

A NEW SPECTROPHOTOMETRIC METHOD FOR THE DETERMINATION OF OSELTAMIVIR PHOSPHATE IN BULK AND CAPSULES

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SUMMARY

In this study, a simple, rapid and accurate spectrophotometric method has been developed for the assay of oseltamivir phosphate (OSP). The proposed method based on the charge-transfer reactions of oseltamivir, as n-electron donor, with 7,7,8,8-tetracyanoquinodimethane (TCNQ), as π -acceptors to give highly colored complexes. The experimental conditions such as reagent concentration, reaction solvent and time have been carefully optimized to achieve the highest sensitivity. Beer's law is obeyed over the concentration range of 3–30 $\mu\text{g/mL}$ with correlation coefficient 0.9999. The method was applied successfully to the determination of this drug in capsules. The mean recovery for the commercial capsules was 100.03%. The suggested method could be used for the determination of OSP in pure and capsules being sensitive, simple and selective.

ÖZET

Bu çalışmada, oseltamivir fosfatın tayini için basit, hızlı ve doğru bir spektrofotometrik bir yöntem geliştirildi. Yöntem bir n-elektron verici olan oseltamivirin bir π -alıcısı olan 7,7,8,8-tetrasiyanoquinodimetan (TCNQ) ile oldukça renkli bir kompleks oluşumuna dayanmaktadır. Analizi en yüksek hassasiyette gerçekleştirmek için belirteç miktarı, reaksiyon çözeltisi, reaksiyon zamanı gibi deneysel koşullar dikkatlice incelendi. Kalibrasyon eğrisinin 3–30 $\mu\text{g/mL}$ derişim

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