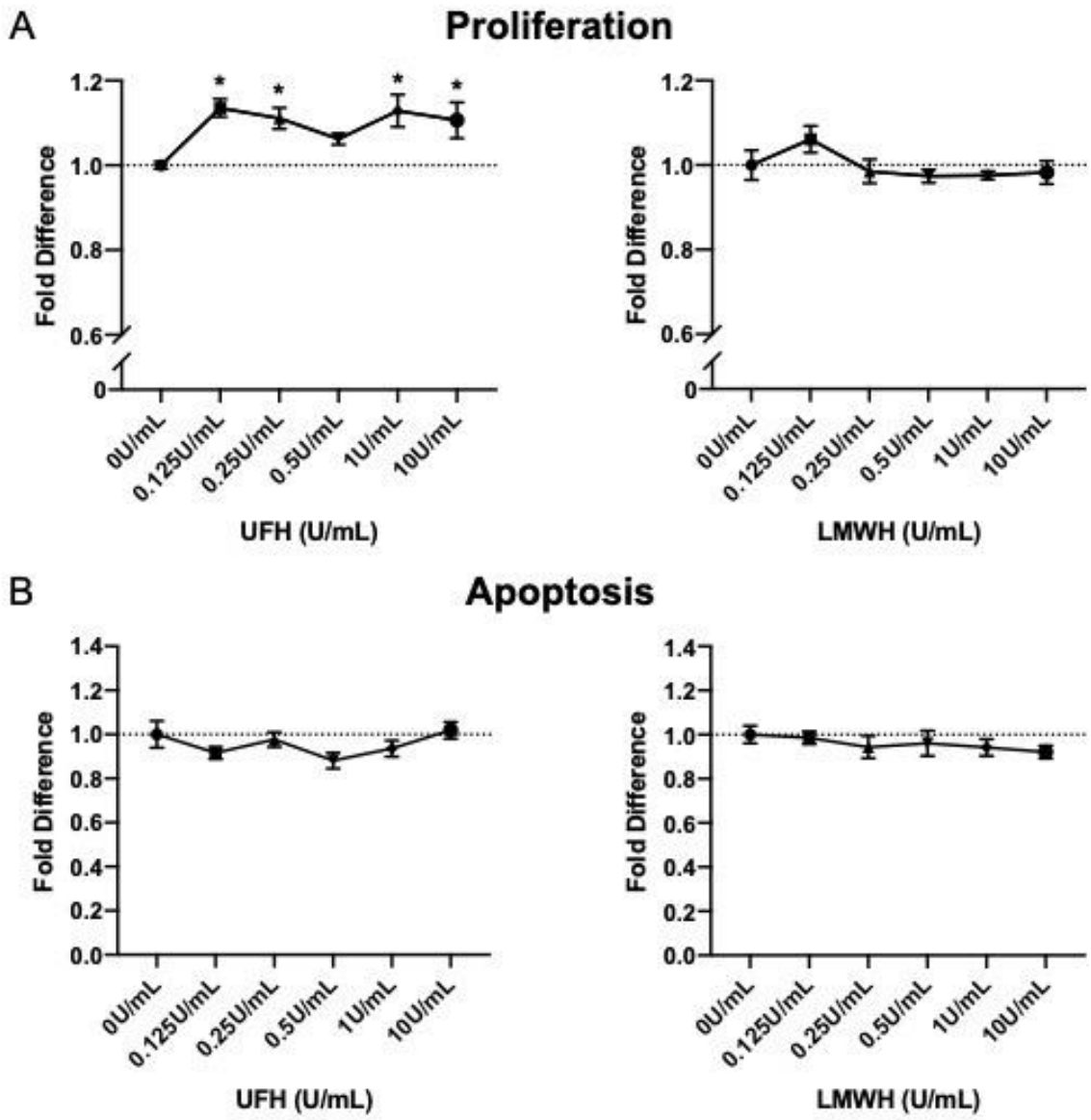
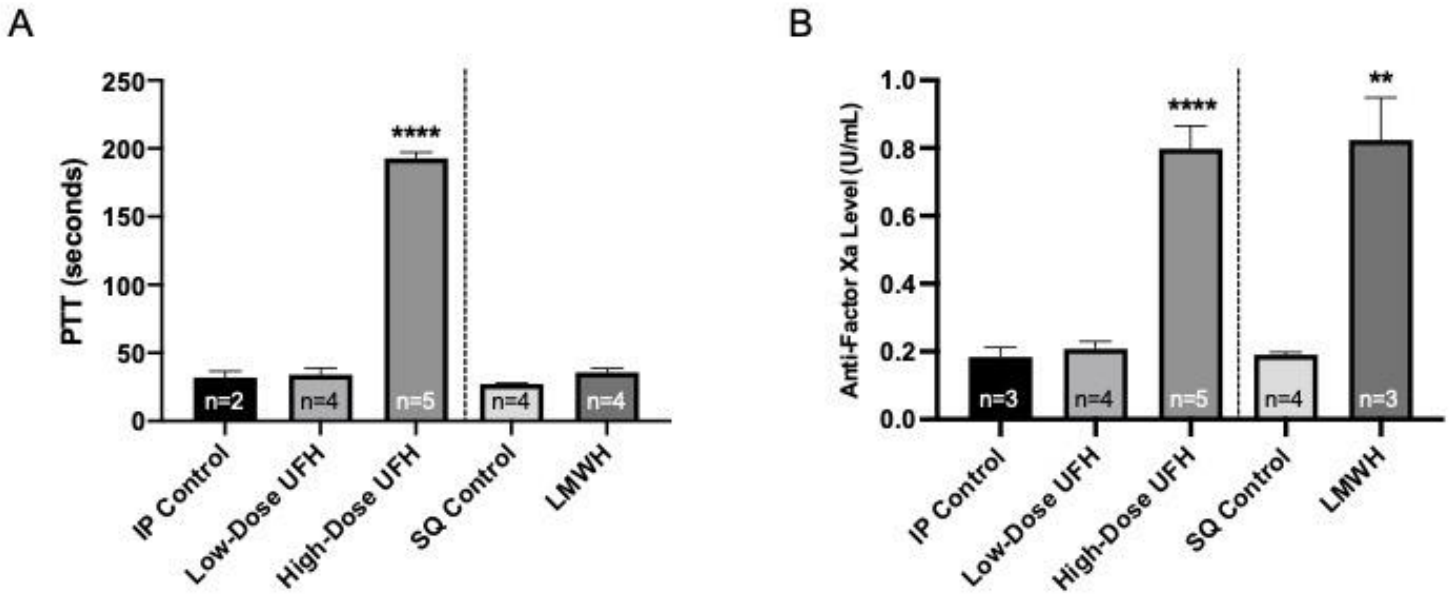


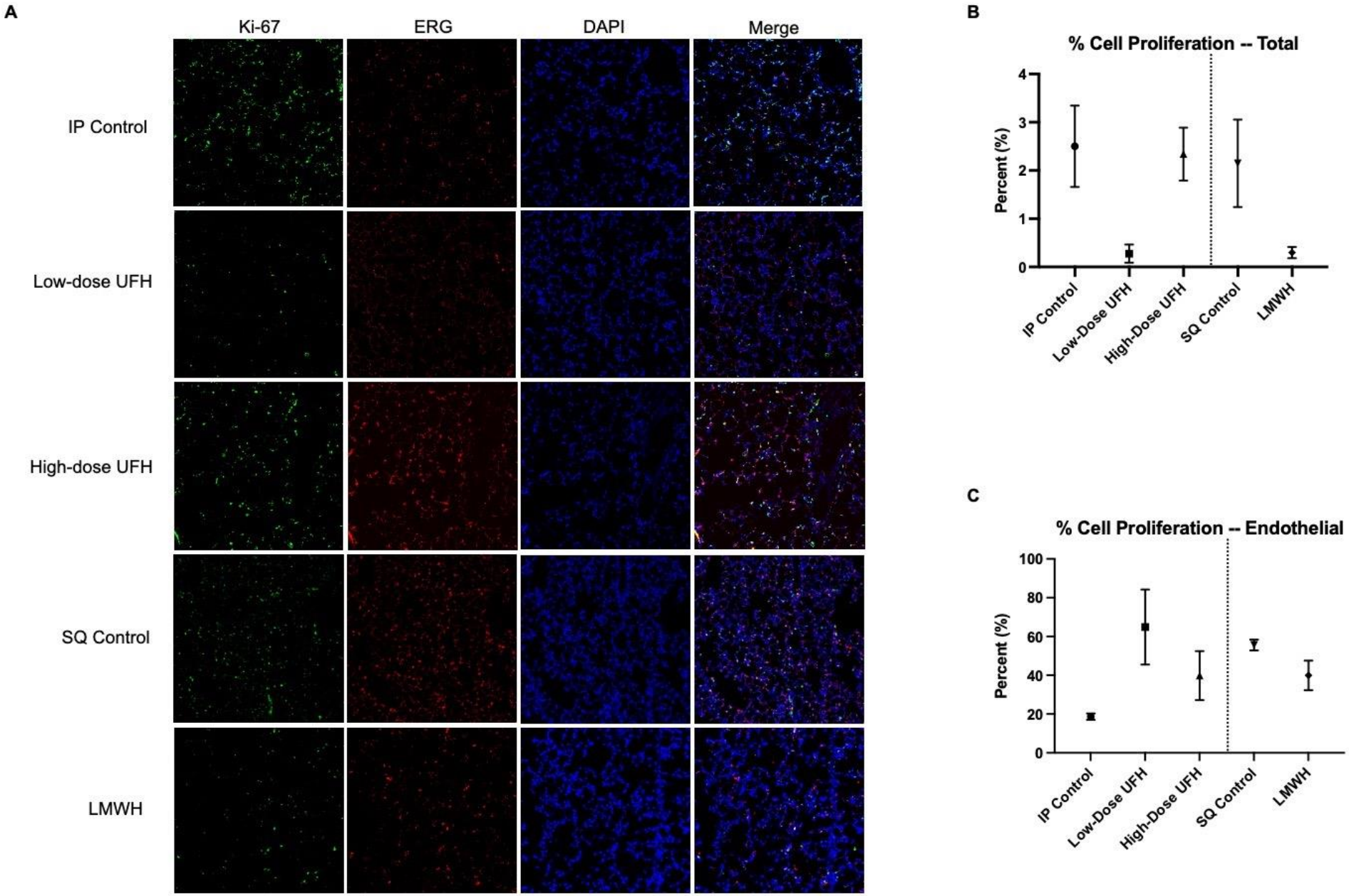
Supplemental Figure 1. The effects of unfractionated and low molecular weight heparin on cell proliferation are endothelial cell specific.

Human pulmonary alveolar cells (HPAEC) treated with increasing doses of UFH demonstrate increase in cell proliferation **(A)**, without significant changes in apoptosis **(B)**. Similarly, HPAEC treated with LMWH did not display significant changes in proliferation **(A)** or apoptosis **(B)**. Statistical analysis of cell proliferation and apoptosis was performed by ANOVA with Holm-Sidak correction for multiple comparisons. Results are expressed as mean ± SE. *P<0.05.

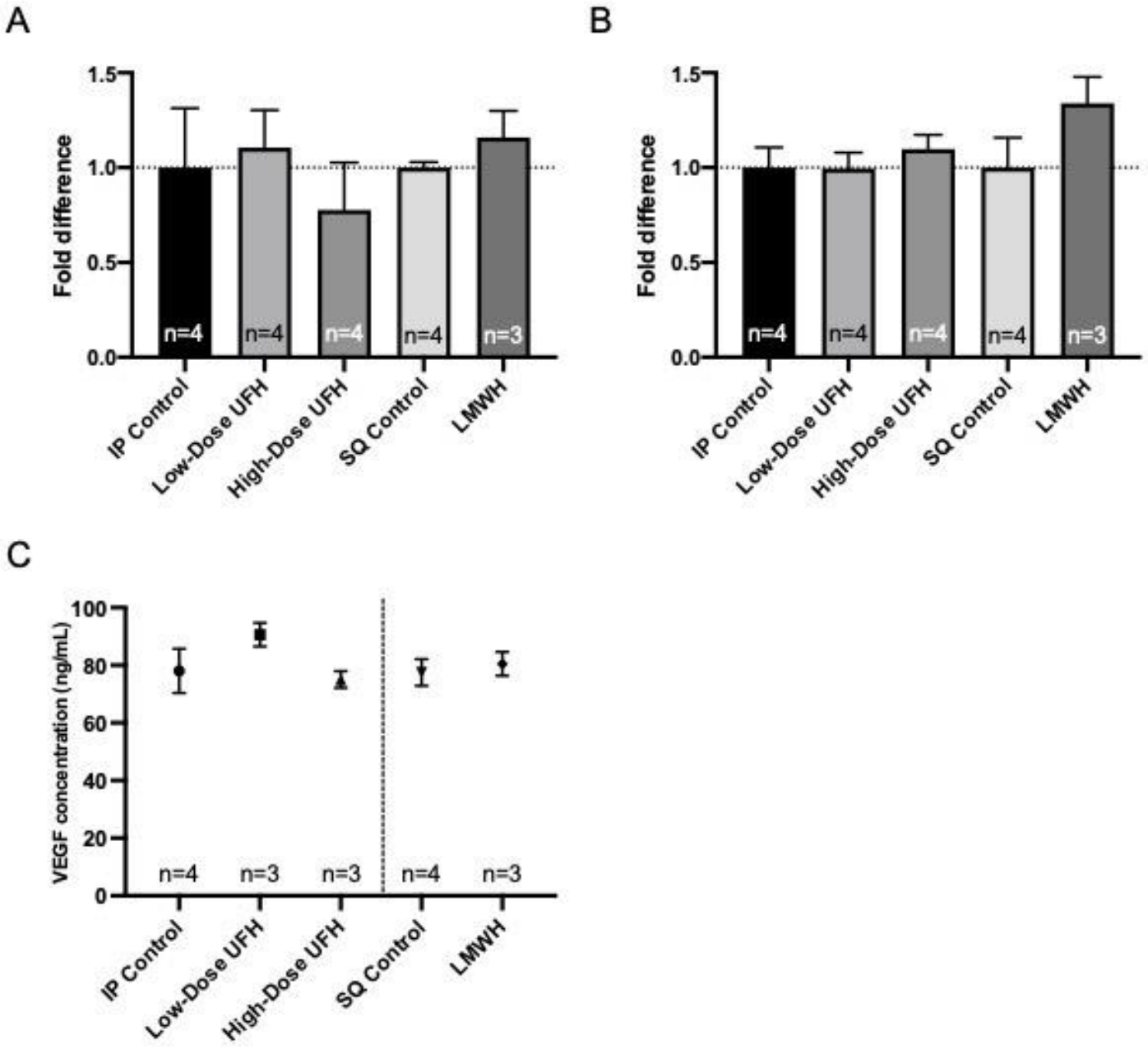


Supplemental Figure 2. High-dose UFH and LMWH achieve therapeutic anticoagulation.

High-dose UFH significantly elevates PTT over control while low-dose UFH does not **(A)**. High-dose UFH and LMWH significantly increase anti-factor Xa level over control, while low-dose UFH does not **(B)**. Normal PTT range (25.0-37.0), normal anti-factor Xa range (0.30-0.70). Statistical analysis of PTT and anti-factor Xa level was performed by ANOVA with Holm-Sidak correction for multiple comparisons for IP treatments, or by student's t- test for SQ treatments. Results are expressed as mean ± SE. *P<0.05, **P<0.01, ***P<0.001, ****P<0.0001.



Supplemental Figure 3. Anticoagulation with UFH or LMWH may affect endothelial-specific lung proliferation in CLG.
Representative micrographs at x200 magnification of immunofluorescence-stained lung tissue with Ki-67 (green), ERG (red), and nuclear DAPI (blue) at POD8 after L pneumonectomy **(A)** demonstrated low levels of cell proliferation overall, with decreased total cell proliferation in the low-dose UFH and LMWH-treated lung tissue compared to their respective controls, although not statistically significant **(B)**. However, of the cells that were proliferating, an increased percentage were endothelial cells in samples treated with low- or high—dose UFH, although not statistically significant **(C)**. Statistical analysis of immunofluorescence co-staining quantification was performed by ANOVA with Holm-Sidak correction for multiple comparisons for IP treatments, or by student's t- test for SQ treatments. Results are expressed as mean ± SE. N=3 per group.



Supplemental Figure 4. Anticoagulation with UFH or LMWH does not affect pulmonary VEGF or EGF gene expression or circulating VEGF levels.
Despite increases in VEGF protein expression and phosphorylated EGFR observed on POD 8 in lung tissue treated with UFH or LMWH, anticoagulation did not influence mRNA expression of either VEGF **(A)** or EGF **(B)** in the lung. Circulating VEGF was not affected by anticoagulation **(C)**. Statistical analysis of gene expression and protein level was performed by ANOVA with Holm-Sidak correction for multiple comparisons for IP treatments, or by student's t-test for SQ treatments. Results are expressed as mean ± SE.