

# Steroids Analysis Using 4.6 x 20 mm Intelligent Speed Separation Columns

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Waters Corporation



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

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## Abstract

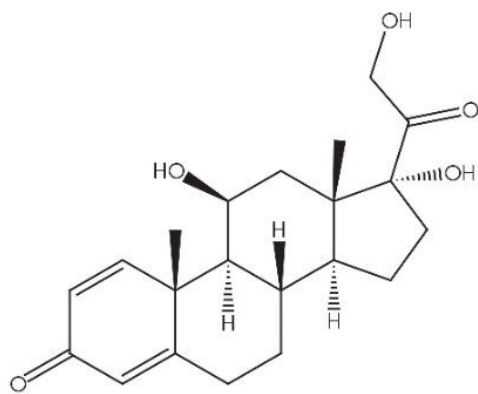
This application brief demonstrates analysis of steroids.

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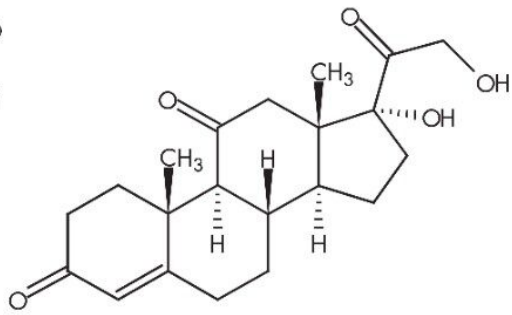
## Introduction

The compounds used in this study are:

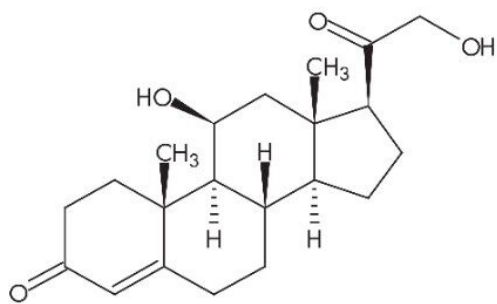
1. Prednisone
2. Cortisone
3. Corticosterone
4. Estradiol
5. Estrone
6. Progesterone



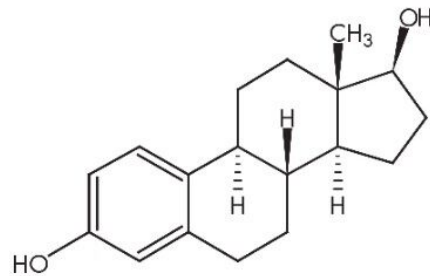
Prednisolone



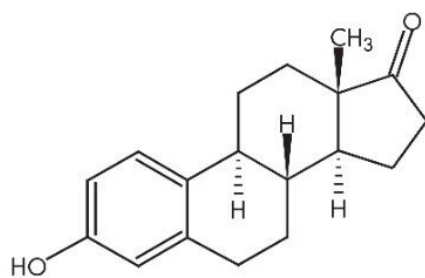
Cortisone



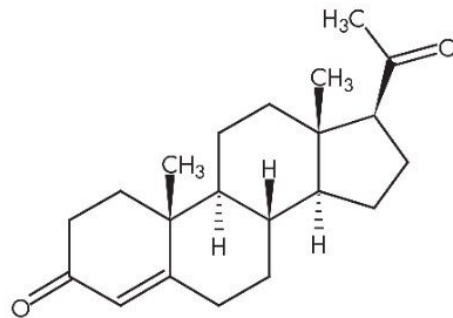
Corticosterone



Estradiol



Estrone



Progesterone

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Experimental

## Conditions

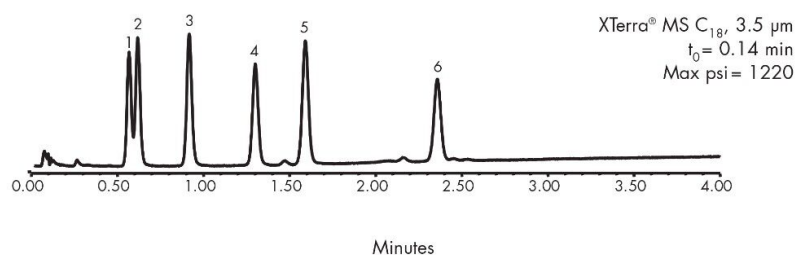
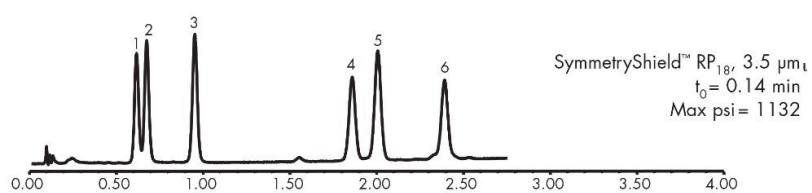
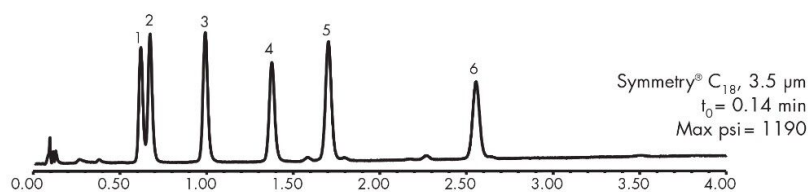
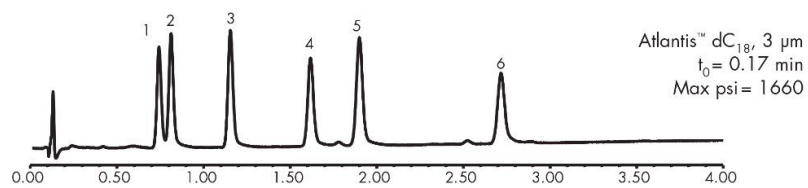
|                       |                                                                                                                                                                                                                                                                                                                  |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Columns:              | Atlantis dC <sub>18</sub> , 4.6 x 20 mm IS 3 µm,<br>(P/N:186002062)<br><br>Symmetry C <sub>18</sub> , 4.6 x 20 mm IS 3.5 µm,<br>(P/N:186002090)<br><br>Symmetry Shield RP <sub>18</sub> , 4.6 x 20 mm IS 3.5 µm,<br>(P/N:186002092)<br><br>XTerra MS C <sub>18</sub> , 4.6 x 20 mm IS 3.5 µm,<br>(P/N:186001891) |
| Mobile phase A:       | Water                                                                                                                                                                                                                                                                                                            |
| Mobile phase B:       | Acetonitrile                                                                                                                                                                                                                                                                                                     |
| Flow rate:            | 3.0 mL/min                                                                                                                                                                                                                                                                                                       |
| Injection volume:     | 10 µL                                                                                                                                                                                                                                                                                                            |
| Sample concentration: | 20 µg/mL                                                                                                                                                                                                                                                                                                         |
| Temperature:          | 30 °C                                                                                                                                                                                                                                                                                                            |
| Detection:            | UV @ 220 nm                                                                                                                                                                                                                                                                                                      |
| Instrument:           | Alliance 2795 with 996 PDA                                                                                                                                                                                                                                                                                       |

Gradient

| Time<br>(min) | Profile |    |
|---------------|---------|----|
|               | %A      | %B |
| 0.0           | 80      | 20 |
| 4.0           | 36      | 65 |

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Results and Discussion



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## Featured Products

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

WA31787.27, June 2003

