

Supplemental Figure 1: Brightfield images and quantification of ultra-low attachment (ULA) spheroid areas for (**A**,**B**) 4 additional immortalized FTE cell lines (FT189, FT190, FT240, FT282) grown for 24 hrs -/+ 10 μ M NE, (**C**,**D**) FT237 and FT246 cells grown for 24 hrs in various concentrations of NE, (**E**,**F**) FT237 and FT246 cells grown -/+ 10 μ M NE at various timepoints. Statistical analyses were conducted via: (**B**,**F**) Student's t-tests, or (**D**) one-way ANOVA with Dunnett's correction for multiple comparisons. Data are represented as mean ± standard deviation.



Supplemental Figure 2: Fluorescent images and quantification of dead cells (green) in spheroids (blue) cultured under ULA conditions. (**A**,**B**) 4 additional immortalized FTE cell lines (FT189, FT190, FT240, FT282) grown for 24 hrs -/+ 10 μ M NE, (**C**,**D**) FT237 and FT246 cells grown for 24 hrs in various concentrations of NE, (**E**,**F**) FT237 and FT246 cells grown -/+ 10 μ M NE at various timepoints. Statistical analyses were conducted via: (**B**,**F**) Student's t-tests, or (**D**) one-way ANOVA with Dunnett's correction for multiple comparisons. Data are represented as mean ± standard deviation.



Supplemental Figure 3: (**A**,**B**) Brightfield images and quantification of spheroid areas for FT237 and FT246 cells cultured under ULA conditions for 24 hrs in various concentrations of propranolol. (**C**,**D**) Fluorescent images and quantification of dead cells (green) in spheroids (blue) as cultured in (**A**). All statistical analyses for this figure were conducted via two-way ANOVA with Sidak's correction for multiple comparisons. Data are represented as mean ± standard deviation.



Supplemental Figure 4: (**A**) Relative RNA expression levels of ADRB1 and ADRB2 in control tissues and immortalized FTE and HGSC cell lines. (**B**) RTqPCR validation of knockdown for pooled siRNAs targeting ADRB1 and ADRB2 in FT237 and FT246. (**C**) Western blot validation of ADRB2 knockdown. (**D**) RTqPCR deconvolution of individual siRNAs within the siADRB2 pool in FT237 and FT246. (**E**) Quantification of relative changes in sphere areas upon knockdown of ADRB2 with pooled or individual siRNAs. (**F**) Quantification of relative changes in cell death for spheres described in (**E**). Statistical analyses were conducted via: (**B**) Student's t-tests, (**D**) one-way ANOVA with Dunnett's correction for multiple comparisons. Data are represented as mean ± standard deviation.



Supplemental Figure 5: (**A**) Representative images of H&E stained human fallopian tube epithelial tissue with low (1), medium (2) and high (3) ADRB2 staining (brown). (**B**) Distribution of ADRB2 staining intensity for the immunohistochemistry of samples in (**A**) (n=20). (**C**) Violin plots depicting ADRB2 staining levels according to BRCA status.



Supplemental Figure 6: (**A**,**B**) Brightfield images and area measurements for FT237 cells treated for 24 hrs in ULA with 18 different follicular fluid samples collected from 17 different patients (10% volume). (**C**) Linear regression for correlation between FT237 aggregate area and relative NE concentration quantified via mass spectrometry analysis. (**D**,**E**) Fluorescent images of total cells (blue) and dead cells (green) in each FT237 cell aggregate, cultured as in A. (**F**) Linear regression for correlation between the number of dead cells in FT237 aggregates and relative NE concentration per sample. (**G**,**H**) Brightfield images and area measurements for FT237 cells treated with vehicle, NE, FF2, FF6, or FF16 in the presence or absence of 10µM propranolol. (**I**,**J**) Fluorescent images and dead cell quantification for cells as cultured in (**G**). Each experiment was conducted in technical triplicate.



Supplemental Figure 7: (A) Volcano plots for differentially expressed transcripts in ULA-cultured FT237 and FT246 that are upregulated (magenta) and downregulated (cyan) after 4 hrs of 10µM NE treatment relative to vehicle. (B) Temporal heatmap for top differentially expressed transcripts common to both cell lines at early (4hr) and late (24hr) timepoints, relative to the baseline cell profiles prior to ULA culture.



Supplemental Figure 8: RTqPCR validation of RNAsequencing hits common to both FT237 and FT246. All statistical analyses for this figure were conducted using one-way ANOVA with Tukey's correction for multiple comparisons. Data are represented as mean ± standard deviation.



Supplemental Figure 9: (**A**) RTqPCR panel of CSF2 mRNA expression across FTE cell lines. (**B**) RTqPCR validation of knockdown for pooled siRNA targeting *CSF2* in FT237 and FT246. (**C**) RTqPCR deconvolution of individual siRNAs within the siCSF2 pool in FT237 and FT246. (**D**,**E**) Representative brightfield images and quantification of sphere areas for FTE cell lines transfected with two of the most efficient siRNAs (#6 and #7) when cultured under ULA conditions for 24 hrs in the presence or absence of 10µM NE. (**F**,**G**) Representative fluorescent images of total cells (blue) and dead cells (green) and quantification of relative cell death in each condition as cultured in (**D**). Statistical analyses were conducted via: (**B**) Student's t-tests, (**C**) one-way ANOVA with Dunnett's correction for multiple comparisons, or (**E**, **G**) two-way ANOVA with Sidak's correction for multiple comparisons. Data are represented as mean ± standard deviation.

Primer	Sequence (5'> 3')	Primer	Sequence (5'> 3')
GAPDH_F	GAGTCAACGGATTTGGTCGT	PER3_F	GCAGAGGAAATTGGCGGACA
GAPDH_R	TTGATTTTGGAGGGATCTCG	PER3_R	GGTTTATTGCGTCTCTCCGAG
ADRB1_F	CGAGACCCTGTGTGTCATTG	CXCL12_F	ATTCTCAACACTCCAAACTGTGC
ADRB1_R	ACGACTTGGGGTCGTTGTAG	CXCL12_R	ACTTTAGCTTCGGGTCAATGC
ADRB2_F	GAGCACAAAGCCCTCAAGAC	LRRC4_F	CTCCCGTTCGTCTACCTCAC
ADRB2_R	TGGAAGGCAATCCTGAAATC	LRRC4_R	GGTGTTCGAGGGAATACCCTG
18S_F	GGAAAGCAGACATTGACCTCAC	FGG_F	TTATTGTCCAACTACCTGTGGC
18S_R	CCATCCTTTACATCCTTCTGTCTGT	FGG_R	GACTTCAAAGTAGCAGCGTCTAT
CALCA_F	TGCAGATGAAGGCCAGTGAG	FGB_F	AGTGATTCAGAACCGTCAAGAC
CALCA_R	TACTCAGATTACCGCACCGC	FGB_R	CATCCTGGTAAGCTGGCTAATTT
RHCG_F	GGTTCCACTTCTTACAAGACCG	LINGO3_F	TGCCTCAATCTGTCGCACAA
RHCG_R	GGGCTGACTTTACCCAGAACT	LINGO3_R	CAGCGTCTCTAGCGTGTTCA
UPK1B_F	CCAAAGACAACTCAACTGTTCGT	PLIN1_F	CCATGTCCCTATCAGATGCCC
UPK1B_R	AATGCCGCAACAACCAATAATC	PLIN1_R	CTGGTGGGTTGTCGATGTC
GNLY_F	CCTGTCTGACGATAGTCCAAAAA	VAC14AS1_F	TACGAGGGTGTCCCAAAAGC
GNLY_R	GACCTCCCCGTCCTACACA	VAC14AS1_R	TTCCTGGATGCGGGAGACTA
CD177_F	ATGAGCGCGGTATTACTGCTG	HSPA6_F	CGTGCCCGCCTATTTCAATG
CD177_R	GGTCGGACACCTTCCACAC	HSPA6_R	AAAAATGAGCACGTTGCGCT
PDE3A_F	CCACGGCCTCATTACCGAC	CSF2_F	TCCTGAACCTGAGTAGAGACAC
PDE3A_R	TTGCTCACGGCTCTCAAGG	CSF2_R	TGCTGCTTGTAGTGGCTGG
NFE2_F	GCAGGAACAGGGTGATACAGC	CEMIP_F	GCTCTTGAGTTGCATGGACA
NFE2_R	GCAGCTCGGTGATGGACAT	CEMIP_R	ACCGCGTTCAAATACTGGAC
WNT16_F	TTCAGACACGAGAGATGGAACT	LOC100419170_F	GGAAGCCTGAAGCTCCCTAT
WNT16_R	CCAGCCTTCACTTGCTGAG	LOC100419170_R	CCTCGTGTCTGGGAAACAAT
KCNK15_F	GCTCTCCGGAGGAAGTTCG	DISP3_F	CACAGCCTGCAGAACAACAT
KCNK15_R	TGATGACGGTGATGGCGAAG	DISP3_R	AGGCGCTCTATACACCTGGA
PTPRN_F	CGGGACACATGATTCTGGCAT	HDAC9_F	AGTAGAGAGGCATCGCAGAGA
PTPRN_R	CTGCTTGGTAGGCACAGAGG	HDAC9_R	GGAGTGTCTTTCGTTGCTGAT
NPTX1_F	CACCGAGGAGAGGGGTCAAGAT	ARNTL_F	AAGGGAAGCTCACAGTCAGAT
NPTX1_R	CAGGGCGGTTGTCTTTCTGA	ARNTL_R	GGACATTGCGTTGCATGTTGG
WISP2_F	CCTCCTCTCAAAGGTGCGTA	NIPAL4_F	CCAACTTTGGAGCCTACGCAT
WISP2_R	CTGTCGTCCTCTGCCAAGA	NIPAL4_R	TCCATGATGGTAGTGACCTTCT
DBP_F	CTGATCTTGCCCTATCAAGCATT	LONRF3_F	ATGGAGTCAGTACGGATCGAA
DBP_R	CGATGTCTTCGAGGGTCAAAG	LONRF3_R	GTCCCCGGAGACTGCTCTT
EPHA5_F	TAGGACCTCTAAGCAAAAAGGGA	ARC_F	AGCGGGACCTGTACCAGAC
EPHA5_R	GAGCCTGACACTTCGAGCAA	ARC_R	GCAGGAAACGCTTGAGCTTG

Supplemental Table 1. List of primers used for RTqPCR experiments