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(54) **Title:** COMPOSITIONS AND METHODS FOR BIOLOGICAL DELIVERY VEHICLES

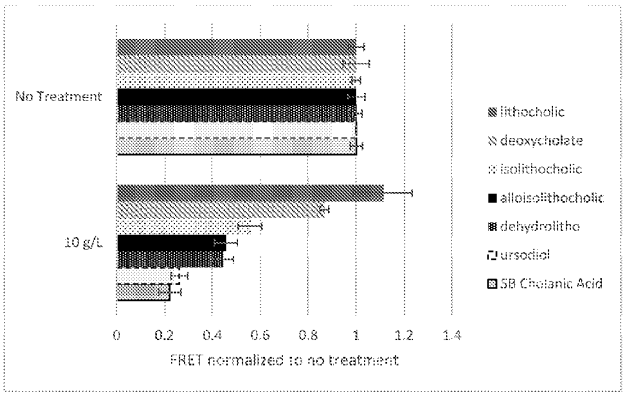


FIG. 20

(57) **Abstract:** Delivery vehicles comprising lipid nanoparticles for the administration of therapeutics, as well as methods of making and using the same for the delivery of therapeutics to epithelial cells, such as those within mucus-containing environments, are provided. The provided nanoparticles comprise ionizable lipids and/or cationic lipids, such as MVL5, MC2, CL1H6, or DODMA, phospholipids, and bile salts. Methods for the delivery of therapeutics, particularly nucleic acid therapeutics, to epithelial cells in the gastrointestinal tract using said delivery vehicles are also provided.

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