



Comparative functionality of Croscarmellose and Carmacel as Tablet Excipients

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SUMMARY. The great variety of excipients to which we have access thanks the globalization gives rise to the necessity to evaluate their functionality, currently the pharmaceutical performance of croscarmellose and carmacel as tablet excipient. Carmacel formulations show faster powder flow and dissolution rate while Croscarmellose formulations show greater compactibility. Individually, carmacel formulations show greater powder flow and faster dissolution rate when the diluent is pharmatose or calcium phosphate but if the diluent is alfacel formulations with croscarmellose or carmacel show similar powder flow and dissolution rate. The compactibility of formulations containing pharmatose or calcium phosphate is similar for tablets containing carmacel or croscarmellose while croscarmellose formulations containing alfacel exhibit a greater compactibility. The functionality of croscarmellose and carmacel depends on the parameter and the formulation being considered. Current results are not contradictory with surrogate functionality tests where compactibility of croscarmellose tablets was greater while carmacel tablets showed shorter disintegrations times.

KEY WORDS: Carmacel, Croscarmellose, Excipients functionality, Sodium cross-linked carboxymethylcellulose, Solid dosage forms, Tablet disintegrants.

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