

Evaluation of spherical agglomerated crystals of Lomefloxacin by IR and optical microscopy

Authors:

**Muthukumar N¹ and
Harry Thomas Rodriguez A²**

Institution:

1. Associate Professor,
Department of Pharmaceutical
Biotechnology, Chilkur Balaji
College of Pharmacy,
Hyderabad.

2. Antarcticaa College of
Pharmacy, Tamil Nadu India.

Corresponding author:

Muthukumar N

ABSTRACT:

The spherical crystallization technique was studied to improve the dissolution rate and bioavailability of lomefloxacin which is used as an antibacterial agent for Typhoid, Vaginal, GIT and ENT infection. In solvent change method, irregular shaped agglomeration was observed. Neutralization method was performed to maintain the form of spherical crystals. In ammonia diffusion method, best form of spherical agglomerates with crystal form was obtained. Spherical agglomerated crystals of lomefloxacin were evaluated by IR and optical microscopy. The results suggested that the spherical crystal form of lomefloxacin shows greater dissolution rates and bio availability.

Keywords:

Spherical crystallization, Lomefloxacin, IR and Optical microscopy.