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## Analytical method development for the estimation of salbutamol sulphate and budesonide in binary mixture by UV spectrophotometric method

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# Analytical method development for the estimation of salbutamol sulphate and budesonide in binary mixture by UV spectrophotometric method

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## Abstract

The main aim of the intended investigation was to establish an analytical method for the assessment of salbutamol sulphate and budesonide in a mixture by UV spectrophotometer. The method involves formation and solving a simultaneous equation for the estimation of individual component in mixture containing salbutamol sulphate and budesonide. Standard solution of salbutamol sulphate shows maximum absorbance at 224 nm and budesonide at 247 nm. Both the drugs followed Beer Lambert's law in the concentration range of 2-10 µg/mL. The method was developed by performing the analytical parameters like linearity, precision, reproducibility, accuracy, recovery, ruggedness, and robustness, limit of detection, and limit of quantitation. The result of all the parameters indicated a good adaptability of the method for the estimation of individual components in a binary mixture of salbutamol sulphate and budesonide.

**Key words:** Budesonide, salbutamol sulphate, simultaneous equation, UV spectrophotometer

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