
معايرة الترفينادين
في أشكاله الصيدلانية وفي البلاسما

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الملخص

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Determination of Terfenadine in Dosage Forms and Plasma

Joumaa Al-Zehouri*

Abstract

Terfenadine reacts with mixed anhydrides (Malonic and acetic anhydrides) producing a yellow-colored product with intense fluorescence. Based on this fact, a spectrophotometric method was developed for the determination of terfenadine in dosage forms. The relation between the absorbance at 395 nm and the concentration is rectilinear over the range 0.5-5 $\mu\text{g}\cdot\text{ml}^{-1}$. The reaction product was also measured spectrofluorimetrically at 435 nm after excitation at 395 nm. The fluorescence intensity was directly proportional to the concentration over the range 0.5-4 $\text{ng}\cdot\text{ml}^{-1}$. The different parameters affecting the development and stability of the reaction product were carefully studied and incorporated into the procedure. The proposed spectrophotometric method was successfully applied to the determination of terfenadine in tablets and suspensions; the % recoveries were 99.83 ± 0.75 and 99.65 ± 0.83 , respectively. The proposed spectrofluorimetric method was applied to the determination of terfenadine in spiked human plasma. the % recovery was 99.35 ± 2.19 . The method is highly sensitive and specific. No interference was noticed from co-formulated drugs, such as pseudoephedrine and ibuprofen.

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مقدمة البحث وأهميته

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[3-9]

[10-24]

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P450-3A4

الترفينادين Terfenadine

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Telden

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Marion

Merrel Dow

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(KKH)

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BDH

Merck

(MAA)

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المواد والطريقة

المواد والكواشف

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Shimadzu,
UV-160 IPC.

Sigma

Spectrofluorimeter,

Telden

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Regression)

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٤- طريقة العمل على البلازما

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النتائج والمناقشة

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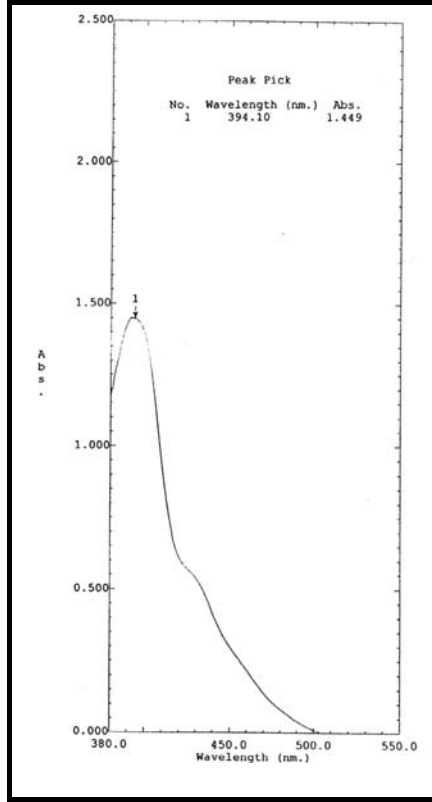
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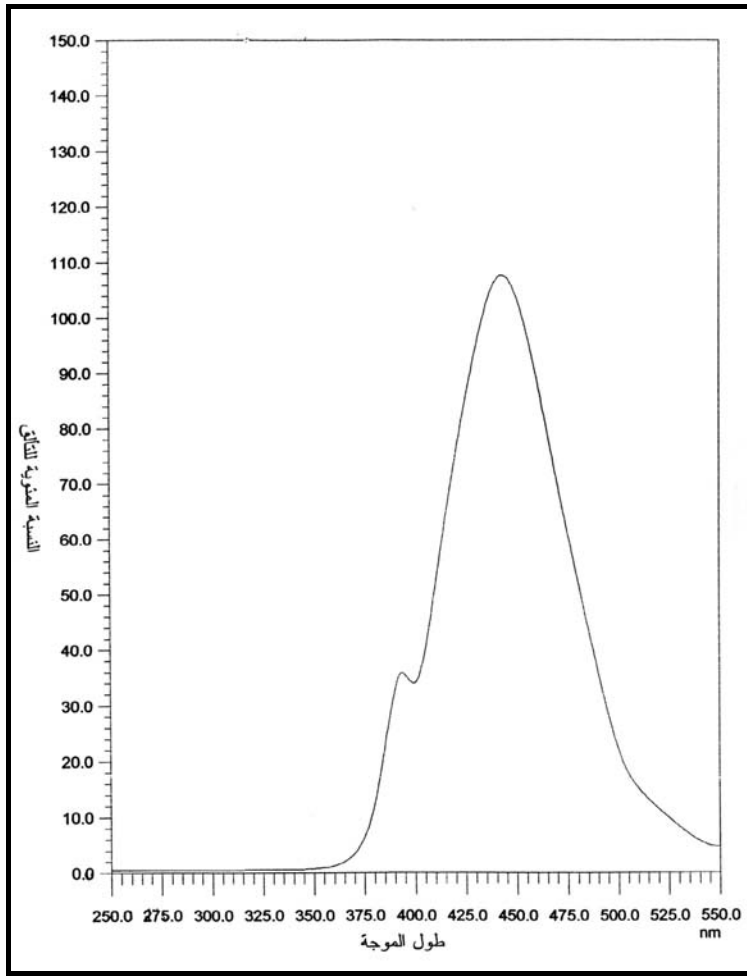
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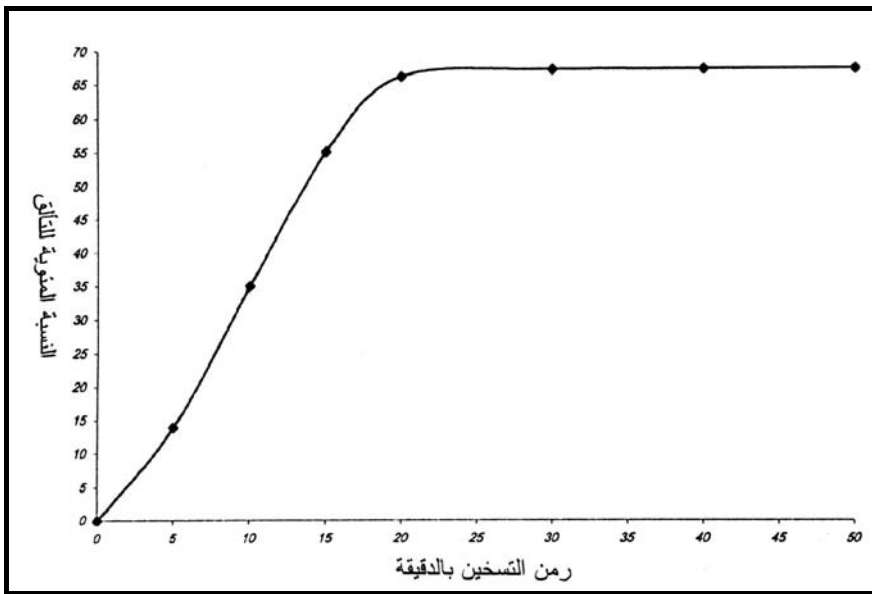
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Spectrophotometric method

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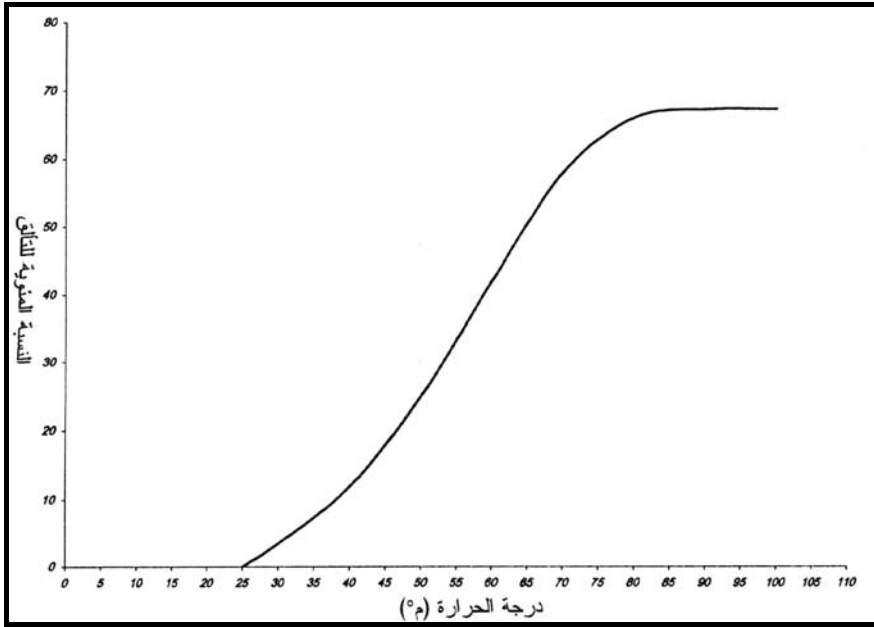
Fluorimetric method

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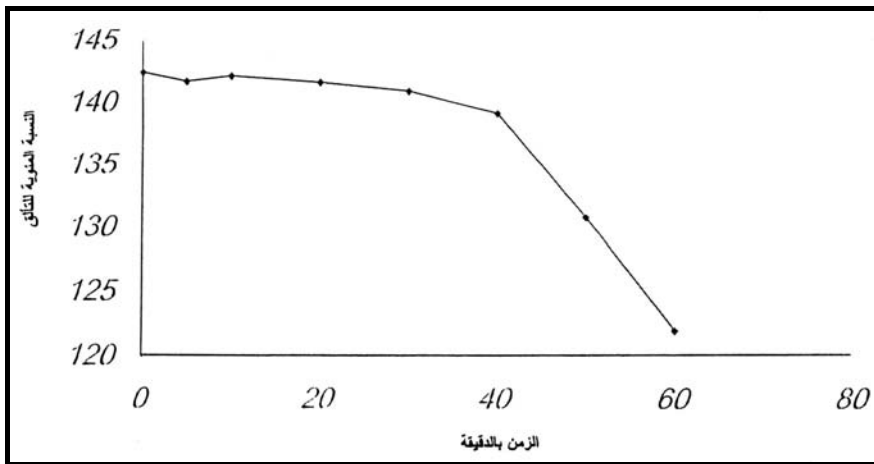


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