

Cardiac arrhythmias are major causes of morbidity and mortality throughout the world. Arrhythmias are controlled by medication of several drugs, such as amiodarone, an antiarrhythmic agent that helps to stabilise the normal rhythm of the heart. The re-sorption rate and the biological availability of amiodarone is low and extremely variable. The therapy therefore requires a close monitoring for the adjustment of the drug dosage. The RECIPE ClinRep® Complete Kit allows for a quick, sensitive and reliable determination of amiodarone and the main metabolite desethylamiodarone. The sample preparation consists of a simple precipitation step.



→ Simple and quick sample preparation

→ Linearity over a wide range

→ Short run time

## Antiarrhythmics

# Amiodarone in Plasma

### Test Data

|                       |                                             |
|-----------------------|---------------------------------------------|
| Linearity:            | 0.1 - 10 µg/ml                              |
| Recovery:             | 95 - 105 %                                  |
| LOD:                  | 0.07 µg/ml                                  |
| LLOQ:                 | 0.1 µg/ml                                   |
| Intraassay precision: | Amiodarone: 2.1 %,<br>Desethylamiod.: 2.5 % |
| Interassay precision: | Amiodarone: 4.0 %,<br>Desethylamiod.: 4.2 % |

### HPLC Parameters

|                     |                                          |
|---------------------|------------------------------------------|
| Pump:               | isocratic pump,<br>flow rate: 0.8 ml/min |
| Injection volume:   | 20 µl                                    |
| Injection interval: | 8 min                                    |
| UV/VIS-Detector:    | 255 nm                                   |
| HPLC-Thermostat:    | 30 °C                                    |

### Sample Preparation

#### Extraction:

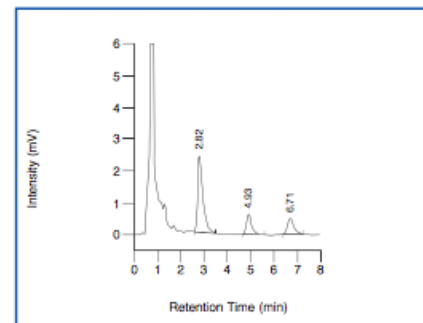
|               |                                                         |
|---------------|---------------------------------------------------------|
| 100 µl sample | 150 µl Precipitant P<br>(contains Internal Standard IS) |
|---------------|---------------------------------------------------------|

↓ centrifuge

#### HPLC Analysis:

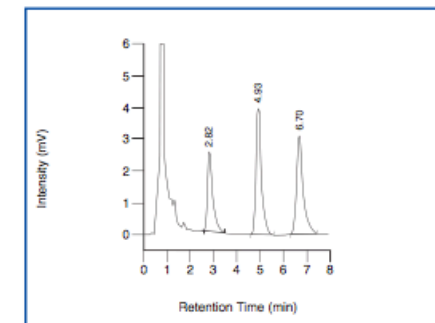
Inject 20 µl of the supernatant

ClinChek® Serum Control, Level I



IS: 2.82 min, Desethylamiodarone: 4.93 min,  
Amiodarone: 6.71 min

ClinChek® Serum Control, Level II



IS: 2.82 min, Desethylamiodarone: 4.93 min,  
Amiodarone: 6.70 min

### Ordering Information

| Order No.                                | Description                                                   | Quantity                |
|------------------------------------------|---------------------------------------------------------------|-------------------------|
| 20000                                    | ClinRep® Complete Kit for Amiodarone in Plasma for 100 assays | 1 pce.                  |
| <b>Kit Components (order no. 20000):</b> |                                                               |                         |
| 20010                                    | Mobile Phase                                                  | 1000 ml                 |
| 20011                                    | Standard Solution                                             | 3 ml                    |
| 20012                                    | Precipitant P with Internal Standard                          | 15 ml                   |
| 20013                                    | Serum Calibrator, lyophil.                                    | 3 ml                    |
| 20020                                    | Sample Preparation Vials with Reagent, lyophil.               | 2 x 20020 (2 x 50 pcs.) |
|                                          | Manual                                                        | 1 pce.                  |
|                                          | Quick Reference                                               | 1 pce.                  |
| <b>Start Accessories:</b>                |                                                               |                         |
| 20030                                    | Analytical Column with test chromatogram                      | 1 pce.                  |
| 20032                                    | Guard Column Holder incl. 1 Guard Column                      | 1 pce.                  |
| <b>Accessories:</b>                      |                                                               |                         |
| 20033                                    | Guard Column                                                  | 5 pcs.                  |
| FK5810                                   | PEEK tubing (connection of prefilter and column)              | 1 pce.                  |
| FK5820                                   | Stainless steel prefilter holder                              | 1 pce.                  |
| FK5821                                   | Replacement filter for stainless steel prefilter holder       | 10 pcs.                 |
| <b>ClinChek® Controls:</b>               |                                                               |                         |
| 20080                                    | Serum Control, lyophil., Level I                              | 10 x 3 ml               |
| 20081                                    | Serum Control, lyophil., Level II                             | 10 x 3 ml               |
| 20082                                    | Serum Control, lyophil., Level I, II                          | 2 x 5 x 3 ml            |