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(54) Title: METHODS FOR IMPROVING THE DESIGN, BIOAVAILABILITY, AND EFFICACY OF DIRECTED SEQUENCE POLYMER COMPOSITIONS VIA SERUM PROTEIN-BASED DETECTION OF DIRECTED SEQUENCE POLYMER COMPOSITIONS

(57) Abstract: There exist in the art methods of detecting simple peptides. However, methods to determine the effective plasma concentration of directed sequence polymers (DSPs), are complicated because DSPs are complex mixtures of peptides, as opposed to individual peptides with a defined amino acid sequence. This application provides improved methods of detecting and assessing DSP compositions, methods for the detection and quantitation of DSP compositions, means to determine and enrich a subset of peptides in a DSP composition based on the subset's interactions with certain capture polypeptides, and methods for administering DSP compositions to a subject in need thereof, wherein the dosage regimen and quantity may be determined or evaluated based on the above-mentioned methods for detection and quantitation.

