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(54) Title: POLY(PEPTIDE) AS A CHELATOR: METHODS OF MANUFACTURE AND USES

(57) Abstract: Novel compositions for imaging that include (a) a polypeptide that includes two or more consecutive amino acids that will function to non-covalently bind valent metal ions and (2) a valent metal ion chelated to at least one of the two consecutive amino acids, are disclosed. Also disclosed are methods of imaging using these novel compositions, such as methods of imaging a tumor within a subject. Methods of synthesizing an imaging agent and kits for preparing an imaging agent are also disclosed. Methods for determining the effectiveness of a candidate substance as an imaging agent that involve conjugating or chelating the candidate substance with a polypeptide that includes two or more consecutive amino acids that will function to non-covalently bind valent metal ions.

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