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(54) Title: LIPID NANOPARTICLES

Figure 1

An Exemplary Composition of the LNP-1 Lipid Nanoparticle Platform: Structural Lipid Components

Lipid Components (LNP1)	Lipid Component & Formula	Mw (g/mol)	Exact Mass (g/mol)
DOOMA (18:1)		620.10	620.63
L1A (18:1)		~2839.57 (Average)	~2837.79 (Average)
DSPC (18:0)		790.16	790.62
Cholesterol		386.86	386.35

Drug Product Formulation Buffer Solution pH 7.4 ± 0.2, -13.7 ± 0.8 mV at 25°C (Exemplary):

- Sodium Phosphate Dibasic: 10.14 mM
- Potassium Phosphate Monobasic: 1.75 mM
- Potassium Chloride: 2.7 mM
- Sodium Chloride: 137 mM
- Nuclease-Free Water, not DEPC-Treated

(57) Abstract: The present disclosure relates to lipid nanoparticles and methods of delivering active agents to target organs, tissues, or cells by utilizing the lipid nanoparticles.

[Continued on next page]

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