New multi-particle systems for colon-targeted Meloxicam

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Meloxicam (MLX) is a non-steroidal anti-inflammatory drug (NSAIDs) from the Oxicam family. This group of NSAIDs has been highly used in the treatment of rheumatoid arthritis and post-operative inflammation and is known as good antioxidants. Recently, their activity in chemoprevention, chemo-suppression, UV-sensitization and UV-protection was also identified. MLX has been described as a COX-2 selective inhibitor. Its use has some advantages regarding to its selectivity, namely, less adverse effects as gastrointestinal aggression and anticlotting activity. As MLX is better absorbed in colon and its properties against colon cancer and colonic inflammatory diseases are being studied, it is interesting to investigate a new MLX formulation for colonic delivery.

We are studying the solubility and the dissolution of different combined formulations at pH 1’2, 6’8 and 7’4 to mimic their absorbance in the colon. These formulations are composed by different excipients that provide pH and time-dependent deliveries such as cellulose (Metolose®) and methacrylic acid esters with quaternary ammonium groups (EUDRAGIT® RS 30D, EUDRAGIT® FS 30D and EUDRAGIT® NM 30D).

Biography

Eva Navarro Ruiz was born in Madrid, Spain, the 8th April of 1990. She graduated as a pharmacist in 2015 and, recently, she has started her PhD at the same university. Her investigation group was formed at the Department of Pharmacy and Pharmaceutical Technology of the Complutense University of Madrid, and it has established collaboration with the Department of Parasitology. It is composed by several professors from Parasitology and from Pharmaceutical Technology department, and several PhD students. We started studying colon targeted MLX in 2013.