

8th International Conference and Exhibition on

Pharmaceutics & Novel Drug Delivery Systems

March 07-09, 2016 Madrid, Spain

Nanospheres embedded microparticulate based dry powder inhalers as lungs targeted drug delivery for Tuberculosis

Vishnu Vardhan Reddy Beeram¹, Venkata Nadh R² and Krupanidhi S¹

¹Vignans University, India

²GITAM University, India

Although conventional therapeutic regimens are available, there is a need of novel drug delivery system is required for effective tuberculosis chemotherapy. Because patient noncompliance, Multi drug resistance, Extreme drug resistance leads to treatment failure. The first line drugs administered dose is usually high than required minimum inhibitory concentration levels because of their poor oral bioavailability, low permeability, first pass metabolism, less drug availability at site of action. High doses of drugs administration resulting to unwanted side effects, toxicity and emergence of drug resistance. By looking all these obstacles there is a need of study of novel drug delivery systems are required. Nanospheres Embedded Microparticulates based dry powder inhalers are increasing attention towards treatment of pulmonary infections like tuberculosis. An attractive way to reduce the toxicity against Mycobacterium tuberculosis and for direct delivery of high drug concentrations to site of infection is aerosolized anti tubercular drugs. Out of the different formulation approaches, Nanospheres/particles seem to be promising for anti tubercular inhalation. Recently well demonstrated that the polymeric particles to penetrate airway mucus can be tuned at size level that is small enough Nanospheres may avoid steric inhibition by the dense mucin fibre meshes. Nanospheres with enough surface properties may hide chemical properties of the free molecules and reduce its non-specific interactions mucosal tissues.

Biography

Vishnu Vardhan Reddy Beeram pursuing PhD from VIGNAN'S University, Vadlamudi, Guntur, Andhrapradesh, India. He has Completed Master of pharmacy in Pharmaceutics specialization form Rajiv Gandhi University of Health and Sciences, Bengaluru, Karnataka, India. He has published more than 10 papers in reputed scientific journals.

srivyshu.pharma@gmail.com

Notes: