Solid lipid nanoparticle formulations of Oligonucleotides

Bo Ying
Dicerna Pharmaceuticals, USA

Dicerna is a biopharmaceutical company focused on the discovery and development of innovative treatments for rare inherited diseases involving the liver and for cancers that are genetically defined. We have developed our own solid lipid nanoparticles for the delivery of our proprietary dicer substrate RNA for the treatment of cancer and many other diseases. Here, we will describe our solid lipid nanoparticles and the manufacturing process for the scale-up productions, our formulation screening process on animal models, efficacy results from knocking down MYC and β-catenin in orthotopic and subcutaneous hepatocellular carcinoma tumor models, and the methodologies to accurately characterize LNP formulations as in process controls for GMP manufacture.

Biography

Bo Ying received his Ph.D. degree in pharmaceutical sciences from Northeastern University in Boston before he joined Dicerna Pharmaceuticals. There, he has been responsible for the formulation design and development for the delivery of dicer substrate RNA to treat cancer and many other diseases. Currently he is the leading scientist in the formulation group at Dicerna Pharmaceuticals.

boying@dicerna.com