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(54) Title: POLY(AMINE-CO-ESTER) POLYMERIC PARTICLES FOR SELECTIVE PULMONARY DELIVERY

(57) Abstract: Poly(amine-co-ester) polymers, methods of forming active agent-load polyplexes and particles therefrom, and methods of using them for delivery of nucleic acid agents with optimal uptake have been developed. Examples demonstrate critical molecular weights in combination with exposed carboxylic and/or hydroxyl groups, and methods of making. Typically, the compositions are less toxic, more efficient at drug delivery, or a combination thereof compared to a control other transfection reagents. In some embodiments, the compositions are suitable for *in vivo* delivery, and can be administered systemically to a subject to treat a disease or condition.

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