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Simultaneous Determination of Antiretroviral Zidovudine, Lamivudine and Efavirenz by RP HPLC-DAD

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SUMMARY. **A reverse phase high-performance liquid chromatography-photodiode array detector (RP HPLC-DAD) method for simultaneous determination of lamivudine (3TC), zidovudine (AZT), two nucleoside reverse transcriptase inhibitors, and efavirenz (EFV), a non-nucleoside reverse transcriptase inhibitor, in tablets is described. The drugs separation was performed on a C18 column (250 x 4,6 mm, 5 μm - Phenomenex®), through a mobile phase drag composed by a binary gradient of acetonitrile and water HPLC grade. The drugs detection was performed at 248 nm, resulting in a 14 min chromatographic run. The samples were prepared by crushing tablets, weighing powder, diluting it by a 10 min sonication and filtrating solution, resulting in samples with final concentration of 20, 40 e 40 μg.mL^{-1} of 3TC, AZT and EFV, respectively. The method was adequate for quality control purposes and was validated following the ICH guidelines.**

KEY WORDS: Analytical method, Efavirenz, Lamivudine, RP HPLC-DAD, Validation, Zidovudine.

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