

# Drug Formulation & Bioavailability Congress

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## Formulation and evaluation of modified disintegrating sustained release tablets

Rajesh Oswal<sup>1</sup> and Lakkad Harish R<sup>2</sup>

<sup>1</sup>SPPU's affiliated RJSPM College of Pharmacy, Dadulgaon, PUNE – 412105. MS. India

<sup>2</sup>Shri Jagdish Prasad Jhabarmal Tibrewala University, Rajasthan, India

Oral drug delivery is the largest and the oldest segment of the total drug delivery market. It is the fastest growing and most preferred route for drug administration. In oral drug delivery, the sustained release (SR) tablets maintains the desired drug concentration for prolong period of time, reduced 'see- saw' fluctuation, reduced total dose, improved efficiency in treatment. But many patients such as paediatric, geriatric and Dysphagia patients does not find it easy to take tablets and this is simply injustice with the prescription. Also the travelling patients require water for the swallowing the tablets. This problem is overcome by formulating and developing modified disintegrating sustained release tablets. In this case, first microspheres of the drug are formulated by using any suitable technique. And then optimized microspheres formulation is further formulated in to the fast disintegrating tablets (FDT) by using Superdisintegrants. So that after taking such tablets, the tablet only disintegrates into the mouth then microspheres are separated and ingestion of such microspheres starts releasing drug for prolonged period of time. Due to this concept it satisfies both objectives as sustained release action by using microspheres and the formulating such microspheres into fast disintegrating tablet overcoming the problem of swallowing and need of water. So it fulfils both the advantages of sustained release and fast disintegrating tablets.

### Biography

Dr. Rajesh Oswal has completed his PhD at the age of 27 years in 1998 from University of Pune (India). He is working as University Approved Full Time Professor and Principal, Ex-Member Board of Studies and Exam of SPPU University, Pune, Principal Research Investigator for NDDS & CDDS Reseach Projects, Research Guide of Postgraduate and Doctorate Research Work of University of Pune & many more Universities. He has published more than 60 papers in reputed journals and serving as an editorial board member of repute Journals.

[oswal\\_rajesh@rediffmail.com](mailto:oswal_rajesh@rediffmail.com)

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