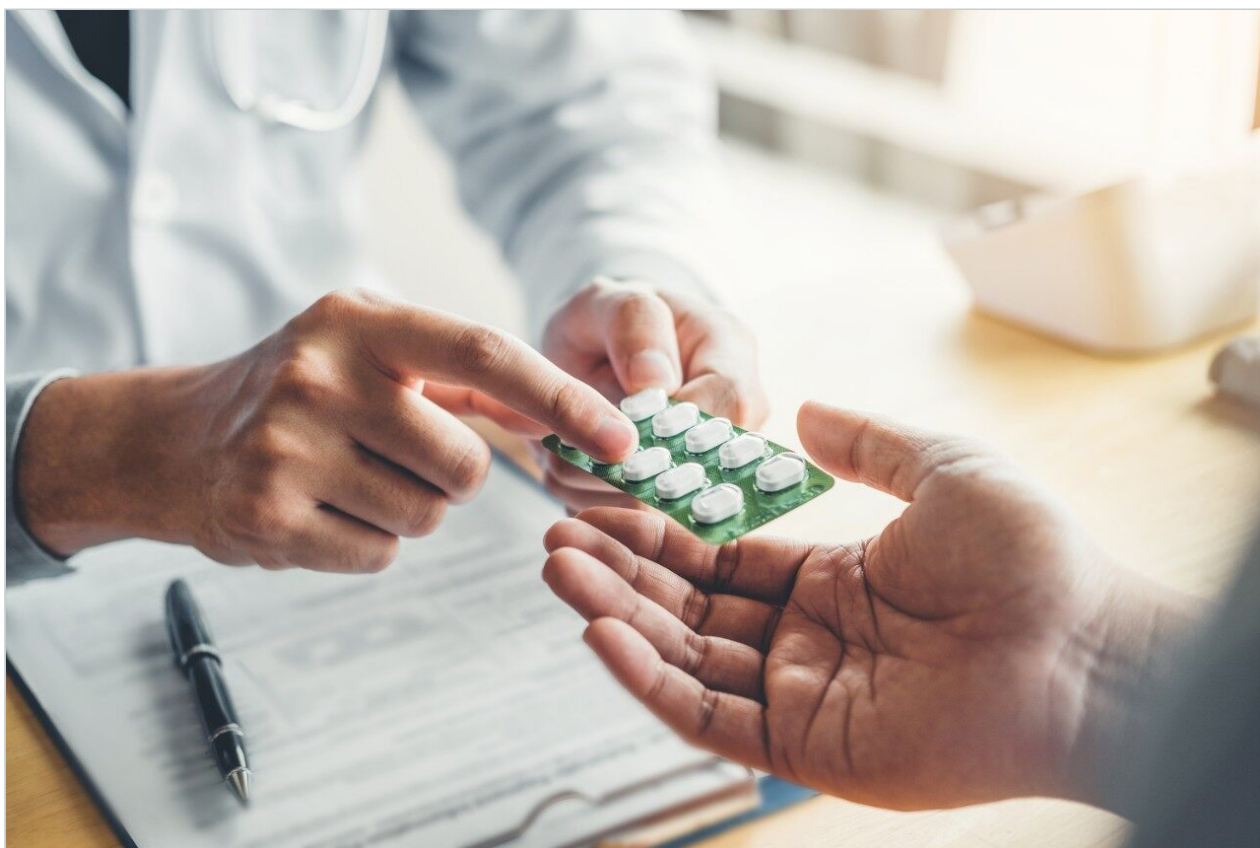


Tricyclic Antidepressants

Waters Corporation



This is an Application Brief and does not contain a detailed Experimental section.

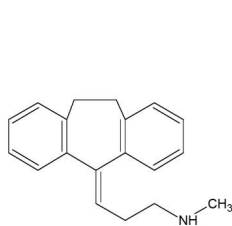
Abstract

This application brief demonstrates analysis of tricyclic antidepressants.

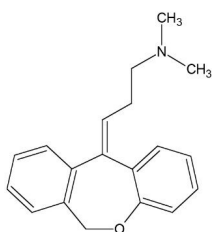
Introduction

The compounds used in this study are -

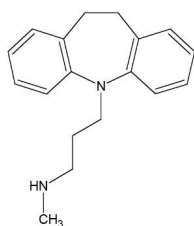
| Compounds | USP tailing |
|------------------|-------------|
| 1. Desimpramine | 1.20 |
| 2. Nortriptyline | 1.18 |
| 3. Doxepin | 1.17 |
| 4. Imipramine | 1.17 |
| 5. Amitriptyline | 1.14 |



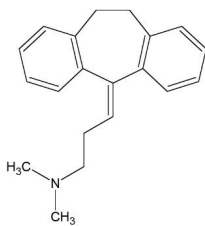
Nortriptyline



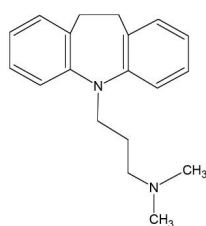
Doxepin



Desipramine



Amitriptyline



Imipramine

Experimental

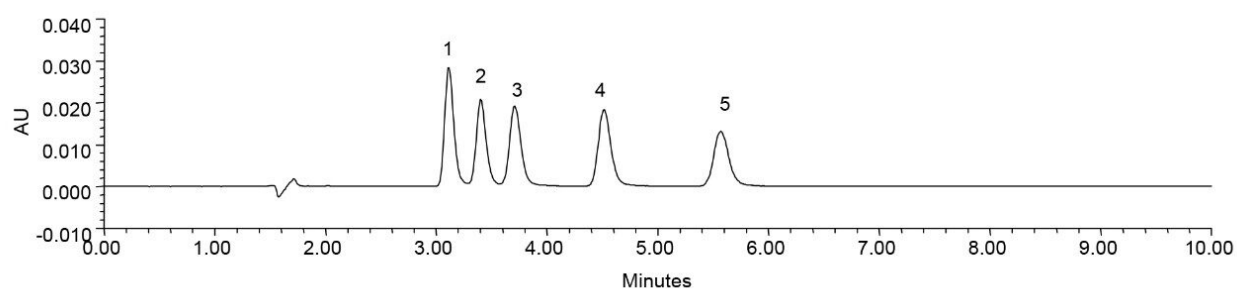
Conditions

| | |
|------------------------------------|---|
| Column: | SunFire C ₁₈ 4.6 x 150 mm, 5 μm |
| Part number: | 186002559 |
| Mobile phase A: | Water |
| Mobile phase B: | MeOH |
| Mobile phase C: | 100 mM CH ₃ COO ⁻ NH ₄ ⁺ , pH 6.0 |
| Flow rate: | 1 mL/min |
| Isocratic mobile phase conditions: | 18% A, 72% B, 10% C |

| | |
|-----------------------|-----------------------------|
| Injection volume: | 10 μ L |
| Sample concentration: | 10 μ g/mL in water |
| Temperature: | 30 $^{\circ}$ C |
| Detection: | UV @ 254 nm |
| Instrument: | Alliance 2695 with 2996 PDA |

Results and Discussion

Excellent peak shape on basic tricyclic antidepressants with SunFire C₁₈ analytical Column.



Featured Products

Alliance HPLC System <<https://www.waters.com/534293>>

WA41907, May 2005

