

STABILITY INDICATING ASSAY DEVELOPMENT AND METHOD VALIDATION OF VALGANCICLOVIR HCL BY UV-VISIBLE SPECTROPHOTOMETRY

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ABSTRACT

The goal of the current study to develop and validate a stability indicating approach that would produce accurate data for valganciclovir HCl, whether for pharmacokinetics, acceptability, release, or stability studies. A UV-visible spectroscopic method that is accurate, precise, and economical is presented here. Purified water was utilized as the solvent, and the drug's absorption λ_{max} was measured at 252 nm. The linear response was observed in the 1–50 $\mu\text{g mL}^{-1}$ range. The regression coefficient (R^2) = 0.999 attached to the equation $y = 0.031x + 0.016$ was obtained by linearly regressing absorbance on concentration. Following that, the procedure was verified for several criteria in accordance with ICH guidelines. Stress degradation of valganciclovir HCl was conducted under various (International Council for Harmonisation) ICH-recommended conditions. The developed approach was used to conduct deterioration studies. This technique is suitable for determining valganciclovir HCl in pharmaceutical formulations and bulk.