### PhytoChol<sup>®</sup>

## PhytoChol® Inject

Parenteral-grade cholesterol for nucleic acid therapeutics



- 1 High-purity, non-animal-derived cholesterol for parenteral drug delivery
- 2 Important component in lipid-based drug delivery systems
- 3 Secure supply in cGMP quality



# PhytoChol® Inject

### Non-animal-derived, high-purity cholesterol for parenteral use

Cholesterol is an important naturally occurring biomolecule. It is an essential component in lipid nanoparticles (LNPs) and liposome formulations, where it acts as a helper lipid. Cholesterol is crucial for the efficacy of delivery systems because it controls the stability, drug loading and release, membrane fluidity, and fusion with cells.

Evonik offers PhytoChol® Inject, a cGMP-grade, highpurity, plant-derived cholesterol suitable for parenteral use. Cholesterol is typically extracted from sheepswool. However, animal sources can be linked to undesired immunological responses, pathogens, inconsistent quality and may require more stringent regulatory control. PhytoChol® Inject is manufactured through a biosyntheticsemi-synthetic pathway starting with plant-derived sterols. This enables high-purity (low endotoxin levels) and large-scale manufacturing in consistent cGMP quality. PhytoChol® Inject complies with USP-NF, Ph. Eur., JP and ChP monographs. PhytoChol® Inject stands for stable supply security and full functionality and efficacy in the final drug product.

High-purity cGMP excipients are key for the development of innovative mRNA therapeutics like vaccines and cancer treatments. Evonik's PhytoChol® Inject sets new standards for your drug delivery needs.

#### PhytoChol® Inject sets new standards for nucleic acid therapeutics

- Sustainable & non-animal-derived
- 1:1 replaces animal-derived cholesterol
- High-purity cholesterol (i.e. low endotoxin)
- Secure supply
- Consistent cGMP quality
- Complies with USP-NF, Ph. Eur., JP and ChP

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