THE STABILITY DETERMINATION TEST OF RETENTION TIME *MEGESTROLE ACETATE* IN ELUENT MOBILE PHASE USING HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

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ABSTRACT

The aim of this research was to determine the level of stability of *Megestrole acetate*-retention time in storage period for six, eight and 12 hours using High Performance Liquid Chromatography (HPLC). The research method used posttest-only control group design by using three treatments and six repetitions. The three repetitions consist into six hours, eight hours and 12 hours. The data were obtained analyzed by Summery Independent T-Test with SPSS 24 for windows. The result showed six hours retention time of *Megestrole acetate* is stable and eight hours treatment and 12 hours treatment are not stable there is one unstable point of 12 hours treatment that indicates the substance is break down. Based on those result, it could be concluded that the storage time of *Megestrole acetate* in Eluent Mobile Phase began to show unstable at eight hours of storage.

Keywords: stability, *Megestrole acetate*, retention time, High Performance Liquid Chromatography (HPLC)