

# Evaluation of Opiate results

## Cut-off value

300 µg/L

## Cross-reactivity

This assay detects morphine, heroin (diacetylmorphine), 6-monoacetyl morphine, codeine, dihydrocodeine, hydrocodone, hydromorphone, and oxycodone (in high levels).

This assay will not detect methadone or buprenorphine (a buprenorphine assay is available at an extra charge).

## Metabolism

**Heroin** (half-life = 10 minutes) is rapidly metabolised to 6-monoacetyl morphine and morphine. 80% of the dose is excreted within 24 hours.

**Morphine** (half-life = 2 hours) is metabolised to morphine-3 and morphine-6 glucuronides. 84% of the dose is excreted within 8 hours.

**Codeine** (half-life = 3 hours) is metabolised to morphine (except in 10% of the Caucasian population) and norcodeine. 86% of the dose is excreted within 24 hours.

**Dihydrocodeine** (half-life = 4 hours) is metabolised to nordihydrocodeine and dihydromorphone. 20–30% of the dose is excreted within 24 hours.

**Hydrocodone** (half-life = 4 hours) is a metabolite of codeine. 26% of the dose is excreted in 72 hours. Hydrocodone is metabolised to hydromorphone.

**Hydromorphone** (half-life = 1.5–4 hours). 36% of the dose is excreted within 72 hours.

Heroin, morphine, and their metabolites are usually detectable for 36–48 hours following a standard dose.

## Interferences

High levels of naltrexone may cause false positive results.