Determination of simvastatin and ezatimibe in combined tablet dosage forms by constant center spectrophotometric method

Hayam Lotfy, H.M. Lotfy

Professor of Analytical Chemistry

Abstract

A novel, simple, specific and accurate spectrophotometric method is developed and validated for determination of simvastatin (SM) and ezatimibe (EZ) namely; constant center spectrophotometric method (CCSM). The proposed spectrophotometric method do not require any separation step. Linear correlation was obtained in range 2-16 µg/ml and 4-24 µg/ml for simvastatin and ezatimibe respectively, with mean recoveries 100.15±1.281 for simvastatin and 100.12±0.818 for ezatimibe. The proposed method was applied to pharmaceutical formulation and the results obtained were statistically compared with reported HPLC method. The statistical comparison showed that there is no significant difference between the proposed method and the reported HPLC method regarding both accuracy and precision. The method was validated according to ICH guidelines.

International Journal of Pharmacy and Pharmaceutical Sciences. - 2012, September