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Controlled release floating multiparticulates of metoprolol succinate by hot melt extrusionVilas N. Malode¹, Anant Paradkar² and Padma V. Devarajan^{1*}

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Abstract

We present hot melt extrusion (HME) for the design of floating multiparticulates. Metoprolol succinate was selected as the model drug. Our foremost objective was to optimize the components Eudragit[®] RS PO, polyethylene oxide (PEO) and hydroxypropyl methylcellulose (HPMC) to balance both buoyancy and controlled release. Gas generated by sodium bicarbonate in acidic medium was trapped in the polymer matrix to enable floating. Eudragit[®] RS PO and PEO with sodium bicarbonate resulted in multiparticulates which exhibited rapid flotation within 3 minutes but inadequate total floating time (TFT) of 3 hours. Addition of

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