

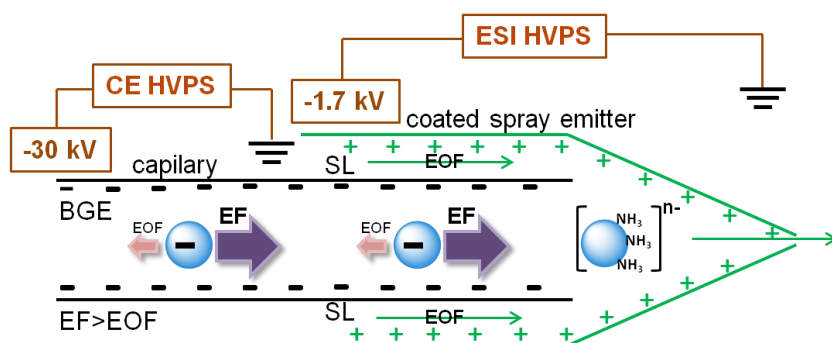
Analytical and Bioanalytical Chemistry

Electronic Supplementary Material

Analysis of heparin oligosaccharides by capillary electrophoresis- negative-ion electrospray ionization mass spectrometry

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Negative mode CE-MS



HVPS: high voltage power supply
 EF: electrophoretic force EOF: electro-osmotic flow

- Bare capillary
- Spray emitter: coated borosilicate glass
- Background electrolyte (BGE) & sheath liquid (SL):
 10 mM ammonium acetate in 80% aqueous methanol
- In high organic solvent, EF > EOF

Fig. S1 Schematic representation of negative mode CE-MS system



Fig. S2 Photograph of the electrospray taken by a microscope camera

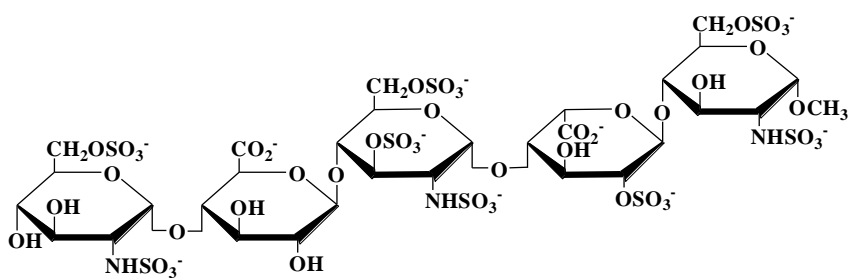
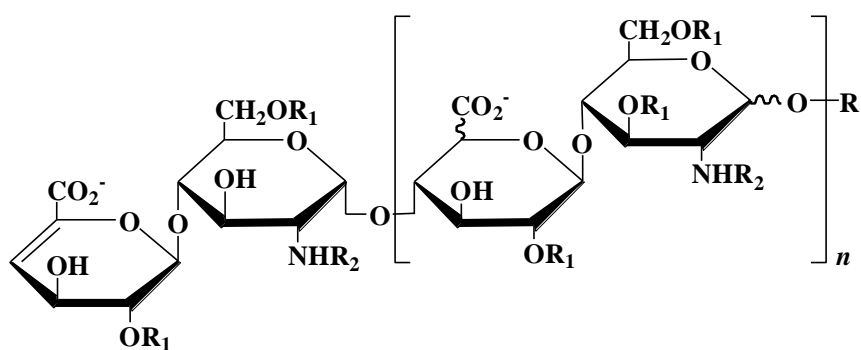


Fig. S3 The structure of Arixtra®



R	 ($n=0$ to 20)	H ($n=1$ to 21)
R ₁	H or SO ₃ ⁻	
R ₂	SO ₃ ⁻ or COCH ₃	

Fig. S4 The generalized structure of Lovenox®

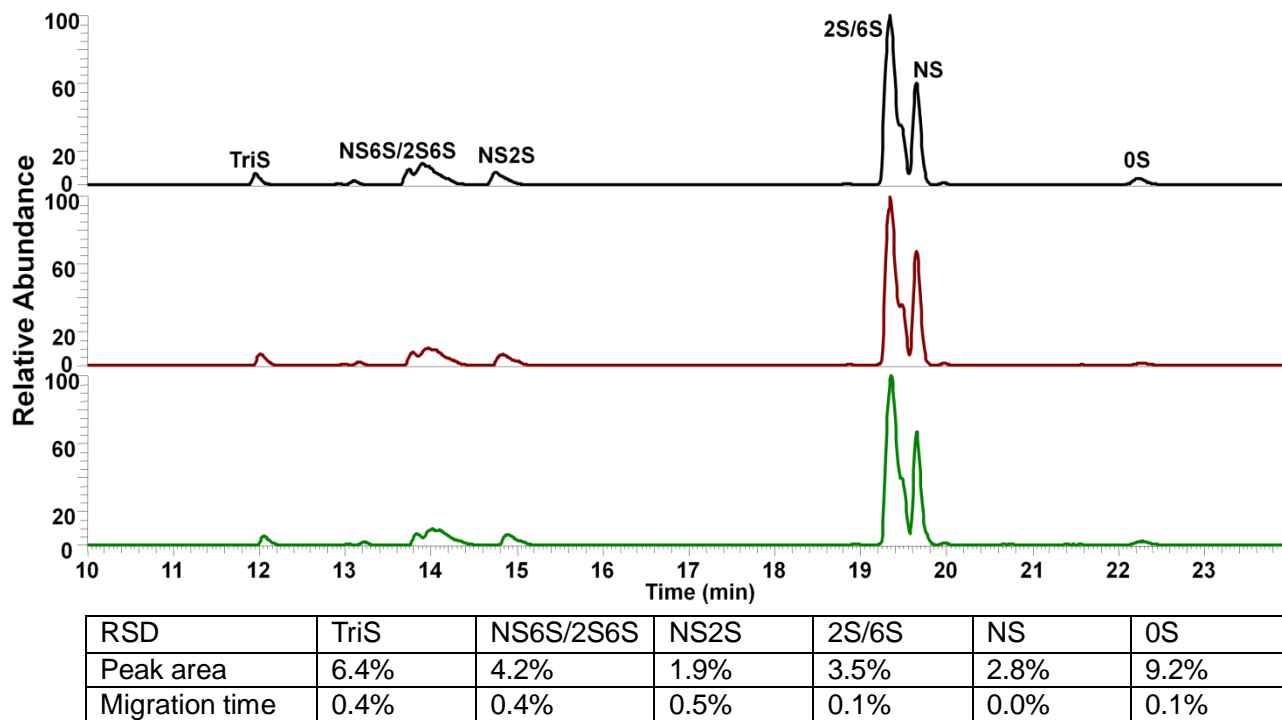


Fig. S5 Reproducibility test of 8 disaccharide standards

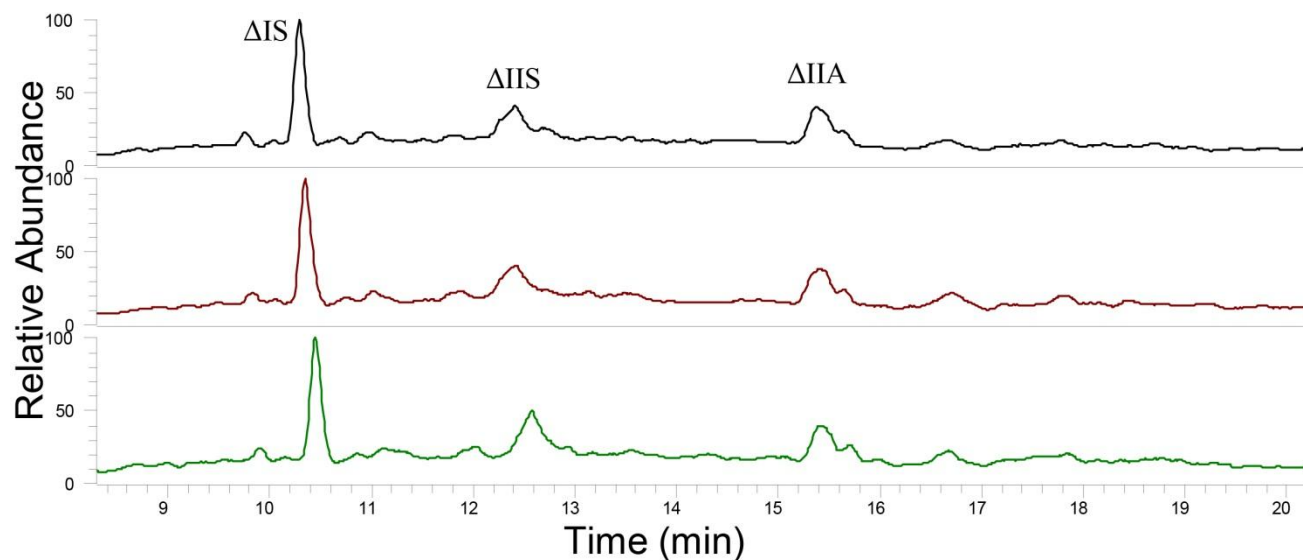


Fig. S6 Reproducibility test of CE-MS for LMWH digestion (Lovenox®)

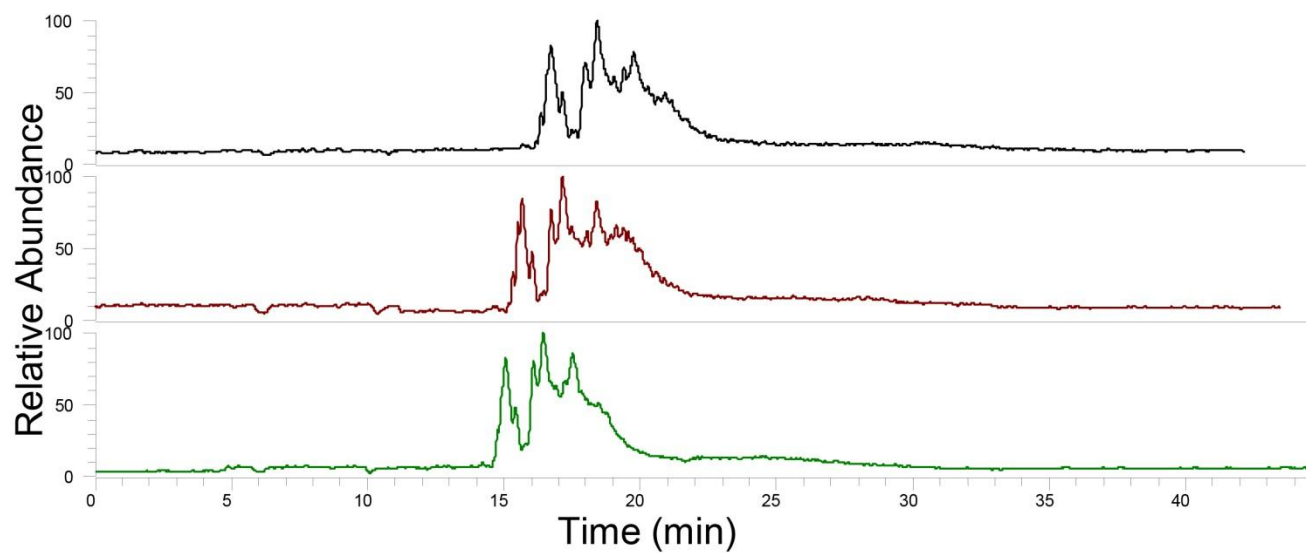


Fig. S7 Reproducibility test of CE-MS for LMWH intact chains (Lovenox®)