



## Formulation And Characterization Studies Of Sodium Alginate Itraconazole Microspheres

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## ABSTRACT

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In previous few decades, many research study have been carried out related to the drug delivery system (DDS) in the human physiology to achieve the most appropriate bio-availability in desirable range within the therapeutic window to get quick onset of action. In conventional era, we saw most prescribed mode of medication were oral.

As compared to the present situation, drug are prescribed as per convenience of the patient which is most orally administration. Thus, above all reliable advantages, oral formulations have been reported in earlier decline in reaching the MSC (Maximum Safe Concentration). Thus, to reduce concentration problems, a novel DDS has been designed as microspheres (MS), which can be loaded to preferable formulation for administration.

Itraconazole Microspheres (ITCZ-MS) are the triazole, a class of anti- fungal drug which has 99.8% PPB. In market, generally the prescribed dosage forms are oral with 200mg dose for acute infection and 400mg dose for the chronic infections.

ITCZ MS were made by encapsulation of the API within the polymeric film separately and this was further transferred to another aqueous system with help of a needle syringe drop wise at 40°C at 100 rpm.

Varying polymeric concentration formulation of ITCZ MS were made, collected and washed followed by air drying for 24 hrs and evaluated by SEM, XRD, FTIR, entrapment efficiency etc.

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