$).

ARC									
Cell Size	**Kruskal-Wallis rank sum test**			**Pairwise Wilcoxon Rank Sum with Benjamini and Hochberg Adjustment**					
	Age	Treatment	Group	YV vs. AV	YE vs. AE	YV vs. YE	AV vs. AE	YV vs. AE	YE vs. AV
0 - 49	1.00	0.17	0.59	-	-	-	-	-	-
50 - 99	0.46	0.76	0.87	-	-	-	-	-	-
100 - 149	***0.07***	0.15	0.14	0.47	***0.08***	0.36	0.13	***0.09***	0.65
150 - 199	0.17	0.39	0.44	-	-	-	-	-	-
200 - 249	***0.09***	0.62	0.40	0.23	0.31	0.78	0.69	0.22	0.41
250 - 299	0.28	0.62	0.71	-	-	-	-	-	-
300 - 349	0.59	0.27	0.66	-	-	-	-	-	-
350 - 399	0.34	0.41	0.66	-	-	-	-	-	-
≥ 400	0.28	0.73	0.71	-	-	-	-	-	-

PERI									
Cell Size	**Kruskal-Wallis rank sum test**			**Pairwise Wilcoxon Rank Sum with Benjamini and Hochberg Adjustment**					
	Age	Treatment	Group	YV vs. AV	YE vs. AE	YV vs. YE	AV vs. AE	YV vs. AE	YE vs. AV
0 - 49	0.27	0.49	0.59	-	-	-	-	-	-
50 - 99	***0.07***	0.25	0.13	0.32	***0.07***	0.11	0.62	0.75	***0.07***
100 - 149	0.66	0.90	0.97	-	-	-	-	-	-
150 - 199	0.11	***0.09***	***0.06***	0.65	***0.07***	***0.02***	0.52	1.00	***0.03***
200 - 249	0.36	0.66	0.71	-	-	-	-	-	-
250 - 299	0.30	0.73	0.54	-	-	-	-	-	-
300 - 349	0.73	0.77	0.96	-	-	-	-	-	-
350 - 399	0.46	0.35	0.68	-	-	-	-	-	-
≥ 400	0.61	0.90	0.49	-	-	-	-	-	-

Supplemental Table 2c. *p* values for correlation networks. Pearson's *r* values (top) are highlighted in grey. All *p* values < 0.1 are bolded. Italicized *p* values also passed the Benjamini and Hochberg false discovery rate correction (ARC $p \leq 0.01$, PERI $p \leq 0.03$). Cell density, %, and total cells # were highly correlated therefore we included only % ir-cells for simplicity sake.

ARC								
Correlation *p* values	# Births	Weight (Kg)	Age (Months)	% GPER	% ERα	% PR	% Large GPER	**Pearson's *r* values**
# Births	\	0.26	0.29	**0.49**	0.36	0.36	-0.51	# Births
Weight (Kg)	0.23	\	0.02	0.22	0.35	0.20	-0.21	Weight (Kg)
Age (Months)	0.35	0.40	\	0.21	0.17	0.08	***0.47***	Age (Months)
% GPER	**0.04**	0.43	0.34	\	***0.54***	**0.58**	-0.06	% GPER
% ERα	0.13	0.16	0.56	***0.01***	\	***0.71***	-0.24	% ERα
% PR	0.11	0.82	0.18	**0.07**	***0.00***	\	-0.23	% PR
% Large GPER	0.34	0.85	***0.01***	0.54	0.48	0.65	\	% Large GPER

PERI								
Correlation	# Births	Weight (Kg)	Age (Months)	% GPER	% Erα	% PR	% Large GPER	**Pearson's**
# Births	\	0.13	0.31	***0.61***	***0.55***	**0.40**	0.39	# Births
Weight (Kg)	0.23	\	0.08	***0.53***	**0.32**	0.19	-0.11	Weight (Kg)
Age (Months)	0.35	0.40	\	***0.33***	0.10	0.20	***0.35***	Age (Months)
% GPER	***0.01***	***0.02***	***0.03***	\	***0.74***	***0.59***	**0.35**	% GPER
% ERα	***0.00***	**0.04**	0.33	***0.00***	\	***0.84***	-0.11	% ERα
% PR	**0.05**	0.52	0.70	***0.01***	***0.00***	\	-0.07	% PR
% Large GPER	0.34	0.58	***0.00***	**0.08**	0.97	0.60	\	% Large GPER

\ = Not Applicable.