

Fluoxetine

General:

Fluoxetine (trade name Prozac) is an antidepressant of the selective serotonin reuptake inhibitor (SSRI) class. Fluoxetine is approved for the treatment of major depression (including pediatric depression), obsessive-compulsive disorder (in both adult and pediatric populations), bulimia nervosa, anorexia nervosa, panic disorder and premenstrual dysphoric disorder. The bioavailability of fluoxetine is relatively high (72%), and peak plasma concentrations are reached in 6 to 8 hours. It is highly bound to plasma proteins, mostly albumin.

Fluoxetine is metabolized in the liver by isoenzymes of the cytochrome P450 system, including CYP2D6. The role of CYP2D6 in the metabolism of fluoxetine may be clinically important, as there is great genetic variability in the function of this enzyme among persons. Only one metabolite of fluoxetine, norfluoxetine (demethylated fluoxetine), is biologically active.

The extremely slow elimination of fluoxetine and its active metabolite norfluoxetine from the body distinguishes it from other antidepressants. With time, fluoxetine and norfluoxetine inhibit their own metabolism, so fluoxetine elimination half-life changes from 1 to 3 days, after a single dose to 4 to 6 days, after long-term use. Similarly, the half-life of norfluoxetine is longer (16 days) after long-term use.

Indication: therapy monitoring, intoxication

Material: 1 ml serum

TAT: 7-10 days*

Method: LCMS

Units: µg/l

Ref.- range: see report

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>