

# Nanoparticle Development Services for Drug Delivery System

Nanoparticles have a high surface area to volume ratio, which allows them to hold a lot of material on their surface. When used as nanodrug carriers, the delivery of water-insoluble drugs is improved by delivering small particle size drugs that dissolve faster in the blood stream, resulting in targeted drug delivery in a cell- or tissue-specific manner. Carriers used for drug delivery include liposomes, polymers, inorganic nanoparticles and protein-based nanoparticles, etc. **CD Formulation** is committed to developing suitable drug carriers and nanotechnology to deliver drugs to diseased lesions for disease treatment.

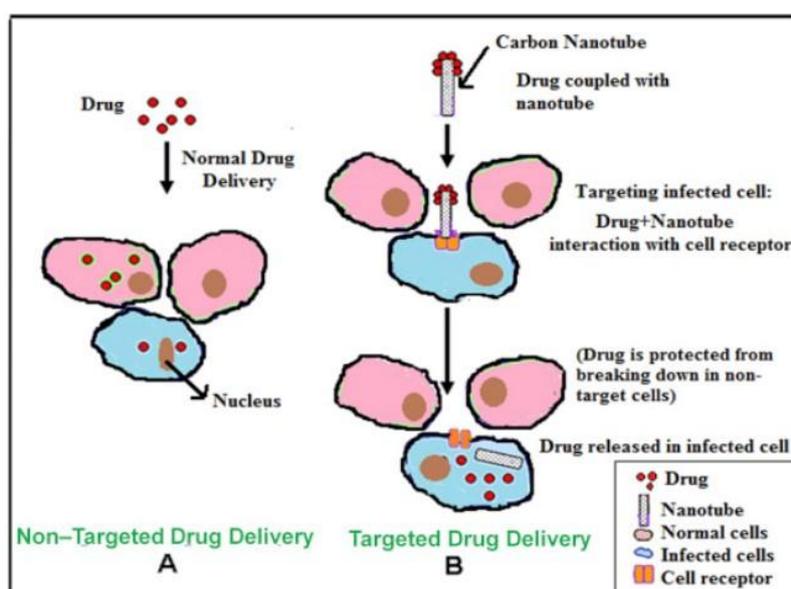


Fig. 1. Schematic presentation of drug delivery approaches. (Bipul et al., 2017)

## Advantages of Nanoparticles for Drug Delivery Systems

- Nanomedicines reach the level of ultra-fine powder, and the specific surface area is significantly increased to improve bioavailability.

- Nanoparticles have the characteristics of long circulation, invisibility and steric stability in the body, which are all beneficial to increase the targeting of drugs and are good carriers for anti-tumor drugs and anti-parasitic drugs.
- Nanotechnology can increase the stability of drugs during storage by maintaining their nanomorphs during processing or storage.
- On the premise of ensuring the drug action, reduce the dose of drug administration and mitigate or avoid toxic side effects; improve drug stability for storage.

## **Our Services**

**CD Formulation** specializes in designing, customizing, optimizing and providing product solutions for drug delivery of nanoparticles. We currently offer the following services related to nanoparticles.

- Liposome Drug Delivery Technology Services
- Custom Niosomes Services for Drug Delivery
- Extracellular Vesicles Purification and Process Design Services
- Polymer Nanoparticles for Drug Delivery Services
- Inorganic Nanoparticles Functionalization Services Based on Drug Delivery Systems
- Protein-based Nanoparticles Design and Testing Services for Drug Delivery
- Nanocrystal Technology for Nanocrystalline Drug Development

Customers can choose from the above services related to nanoparticle drug delivery to enable your drug delivery studies. These nanoparticle carriers can be modified with specific ligands on the surface to achieve effective delivery of drugs to meet your goals.

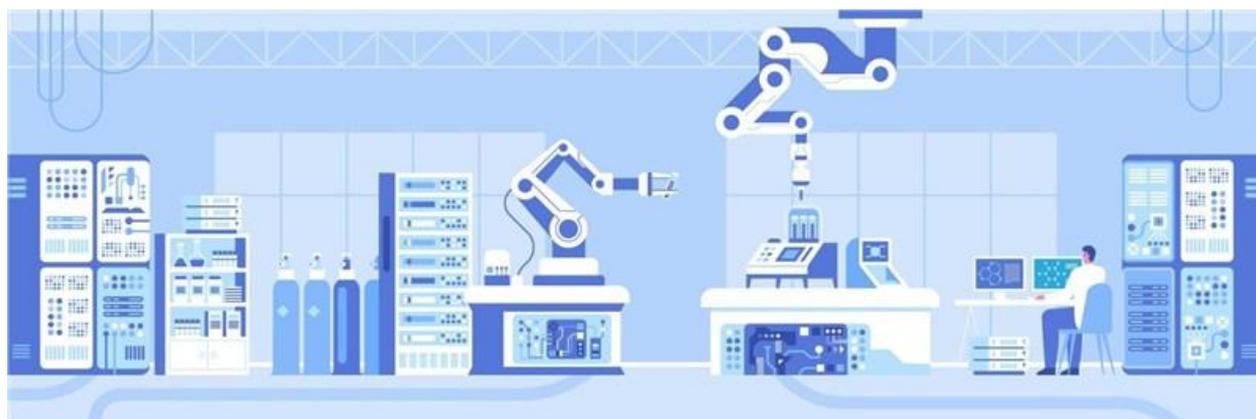
**CD Formulation** also offers a variety of nanoparticle testing and characterization services.

Nanoparticle morphology and structure characterization: SEM, TEM, AFM, X-ray diffraction.

Nanoparticle physical and chemical characterization: UV-Vis absorption spectroscopy, FTIR infrared spectroscopy, FS fluorescence spectroscopy, SERS Raman spectroscopy.

Nanoparticle composition analysis: ICP inductively coupled plasma spectroscopy, thermogravimetric analysis, SEM electron energy spectroscopy.

Nanoparticle hydrodynamic properties: DLS hydrodynamic size, zeta potential.



## About CD Formulation

**CD Formulation** provides integrated innovation solutions from strategy to implementation to help you increase opportunities and address challenges. Through our in-depth experience in many different industries, including consumer and technology, we bring innovative solutions and cross-industry best practices to drug development. If you have a requirement about our services, please contact us by phone or email, our colleagues will reply to you within three working days.

Source:

<https://www.formulationbio.com/nanoparticle-development-services-for-drug-delivery-system.html>