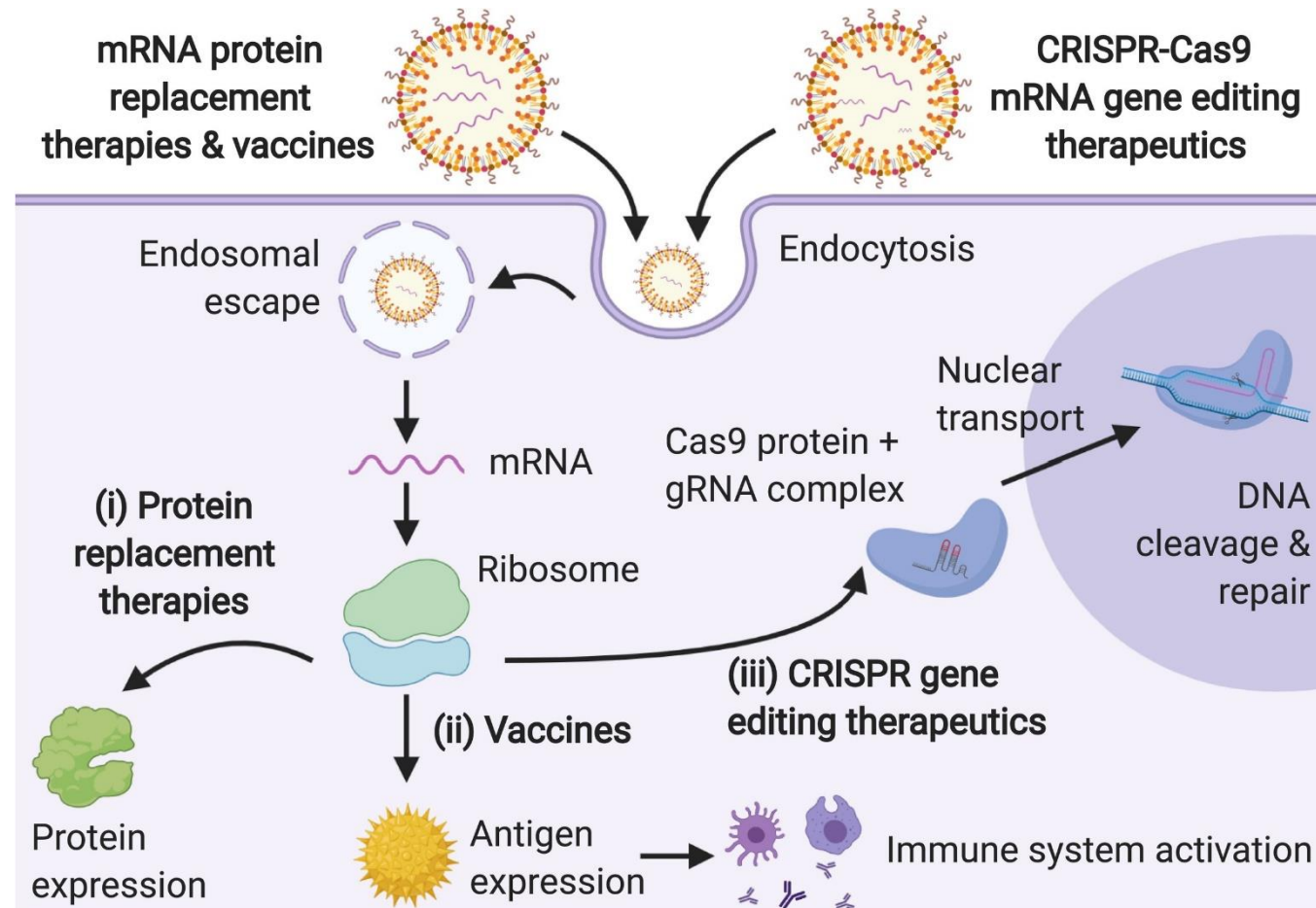




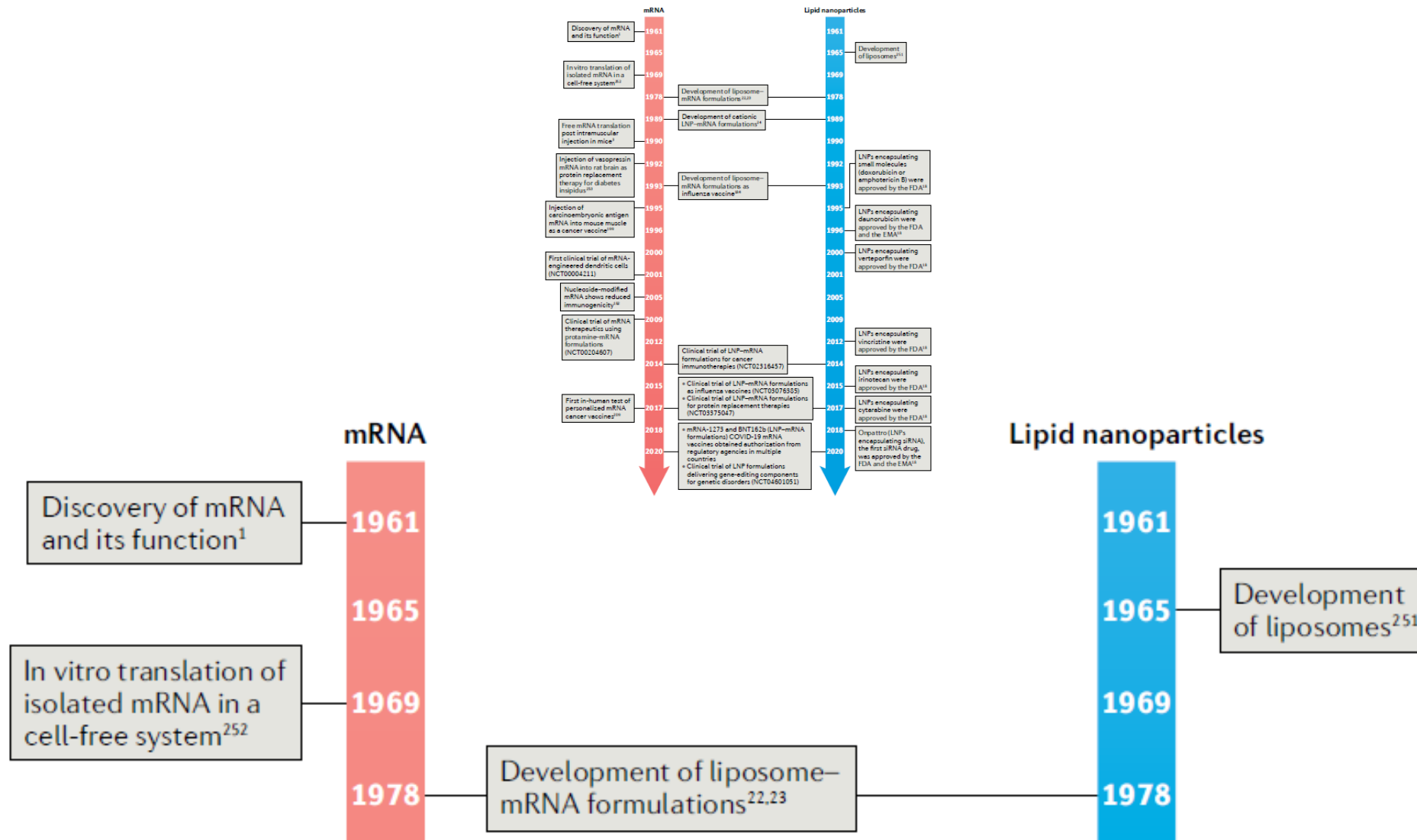
Methods in Drug Development

siRNA Therapeutics and Lipid Nanoparticle Drug Delivery

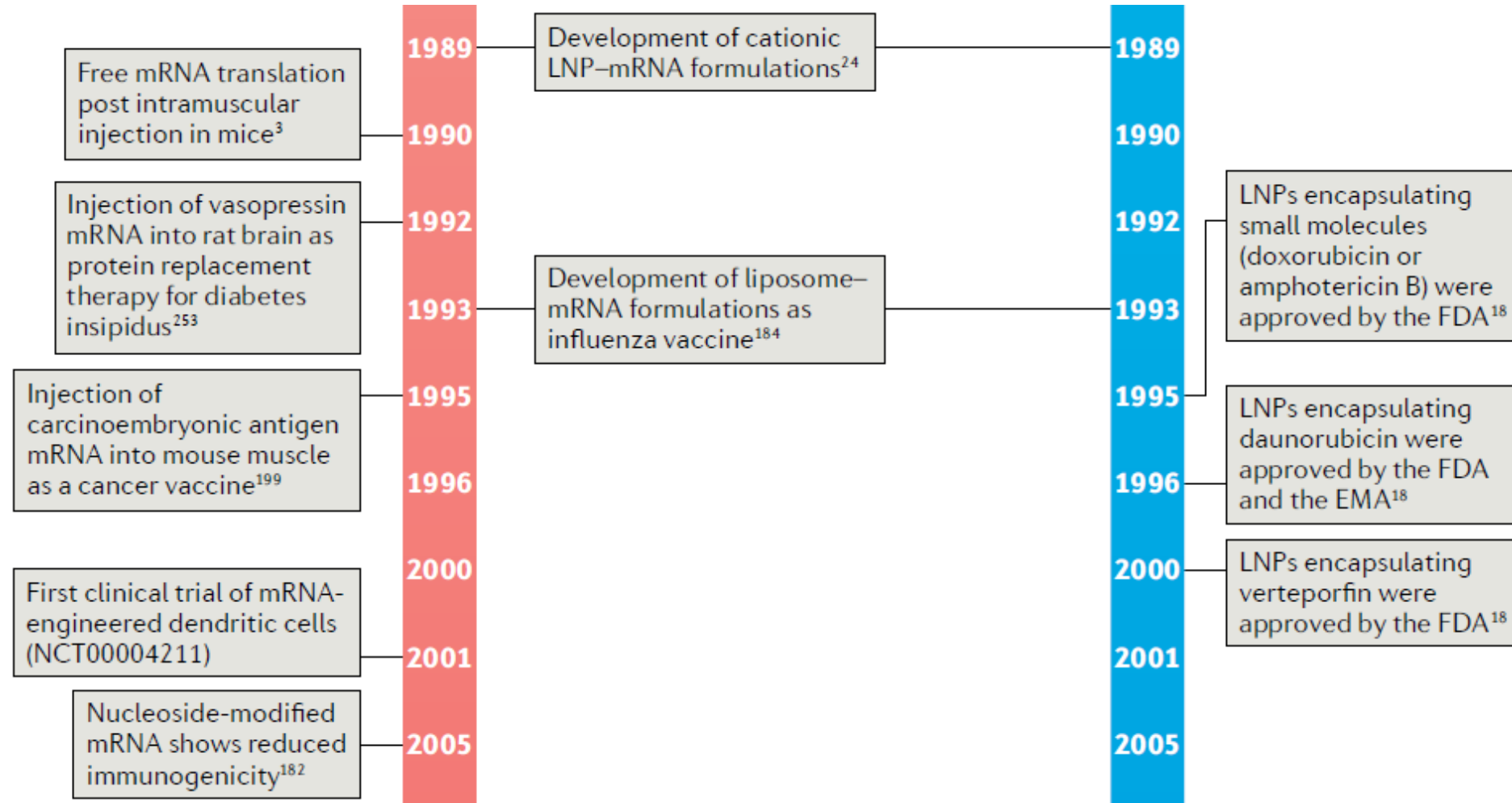
Principle of lipid nanoparticle RNA drug delivery



Historical perspective



Historical perspective



Historical perspective

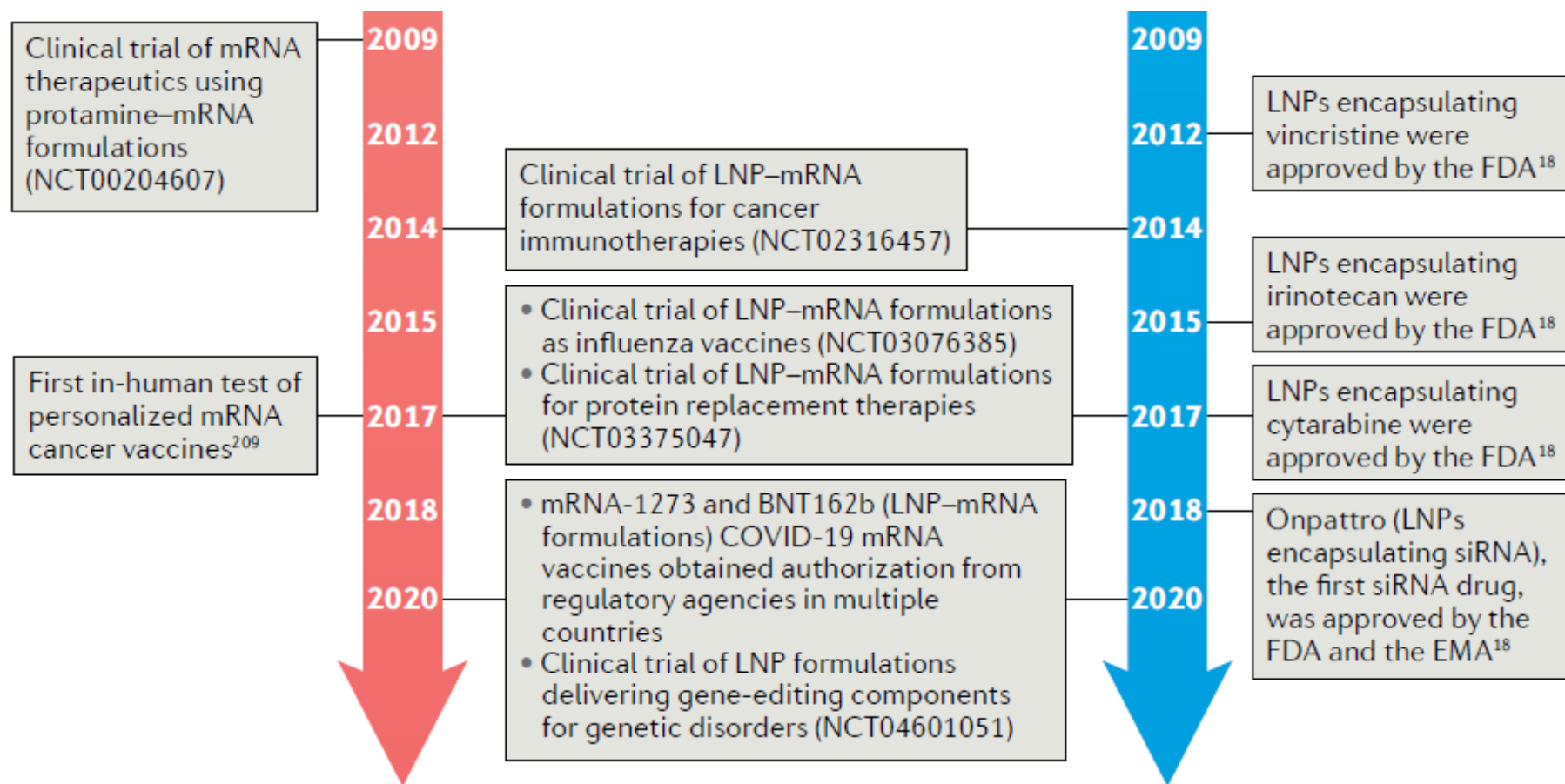


Fig. 1 | **Timeline of some key milestones for mRNA and lipid nanoparticle development.** COVID-19, coronavirus disease 2019; EMA, European Medicines Agency; FDA, United States Food and Drug Administration; LNP, lipid nanoparticle²⁵¹⁻²⁵³.

First siRNA drug: onpattro



SARS-CoV-2 vaccine

