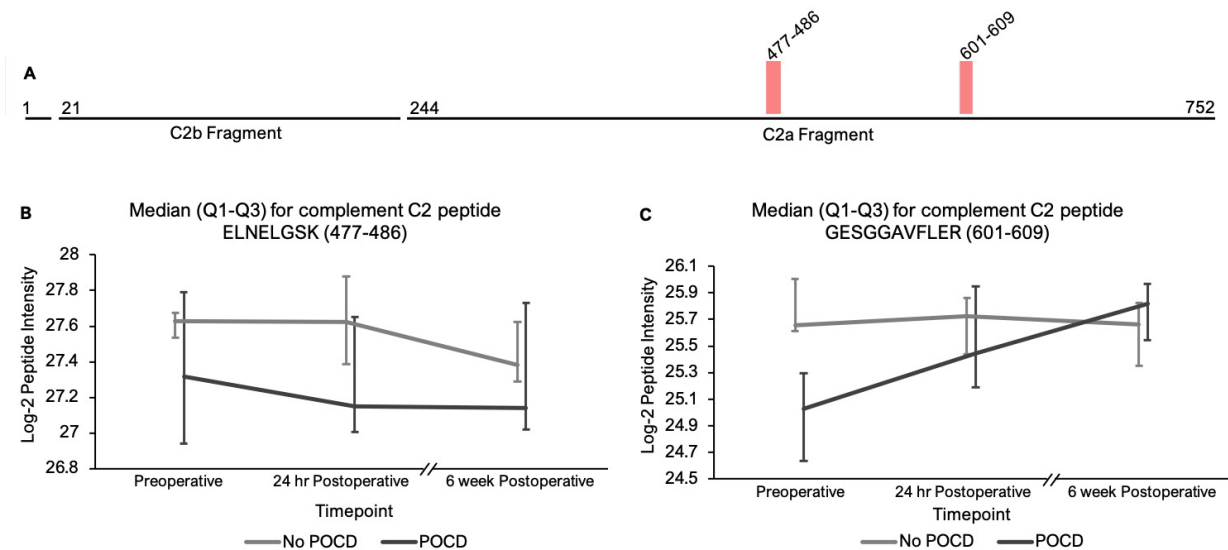


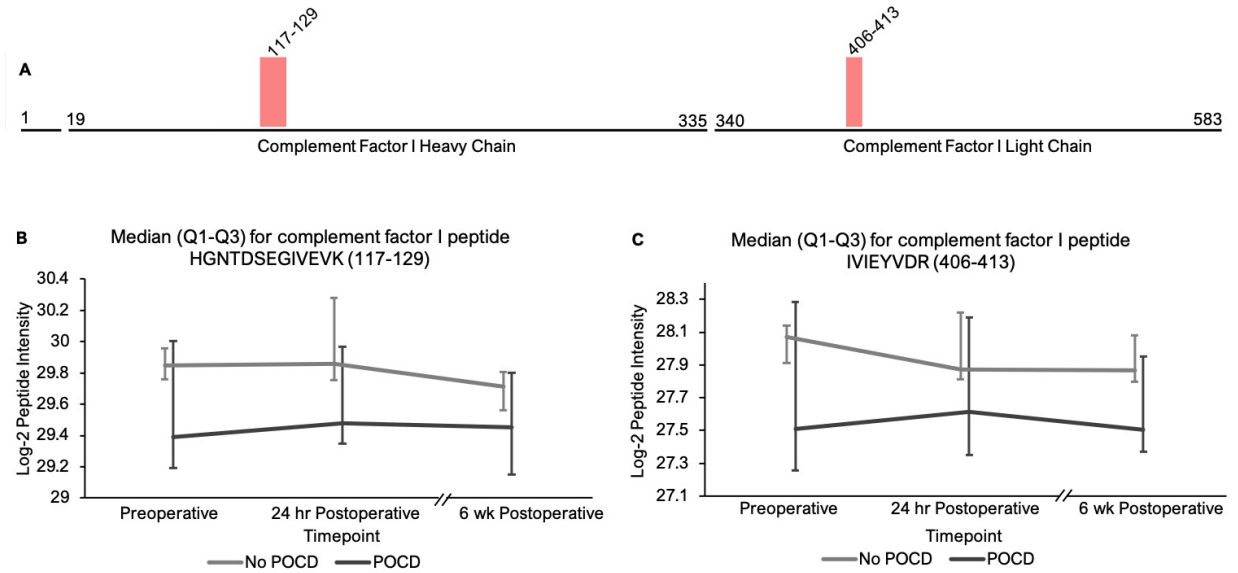
Supplementary Material

Cerebrospinal Fluid Proteome Changes in Older Non-Cardiac Surgical Patients with Postoperative Cognitive Dysfunction

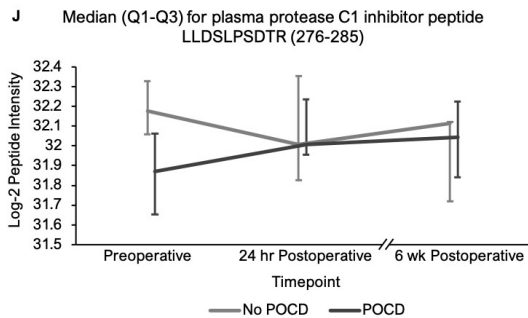
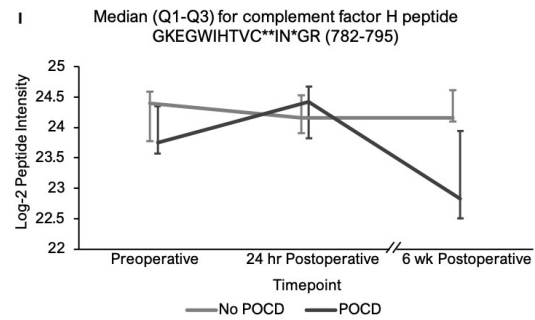
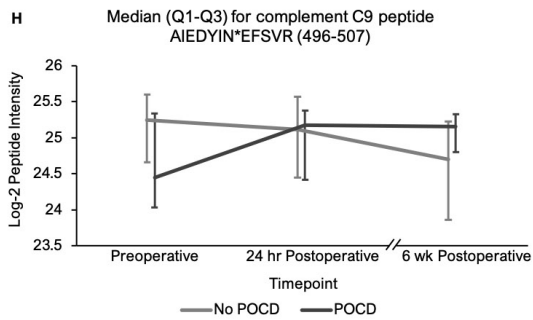
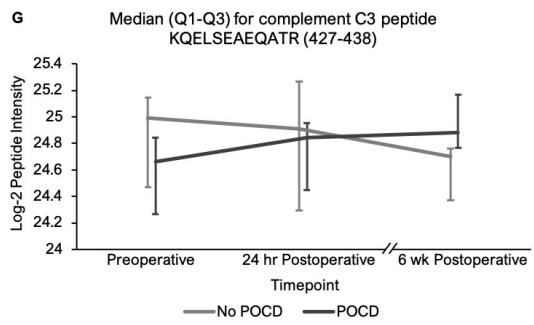
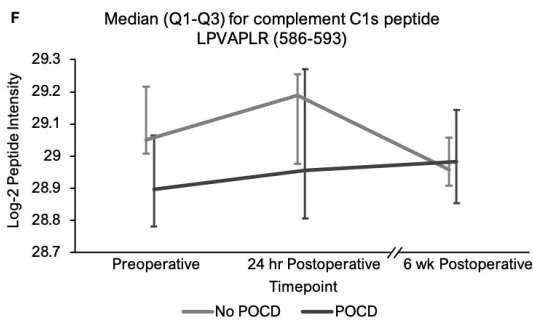
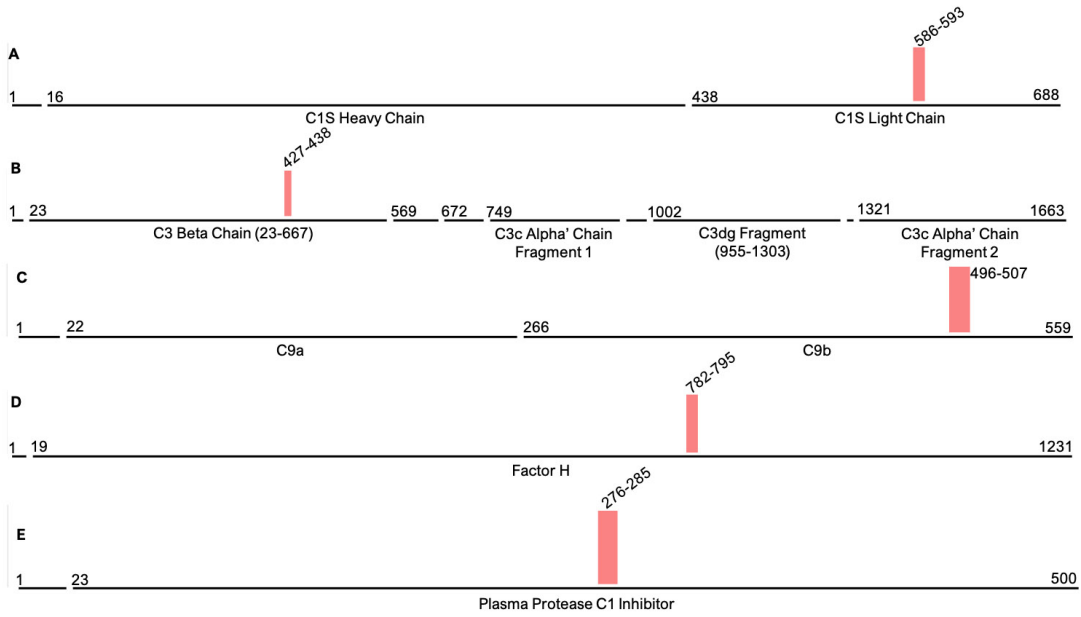
Supplementary Figure 1. Complement C2b peptide locations and intensity trends. A) A map of complement C2 showing the locations of its two peptides with $q < 0.25$ in the linear mixed model, which are both derived from its C2a fragment. B,C) Graphs comparing median complement C2 peptide intensities between POCD and non-POCD groups across all three time points. Vertical bars represent interquartile range.



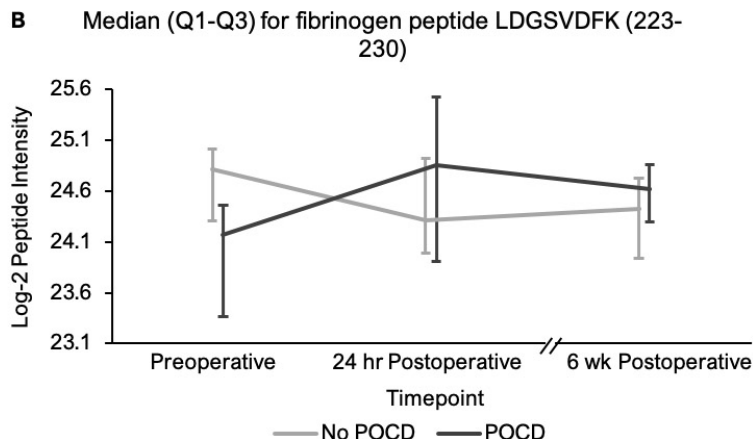
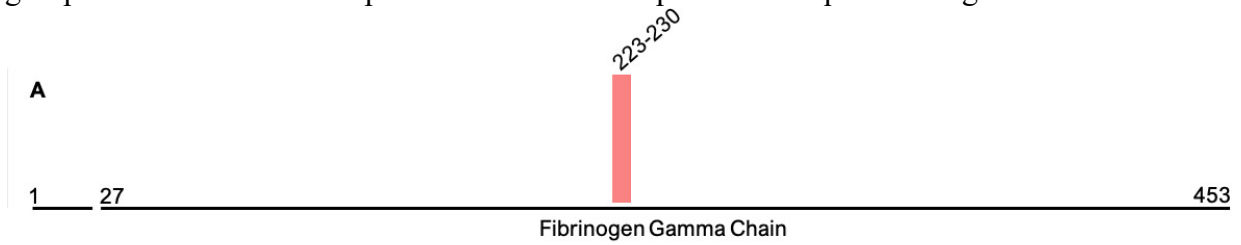
Supplementary Figure 2. Complement factor I peptide locations and intensity trends. A) A map of complement factor I indicating the locations of its two peptides at $q < 0.25$ in the linear mixed model. One peptide is derived from its heavy chain, and one from its light chain. B,C) Graphs comparing median complement factor I peptide intensities between POCD and non-POCD groups across all three time points. Vertical bars represent interquartile range.



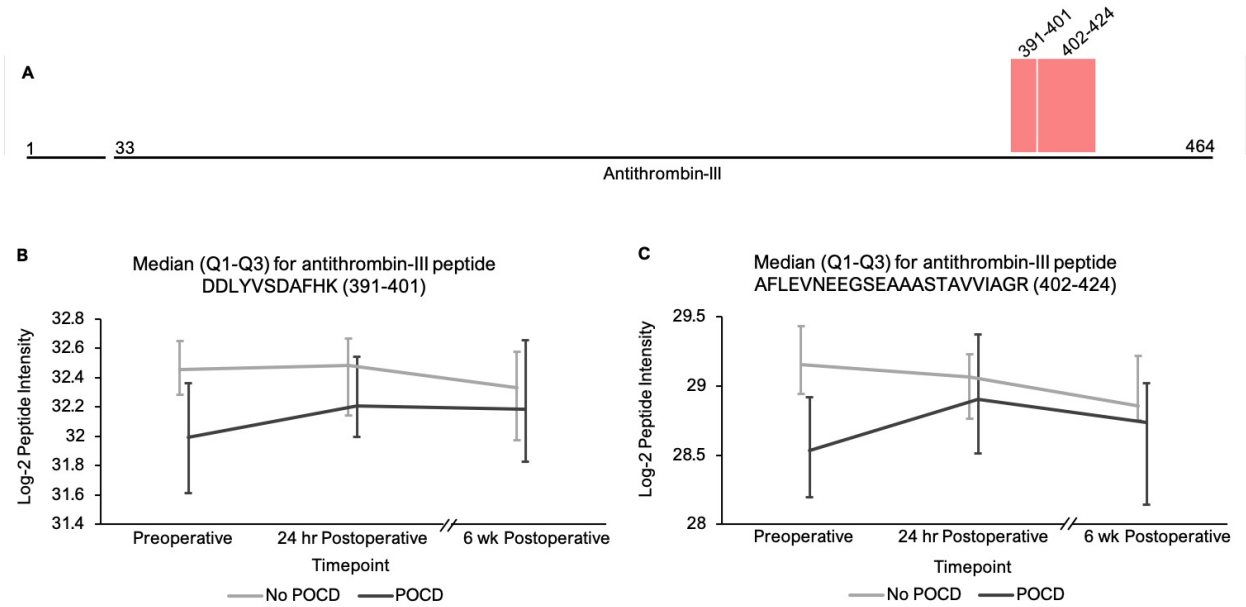
Supplementary Figure 3. Complement C1s, C3, C9, factor H, and plasma protease C1 inhibitor peptide locations and intensity trends. A) Maps of the complement proteins that contained only one peptide with with $q < 0.25$ each: Complement C1s, C3, C9, factor H, and Plasma Protease C1 inhibitor. B-J) Graphs comparing the median intensities of each peptide between POCD and non-POCD groups across all three time points. Vertical bars represent interquartile range. Post-translational modifications: *Deamidation, **Carbamidomethylation, ***Oxidation



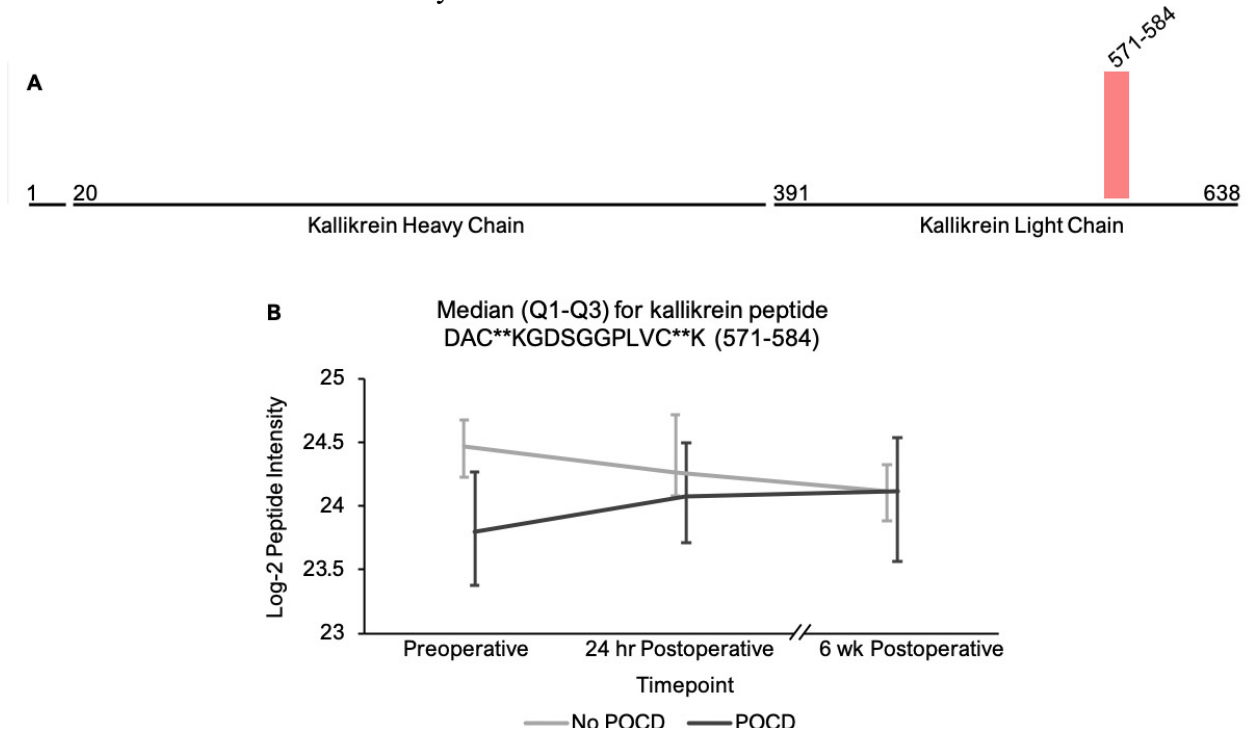
Supplementary Figure 4. Fibrinogen peptide locations and intensity trends. A) A map of the fibrinogen protein indicating the location of its peptide with $q < 0.25$ in the linear mixed model. B) A graph comparing median fibrinogen peptide intensities between POCD and non-POCD groups across all three time points. Vertical bars represent interquartile range.



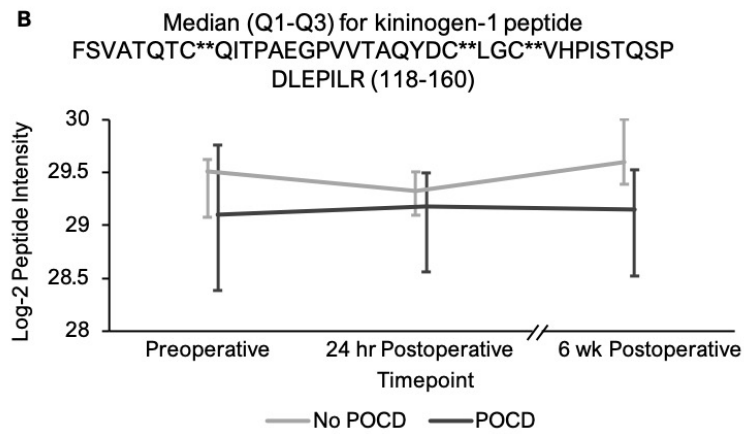
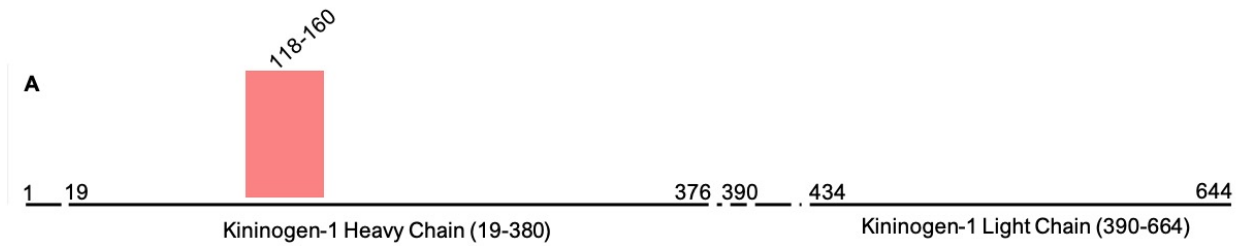
Supplementary Figure 5. Antithrombin-III peptide locations and intensity trends. A) A map of the antithrombin-III protein indicating the locations of its two peptides with $q < 0.25$ in the linear mixed model. B,C) Graphs comparing the median intensities of antithrombin-III peptides between POCD and non-POCD groups across all three time points. Vertical bars represent interquartile range.



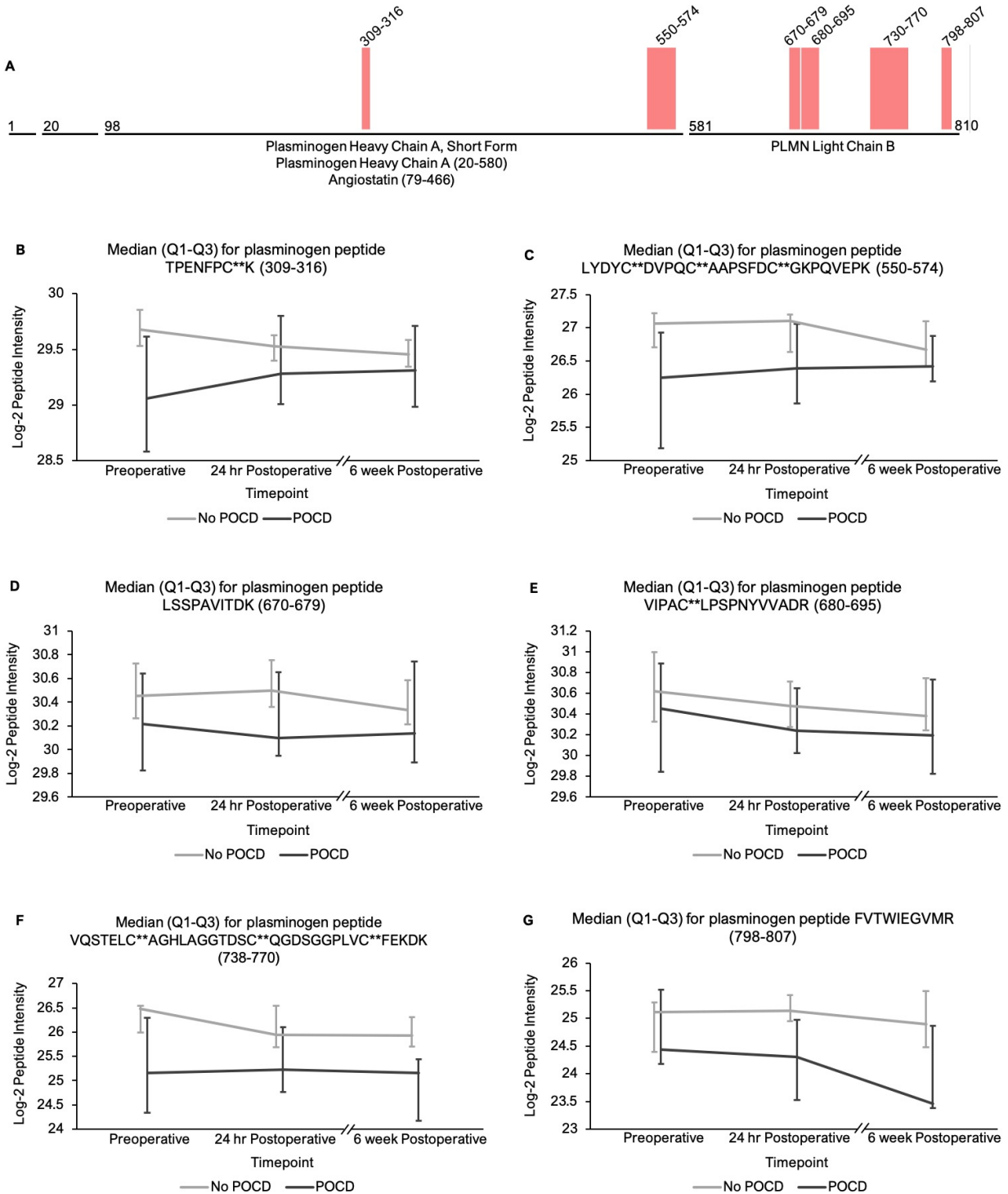
Supplementary Figure 6. Kallikrein peptide locations and intensity trends. A) A map of kallikrein indicating the location of its peptide with $q < 0.25$ in the linear mixed model. B) A graph comparing the intensities of this antithrombin-III peptide between POCD and non-POCD groups across all three time points. Vertical bars represent interquartile range. Post-translational modifications: **Carbamidomethylation



Supplementary Figure 7. Kininogen-1 peptide locations and intensity trends. A) A map of kininogen-1 indicating the locations of its peptide with with $q < 0.25$ in the linear mixed model. B) Graphs comparing the median intensities of this kininogen peptide between POCD and non-POCD groups across all three time points. Vertical bars represent interquartile range. Post-translational modifications: **Carbamidomethylation

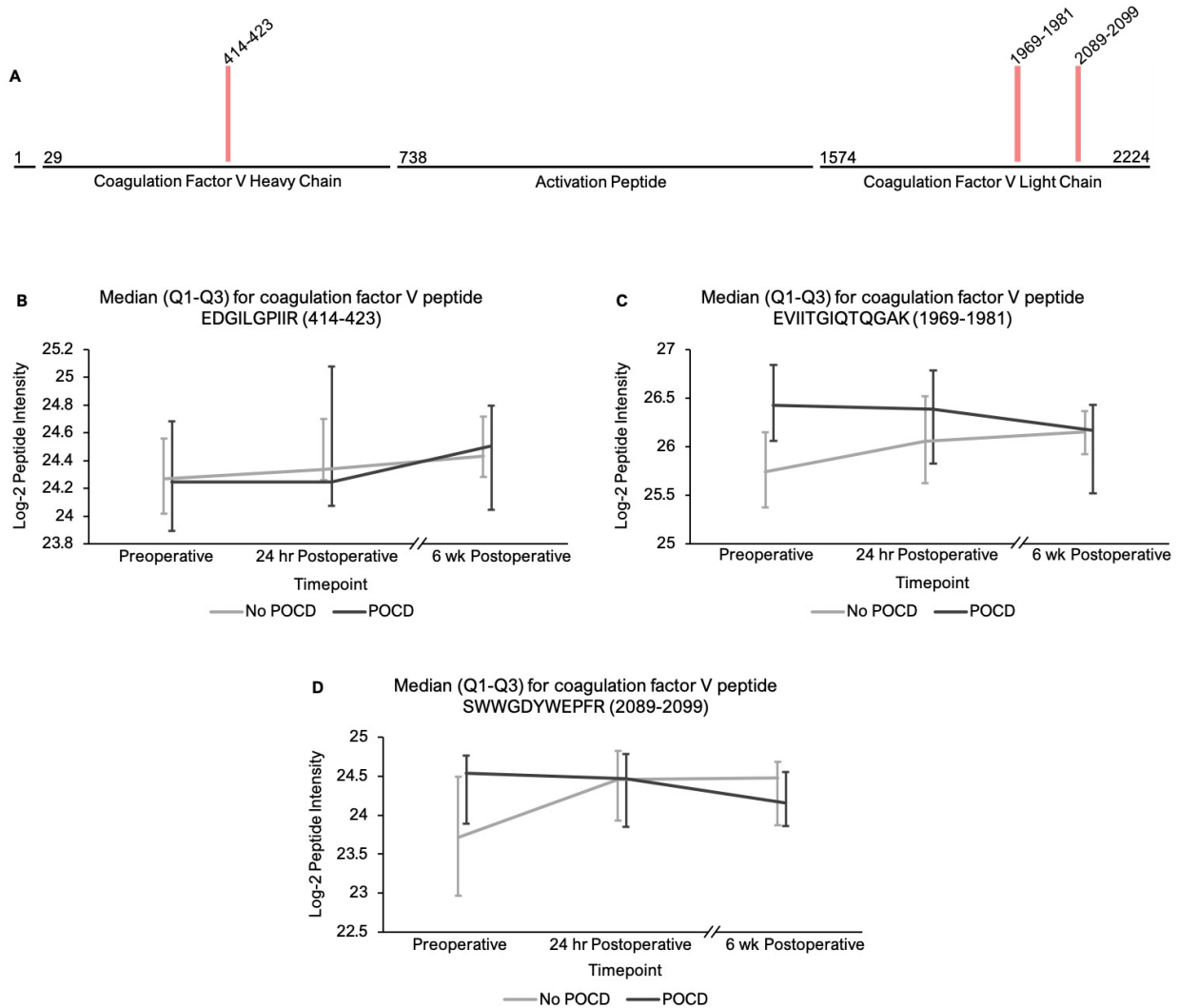


Supplementary Figure 8. Plasminogen Peptide Locations and Intensity Trends. A) A map of the plasminogen protein indicating the locations of its six peptides with $q < 0.25$ in the linear mixed model. Two significant peptides were located on the plasminogen heavy chain and four were located on the light chain. B-G) Graphs comparing the median intensities of kininogen significant peptides between POCD and non-POCD groups across all three time points. Vertical bars represent interquartile range. Post-translational modifications: **Carbamidomethylation



Supplementary Figure 9. Coagulation Factor V Peptide Locations and Intensity Trends. A)

A map of coagulation factor V indicating the locations of its three peptides with with $q < 0.25$ in the linear mixed model. One significant peptide was derived from its heavy chain, and two were found within its light chain. B-D) Graphs comparing median complement factor I peptide intensities between POCD and non-POCD groups across all three time points. Vertical bars represent interquartile range.



Supplementary Table 1. All peptides with $q < 0.25$ for time-group interaction at six weeks in the linear mixed model. A list of the 283 peptides with $q < 0.25$ in the linear mixed model along with their parent proteins, sequences, positions, and q-values. Post-translational modifications: *Deamidation, **Carbamidomethylation, ***Oxidation

See the Excel file.