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Formulation, evaluation and optimization of granulating agents on the tablets containing poorly water-soluble anti-HIV drug

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Abstract:

Elvitegravir have low dissolvability in aqueous media. Because of poor aqueous solvency, formulation improvement turns out to be very troublesome as this may reason for inconstancy in percent drug discharge. In such kind of conditions detailing synthesis and interaction have a definitive impact in concluding the % discharge in the dissolution medium. Nonetheless, Commercial products of drug Elvitegravir are accessible yet no work in regards to the formulation perspective is accounted for. In the current study, effect of granulating agent, upon Physico-substance parameter of Elvitegravir drug eventual outcome was contemplated. The medication Elvitegravir goes under class II classification for example low solubilization and poor penetrability. The medication discharge from becomes a rate limiting factor for their absorption. Thus, for advancement of retention of Elvitegravir, its solubilization in the media ought to get enhanced. For increment of Elvitegravir dissolvability and delivery, formulation variables factors assume a huge part. The significant target of this investigation was to assess the formulation variables such as granulating agent, for example, Gum Arabic, Pharma Sugar, PVP, Klucel, Hypromellose, and Paste & Crayogel. According to the observed outcomes granulating agents like Gum Arabic, Paste, Pharma Sugar greatly influence the release of final product. As opposed to end result final product manufactured from pure drug, the products made from these excipients have significant impact on dissolution efficiency.

Keywords:

Granulating Agents, Binders, Solubility, Bioavailability, Drug Release