

**Title: Unique Effect of Aspirin Therapy on Biomarkers in Aspirin-Exacerbated Respiratory Disease: A Prospective Trial**

**Authors:** <sup>1</sup>Katherine N. Cahill, M.D., <sup>2,5</sup>Jing Cui, M.D., Ph.D., <sup>2,5</sup>Parul Kothari, M.D., <sup>2</sup>Katherine Murphy, <sup>3-5</sup>Benjamin A. Raby, M.D., <sup>2</sup>Joseph Singer, <sup>2,3,5</sup>Elliot Israel, M.D., <sup>2,5</sup>Joshua A. Boyce, M.D., and <sup>2,5</sup>Tanya M. Laidlaw, M.D.

ONLINE DATA SUPPLEMENT

**Supplemental Table E1.** Change in urinary eicosanoids and correlation with change in clinical outcomes.

	Change in Urinary Eicosanoid					
	LTE <sub>4</sub>		PGD-M		PGE-M	
Clinical Outcome	<i>r</i>	p-value	<i>r</i>	p-value	<i>r</i>	p-value
TNSS	0.114	0.489	-0.020	0.904	-0.121	0.456
ACQ-7	0.259	0.111	0.193	0.245	0.124	0.448
FEV1% predicted	-0.136	0.410	-0.230	0.165	-0.090	0.800
FeNO	0.136	0.408	0.191	0.252	0.177	0.615

Pearson correlation coefficient reported. TNSS – total nasal symptom score, ACQ-7 – asthma control questionnaire 7, FEV1% - forced expiratory volume in 1 second, FeNO – fraction exhaled nitric oxide.

	Baseline			
	ATA	AERD All <sup>#</sup>	AERD Normal Eos <sup>#</sup>	AERD subjects with paired samples
<b>n</b>	10	25	19	15
<b>Age (years)</b>	39.5 ± 17	48 ± 8.3	48.3 ± 8.6	48.9 ± 7.4
<b>Male (n, %)</b>	4 (40%)	9 (36%)	7 (37%)	6 (40%)
<b>Race (n, %)</b>				
<b>White</b>	8 (80%)	24 (96%)	19 (100%)	15 (100%)
<b>Black/AA</b>	2 (20%)	1 (4%)	0	0
<b>Absolute eos</b>				
<b>Baseline</b>	0.24 ± 0.12	0.34 ± 0.26	0.22 ± 0.1	0.34 ± 0.28
<b>High-dose aspirin</b>	--	--	--	1.1 ± 1.11*

**Supplemental Table E2.** Population characteristics for RNA-sequencing analysis

\* Comparison of absolute eosinophil counts at baseline versus on high-dose aspirin in 14 subjects with aspirin exacerbated respiratory disease (AERD) on whom CBCs with differential were available (paired t-test p-value = 0.023)

# Comparisons made with subjects with aspirin-tolerant asthma (ATA)

Eos - eosinophils

**Supplemental Table E3.** Genes differentially expressed with high dose aspirin treatment in subjects with AERD for whom RNA-sequencing was available at baseline and on aspirin (adjusted p-value < 0.05).

HGNC Symbol	Ensembl ID	Average Expression	Log 2 Fold Change	Standard Error Log 2 Fold Change	Wald Statistic	P Value	Adjusted P Value
CLU	ENSG00000120885	71.25	1.04	0.20	5.15	2.65E-07	0.00232
GIMAP1	ENSG00000213203	40.26	-1.08	0.21	-5.10	3.45E-07	0.00232
NIPSNAP3A	ENSG00000136783	115.06	0.67	0.14	4.89	9.87E-07	0.00444
PDLIM1	ENSG00000107438	199.46	1.00	0.21	4.79	1.67E-06	0.00446
HRK	ENSG00000135116	98.63	1.18	0.25	4.79	1.69E-06	0.00446
NA	ENSG00000229023	56.35	-0.75	0.16	-4.74	2.11E-06	0.00446
THYN1	ENSG00000151500	152.79	0.68	0.14	4.72	2.32E-06	0.00446
OAS2	ENSG00000111335	412.91	-0.92	0.20	-4.70	2.64E-06	0.00446
MZT2A	ENSG00000173272	23.79	0.99	0.22	4.58	4.63E-06	0.00632
COMMD7	ENSG00000149600	117.28	0.66	0.14	4.58	4.68E-06	0.00632
VLDLR	ENSG00000147852	173.33	0.95	0.21	4.53	5.82E-06	0.00656
ANXA1	ENSG00000135046	4938.37	0.75	0.16	4.53	5.83E-06	0.00656
NTAN1	ENSG00000157045	262.97	0.64	0.14	4.50	6.81E-06	0.00663
PQLC3	ENSG00000162976	167.24	0.59	0.13	4.50	6.88E-06	0.00663
ADH5	ENSG00000197894	196.42	0.59	0.13	4.48	7.37E-06	0.00663
CDC14B	ENSG00000081377	105.70	0.71	0.16	4.47	8.00E-06	0.00674
CD52	ENSG00000169442	1162.76	0.78	0.18	4.40	1.09E-05	0.00755
CD24	ENSG00000272398	1064.45	0.90	0.20	4.39	1.12E-05	0.00755
PIN1	ENSG00000127445	95.59	0.56	0.13	4.39	1.13E-05	0.00755
LINC00299	ENSG00000236790	162.23	0.89	0.20	4.39	1.15E-05	0.00755
NA	ENSG00000259418	45.98	0.74	0.17	4.38	1.18E-05	0.00755
NA	ENSG00000267416	42.57	1.12	0.26	4.36	1.27E-05	0.00755

TBC1D4	ENSG00000136111	83.20	-0.99	0.23	-4.36	1.31E-05	0.00755
STAC	ENSG00000144681	50.27	1.26	0.29	4.35	1.34E-05	0.00755
NA	ENSG00000254614	29.15	0.71	0.16	4.34	1.41E-05	0.00759
SEPW1	ENSG00000178980	114.77	0.75	0.17	4.32	1.58E-05	0.00818
CD244	ENSG00000122223	397.51	0.81	0.19	4.29	1.80E-05	0.00843
AGBL5	ENSG00000084693	38.32	0.66	0.15	4.29	1.81E-05	0.00843
PIM1	ENSG00000137193	1496.52	0.62	0.15	4.29	1.83E-05	0.00843
RHOBTB3	ENSG00000164292	396.47	0.88	0.21	4.28	1.89E-05	0.00843
NA	ENSG00000261026	643.98	-0.85	0.20	-4.27	1.94E-05	0.00843
LPAR6	ENSG00000139679	91.90	-0.91	0.21	-4.26	2.02E-05	0.00852
FBN1	ENSG00000166147	282.66	0.95	0.22	4.25	2.18E-05	0.00875
GDAP1	ENSG00000104381	33.34	0.82	0.19	4.24	2.21E-05	0.00875
CDK2AP1	ENSG00000111328	116.88	0.82	0.19	4.23	2.33E-05	0.00896
MTFR1L	ENSG00000117640	293.29	0.71	0.17	4.22	2.48E-05	0.00912
GALNT12	ENSG00000119514	47.04	0.84	0.20	4.20	2.68E-05	0.00912
FAM110B	ENSG00000169122	80.36	0.63	0.15	4.20	2.71E-05	0.00912
PKIA	ENSG00000171033	17.85	-0.97	0.23	-4.19	2.74E-05	0.00912
GOLIM4	ENSG00000173905	213.99	0.81	0.19	4.19	2.81E-05	0.00912
SRI	ENSG00000075142	511.57	0.57	0.14	4.19	2.82E-05	0.00912
GRHL1	ENSG00000134317	87.10	0.96	0.23	4.19	2.84E-05	0.00912
PLEKHA7	ENSG00000166689	35.80	0.99	0.24	4.17	2.98E-05	0.00935
KCNA3	ENSG00000177272	58.54	-0.87	0.21	-4.17	3.05E-05	0.00936
IGFBP7	ENSG00000163453	84.93	0.71	0.17	4.16	3.17E-05	0.00943
CDCA7L	ENSG00000164649	144.77	0.60	0.14	4.16	3.22E-05	0.00943
SOCS6	ENSG00000170677	48.54	0.76	0.18	4.15	3.36E-05	0.00964
NEK3	ENSG00000136098	33.67	0.78	0.19	4.14	3.54E-05	0.00994
SYNJ2BP	ENSG00000213463	39.48	-0.91	0.22	-4.11	3.87E-05	0.01066
BCL2	ENSG00000171791	217.36	-0.85	0.21	-4.09	4.40E-05	0.01186

EEF2K	ENSG00000103319	421.07	0.94	0.23	4.05	5.17E-05	0.01367
NA	ENSG00000224550	19.95	0.74	0.18	4.03	5.56E-05	0.01426
C9orf40	ENSG00000135045	38.58	0.64	0.16	4.03	5.61E-05	0.01426
RAB4A	ENSG00000168118	163.94	0.61	0.15	4.02	5.79E-05	0.01426
M6PR	ENSG00000003056	565.63	0.46	0.11	4.02	5.82E-05	0.01426
CYP7B1	ENSG00000172817	41.03	0.99	0.25	4.01	6.00E-05	0.01446
LRP12	ENSG00000147650	50.14	0.89	0.22	4.01	6.12E-05	0.01447
ORMDL3	ENSG00000172057	281.11	0.58	0.14	4.00	6.27E-05	0.01455
CAT	ENSG00000121691	7306.36	0.73	0.18	4.00	6.39E-05	0.01455
CYP4V2	ENSG00000145476	46.93	-0.69	0.17	-3.99	6.47E-05	0.01455
ENTPD5	ENSG00000187097	138.81	0.81	0.20	3.97	7.23E-05	0.01550
SOCS2	ENSG00000120833	178.38	0.92	0.23	3.97	7.23E-05	0.01550
GIPR	ENSG00000010310	36.81	0.88	0.22	3.97	7.24E-05	0.01550
INPP5B	ENSG00000204084	623.41	0.65	0.16	3.96	7.38E-05	0.01552
CISD2	ENSG00000145354	94.86	0.56	0.14	3.96	7.48E-05	0.01552
ITGA6	ENSG00000091409	1292.47	0.67	0.17	3.96	7.65E-05	0.01556
TEX30	ENSG00000151287	126.84	0.80	0.20	3.95	7.74E-05	0.01556
MIAT	ENSG00000225783	667.18	0.80	0.20	3.95	7.85E-05	0.01556
SEPT11	ENSG00000138758	416.88	0.81	0.20	3.94	8.29E-05	0.01597
INPP4B	ENSG00000109452	182.06	-0.94	0.24	-3.93	8.34E-05	0.01597
TP53TG1	ENSG00000182165	20.96	0.86	0.22	3.93	8.48E-05	0.01597
TEC	ENSG00000135605	487.91	0.88	0.22	3.93	8.53E-05	0.01597
TMED3	ENSG00000166557	144.58	0.75	0.19	3.92	8.89E-05	0.01636
CAMK4	ENSG00000152495	150.89	-0.93	0.24	-3.92	8.98E-05	0.01636
C1orf174	ENSG00000198912	123.94	0.40	0.10	3.89	9.92E-05	0.01768
C10orf128	ENSG00000204161	794.09	0.80	0.21	3.89	1.01E-04	0.01768
ZNF823	ENSG00000197933	78.62	0.84	0.22	3.89	1.01E-04	0.01768
RNASE2	ENSG00000169385	437.28	1.03	0.27	3.88	1.04E-04	0.01775

DBI	ENSG00000155368	319.67	0.48	0.12	3.88	1.06E-04	0.01775
PARL	ENSG00000175193	141.05	0.41	0.11	3.88	1.06E-04	0.01775
CD28	ENSG00000178562	101.82	-0.93	0.24	-3.87	1.07E-04	0.01775
GIMAP2	ENSG00000106560	181.90	-0.72	0.19	-3.87	1.08E-04	0.01775
PYROXD2	ENSG00000119943	124.70	0.83	0.21	3.87	1.09E-04	0.01778
ADGRG6	ENSG00000112414	14.43	1.06	0.28	3.86	1.13E-04	0.01789
HDAC1	ENSG00000116478	589.86	0.36	0.09	3.86	1.14E-04	0.01789
ANKRD55	ENSG00000164512	87.66	0.66	0.17	3.86	1.14E-04	0.01789
CD9	ENSG00000010278	588.13	0.84	0.22	3.85	1.18E-04	0.01802
SUSD1	ENSG00000106868	452.84	0.68	0.18	3.85	1.18E-04	0.01802
NA	ENSG00000228363	49.72	0.74	0.19	3.85	1.19E-04	0.01802
S100A10	ENSG00000197747	242.99	0.67	0.17	3.84	1.21E-04	0.01802
SORD	ENSG00000140263	365.12	0.80	0.21	3.84	1.23E-04	0.01802
NDFIP2	ENSG00000102471	127.82	0.88	0.23	3.84	1.23E-04	0.01802
SCRN1	ENSG00000136193	220.80	0.65	0.17	3.83	1.29E-04	0.01850
RNASE3	ENSG00000169397	57.72	0.85	0.22	3.82	1.32E-04	0.01850
MSRB3	ENSG00000174099	153.29	0.52	0.14	3.82	1.34E-04	0.01850
ESYT1	ENSG00000139641	1527.28	0.81	0.21	3.82	1.35E-04	0.01850
CCL23	ENSG00000274736	89.15	1.07	0.28	3.82	1.36E-04	0.01850
NA	ENSG00000279957	88.20	-0.74	0.19	-3.82	1.36E-04	0.01850
SERPINB6	ENSG00000124570	148.76	0.55	0.14	3.81	1.37E-04	0.01850
ZNF597	ENSG00000167981	185.90	0.70	0.18	3.81	1.37E-04	0.01850
GCNT4	ENSG00000176928	36.34	-0.92	0.24	-3.81	1.41E-04	0.01882
ENC1	ENSG00000171617	314.21	0.72	0.19	3.80	1.44E-04	0.01907
TFF3	ENSG00000160180	19.25	1.04	0.27	3.80	1.47E-04	0.01919
ACSM3	ENSG00000005187	319.79	0.88	0.23	3.79	1.48E-04	0.01919
INO80C	ENSG00000153391	42.55	0.58	0.15	3.79	1.51E-04	0.01938
RDH11	ENSG00000072042	163.99	0.53	0.14	3.78	1.56E-04	0.01980

TRPC6	ENSG00000137672	180.38	0.88	0.23	3.78	1.58E-04	0.01988
ADORA3	ENSG00000282608	189.54	0.92	0.24	3.78	1.59E-04	0.01988
APOL6	ENSG00000221963	1940.48	-0.68	0.18	-3.77	1.63E-04	0.02022
SLC24A3	ENSG00000185052	92.56	0.84	0.22	3.76	1.69E-04	0.02075
SYNE1	ENSG00000131018	20249.04	0.80	0.21	3.76	1.73E-04	0.02082
NA	ENSG00000259834	60.80	-0.87	0.23	-3.75	1.79E-04	0.02082
PKP2	ENSG00000057294	69.72	0.90	0.24	3.74	1.82E-04	0.02082
NA	ENSG00000259374	34.51	-0.82	0.22	-3.74	1.82E-04	0.02082
LEF1	ENSG00000138795	190.83	-0.88	0.23	-3.74	1.82E-04	0.02082
FLNB	ENSG00000136068	621.64	0.87	0.23	3.74	1.82E-04	0.02082
SYCP2L	ENSG00000153157	30.50	0.96	0.26	3.74	1.83E-04	0.02082
GALNT10	ENSG00000164574	596.65	0.54	0.14	3.74	1.84E-04	0.02082
LAIR1	ENSG00000167613	367.34	0.69	0.19	3.74	1.84E-04	0.02082
MYO5C	ENSG00000128833	18.70	-0.75	0.20	-3.73	1.92E-04	0.02148
SNORA38B	ENSG00000200394	42.71	0.69	0.18	3.73	1.94E-04	0.02148
ARHGAP10	ENSG00000071205	277.65	0.85	0.23	3.73	1.94E-04	0.02148
C11orf21	ENSG00000110665	490.84	0.48	0.13	3.72	1.96E-04	0.02148
SFMBT2	ENSG00000198879	597.12	0.81	0.22	3.72	2.00E-04	0.02174
PDE4D	ENSG00000113448	1469.51	0.66	0.18	3.72	2.02E-04	0.02184
NA	ENSG00000273015	135.59	0.63	0.17	3.71	2.06E-04	0.02203
DPP4	ENSG00000197635	60.27	-0.90	0.24	-3.71	2.08E-04	0.02208
NA	ENSG00000234290	679.08	-0.71	0.19	-3.71	2.11E-04	0.02208
IL7R	ENSG00000168685	977.98	-0.86	0.23	-3.70	2.11E-04	0.02208
ZFP36	ENSG00000128016	10908.12	-0.68	0.18	-3.70	2.13E-04	0.02208
FUCA1	ENSG00000179163	150.97	0.60	0.16	3.70	2.17E-04	0.02223
BHLHE40	ENSG00000134107	2089.05	0.69	0.19	3.70	2.18E-04	0.02223
GSTM4	ENSG00000168765	109.29	0.83	0.22	3.69	2.26E-04	0.02285
ANKRD18A	ENSG00000180071	87.26	0.74	0.20	3.69	2.27E-04	0.02285



LRP6	ENSG0000070018	14.57	-0.80	0.22	-3.68	2.30E-04	0.02285
LONRF2	ENSG00000170500	14.17	0.97	0.26	3.68	2.30E-04	0.02285
SLC16A7	ENSG00000118596	116.39	-0.70	0.19	-3.68	2.34E-04	0.02293
ACSF2	ENSG00000167107	111.70	0.80	0.22	3.68	2.35E-04	0.02293
SLC6A12	ENSG00000111181	14.34	-0.77	0.21	-3.68	2.36E-04	0.02293
CEP85	ENSG00000130695	208.76	0.72	0.20	3.67	2.39E-04	0.02300
ICOS	ENSG00000163600	39.84	-0.94	0.26	-3.67	2.46E-04	0.02354
NA	ENSG00000270019	80.45	-0.81	0.22	-3.66	2.55E-04	0.02404
TNNT1	ENSG00000105048	33.40	0.97	0.27	3.66	2.56E-04	0.02404
RASSF1	ENSG00000068028	315.20	0.52	0.14	3.65	2.59E-04	0.02404
AGA	ENSG00000038002	81.21	0.51	0.14	3.65	2.60E-04	0.02404
CMAHP	ENSG00000168405	335.92	0.75	0.21	3.65	2.63E-04	0.02404
ABCB10	ENSG00000135776	234.17	0.67	0.18	3.65	2.63E-04	0.02404
TTC7B	ENSG00000165914	231.18	0.84	0.23	3.65	2.64E-04	0.02404
WFDC21P	ENSG00000261040	9.53	0.99	0.27	3.65	2.66E-04	0.02405
PAPSS1	ENSG00000138801	936.08	0.69	0.19	3.64	2.71E-04	0.02412
PTGS1	ENSG00000095303	306.51	0.59	0.16	3.64	2.72E-04	0.02412
C1orf228	ENSG00000198520	51.73	0.72	0.20	3.64	2.72E-04	0.02412
CDK15	ENSG00000138395	48.89	0.92	0.25	3.64	2.75E-04	0.02412
MCCC1	ENSG00000078070	118.48	0.63	0.17	3.64	2.76E-04	0.02412
CDKN2C	ENSG00000123080	26.94	0.65	0.18	3.63	2.79E-04	0.02412
TRAT1	ENSG00000163519	69.55	-0.92	0.25	-3.63	2.79E-04	0.02412
ADI1	ENSG00000182551	280.59	0.55	0.15	3.63	2.84E-04	0.02441
CSRP1	ENSG00000159176	228.55	0.68	0.19	3.63	2.88E-04	0.02457
SLC4A10	ENSG00000144290	21.88	-0.96	0.26	-3.62	2.93E-04	0.02483
TMEM140	ENSG00000146859	728.22	-0.52	0.14	-3.62	2.99E-04	0.02518
NA	ENSG00000253736	27.28	-0.75	0.21	-3.61	3.01E-04	0.02518
OAS3	ENSG00000111331	758.41	-0.77	0.21	-3.61	3.05E-04	0.02539

P2RY6	ENSG00000171631	9.33	0.93	0.26	3.61	3.09E-04	0.02539
TRNAU1AP	ENSG00000180098	85.57	0.45	0.12	3.61	3.09E-04	0.02539
HIST2H2BC	ENSG00000203819	18.65	-0.75	0.21	-3.61	3.11E-04	0.02539
ASRGL1	ENSG00000162174	131.79	0.82	0.23	3.60	3.14E-04	0.02551
SERPING1	ENSG00000149131	99.38	-0.86	0.24	-3.60	3.16E-04	0.02551
SNTB1	ENSG00000172164	598.83	0.65	0.18	3.60	3.18E-04	0.02551
TXNRD3	ENSG00000197763	9.51	0.88	0.25	3.60	3.21E-04	0.02559
LSM4	ENSG00000130520	57.91	0.57	0.16	3.59	3.25E-04	0.02559
TFCP2L1	ENSG00000115112	21.38	0.92	0.26	3.59	3.27E-04	0.02559
CAMK2D	ENSG00000145349	109.61	-0.78	0.22	-3.59	3.27E-04	0.02559
CCR3	ENSG00000183625	1366.98	0.76	0.21	3.59	3.29E-04	0.02559
TMEM14C	ENSG00000111843	95.83	0.59	0.16	3.59	3.30E-04	0.02559
ENPEP	ENSG00000138792	21.47	0.86	0.24	3.59	3.37E-04	0.02589
SKP2	ENSG00000145604	108.00	0.64	0.18	3.58	3.38E-04	0.02589
NUDT17	ENSG00000186364	23.36	0.78	0.22	3.58	3.44E-04	0.02616
NA	ENSG00000207034	88.98	-0.56	0.16	-3.58	3.45E-04	0.02616
ADGRE1	ENSG00000174837	2433.53	0.86	0.24	3.57	3.52E-04	0.02649
SLFN13	ENSG00000154760	501.30	0.70	0.20	3.57	3.57E-04	0.02675
CORO2A	ENSG00000106789	204.05	0.64	0.18	3.57	3.61E-04	0.02686
LRIG1	ENSG00000144749	147.13	0.67	0.19	3.57	3.63E-04	0.02686
NA	ENSG00000279608	138.09	-0.48	0.13	-3.56	3.68E-04	0.02709
KLF12	ENSG00000118922	290.59	-0.79	0.22	-3.56	3.78E-04	0.02770
ERMP1	ENSG00000099219	205.94	0.65	0.18	3.55	3.84E-04	0.02799
DENND2C	ENSG00000175984	44.48	0.70	0.20	3.54	4.05E-04	0.02939
LINC01146	ENSG00000258867	41.16	0.64	0.18	3.53	4.13E-04	0.02980
NA	ENSG00000232680	29.76	-0.72	0.20	-3.52	4.25E-04	0.03047
ZNF792	ENSG00000180884	123.84	0.61	0.17	3.52	4.36E-04	0.03080
ACSL6	ENSG00000164398	16.84	-0.88	0.25	-3.52	4.38E-04	0.03080

SIAH2	ENSG00000181788	386.44	0.49	0.14	3.52	4.38E-04	0.03080
BTLA	ENSG00000186265	50.02	-0.78	0.22	-3.51	4.40E-04	0.03080
CTSO	ENSG00000256043	44.89	-0.61	0.17	-3.51	4.41E-04	0.03080
WSB2	ENSG00000176871	314.78	0.43	0.12	3.51	4.47E-04	0.03107
ARHGAP5	ENSG00000100852	241.03	-0.66	0.19	-3.51	4.51E-04	0.03107
SNX17	ENSG00000115234	265.41	0.43	0.12	3.51	4.52E-04	0.03107
ITGB7	ENSG00000139626	391.40	0.71	0.20	3.50	4.58E-04	0.03118
DOCK9	ENSG00000088387	113.68	-0.72	0.21	-3.50	4.58E-04	0.03118
SCPEP1	ENSG00000121064	754.59	0.50	0.14	3.50	4.62E-04	0.03124
NAT6	ENSG00000243477	39.27	0.75	0.21	3.50	4.63E-04	0.03124
SAMHD1	ENSG00000101347	1176.83	-0.59	0.17	-3.50	4.70E-04	0.03136
DHCR24	ENSG00000116133	15.43	0.81	0.23	3.50	4.70E-04	0.03136
SLC4A8	ENSG00000050438	193.30	0.79	0.23	3.50	4.73E-04	0.03137
KHDRBS3	ENSG00000131773	25.98	0.83	0.24	3.49	4.75E-04	0.03137
DOK2	ENSG00000147443	272.72	0.72	0.21	3.49	4.88E-04	0.03208
CD101	ENSG00000134256	596.94	0.83	0.24	3.49	4.91E-04	0.03215
BRI3BP	ENSG00000184992	571.57	0.68	0.20	3.48	4.99E-04	0.03242
ZFP28	ENSG00000196867	32.50	0.62	0.18	3.48	5.00E-04	0.03242
PXMP4	ENSG00000101417	32.66	0.66	0.19	3.48	5.03E-04	0.03244
ATP6V0A2	ENSG00000185344	623.20	0.56	0.16	3.47	5.15E-04	0.03307
ATP8B2	ENSG00000143515	510.29	0.60	0.17	3.46	5.38E-04	0.03417
ZMYND11	ENSG00000015171	421.29	0.59	0.17	3.46	5.38E-04	0.03417
SCP2	ENSG00000116171	339.77	0.44	0.13	3.46	5.40E-04	0.03417
TFDP2	ENSG00000114126	352.61	0.49	0.14	3.45	5.51E-04	0.03458
NR3C2	ENSG00000151623	58.29	-0.76	0.22	-3.45	5.51E-04	0.03458
GALNT6	ENSG00000139629	224.82	0.77	0.22	3.45	5.56E-04	0.03470
CTNS	ENSG00000040531	65.61	0.63	0.18	3.45	5.59E-04	0.03471
RNF144A	ENSG00000151692	450.64	0.66	0.19	3.45	5.61E-04	0.03471

STARD4	ENSG00000164211	311.92	0.76	0.22	3.45	5.64E-04	0.03472
KLHDC10	ENSG00000128607	256.05	0.36	0.10	3.45	5.68E-04	0.03480
PCTP	ENSG00000141179	355.39	0.43	0.12	3.44	5.71E-04	0.03483
ALS2	ENSG00000003393	393.85	0.58	0.17	3.44	5.73E-04	0.03483
CISH	ENSG00000114737	53.52	0.57	0.17	3.44	5.83E-04	0.03516
PIK3R3	ENSG00000117461	47.85	0.82	0.24	3.44	5.86E-04	0.03516
NA	ENSG00000280228	31.63	-0.86	0.25	-3.44	5.87E-04	0.03516
CENPV	ENSG00000166582	41.20	0.76	0.22	3.43	5.93E-04	0.03526
PLD4	ENSG00000166428	67.56	0.82	0.24	3.43	5.96E-04	0.03526
GSTM2	ENSG00000213366	109.30	0.80	0.23	3.43	5.96E-04	0.03526
IER2	ENSG00000160888	3190.73	-0.64	0.19	-3.43	6.01E-04	0.03536
KLHL6	ENSG00000172578	754.37	0.57	0.17	3.43	6.04E-04	0.03543
FAM124B	ENSG00000124019	68.87	0.83	0.24	3.43	6.12E-04	0.03567
ACCS	ENSG00000110455	194.04	0.73	0.21	3.43	6.14E-04	0.03567
GBP4	ENSG00000162654	490.77	-0.70	0.20	-3.42	6.20E-04	0.03582
TMEM50B	ENSG00000142188	290.41	0.58	0.17	3.42	6.22E-04	0.03582
NA	ENSG00000254281	245.26	-0.83	0.24	-3.42	6.33E-04	0.03618
GPI	ENSG00000105220	474.35	0.78	0.23	3.42	6.34E-04	0.03618
CNR2	ENSG00000188822	500.61	0.76	0.22	3.42	6.36E-04	0.03618
KLF2	ENSG00000127528	2043.14	-0.55	0.16	-3.41	6.50E-04	0.03656
TSC22D1	ENSG00000102804	169.37	0.42	0.12	3.41	6.51E-04	0.03656
MAML2	ENSG00000184384	482.22	-0.64	0.19	-3.41	6.53E-04	0.03656
MYCT1	ENSG00000120279	86.71	0.81	0.24	3.41	6.54E-04	0.03656
GPR137B	ENSG00000077585	123.29	0.80	0.23	3.41	6.60E-04	0.03656
NDUFA4	ENSG00000189043	267.94	0.50	0.15	3.41	6.60E-04	0.03656
POLR2L	ENSG00000177700	23.84	0.65	0.19	3.40	6.63E-04	0.03656
NBPF11	ENSG00000263956	67.39	0.61	0.18	3.40	6.65E-04	0.03656
PAFAH2	ENSG00000158006	197.58	0.62	0.18	3.40	6.67E-04	0.03656

ITM2C	ENSG00000135916	179.84	0.81	0.24	3.40	6.78E-04	0.03659
NA	ENSG00000223960	9.48	-0.81	0.24	-3.40	6.80E-04	0.03659
HS3ST3B1	ENSG00000125430	59.14	-0.71	0.21	-3.40	6.85E-04	0.03659
ZNF34	ENSG00000196378	38.13	0.64	0.19	3.40	6.85E-04	0.03659
OBFC1	ENSG00000107960	273.90	0.40	0.12	3.39	6.88E-04	0.03659
TFEC	ENSG00000105967	71.55	-0.73	0.22	-3.39	6.92E-04	0.03659
PDGFD	ENSG00000170962	101.80	0.56	0.17	3.39	6.92E-04	0.03659
TRABD2A	ENSG00000186854	86.23	-0.80	0.24	-3.39	6.93E-04	0.03659
NA	ENSG00000272941	131.91	-0.54	0.16	-3.39	6.94E-04	0.03659
KIFAP3	ENSG00000075945	184.06	0.53	0.16	3.39	6.95E-04	0.03659
FIBP	ENSG00000172500	65.78	0.50	0.15	3.39	6.97E-04	0.03659
MFHAS1	ENSG00000147324	54.74	-0.66	0.20	-3.39	7.02E-04	0.03671
HSPD1P11	ENSG00000251348	23.29	0.89	0.26	3.39	7.10E-04	0.03698
GFOD1	ENSG00000145990	766.67	0.73	0.22	3.38	7.17E-04	0.03700
NA	ENSG00000225339	23.84	0.65	0.19	3.38	7.17E-04	0.03700
TMEM181	ENSG00000146433	462.66	0.56	0.17	3.38	7.19E-04	0.03700
EGR1	ENSG00000120738	2242.99	-0.77	0.23	-3.38	7.22E-04	0.03700
KDSR	ENSG00000119537	44.28	-0.64	0.19	-3.38	7.30E-04	0.03726
SMYD2	ENSG00000143499	113.70	0.52	0.15	3.38	7.34E-04	0.03733
LMLN	ENSG00000185621	22.28	0.68	0.20	3.37	7.45E-04	0.03778
TNIK	ENSG00000154310	507.12	0.68	0.20	3.37	7.51E-04	0.03794
SNX5	ENSG00000089006	308.94	0.59	0.18	3.37	7.55E-04	0.03801
SEMA3C	ENSG00000075223	121.89	-0.57	0.17	-3.37	7.64E-04	0.03829
CD3G	ENSG00000160654	95.92	-0.80	0.24	-3.36	7.76E-04	0.03874
MAP4K5	ENSG00000012983	553.89	0.65	0.19	3.36	7.80E-04	0.03878
OAS1	ENSG00000089127	282.55	-0.67	0.20	-3.36	7.82E-04	0.03878
BCL7C	ENSG00000099385	34.25	0.63	0.19	3.36	7.86E-04	0.03881
APOL3	ENSG00000128284	88.77	-0.76	0.23	-3.36	7.92E-04	0.03898

AGFG2	ENSG00000106351	37.83	0.70	0.21	3.35	8.12E-04	0.03972
SPINT2	ENSG00000167642	149.02	0.58	0.17	3.35	8.13E-04	0.03972
NA	ENSG00000214797	12.92	-0.77	0.23	-3.34	8.23E-04	0.04009
IKZF2	ENSG00000030419	1604.88	0.69	0.21	3.34	8.31E-04	0.04023
FAM69A	ENSG00000154511	17.50	-0.79	0.24	-3.34	8.32E-04	0.04023
ANKRD33B	ENSG00000164236	305.86	0.72	0.21	3.34	8.42E-04	0.04056
NA	ENSG00000251002	82.65	0.63	0.19	3.34	8.45E-04	0.04056
RAB29	ENSG00000117280	298.80	0.40	0.12	3.34	8.49E-04	0.04059
LRRRC8C	ENSG00000171488	135.39	-0.71	0.21	-3.33	8.59E-04	0.04091
SLC2A8	ENSG00000136856	10.12	0.84	0.25	3.33	8.65E-04	0.04091
SNORA65	ENSG00000201302	33.70	0.56	0.17	3.33	8.65E-04	0.04091
DAAM2	ENSG00000146122	84.10	-0.72	0.22	-3.33	8.75E-04	0.04124
BTN2A2	ENSG00000124508	153.01	-0.50	0.15	-3.33	8.79E-04	0.04129
CCDC149	ENSG00000181982	34.57	-0.65	0.19	-3.32	8.85E-04	0.04132
HES6	ENSG00000144485	12.04	0.83	0.25	3.32	8.86E-04	0.04132
ACTR8	ENSG00000113812	179.10	0.35	0.11	3.32	8.92E-04	0.04146
SFXN1	ENSG00000164466	191.22	0.55	0.16	3.32	8.95E-04	0.04146
NA	ENSG00000276568	13.59	0.84	0.25	3.32	8.99E-04	0.04146
GBP1	ENSG00000117228	1751.69	-0.70	0.21	-3.32	9.01E-04	0.04146
STAT1	ENSG00000115415	4670.78	-0.53	0.16	-3.32	9.16E-04	0.04200
DUSP1	ENSG00000120129	40402.89	-0.61	0.18	-3.31	9.22E-04	0.04214
GPRIN3	ENSG00000185477	209.01	-0.68	0.21	-3.31	9.36E-04	0.04225
CDK8	ENSG00000132964	112.53	0.37	0.11	3.31	9.37E-04	0.04225
LINC00539	ENSG00000224429	21.48	0.80	0.24	3.31	9.39E-04	0.04225
IAH1	ENSG00000134330	100.97	0.40	0.12	3.31	9.41E-04	0.04225
THBS4	ENSG00000113296	64.28	0.85	0.26	3.31	9.42E-04	0.04225
UBE2Q2	ENSG00000140367	289.09	0.46	0.14	3.31	9.43E-04	0.04225
L2HGDH	ENSG00000087299	28.79	0.76	0.23	3.30	9.55E-04	0.04265

NIPAL2	ENSG00000104361	157.82	0.71	0.21	3.30	9.62E-04	0.04272
WEE1	ENSG00000166483	118.28	0.67	0.20	3.30	9.63E-04	0.04272
CYP4F12	ENSG00000186204	150.99	0.66	0.20	3.30	9.72E-04	0.04286
FAM110A	ENSG00000125898	74.31	0.61	0.18	3.30	9.73E-04	0.04286
ARHGAP18	ENSG00000146376	250.18	0.50	0.15	3.30	9.81E-04	0.04307
SPATA9	ENSG00000145757	21.29	0.87	0.26	3.30	9.84E-04	0.04307
VIPAS39	ENSG00000151445	153.39	0.33	0.10	3.29	9.96E-04	0.04346
ANKRD6	ENSG00000135299	133.41	0.47	0.14	3.29	1.00E-03	0.04365
DMAP1	ENSG00000178028	92.37	0.40	0.12	3.29	1.01E-03	0.04372
BTBD19	ENSG00000222009	175.71	-0.74	0.23	-3.29	1.02E-03	0.04392
PTGS2	ENSG00000073756	49864.25	-0.75	0.23	-3.29	1.02E-03	0.04392
CHST12	ENSG00000136213	92.35	0.72	0.22	3.28	1.03E-03	0.04404
ALDH6A1	ENSG00000119711	274.89	0.72	0.22	3.28	1.03E-03	0.04411
NA	ENSG00000254826	152.12	-0.52	0.16	-3.28	1.04E-03	0.04412
RASGRF2	ENSG00000113319	53.15	-0.79	0.24	-3.28	1.04E-03	0.04412
TULP4	ENSG00000130338	106.35	-0.57	0.18	-3.28	1.04E-03	0.04430
SLC18A2	ENSG00000165646	49.35	0.66	0.20	3.28	1.05E-03	0.04437
RN7SL368P	ENSG00000239948	573.07	-0.67	0.20	-3.27	1.06E-03	0.04475
TSHZ2	ENSG00000182463	14.51	-0.83	0.25	-3.27	1.07E-03	0.04482
CS	ENSG00000062485	867.71	0.58	0.18	3.27	1.07E-03	0.04487
CLINT1	ENSG00000113282	1407.73	0.53	0.16	3.27	1.07E-03	0.04487
PMP22	ENSG00000109099	218.78	0.93	0.28	3.27	1.08E-03	0.04489
LPIN1	ENSG00000134324	263.46	0.62	0.19	3.27	1.09E-03	0.04492
LINC00426	ENSG00000238121	43.71	0.69	0.21	3.27	1.09E-03	0.04492
AFG3L1P	ENSG00000223959	83.26	0.46	0.14	3.26	1.10E-03	0.04492
MAP9	ENSG00000164114	13.16	-0.87	0.27	-3.26	1.10E-03	0.04492
POLR3C	ENSG00000186141	116.54	0.43	0.13	3.26	1.10E-03	0.04492
ELMOD3	ENSG00000115459	104.48	0.34	0.10	3.26	1.10E-03	0.04492

FMNL3	ENSG00000161791	278.48	0.61	0.19	3.26	1.11E-03	0.04492
LINC01366	ENSG00000235172	105.74	-0.76	0.23	-3.26	1.11E-03	0.04492
LINC00861	ENSG00000245164	76.22	-0.74	0.23	-3.26	1.11E-03	0.04492
HDAC9	ENSG00000048052	114.02	-0.63	0.19	-3.26	1.11E-03	0.04492
PLA2G4A	ENSG00000116711	139.06	0.65	0.20	3.26	1.12E-03	0.04498
CHRM3-AS2	ENSG00000233355	161.02	0.70	0.22	3.25	1.14E-03	0.04571
MYB	ENSG00000118513	177.26	0.56	0.17	3.25	1.15E-03	0.04617
INPP1	ENSG00000151689	148.25	0.67	0.21	3.25	1.16E-03	0.04617
NUP85	ENSG00000125450	107.47	0.38	0.12	3.25	1.16E-03	0.04617
ZSCAN9	ENSG00000137185	80.65	0.54	0.17	3.25	1.17E-03	0.04630
ALDH3A2	ENSG00000072210	146.32	0.54	0.17	3.24	1.18E-03	0.04630
IFIH1	ENSG00000115267	639.74	-0.60	0.18	-3.24	1.18E-03	0.04630
MCPH1	ENSG00000147316	320.22	0.58	0.18	3.24	1.18E-03	0.04630
SLC35D1	ENSG00000116704	312.74	0.62	0.19	3.24	1.18E-03	0.04630
HILPDA	ENSG00000135245	19.07	0.63	0.20	3.24	1.19E-03	0.04648
CA8	ENSG00000178538	29.88	0.70	0.22	3.24	1.20E-03	0.04682
PRKAB2	ENSG00000131791	160.51	0.55	0.17	3.24	1.21E-03	0.04683
TM7SF3	ENSG00000064115	243.19	0.41	0.13	3.24	1.21E-03	0.04683
ZSCAN29	ENSG00000140265	495.40	0.54	0.17	3.23	1.22E-03	0.04683
RPS6KA2	ENSG00000071242	171.00	0.77	0.24	3.23	1.22E-03	0.04683
PPOX	ENSG00000143224	28.58	0.62	0.19	3.23	1.22E-03	0.04683
P2RY14	ENSG00000174944	1058.94	0.69	0.21	3.23	1.23E-03	0.04683
NUP93	ENSG00000102900	327.28	0.57	0.18	3.23	1.23E-03	0.04683
IL15	ENSG00000164136	27.77	-0.71	0.22	-3.23	1.23E-03	0.04683
CYSLTR2	ENSG00000152207	1365.04	0.78	0.24	3.23	1.24E-03	0.04692
CNKSR3	ENSG00000153721	43.07	0.86	0.27	3.23	1.24E-03	0.04692
FAM136A	ENSG00000035141	81.80	0.40	0.12	3.23	1.25E-03	0.04727
PIK3R6	ENSG00000276231	395.05	0.80	0.25	3.22	1.27E-03	0.04759



SRGAP2C	ENSG00000171943	90.01	-0.45	0.14	-3.22	1.27E-03	0.04759
NA	ENSG00000238142	30.25	0.73	0.23	3.22	1.27E-03	0.04759
ADORA2A-AS1	ENSG00000178803	106.66	-0.75	0.23	-3.22	1.28E-03	0.04759
VAMP1	ENSG00000139190	228.57	0.47	0.14	3.22	1.28E-03	0.04759
MGAT4B	ENSG00000161013	163.72	0.60	0.19	3.22	1.28E-03	0.04759
BCL11B	ENSG00000127152	201.30	-0.76	0.24	-3.22	1.29E-03	0.04774
AAED1	ENSG00000158122	120.97	0.57	0.18	3.22	1.29E-03	0.04774
OLIG1	ENSG00000184221	109.22	0.80	0.25	3.21	1.31E-03	0.04815
RAD18	ENSG00000070950	186.11	0.53	0.17	3.21	1.31E-03	0.04821
LINC00528	ENSG00000269220	579.39	-0.69	0.21	-3.21	1.32E-03	0.04825
GSDMB	ENSG00000073605	172.88	0.66	0.20	3.21	1.33E-03	0.04844
RTKN2	ENSG00000182010	22.30	-0.79	0.25	-3.21	1.33E-03	0.04844
OBSCN	ENSG00000154358	26.72	-0.78	0.24	-3.20	1.36E-03	0.04927
PPARA	ENSG00000186951	353.62	0.70	0.22	3.20	1.37E-03	0.04947
EXT2	ENSG00000151348	210.66	0.51	0.16	3.20	1.37E-03	0.04947
GFI1B	ENSG00000165702	102.21	0.78	0.24	3.20	1.37E-03	0.04947
YES1	ENSG00000176105	156.77	0.68	0.21	3.20	1.38E-03	0.04966
NT5E	ENSG00000135318	22.71	-0.80	0.25	-3.20	1.39E-03	0.04988
C1orf162	ENSG00000143110	699.85	0.39	0.12	3.20	1.40E-03	0.04988
SLC10A7	ENSG00000120519	87.94	0.55	0.17	3.20	1.40E-03	0.04988
ARID5B	ENSG00000150347	189.93	-0.60	0.19	-3.19	1.40E-03	0.04997

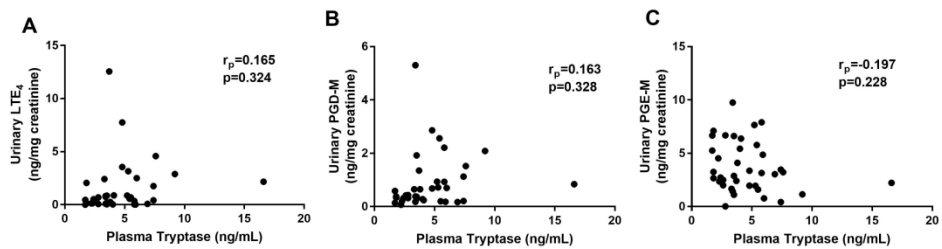
**Supplemental Figure Legends:**

**Supplemental Figure 1: Plasma tryptase does not correlate with urinary eicosanoids in subjects with AERD on high-dose aspirin.**

**A)** Plasma total tryptase correlation (Pearson) with urinary leukotriene (LT)<sub>4</sub> on high-dose aspirin in subjects with AERD.

**B)** Plasma tryptase correlation (Pearson) with urinary prostaglandin D metabolite (PGD-M) on high-dose aspirin in subjects with AERD.

**C)** Plasma tryptase correlation (Pearson) with urinary prostaglandin E metabolite (PGE-M) on high-dose aspirin in subjects with AERD.



Supplemental Figure 1: Plasma tryptase does not correlate with urinary eicosanoids in subjects with AERD on high-dose aspirin. A) Plasma total tryptase correlation (Pearson) with urinary leukotriene (LT)E<sub>4</sub> on high-dose aspirin in subjects with AERD. B) Plasma tryptase correlation (Pearson) with urinary prostaglandin D metabolite (PGD-M) on high-dose aspirin in subjects with AERD. C) Plasma tryptase correlation (Pearson) with urinary prostaglandin E metabolite (PGE-M) on high-dose aspirin in subjects with AERD.

267x213mm (300 x 300 DPI)