

ABSTRAK

Sediaan racikan pulveres kombinasi ambroxol hidroklorida dan salbutamol sulfat diresepkan untuk mengatasi bronkitis, batuk, dan asma. Sediaan racikan sering diresepkan kepada bayi, anak, dan lansia yang mengalami kesulitan menelan kapsul atau tablet serta memerlukan pengaturan dosis tertentu. Penelitian ini bertujuan mengetahui parameter kualitas sediaan racikan pulveres kombinasi ambroxol hidroklorida dan salbutamol sulfat yang diracik salah satu rumah sakit swasta di Semarang meliputi uji organoleptis, uji derajat halus, uji kandungan lembab, penetapan kadar, dan uji keseragaman kandungan.

Penelitian ini termasuk jenis penelitian non eksperimental deskriptif. Uji organoleptis dilakukan dengan pengamatan visual. Uji derajat halus dilakukan untuk mengetahui tingkat kehalusan serbuk menggunakan mikroskop. Uji kandungan lembab dilakukan dengan menghitung nilai persen *moisture content* setelah pemanasan dalam *moisture analyzer*. Penetapan kadar dilakukan menggunakan spektrofotometer UV dan diolah menggunakan analisis kemometrik teknik kalibrasi multivariat *partial least square* (PLS) dengan bantuan *software minitab*. Keseragaman kandungan didapatkan dengan menghitung nilai penerimaan.

Hasil penelitian menunjukkan bahwa uji kualitas sediaan racikan pulveres kombinasi ambroxol hidroklorida dan salbutamol sulfat salah satu rumah sakit swasta di Semarang memenuhi uji kualitas meliputi uji organoleptis, uji derajat halus, dan penetapan kadar. Terkait uji kandungan lembab dan uji keseragaman kandungan tidak memenuhi uji kualitas sediaan racikan pulveres.

Kata Kunci: ambroxol hidroklorida, salbutamol sulfat, pulveres, kemometrik, spektrofotometer UV, uji kualitas pulveres.

ABSTRACT

Pulveres preparations, a combination of ambroxol hydrochloride and salbutamol sulfate are prescribed for bronchitis, coughs and asthma. Compounded preparations are often prescribed for infants, children, and the elderly who have difficulty swallowing capsules or tablets and require certain dosage adjustments. This study aims to determine the quality parameters of the pulveres combination of ambroxol hydrochloride and salbutamol sulfate formulated by a private hospital in Semarang including organoleptic test, smooth degree test, moisture content test, determination level, and content uniformity test.

This research is a descriptive non-experimental research. The organoleptic test was carried out by visual observation. The smooth degree test was carried out to determine the level of fineness of the powder using a microscope. Moist content test was done by calculating the percent value of moisture content after heating in the moisture analyzer. The determination level was carried out using a UV spectrophotometer and processed using chemometric analysis the multivariate partial least square (PLS) calibration technique with the help of Minitab software. The uniformity of content is obtained by calculating the acceptance value.

The results showed that the quality test of the pulveres preparation, a combination of ambroxol hydrochloride and salbutamol sulfate by a private hospital in Semarang met the quality tests including organoleptic test, smooth degree test, and determination level. Regarding the moisture content test and the content uniformity test, it does not meet the quality test for the pulveres compound preparation.

Keyword: ambroxol hydrochloride, salbutamol sulfate, pulveres, chemometrics, UV spectrophotometer, pulveres quality test.