

## Oxybutynin in Rat Plasma - Xterra MS C18 Column

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Waters Corporation



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

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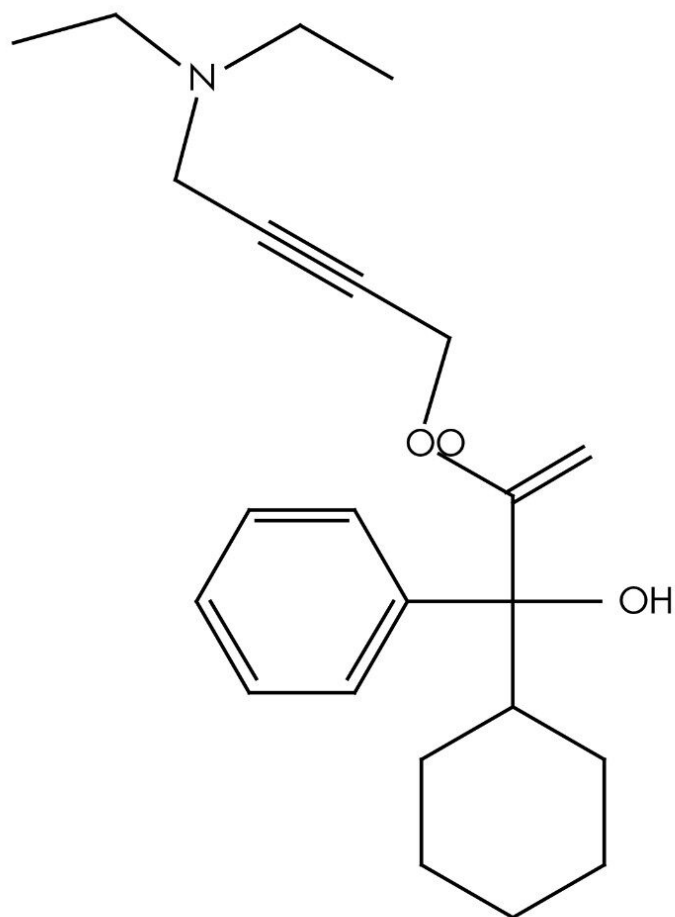
### Abstract

This application brief demonstrates analysis of oxybutynin in rat plasma.

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## Introduction

The compound analyzed in this study is oxybutynin.



OXYBUTYNIN

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## Experimental

### HPLC Method

Column:

Xterra MS C<sub>18</sub> 2.1 x 30 mm, 3.5 μm

Part number:	186000398
Mobile phase A:	100 mM NH <sub>4</sub> COOH
Mobile phase B:	ACN
Isocratic mobile phase composition:	45% A; 55% B
Flow rate:	0.2 mL/min
Injection volume:	30 µL
Detection:	MS ESI <sup>+</sup>
Instrument:	Alliance 2790, Quattro Ultima
Ion source:	Electrospray Positive
Source temperature:	150 °C
Gas cell:	1.5e <sup>-3</sup> mbar, 25eV
Desolvation temperature:	350 °C
Cone gas flow:	150 L/hr
Drying gas flow:	600 L/hr
Cone voltage:	30 V

## OASIS® MCX EXTRACTION METHOD

Oasis® MCX Extraction Plate, 10 mg/96 well

Part Number 186000259

### **CENTRIFUGE:**

25 mL of EDTA rat plasma  
at 10000 ( RPM)

### **SPIKE:**

5 mL of centrifuged plasma with drug  
(max 5% organic load)  
Add 100 µL H<sub>3</sub>PO<sub>4</sub>  
(Oxybutyninis base sensitive)

### **CONDITION PLATE:**

500 µL methanol followed  
with 500 µL water

### **LOAD PLATE:**

500 µL spiked rat plasma

### **WASH PLATE:**

500 µL 2% HCl in water

### **ELUTE PLATE:**

300 µL 5% NH<sub>4</sub>OH in methanol

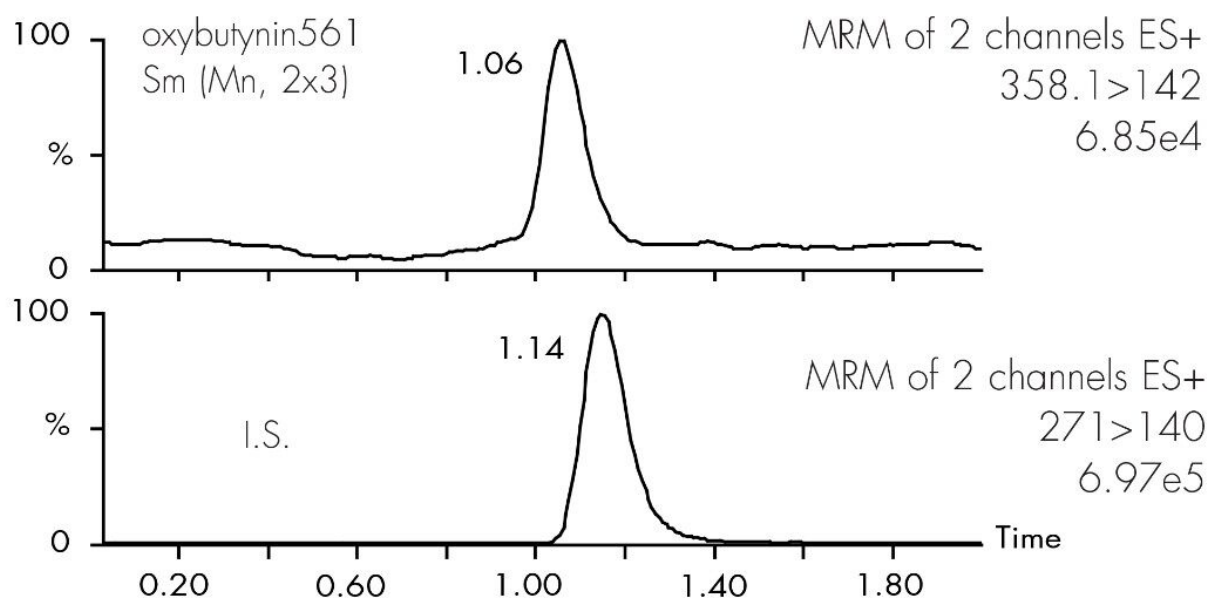
### **DILUTE:**

200 µL water 10% Formic Acid in water

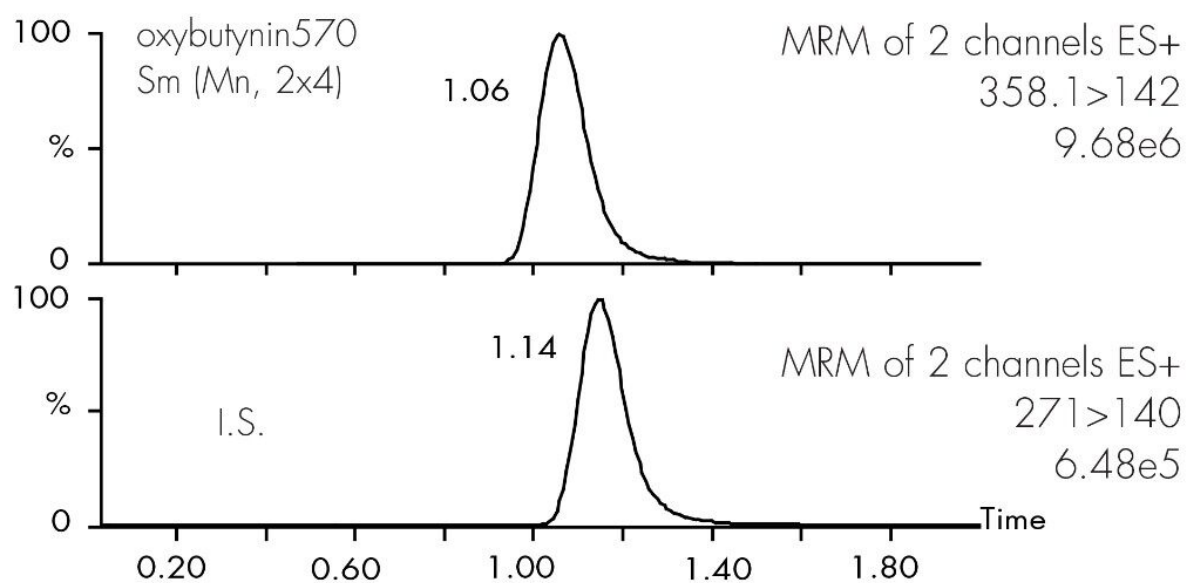
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## Results and Discussion

Spike 1 ng/mL, 55/45 ACN/H<sub>2</sub>O 0.1 M NH<sub>4</sub> Formate pH 4



Spike 250 ng/mL, 55/45 ACN/H<sub>2</sub>O 0.1 M NH<sub>4</sub> Formate pH 4



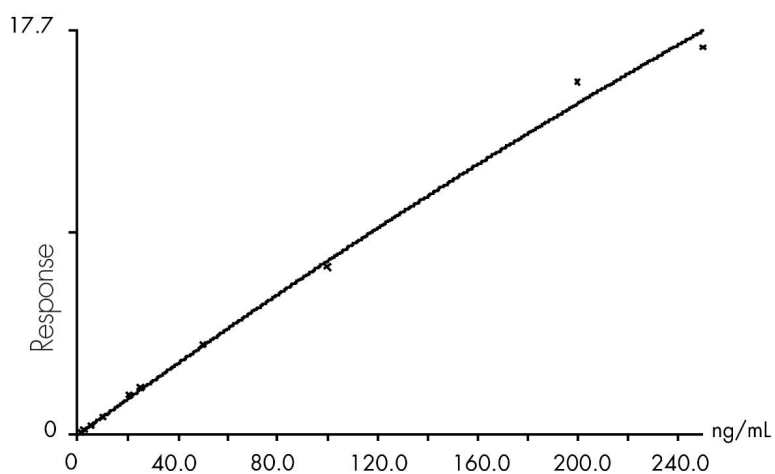
Compound name: Oxybutynin

Coefficient of Determination: 0.995732

Calibration curve:  $-3.59333\text{e-}5 * x^2 + 0.0799116 * x + 0.000289979$

Response type: Internal Std (Ref 1), Area \* (IS Conc./IS Area)

Curve type: 2nd Order, Origin: Exclude, Weighting:  $1/x^2$ , Axis trans: None



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

WA31764.115, June 2003