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Degradation Studies and Stability Assessment of Terizidone using RP-HPLC Method

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Abstract: *In recent years the growing interest in drug stability problem has been observed. The stability of pharmaceutical products seems to play an important role from the economical point of view. The present study was undertaken with the primary objective to establish the inherent stability of Terizidone through stress studies under a variety of ICH-recommended test conditions and to determine the Terizidone degradation using validated HPLC method. Terizidone is an anti-tuberculosis drug used in the treatment of multi-drug resistant and extensively drug-resistant tuberculosis but present with polyneuropathic adverse effects in some patients. In present work, forced degradation study of Terizidone was carried out according to the ICH guideline Q1A (R_2). The drug was subjected to acid (0.1N HCL), alkaline (0.1N NaOH) and neutral hydrolysis conditions as well as an oxidative decomposition at room temperature. Photo stability and thermal study was also carried out.*

Keywords: Terizidone, drug stability, degradation studies, RP-HPLC method, validation