

# Therapeutic Drug Monitoring

**SAMPLE REQUIRED:** Serum, 1ml

**BLOOD TUBE REQUIRED:** : Red top tube (gold top gel tubes may interfere with drug levels)

## **Phenobarbitone:**

After initiating drug therapy or after a change in dose rate, a steady state is achieved after approximately 2-3 weeks. After this time, samples for monitoring can be collected at a random time point. Trough sampling is not routinely required.

Drug monitoring is recommended at 2 weeks, 6 weeks and thereafter 6 monthly after starting medication or after dosage changes,

## **Potassium Bromide:**

Potassium bromide has a very long half life of approximately 25 days. In general, measuring potassium bromide concentration every 6 weeks is recommended until the level is within the therapeutic range. Samples for monitoring can be collected at a random time point.

## **Digoxin:**

A peak sample should be collected at 3-6 hours post the last dose.

## **Levetiracetam / Keppra:**

Half life is estimated at 2-4 hours in dogs and 4-7 hours in cats. As such a steady state will not develop in dogs and will likely not develop in cats.

A fasting sample is required. A peak sample is collected 2-4 hours post therapy. Therapeutic range in dogs and cats is not defined. The human therapeutic range is 5-21 mcg/ml.