Harsh Shah, J Bioequiv Availab 2014, 6:5
http://dx.doi.org/10.4172/0975-0851.S1.017

OMICS Group Conferences
Accelerating Scientific Discovery

5th World Congress on
Bioavailability and Bioequivalence
Pharmaceutical R&D Summit

September 29-October 01, 2014 DoubleTree by Hilton Baltimore-BWI Airport, USA

Formulation and evaluation of esomeprazole buccal patch

Harsh Shah
Shankersinh Vaghela Bapu Institute of Pharmacy, India

Esomeprazole is class of drug called proton pump inhibitors used in treatment of gastro esophagus reflux disease. Buccoadhesive buccal delivery systems for Esomeprazole in the form of unidirectional buccal patches were developed and characterized for improving bioavailability. The patches were formulated by solvent casting method using different bioadhesive polymers like HPMC 50cps and Eudragit RL-100 by using plasticizers glycerol and penetration enhancer tween-80. The physicochemical compatibility of the drug and the polymers was studied by FT-IR spectroscopy. The results suggested no physicochemical incompatibility between the drug and the polymers. Unidirectional release was achieved by preparing composite patches with backing membrane. The patches were characterized on the basis of their physical characteristics like weight uniformity, thickness, swelling studies, folding endurance, surface pH, bioadhesive performance, *in vitro* drug release and ex vivo drug diffusion. By evaluation of formulated patches we can find best formulation on basis of bioadhesive studies, *in vitro* drug release, ex vivo drug diffusion and folding endurance. Stability study of best formulations was carried out at different temperature as per ICH guidelines.

Biography

Harsh Shah has completed his Post graduation in Pharmacy at the age of 23 years from Rajiv Gandhi University of Health care science, Bangalore, India and doing PhD from Gujarat Technological University. He is working as an Assistant Professor in Department of Pharmaceutics at Shankersinh Vaghela Bapu Institute of Pharmacy, Gujarat, India.

aharsh.shah@gmail.com