

Expanding the Frontiers of Pharmaceutical Sciences: rethinking the outcomes

Development and Validation of Quality Control Analytical Methods for Allopurinol Tablets

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ABSTRACT

Allopurinol is a drug used to treat gout^{1,2}. In Brazil, it is manufactured in two presentations: 100 and 300 mg tablets, being relevant the certification of quality control of these products². **Objective**: To develop and validate two methods: ultraviolet spectrophotometry (UV) and high performance liquid chromatography (HPLC) for determination of allopurinol in tablets. **Materials and methods**: The dissolution medium selection using factorial design. **Results**: In the development for HPLC was used the C8 column, mobile phase: ethanol, hydrochloric acid and water; rate 0.6 mL min⁻¹ with detection at 259 nm (the same wavelength used for spectrophotometry). The application of the methods was performed in the dissolution test where more than 90% of the drug was dissolved after 15 minutes. **Conclusion**: The developed methods were able to quantify the allopurinol drug in tablets.

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