STUDY OF POST SHELF LIFE AND MARKETED TABLETS OF CARVEDILOL BY RP-HPLC

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ABSTRACT

The purpose of this work was to determine the tablet content and carry out the dissolving test of expired and non-expired tablet as well as establish a simple, selective, linear, precise, accurate and sensitive RP-HPLC technique for the analysis of carvedilol tablets. The experiment was carried out using a mobile phase consisting of 20 mM phosphate buffer (PB) pH 2.5: acetonitrile (ACN) 55:45 (V/V) at a pH of 2.5 using a column (Oyster ODS 3,150-4.6 mm, 5m) and a L6 6AD pump. The sample had a volume of 20 µL, and it was injected at room temperature for a run period of 6 minutes at a flow rate of 1.0 mL min^{-1}. Detection was carried out at 240 nm using an ultraviolet detector. The retention time of the sample was 2.92 minutes. At 37 °C ± 0.5 °C, the preliminary dissolution tests were performed on an Electro Lab dissolution tester. The results of this analysis revealed that there was no distinct shift in the amount of drug present. The percentage of non-expired tablets discovered in the test was 94.67 %, whereas the percentage of expired tablets was 91.71 %.