

## Testing Procedure

### NOTICE

When using the within-lot calibration feature it is highly recommended that recovery be confirmed on subsequent cartridge(s) from the same lot number by analyzing quality control material prior to analyzing or reporting any patient results.

1. If necessary prepare reagent as defined in the Reagent Preparation section of this chemistry information sheet and load the reagent onto the system.
2. After reagent load is completed, calibration may be required.
3. Program samples and controls for analysis.
4. After loading samples and controls onto the system, follow the protocols for system operation.

For detailed testing procedures, refer to the UniCel DxC 800 System [Instructions For Use](#) (IFU) manual.

## Calculations

UniCel DxC Systems perform all calculations internally to produce the final reported result. The system will calculate the final result for sample dilutions made by the operator when the dilution factor is entered into the system during sample programming.

*If the dilution was programmed in Remisol, the final calculated result from a dilution will not be calculated by the DxC800 system but by Remisol.*

## Reporting Results

Equivalency between the SYNCHRON LX and UniCel DxC 800 Systems has been established. Chemistry results between these systems are in agreement and data from representative systems may be shown.

## Reference Intervals

The following reference intervals were taken from literature and a study performed on SYNCHRON Systems.(7) UCDMC adult reference interval was determined from a normal study.

### Reference Intervals

Intervals	Sample Type	Conventional Units		S.I Units	
Literature	Serum or Plasma	0.3 - 1.2 mg/dL		5.1 - 20.5 µmol/L	
UCDMC	Serum or Plasma	Premature	< 1 day	1 to 6 mg/dL	17.1 to 102.6 µmol/L
	Serum or Plasma		2 days	6 to 8 mg/dL	102.6 to 136.8 µmol/L
	Serum or Plasma		3 - 5 d	10 to 15 mg/dL	171.0 to 256.5 µmol/L
	Serum or Plasma	mature	< 1 day	2 to 6 mg/dL	6.8 to 102.6 µmol/L
	Serum or Plasma		1 - 3 days	6 to 7 mg/dL	102.6 to 119.7 µmol/L
	Serum or Plasma		3 d to 1 m	4 to 12 mg/dL	68.4 to 205.2 µmol/L
	Serum or Plasma		1 m to 12 yrs	0.2 to 0.9 mg/dL	3.42 to 15.39 µmol/L
	Serum or Plasma		> 12 yrs	0.0 to 1.2 mg/dL	0.0 to 20.5 µmol/L

Refer to References (8,9,10) for guidelines on establishing laboratory-specific reference intervals

*Pediatric reference intervals are cited from literature. No in-house studies were performed. This information should serve as a general guideline.*

A reference interval for fluids has not been determined by UCDHS. This result may be less accurate than for the usual sample type, and should be interpreted in the context of the patient's clinical condition.



## Critical Values

Total bilirubin result  $\geq 18.0$  mg/dL is considered a critical value for all newborns < 30 days old and should be called immediately to the attending physician or charge nurse.