

# Novel Instrumental Techniques for Validating Analytical Methods in Pharmaceutical Formulations

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**Abstract:** *Since it is crucial to the stability, effectiveness, and quality of the medication product, the primary goal of this study is to describe the innovative analytical methods used in the method development and validation of various medicines. Numerous innovative analytical methods, such as RP-HPLC and LC-MS. This review discusses automated development in HPTLC and LC-MS-MS using appropriate pharmacological samples in accordance with ICH Guidelines. Regarding ICH Guidelines, a number of validation factors are also specified, including accuracy, specificity, precision, linearity, LOD, LOQ, robustness, and ruggedness. The standard control and quality assurance of pharmaceuticals, and thus patient safety, greatly benefit from validation.*

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