

Supplemental Table S1: TDM assays being used in diagnostic laboratories

Sources: (a) ARUP Consult. <https://arupconsult.com/content/therapeutic-drug-monitoring>. (Accessed Mar. 22, 2021).

(b) Mayo Clinic Laboratories. <https://www.mayocliniclabs.com/test-info/drug-book/therapeutic.html>. (Accessed Mar. 22, 2021).

Drug	Type of Drug	Technique	Source
5-Fluorocytosine	Antifungal	Bioassay	a
5-Fluorocytosine	Antifungal	LC-MS	b
Acetaminophen	Nonopioid Pain Medication	Spectrophotometry	a
Adalimumab	Antibody Therapeutic	Immunoassay	a
Alprazolam	Sedatives	LC-MS	a
Amikacin	Antibiotic	Immunoassay	a
Amiodarone	Antiarrhythmic	LC-MS	a
Amitriptyline and Nortriptyline	Antidepressant	LC-MS	a b
Aripiprazole	Antipsychotic	LC-MS	a
Azithromycin	Antibiotic	HPLC	a
Aztreonam	Antibiotic	Bioassay	a
Barbiturates	Sedatives	GC-MS	a
Benzodiazepines	Sedatives	LC-MS	a
Benzodiazepines	Sedatives	Immunoassay	a
Buprenorphine	Opioids	LC-MS	a
Bupropion	Antidepressant	LC-MS	a
Busulfan	Anti-cancer	LC-MS	b
Butalbital	Pain management	GC-MS	b
Carbamazepine	Anticonvulsant/Antiepileptic	LC-MS	a
Carbamazepine	Anticonvulsant/Antiepileptic	Immunoassay	a
Ceftazidime	Antibiotic	Bioassay	a
Chlordiazepoxide	Sedative	LC-MS	b
Chlorpromazine	Antipsychotic	LC-MS	a
Citalopram	Antidepressant	LC-MS	a b
Clobazam	Anticonvulsant/Antiepileptic	LC-MS	a
Clomipramine	Antidepressant	LC-MS	a b
Clonazepam	Sedatives	LC-MS	a
Clonazepam and 7-Aminoclonazepam	Antiepileptic Drugs	LC-MS	b
Clonidine	Antihypertensive	LC-MS	a
Clorazepate (Assayed as Nordiazepam)	Sedatives	LC-MS	a
Clozapine	Antipsychotic	LC-MS	a b
Cyclosporine	Immunosuppressant	LC-MS	a b
Desipramine	Antidepressant	LC-MS	a b
Diazepam and Nordiazepam	Antidepressant/Sedative	LC-MS	a b
Digitoxin	Antiarrhythmic	Immunoassay	a
Doxepin	Antidepressant	LC-MS	a
Doxepin and Nordoxepin	antidepressant	LC-MS	b
Duloxetine	antidepressant	LC-MS	b
Escitalopram	Antidepressant	LC-MS	a
Ethambutol	Antibiotic	LC-MS	a
Ethosuximide	Anticonvulsant/Antiepileptic	Immunoassay	a
Everolimus	Immunosuppressant	LC-MS	a b
Felbamate	Anticonvulsant/Antiepileptic	HPLC	a

Felbamate (Felbatol)	Anticonvulsant/Antiepileptic	LC-MS	b
Fentanyl	Opioids	LC-MS	a b
Flecainide	Antiarrhythmic	LC-MS	a b
Fluconazole	Antifungal	LC-MS	a
Fluoxetine	antidepressant	LC-MS	b
Fluoxetine	Antidepressant	GC-MS	a
Fluphenazine	Antipsychotic	LC-MS	a
Fluvoxamine	Antidepressant	GC	a
Gabapentin	Anticonvulsant/Antiepileptic	LC-MS	a b
Gentamicin	Antibiotic	Immunoassay	a
Haloperidol	Antipsychotic	LC-MS	a b
Heparin	Anticoagulants	Chromogenic Assay	a
Hydroxychloroquine	Anti-rheumatic	LC-MS	b
Ibuprofen	Nonopioid Pain Medication	HP	a
Imatinib	Oncology	Immunoturbidimetry	a
Imipramine and Desipramine	Antidepressant	LC-MS	a b
Infliximab	Anti-rheumatic drug	Immunoassay	a
Infliximab	Anti-rheumatic drug	LC-MS	b
Itraconazole	Antifungal	LC-MS	a b
Keppra	Anticonvulsant/Antiepileptic	Immunoassay	a
Ketamine	Sedatives	GC-MS	a
Lacosamide	Anticonvulsant/Antiepileptic	LC-MS	a b
Lamotrigine	Anticonvulsant/Antiepileptic	Immunoassay	a
Lamotrigine	Anticonvulsant/Antiepileptic	LC-MS	b
Leflunomide	Anti-rheumatic	LC-MS	a b
Levetiracetam	Anticonvulsant	LC-MS	b
Librium and Nordiazepam	Sedatives	LC-MS	a
Lithium	Antipsychotic	Colorimetry	a
Lorazepam	Sedatives	LC-MS	a
Lurasidone	Antipsychotic	LC-MS	a
Mephobarbital and Phenobarbital	Anticonvulsant	GC-MS	b
Meropenem	Antibiotic	Bioassay	a
Methadone	Opioids	LC-MS	a b
Methotrexate	Immunosuppressant/Oncology	Immunoassay	a
Methotrexate Post Glucarpidase	Immunosuppressants	LC-MS	b
Metoprolol	Antihypertensive	LC-MS	a
Mexiletine	Antiarrhythmic	LC-MS	a b
Mitotane	Oncology	GC	a
Mycophenolic Acid	Immunosuppressant	LC-MS	a b
Nafcillin	Antibiotic	Bioassay	a
Natalizumab	Antibody Therapeutic	Immunoassay	a
Nicotine		LC-MS	b
Nortriptyline	Antidepressant	LC-MS	a b
Olanzapine	Antipsychotic	LC-MS	a
Opiates	Opioids	LC-MS	a
Oxcarbazepine	Anticonvulsant	LC-MS	b
Oxcarbazepine or Eslicarbazepine	Anticonvulsant/Antiepileptic	LC-MS	a
Paliperidone	Antipsychotic	LC-MS	a

Paroxetine	Antidepressant	LC-MS	b
Pentobarbital	Sedatives	GC-MS	a b
Perampanel	Anticonvulsant/Antiepileptic	LC-MS	a
Phenobarbital	Anticonvulsant/Antiepileptic	Immunoassay	a
Phenobarbital	Anticonvulsant/Antiepileptic	LC-MS	a
Phenytoin	Anticonvulsant/Antiepileptic	Immunoassay	a
Piperacillin	Antibiotic	Bioassay	a
Posaconazole	Antifungal	LC-MS	a b
Prazepam (Assayed as Nordiazepam)	Sedatives	LC-MS	a
Pregabalin	Anticonvulsant/Antiepileptic	LC-MS	a b
Primidone	Anticonvulsant/Antiepileptic	Immunoassay	a
Procainamide and NAPA	Antiarrhythmic	Immunoassay	a
Propafenone	Antiarrhythmic	LC-MS	b
Propoxyphene	Opioids	LC-MS	a
Protriptyline	Antidepressant	LC-MS	a
Quetiapine	Antipsychotic	LC-MS	a
Ribavirin	Antiviral	LC-MS	b
Rifampin	Antibiotic	LC-MS	a
Risperidone	Antipsychotic	LC-MS	a
Rufinamide	Anticonvulsant/Antiepileptic	LC-MS	a b
Salicylate	Nonopioid Pain Medication	Spectrophotometry	a
Secobarbital	Barbiturate	GC-MS	b
Sertraline	Antidepressant	LC-MS	a
Sirolimus	Immunosuppressant	LC-MS	a b
Streptomycin	Antibiotic	HPLC	a
Sulfamethoxazole	antibiotic	LC-MS	b
Sulfonamides	Antibiotic	Spectrophotometry	a
Tacrolimus	Immunosuppressant	LC-MS	a b
Tapentadol	Opioids	LC-MS	a
Thiamin (Vitamin B1)	Vitamin	LC-MS	b
Thiopurine	Oncology	LC-MS	a
Tiagabine Quantitative	Anticonvulsant/Antiepileptic	LC-MS	a
Ticarcillin	Antibiotic	Bioassay	a
Topiramate	Anticonvulsant/Antiepileptic	LC-MS	b
Topiramate	Anticonvulsant/Antiepileptic	Immunoassay	a
Tramadol	Opioids	LC-MS	a
Trazodone	Antidepressant	LC-MS	a
Trimethoprim	Antibiotic	LC-MS	b
Trimipramine	Antidepressant	LC-MS	b
Valproic Acid	Anticonvulsant/Antiepileptic	Immunoassay	a
Vancomycin	Antibiotic	Immunoassay	a
Venlafaxine	Antidepressant	LC-MS	a b
Vigabatrin	Anticonvulsant/Antiepileptic	LC-MS	a
Voriconazole	Antifungal	LC-MS	a b
Warfarin	Anticoagulants	LC-MS	a
Ziprasidone	Antipsychotic	LC-MS	a
Zolpidem	Sedatives	LC-MS	a
Zonisamide	Anticonvulsant/Antiepileptic	LC-MS	b

Zonisamide

Anticonvulsant/Antiepileptic

Immunoassay

a