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Floating Drug Delivery System – A Review

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Abstract: *The principal objective behind the writing of this article on the floating drug delivery system (FDDS) was to systematize the recent literature with the core process of floatation in acquiring gastric retention. The novel methodologies in FDDS include approaches to design a single unit and multiple-unit floating systems, the physiological and formulation variability affecting gastric retention along with the use of recently invented and developed polymers. FDDS is the drug delivery system that floats immediately upon contact with gastric fluids present promising approaches for increasing the bioavailability of drugs with absorption windows in the upper small intestine. However immediate floating can only be achieved if the density of them device is low at the very beginning. This review also summarizes the in vitro techniques, in vivo studies to evaluate the performance and application of floating systems. Floating dosage forms can be delivered in conventional forms like tablets, capsules with the addition of suitable ingredients along with the gas generating agent. This review also throws light on some approaches to prepare a floating system, evaluation methods and characterization for FDDS pharmaceutical dosage form and also it's classification and different techniques used in developing floating dosage forms along with current and novel advancements.*

Keywords: Floating Drug Delivery System, single unit and multiple unit floating system, In vitro and in vivo evaluation, Novel advancements

REFERENCES

[1]. Haridwar Lodh, Sheeba, Prabhat Kumar Chourasia, Harshitha Arun Pardhe.Floating Drug Delivery System: A Brief Review.Am.J. PharmTech Res. 2020; 10(4):113-119.
[2]. Juhi Dubey, NavneetVerma, Floating Drug Delivery System: A Brief Review, IJPSR (2013), Vol. 4, Issue 8:2895-2898.
[3]. Geetha A, Rajendra K, Mohan CHK, Sateesh V and Raju PN: A Review on Floating Drug Delivery Systems. International Journal of Pharmaceutical Research and Biomedical Analysis 2012; 1(1): 1-13.
[4]. Raju DB, Sreenivas R and Varma MM: Formulation and evaluation of Floating drug delivery system of Metformin Hydrochloride. Journal of Chemical and Pharmaceutical Research 2010; 2(2): 274-78.
[5]. Dwivedi S and Kumar V: Floating Drug Delivery Systems- A Concept of Gastroretention Dosages Form. International Journal of Research in Pharmaceutical and Biomedical Sciences 2011; 2(4): 1413-26.
[6]. Gopalakrishnan S, Chenthilnathan A. Floating drug delivery system: A Review. Journal of Pharmaceutical Science and Technology 2011; 3(2): 548-554.
[7]. Vedha H, Chaudhary J: The recent developments on gastric floating drug Delivery system: An overview. Journal of Pharmaceutical Technology and Research 2010; 2(1); 524-34
[8]. Shah SH, Patel JK, Patel NV: Stomach specific floating drug delivery System: A review. International Journal of Pharmaceutical Technology and Research 2009; 1(3): 623-33.
[9]. Shah SH, Patel JK, Patel NV: Stomach specific floating drug delivery System: A review. International Journal of Pharmaceutical Technology and Research 2009; 1(3): 623-33.
[10]. Bhowmik D, Chiranjib B, Margret C, Jayakar B and Kumar KPS: Floating Drug Delivery System-A Review. Scholars Research Library 2009; 1(2): 199-18.
[11]. Shyama SK and Sivakumar R. Floating Drug Delivery System: An Updated Review. Int J Curr Pharm Clinical Res. 2014; 4(3):150-53.

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[12]. Sarojini S and Manavalan R. An overview on various approaches to Gastroretentive dosage Forms. Int J Drug Dev Res. 2012; 4(1): 01-13.

[13]. Chien YM. Novel Drug Delivery System, 3rd Ed. Vol. 1. New York: Marcel Dekker 1992; 139-96.

[14]. Arunachalam A, Karthikeyan M, Kishore K, Prasad PH, Sethuraman S, Ashutosh kumar S and Manidipa S. Floating drug delivery systems: A review. Int J Res Pharm Sci. 2011;2(1): 76-83.

[15]. Rabadia N, Tiwari A, Patel G & Virani V. The floating drug delivery system and its impact on calciumchannel blocker: A review article. Internationaljournal of pharmaceutical research and development, 2011; 3(12):107-131.

[16]. Tripathi P, Ubaidulla U, Khar RK & Vishwavibhuti. Floating drug delivery system. International Journalof Research and Development in Pharmacy and Life Sciences, 2012; 1(1): 10.

[17]. Singh BN, Kim KH. Floating drug delivery system: An approach to the controlled drug delivery via gastric retention. J Control Release 2000; 63: 235□259.

[18]. Mayavanshi AV, Gajjar SS.Floating drug deliverysystems to increase gastric retention of drugs: A Review. J Pharm Tech 2008; 1(14): 345□348.

[19]. Gopalakrishnan S, Chenthilnathan A.Floating Drug Delivery Systems: A Review. Journal of Pharmaceutical Science and Technology. 3 (2); 2011: 548-554.

[20]. Goyal M, Prajapati R, Profit KK, Mehta SC.Floating DrugDelivery System. Journal of Current Pharmaceutical Research. 5 (1); 2011:7-18. 6.

[21]. Patil, JM, Horsecar RS, Gide PS, Adam VJ; Trends infloating drugdelivery system; Journal ofScientific and Industrial Research; 2006; 65; 11-21