

Evaluation of Benzodiazepine results

Cut-off value

200 µg/L

Cross-reactivity

This assay detects all benzodiazepines; however, clonazepam, lorazepam, and triazolam exhibit very low cross-reactivity and would need to be present in large quantities to be detectable.

Metabolism

Liver biotransformation by hepatic microsomal enzymes occurs via demethylation or conjugation with a glucuronide. Most benzodiazepines are detected in urine for several days following administration.

Half-life of some benzodiazepines

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| Clonazepam (Rivotril) | 10–58 hours |
| Diazepam (Valium, Valpam, Ducene, Antenex) | 20–50 hours |
| Flunitrazepam (Hypnodorm) | 10–70 hours |
| Flurazepam | 50–100 hours |
| Lorazepam (Ativan) | 9–24 hours |
| Oxazepam (Serepax, Alepam, Murelax) | 3–21 hours |
| Temazepam (Normison, Temaze) | 3–38 hours |
| Triazolam (Halcion) | 1.5–3 hours |
| Alprazolam (Xanax, Zamhexal, Alprax, Kalma) | 10–58 hours |

Other benzodiazepines include

Bromazepam (Lexotan)
Clobazam (Frisium)
Nitrazepam (Alodorm, Mogadon)
Midazolam (Hypnovel)
Zolpidem (Stilnox)