

## Core Biochemistry Reference Intervals

### Drug Monitoring

This document is valid as of the date of issue and will be updated as required by Canterbury Health Laboratories (CHL). Outside of Canterbury Health Laboratories, this document should be used with caution.

Please contact CHL should you require an updated version.

| Test Name                 | Additional Information                                | Reference Intervals |       | Units   | Revision Date |
|---------------------------|---|---------------------|-------|---------|---------------|
|                           |   | Lower               | Upper |         |               |
| Amikacin                  | Trough  | < 2.0               |       | mg/L    | July-25       |
|                           | AUC   | 150                 | 200   | mg/L    | July-25       |
| Carbamazepine             |   | 16                  | 50    | µmol/L  | Aug-09        |
|                           | Unbound   | 4                   | 10    |         |               |
| Digoxin                   |   | 0.6                 | 2     | nmol/L  | Jun-09        |
| Ethanol                   |   | < 3                 |       | mmol/L  | Jun-09        |
| Gentamicin                | Trough  | < 0.5               |       | mg/L    | Aug-09        |
|                           | AUC   | 70                  | 100   | mg/L/hr |               |
| Lithium                   | Therapeutic Range                                     | 0.4                 | 1.2   | mmol/L  | Aug-09        |
| Lamotrigine               |   | 12                  | 55    | µmol/L  | Dec-15        |
| Paracetamol               | As per the latest edition of Hospital Health Pathways |                     |       | µmol/L  |               |
| Phenobarbitone            |   | 65                  | 130   | µmol/L  | Aug-09        |
| Phenytoin                 |   | 40                  | 80    | µmol/L  | Aug-09        |
|                           | Unbound   | 4                   | 9     |         |               |
| Salicylate                |   | 1.5                 | 1.8   | nmol/L  | Jun-09        |
| Theophylline              |   | 55                  | 110   | µmol/L  | Aug-19        |
| Tobramycin                | Trough  | < 0.5               |       | mg/L    | Aug-09        |
|                           | AUC   | 70                  | 100   | mg/L/hr |               |
| Valproate (Valproic Acid) | Adult   | 350                 | 700   | µmol/L  | Aug-09        |
| Vancomycin                |   | 5                   | 10    | mg/L    | Aug-09        |

### Amendments

| Issue number | Date reviewed | Summary of Change                   |
|--------------|---------------|-------------------------------------|
| 3            | 31/07/25      | Added Amikacin Reference Intervals. |
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### Accepted by

| Position  | Section Head | Clinical Director |
|-----------|--------------|-------------------|
| Name      |              |                   |
| Signature |              |                   |
| Date      |              |                   |