Lab Dept: Urine/Stool

Test Name: CREATININE, TIMED URINE

General Information

Lab Order Codes:	CR24		
Synonyms:	Creatinine Quantitative Urine; Creatinine, 24 hour urine		
CPT Codes:	82570 – Creatinine, other source 81050 – Volume measurement for timed collection, each		
Test Includes:	Urine creatinine concentrations in mg/dL and mg/specimen		
Logistics			
Test Indications:	Creatinine is a high energy compound used in the metabolic processes of muscle contraction. A portion of the free creatine in muscle spontaneously and irreversibly converts to creatinine. Creatinine is present in all body fluids and secretions. It is freely filtered by the kidney glomeruli and is measured to assess kidney function.		
Lab Testing Sections:	Chemistry		
Phone Numbers:	MIN Lab: 612-813-6280		
	STP Lab: 651-220-6550		
Test Availability:	Daily, 24 hours		
Turnaround Time:	1 day		
Special Instructions:	Submit an entire 24-hour urine collection. No preservative. Refrigerate specimen during and after collection.		
	Note: Starting and ending times of collection are required for a timed urine collection and must be documented electronically or on the proper request form.		
Specimen			
Specimen Type:	Urine, timed collection		
Container:	Plastic leakproof container (No preservative). Urine GUARD® collection container is preferred for a timed urine sample.		
Draw Volume:	Submit an entire 24-hour urine collection		

Processed Volume:	Minimum: 0.5 mL urine		
Collection:	For timed urine collections, empty the bladder, discard the voided sample, and note the start time. Collect all urine voided for the specified time period. At the end of the period, note the finishing time, add the last voided sample to the container by emptying the bladder. Bring the refrigerated container to the lab. Make sure all specimens submitted to the laboratory are properly labeled with the patient's name, medical record number and date of birth.		
Special Processing:	Specimen stablility: Refrigerated: 24 hours		
Patient Preparation:	None		
Sample Rejection:	Mislabeled or unlabeled specimens		

Interpretive

Reference Range:	Age	Concentration mg/collection	
	3 – 8 years	110 – 680 mg/collection	
	9 – 12 years	170 – 1410 mg/collection	
	13 – 17 years	290 – 1870 mg/collection	
	>17 years	630 – 2500 mg/collection	
	Note: The reference values are for a 24 hour collection. Specimens collected for other than a 24-hour time period have no reference values established.		
Critical Values:	N/A		
Limitations:	N/A		
Methodology:	Enzymatic, correlated to IDMS traceable		
References:	EZCRA Flex® reagent cartridge insert sheet, Siemens Healthcare Diagnostics Inc, Newark, DE 19714, PN 781270.001, US, issue date 2013-08-20 Rev C		
	EZCR Flex® reagent cartridge insert sheet (RXL/MAX),, Siemens Healthcare Diagnostics Inc, Newark, DE 19714, PN 717270.003, US, issue date 2014-11-21 Rev E		
	EZCREA CAL product insert, Dimension Vista System, Siemens Healthcare Diagnostics Inc, Newark, DE 19714, PN 792018.002, US, issue date 03/2012 Rev E		

Chemistry 1 Calibrator package insert, Siemens Healthcare Diagnostics Inc, Newark, DE 19714, PN 792018.002-US, Rev E, Issue date 06/2013

Clinical Significance, Dade Behring Inc., Glasgow Business Community, Mailbox 531, P.O. Box 6101, Newark, Delaware 19714

Jacobs & DeMott Laboratory Test Handbook (2001) Lexi-Comp, Inc, Hudson, OH, 5th Edition

Pediatric Reference Intervals, Sixth Edition, AACC Press, Washington DC, 2007

Biorad Liquichek Unassayed Chemistry Control (Human) product insert, Irvine, CA

Biorad Multiqual® 1 & 3 Control Levels product insert, Bio-Rad Laboratories, Irvine, CA

Biorad Liquichek Urine Chemistry 1 & 2 Control Levels Product insert, Bio-Rad Laboratories, Irvine, CA 92618

Updates:2/4/2013: Method update, previously listed as Alkaline Picrate/Kinetic
7/21/2015: Update for Vista Method