

# Oxcarbazepine

## Synonyms

Trileptal, Oxtellar

## Clinical Indication

For monitoring patients on oxcarbazepine.

Oxcarbazepine is an anti-epileptic drug used alone or in combination with other medications to treat focal and or tonic-clonic seizures. It is a newer drug that is similar in structure and effect to carbamazepine but was developed with the aim of causing fewer side effects.

## Part of Profile / See Also

## Request Form

Combined Pathology manual Blood form (Yellow/Black) or ICE request

## Availability / Frequency of Analysis

Referred test: Analysed by the TDM Unit, Chalfont Centre for Epilepsy [8353](#), if specific criteria met.

## Turnaround Time

2 weeks

## Patient Preparation

Samples should be collected before next dose (trough)

## Sample Requirements

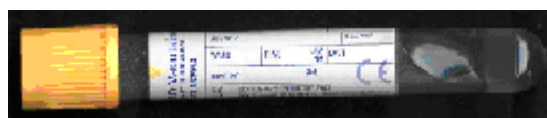
### Specimen Type

Serum / lithium heparin plasma

### Volume

1ml

### Container



yellow top (SST)



Paediatric lithium heparin (Orange top – Sarstedt)



Paediatric lithium heparin (Green top BD Microtainer)

## Reference Range & Units

3 – 35 mg/L

## Interferences

Enzyme inducing AEDs enhance the metabolism of the active metabolites of oxcarbazepine and may lower serum concentrations. Valproate can also cause lowered serum oxcarbazepine levels.

## Interpretation & Clinical

## Decision Value (if applicable)

Adverse effects are more frequent at serum concentrations of 35-40 mg/L. In many patients, adverse effects occur intermittently in relation to fluctuating oxcarbazepine metabolite levels. Monitoring MHD concentrations could therefore help in the management of patients on high-dose oxcarbazepine therapy.

## References

Patsalos, P (2008) Antiepileptic drugs – best practice guidelines for therapeutic drug monitoring: A position paper by the subcommission on therapeutic drug monitoring, ILAE Commission on Therapeutic Strategies. *Epilepsia* **49**:7 1239 – 1276

<https://bnf.nice.org.uk/drug/oxcarbazepine.html>

## Test code

OXCX

## Lab Handling

Aliquot 500ul and store in referrals rack at 4C. Sent daily by first class post to TDM Unit, Chalfont Centre (UCLH).



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