SUPPLEMENTAL INFORMATION

Sex Differences in Thrombosis in Mice are Mediated by Sex-Specific Growth Hormone Secretion Patterns

Joshua H. Wong, B.S., M.S.^{1,3}, Jonathan Dukes, M.D.^{1,4}, Robert E. Levy, B.S.^{1,5}, Brandon Sos, B.S.¹, Sara E. Mason^{1,6}, Tina S. Fong, B.S¹., and Ethan J. Weiss, M.D.^{1,2}. ¹Cardiovascular Research Institute, ²Department of Medicine – Division of Cardiology UCSF, San Francisco, CA, United States, 94143-0124, ³Rosalind Franklin University of Medicine and Science, Chicago Medical School, North Chicago, IL, ⁴Department of Medicine, The Johns Hopkins Hospital, Baltimore, MD, ⁵Jefferson Medical College, Philadelphia, PA, ⁶Vassar College, Poughkeepsie, NY.

Supplemental Figures

Supplemental Figure S1. Comparison of *wild-type* and $Lit^{m/+}$ mice in pulmonary embolism model



Male and female WT and $\text{Lit}^{m/+}$ mice were injected with $2\mu l/g$ of a 1:160 dilution of thromboplastin in the *in vivo* model of pulmonary embolism. Percent survival is shown demonstrating no difference in lethality in WT and mice carrying one copy of the *little* mutation.

Supplemental Figure S2. APC ratio in wild-type mice treated with one week of cGH or pGH



The raw aPTT plus APC was divided by the aPTT minus APC to generate an APC ratio for each group. The APC ratio was significantly higher in female -cGH (a) or -*pGH* (b) versus male control animals. The APC ratio was significantly increased in male animals +*cGH* relative to male animals –cGH while the APC ratio was significantly decreased in female animals + pGH versus -pGH (**P<0.01, *** P<0.001 ANOVA with Bonferroni post-test).

Supplemental Tables

Strain	Treatment	Sex	Mean GH	Standard
			ng/ml	Deviation
WT	-	М	4.5	0.353553
WT	-	F	4	0.707107
Lit ^{m/+}	-	М	4.5	1.06066
Lit ^{m/+}	-	F	4.5	0.353553
Lit ^{m/m}	-	М	<2	-
Lit ^{m/m}	-	F	<2	-
Lit ^{m/m}	+pGH	М	206	70.71068
Lit ^{m/m}	+pGH	F	155	12.72792
Lit ^{m/m}	+cGH	М	23.5	1.767767
Lit ^{m/m}	+cGH	F	16.5	3.181981
WT	+pGH	М	185.5	32.88047
WT	+pGH	F	182	50.91169
WT	+cGH	М	13	7.778175
WT	+cGH	F	32	1.414214

Supplemental Table S1. Growth Hormone concentrations in groups of mice used in the study

Mouse blood was obtained by retro-orbital puncture and serum was prepared. Mouse GH was measured by RIA by the laboratory of Dr. A. Parlow at UCLA. Two mice from each group were measure, and the mean GH levels for each group are reported. Blood was drawn on the morning of the 7th day of the one week GH treatment. Untreated mice were bled at the same time of day and were of similar age and weight as the treated animals. For pGH treated animals, blood was drawn exactly 15 minutes after injection with the final GH dose on day 7.