derivatization procedure (concentration of GATC, reaction temperature and time) was investigated.

[PD4-3] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

Determination of meloxicam in human plasma by semi-micro high -performance liqiud chromatography.

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This study describes a simple and sensitive semi-micro HPLC method with UV detection and direct deproteinization. The plasma protein was precipitated using perchloric acid (60%) and the supernatant was directly injected onto the semi-micro HPLC system. The separation was achieved on a C18 (25 mm X 2.0 mm I.D) analytical column with a mobile phase of sodium acetate buffer (pH 3.5, 50 mmol) - acetonitrile (60:40, V/V). The retention time observed for meloxicam and internal standard (piroxicam) were 4.6 min and 3 min, respectively. The column effluent was monitored by UV detection at 355 nm. The method was linear over the concentration range 20-1500 ng/㎖ with correlation coefficient of 0.999. The lower limit of quantification (at signal-to-noise ratio S/N=10) was 20 ng/mL. This method showed good precision (intra-day CV (%) ≤3.010 , inter-day CV(%) ≤7.329) and accuracy (101.1-109.4%). The present method was successfully applied to the pharmacokinetic study of meloxicam in man.

[PD4-4] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

Simultaneous Chiral Discrimination of Nine Non-Steroidal Antiinflammatory Drugs by Cyclodextrin-Modified Capillary Electrophoresis in Normal and Reversed Polarity Modes

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Simultaneous enantioseparation of nine racemic non-steroidal antiinflammatory drugs (NSAIDs) for their accurate chiral discrimination was achieved by cyclodextrin (CD) modified capillary electrophoresis in the normal polarity (NP) mode and in the reversed polarity (RP) mode. The NP mode employed neutral tri-O-methyl-β-cyclodextrin (TMβCD) as a selector dissolved in MES buffer (pH 6.0). The RP mode used a mixture of neutral TMβCD and slightly charged carboxymethyl-β-CD as the dual selectors dissolved in phosphate buffer (adjusted to pH 3.0 with triethanolamine) containing hexadimethrine bromide. The present NP and RP modes were complements each of the other for the simultaneous enantiomeric purity test of ibuprofen, ketoprofen and flurbiprofen, and also for the chiral separation of ibuprofen and its metabolites in urine.

[PD4-5] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

A GC analytical method of phthalates in plasticized blood component preparations