The preferred solid dosage form for mebeverine is typically a sustained-release capsule.Rationale for Sustained-Release Capsules o Controlled Release: Mebeverine is an antispasmodic used primarily for the treatment of irritable bowel syndrome (IBS) and other gastrointestinal disorders.A sustained-release capsule ensures a gradual release of the drug, maintaining consistent plasma levels over a prolonged period.o Reduction in Dosage Frequency: Sustained-release capsules reduce the frequency of administration (usually to twice daily instead of thrice daily for immediate-release tablets).o Minimized Side Effects: A controlled release reduces the risk of peak plasma concentrations that can cause dose-related side effects, such as nausea or dizziness.Physicochemical and Pharmacokinetic Properties of Mebeverine o Short Half-Life: Mebeverine has a relatively short half-life (~2 hours), which makes it ideal for sustained-release formulations to prolong its action.o Enhanced Patient Comfort: By avoiding frequent dosing, sustained-release formulations improve the quality of life for patients with chronic conditions like IBS.o Sensitive to First-Pass Metabolism: Mebeverine undergoes extensive first-pass metabolism, forming active metabolites.Sustained-release formulations help reduce fluctuations in drug levels and ensure a steady therapeutic effect.This choice is made to enhance its therapeutic efficacy and .improve patient compliance.This increases convenience and adherence to the prescribed regimen.2

lakhasly.com © تم تلخيص النص بواسطة موقع لخصلي