"Polymeric Delivery Agents and Delivery Agent Compounds"

VCU # 01-053

Applications

- Delivery of biological or chemical active agents
- Targeting oral, intranasal, sublingual, GI, pulmonary, or blood-brain barrier

Advantages

- Customizable for specific biological systems
- Cost effective
- Amendable to industrial scale production
- Design to withstand wide range of physiological conditions

Inventors

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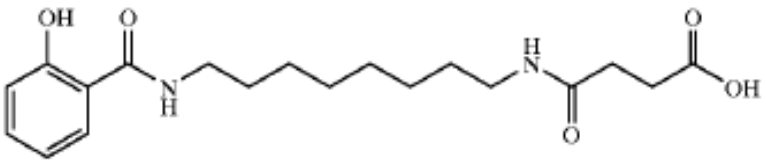
Market Need

Efficient delivery of pharmaceutical agents to its intended location is of paramount importance to ensure effective dosage and drug activity. Yet biological, chemical, and physical barriers exist that make it difficult to actually facilitate uptake of the prescribed dose. In particular, oral delivery of biological or chemical agents poses significant concerns. Current practice is to administer these active agents via a delivery agent, but current delivery agents are known to precipitate out in the low pH of the GI tract. Doctors must administer high concentrations of active agents in order to ensure the proper dose of medication is absorbed. Therefore, developing new and improved delivery agents that are able to be modified according to the requisite solubility have been an ongoing interest in current research.

Technology Summary

VCU researchers have developed a novel line of polymeric delivery agents. These delivery agents are composed of a polymer conjugated to a modified amino acid by one of numerous custom linkages. By changing the amino acid, linkage, or polymer, the delivery agents can be custom tailored to deliver to a specific biological system or withstand specific physiological conditions.



V-COOH

Technology Status

This technology is covered by U.S. Patents 6,627,228 and 7,727,558.

This technology is available for licensing to industry for further development and commercialization.