



Short Communication

Received: December 21, 2009 Accepted: February 5, 2010

## Development and Physicochemical Evaluation of Bilayered Floating Tablet of Diltiazem Hydrochloride Prepared from *Plantago ovata* Seed Husk

Arun JANA, Shyamoshree BASU, Kazi A. ALI & Amal K. BANDYOPADHYAY\*

Centre for Advanced Research in Pharmaceutical Sciences, Department of Pharmaceutical Technology, Jadavpur University, Kolkata- 700032, India

SUMMARY. The aim of the present study is to prepare bilayered floating tablets of diltiazem with different ratios of polymers like HPMC K4M, carbopol 934 P, sodium alginate, Plantago ovata seed husk (psyllium) and to carry out evaluation of the physicochemical parameters of tablets like hardness, friability, content uniformity, weight variation, in vitro buoyancy and in vitro dissolution profiles. In vivo X-ray study was done in human volunteers to determine the floating characteristics of the placebo tablets for a period of 12 h.

KEY WORDS: Bilayered, Diltiazem, Floating, Friability

ISSN 0326-2383

<sup>\*</sup> Author to whom correspondence should be addressed. E-mail: akbju@yahoo.com