

Therapeutic Drug Monitoring (TDM) Recommended Collection Times for Peak/Trough Levels

Drug	Route	Timing of Blood Samples
Antibiotics:		
Aminoglycosides: Amikacin Gentamicin Tobramycin	IV	Trough: IPTND Peak: 30 minutes after infusion is complete
	IM	Trough: IPTND Peak: 1 hour after injection
Vancomycin	IV	Trough: IPTND Peak: 1 hour after infusion is complete
Antineoplastics:		
Methotrexate	IV	24, 48, and 72 hours after infusion is complete
Bronchodilators:		
Theophylline	IV	Loading infusion: 30 minutes after infusion is complete Continuous infusion 30 minutes after loading dose 4 to 6 hours 8 to 12 hours 24 hours thereafter
	PO	Standard release Trough: IPTND Peak: 2 hours after dose Slow release Trough: IPTND Peak: 4 hours after dose
Cardiovascular Agents:		
Digoxin	IV,PO	Trough: IPTND Peak: 6 hours after dose
Lidocaine	IV PO	6 hours after infusion is begun, at least 40 minutes after any dose adjustment 12 to 24 hours thereafter
Quinidine	IV	Trough: IPTND Peak: Not recommended It is best to assess level midway in the dosing interval
Procainamide	PO	Loading infusion: immediately after infusion is complete Maintenance infusion 2 hours after initiation 6 to 12 hours after initiation 24 hours after initiation Trough: IPTND Peak: Not recommended

Drug	Route	Timing of Blood Samples
Neurologics:		
Carbamazepine	PO	Trough: IPTND Peak: 2 to 8 hours after dose for suspected toxicity
Lithium	PO	Immediate Release Trough: IPTND Peak: 1/2 to 3 hours after dose Extended release Trough: IPTND Peak: 4 to 12 hours after dose
Phenytoin (Total and Free)	IV	Trough: IPTND Peak: 2 hours after dose
	PO	Trough: IPTND Peak: 6 to 12 hours after dose
Phenobarbital	IV	Trough: IPTND Peak: 1 hour after dose
	PO	Trough: IPTND Peak: 8 to 12 hours after dose
Valproic Acid	PO	Trough: IPTND Peak: 1 to 4 hours after dose
IPTND = Immediately prior to next dose		