

## 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** 

 $3 - 35 \, \text{mg/L}$ 

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.



PF-PTD-423

## 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.

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

*Epilepsia* **49**:7 1239 – 1276

## **Test code**

## **Lab Handling**

OXCX

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

