

**APPENDIX A. THERAPEUTIC RANGES OF DRUGS IN TRADITIONAL AND SI UNITS**

Drug	Traditional Range	Conversion Factor <sup>a</sup>	SI Range
Acetaminophen	>5 mg/dL toxic	66.16	>330 μmol/L toxic
N-acetylprocainamide	4–10 mg/L	3.606	14–36 μmol/L
Amitriptyline	75–175 ng/mL	3.605	270–630 nmol/L
Carbamazepine	4–12 mg/L	4.23	17–51 μmol/L
Chlordiazepoxide	0.5–5 mg/L	3.336	2–17 μmol/L
Chlorpromazine	50–300 ng/mL	3.136	150–950 nmol/L
Chlorpropamide	75–250 mcg/mL	3.613	270–900 μmol/L
Clozapine	250–350 ng/mL	0.003	0.75–1.05 μmol/L
Cyclosporine	100–200 ng/mL <sup>b</sup>	0.832	80–160 nmol/L
Desipramine	100–160 ng/mL	3.754	375–600 nmol/L
Diazepam	100–250 ng/mL	3.512	350–900 nmol/L
Digoxin	0.9–2.2 ng/mL	1.281	1.2–2.8 nmol/L
Disopyramide	2–6 mg/L	2.946	6–18 μmol/L
Doxepin	50–200 ng/mL	3.579	180–720 nmol/L
Ethosuximide	40–100 mg/L	7.084	280–710 μmol/L
Fluphenazine	0.5–2.5 ng/mL	2.11	5.3–21 nmol/L
Glutethimide	>20 mg/L toxic	4.603	>92 μmol/L toxic
Gold	300–800 mg/L	0.051	15–40 μmol/L
Haloperidol	5–15 ng/mL	2.66	13–40 nmol/L
Imipramine	200–250 ng/mL	3.566	710–900 nmol/L
Isoniazid	>3 mg/L toxic	7.291	>22 μmol/L toxic
Lidocaine	1–5 mg/L	4.267	4–22 μmol/L
Lithium	0.5–1.5 mEq/L	1	0.5–1.5 μmol/L
Maprotiline	50–200 ng/mL	3.605	180–720 μmol/L
Meprobamate	>40 mg/L toxic	4.582	>180 μmol/L toxic
Methotrexate	>2.3 mg/L toxic	2.2	>5 μmol/L toxic
Nortriptyline	50–150 ng/mL	3.797	190–570 nmol/L
Pentobarbital	20–40 mg/L	4.419	90–170 μmol/L
Perphenazine	0.8–2.4 ng/mL	2.475	2–6 nmol/L
Phenobarbital	15–40 mg/L	4.306	65–172 μmol/L
Phenytoin	10–20 mg/L	3.964	40–80 μmol/L
Primidone	4–12 mg/L	4.582	18–55 μmol/L
Procainamide	4–8 mg/L	4.249	17–34 μmol/L
Propoxyphene	>500 ng/mL toxic	2.946	>1,500 ng/mL
Propranolol	50–200 ng/mL	3.856	190–770 nmol/L
Protriptyline	100–300 ng/mL	3.797	380–1,140 nmol/L
Quinidine	2–6 mg/L	3.082	6–18 μmol/L
Salicylate (acid)	15–25 mg/dL	0.072	1.1–1.8 mmol/L

## APPENDIX A. (CONT'D)

Drug	Traditional Range	Conversion Factor <sup>a</sup>	SI Range
Theophylline	10–20 mg/L	5.55	55–110 μmol/L
Thiocyanate	>10 mg/dL toxic	0.172	>1.7 mmol/L toxic
Valproic acid	50–100 mg/L	6.934	350–700 μmol/L

<sup>a</sup>Traditional units are multiplied by conversion factor to get SI units.

<sup>b</sup>Whole blood assay.

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