Patel YD, Peepliwal A, Bonde CG. Enhancement of absorptivity of ursodeoxycholic acid. *Bull. Pharm. Res.* 2011;1(2):1-6.

Abstract: Official monograph of United States Pharmacopoeia describes the procedure to detect ursodeoxycholic acid using refractive index detector because of poor ability of ursodeoxycholic acid to absorb radiation in UV region of electromagnetic spectrum. Present work reports the derivatization procedure to enhance the UV absorption of ursodeoxycholic acid. Reaction with many chromophoric reagents has been performed including reaction with phenyl hydrazine, hydrazine and benzyl alcohol. Among reactions carried out, the successful one involved esterification of ursodeoxycholic acid using ethanol. Esterified derivative was subsequently reacted with hydrazine resulting in hydrazide derivative of ursodeoxycholic acid. Resultant hydrazide moiety was modified by allowing reaction with benzaldehyde; thus forming benzamide derivative which showed enhanced UV absorption evidenced by appearance of a unique peak in UV spectra of compound diluted in ethanol.

Key words: Ursodeoxycholic acid, UV Spectrophotometry, Derivatization, Esterification, Hydrazide.

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