

ABSTRACT

COMPARISON OF FRIABILITY AND HARDNESS OF CONVENTIONAL TABLETS AND FAST MELTING TABLETS WITH DOMPERIDONE RAW MATERIAL

Riza Nur Azizah

Domperidone is an antiemetic of the D2 and D3 dopamine receptor antagonist class which relieves symptoms of nausea by working in the periphery by selectively blocking dopamine receptors in the chemoreceptor trigger zone (CTZ) which is located at the base of the fourth ventricle. Domperidone in a fast-melting preparation is an alternative to increase comfort, especially geriatric patients and children who have difficulty swallowing. The aim of this research was to determine the comparison of the hardness test and the comparison of the tablet friability test. Based on the research results, the F1 value of $4.95 \text{ kgf} \pm 0.4$ meets the requirements, namely 4-8 kgf and F2 of $2.2 \text{ kgf} \pm 0.4$ does not meet the requirements, namely in the range of 3-5 kgf. For the tablet fragility test, the F1 value was $0.7\% \pm 1$ and F2 was $1.9\% \pm 1.2$, so F2 did not meet the tablet fragility requirements, namely 0.8%. From the results of the evaluation data, the data obtained was then processed using the SDPSS application with the Shapiro-Wilk Test, Levena Test and Mann-Whitney Test. From the statistical test results, there is a significant difference with a result of 0.00 in the hardness test and there is no significant difference with a result of 0.99 between Domperidone 10 mg tablets and Vometa FT tablets.

Keywords : *Domperidone, tablet, fast melting, hardness test, friability test*