



Comparative *In Vitro* Analysis of Dissolution Profiles of Pharmaceutical Formulations Containing Amoxicillin

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SUMMARY. Amoxicillin is the beta-lactam antibiotic most used in Brazil, indicated for Gram-positive and Gram-negative bacteria. This antibiotic is marketed as reference, generic and similar products. The objective of this study was to determine and compare the dissolution profiles of amoxicillin in capsules of 500 mg, from each one of the products listed following the specifications described in American Pharmacopeia (USP). Calculation of Dissolution Efficiency, Factors of difference (f_1) and similarity (f_2) was performed. The method was validated through analysis of linearity, precision (repeatability and intermediate precision), accuracy, limit of detection and limit of quantification. The analyzed generic samples had the highest efficiencies of dissolution. An amount of dissolved drug above the labeled dose was detected in all analyzed samples. Tests of f_1 and f_2 could not be made because the criteria established assuming dissimilarity between reference and generic/similar dissolution profiles was not found.

KEY WORDS: Amoxicillin, Capsules, Dissolution.

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