**Abstract**

Two stability-indicating chromatographic methods have been established and validated for concurrent determination of probenecid (PRO), colchicine (COL) along with the degradation product of colchicine (COL deg). PRO and COL were exposed to a stress stability study, which includes acidic,alkaline, oxidative, photolytic and thermal degradations. Chromatographic methods included the use of thin layer chromatography (TLC-densitometry) and high performance liquid chromatography (HPLC). In the first method, separation was achieved by using aluminum TLC plates that were precoated with silica gel G.F254 as the stationary phase and ethyl acetate–methanol–33%ammonia (8:1:1, by volume) as a mobile phase. The obtained chromatograms were scanned at 254 nm. The second method was based on HPLC using a RP- C18 column with isocratic elution. Good separation was obtained through a mobile phase comprised of phosphate buffer pH 5–acetonitrile (70:30, v/v) at a flow rate of 1.0 mL min−1 and ultraviolet detection at 254 nm. Different parameters affecting efficiency of the two methods were studied accurately for optimum separation of the three cited components. The suggested methods were validated according to the International Conference on Harmonization (ICH) guidelines and were applied for bulk powder and commercial tablets.