Test Definition: BMAMA

Basic Metabolic Panel, Serum

Reporting Title: Basic Metabolic Panel, S
Performing Location: Mayo Clinic Laboratories - Rochester Main Campus

Necessary Information:

Patient's age and sex are required.

Specimen Requirements:

Collection Container/Tube:
Preferred: Serum gel
Acceptable: Red top
Submission Container/Tube: Plastic vial
Specimen Volume: 0.5 mL
Collection Instructions:
1. Serum gel tubes should be centrifuged within 2 hours of collection.
2. Red-top tubes should be centrifuged and the serum aliquoted into a plastic vial within 2 hours of collection.

Forms:

If not ordering electronically, complete, print, and send 1 of the following forms with the specimen:
-Kidney Transplant Test Request
-Renal Diagnostics Test Request (T830)

Specimen Type	Temperature	Time	Special Container
Serum	Refrigerated	24 hours	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
AGAP	Anion Gap	Numeric		33037-3
BUN	Bld Urea Nitrog(BUN), S	Numeric	mg/dL	3094-0
CL	Chloride, S	Numeric	mmol/L	2075-0
GLURA	Glucose, Random, S	Numeric	mg/dL	2345-7
HCO3	Bicarbonate, S	Numeric	mmol/L	1963-8
CA	Calcium, Total, S	Numeric	mg/dL	17861-6
NAS	Sodium, S	Numeric	mmol/L	2951-2
KS	Potassium, S	Numeric	mmol/L	2823-3
CRTSA	Creatinine, S	Numeric	mg/dL	2160-0
EGFR1	Estimated GFR (eGFR)	Numeric	mL/min/BSA	98979-8

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

No

Components:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
KS	Potassium, S	1	84132	Yes	Yes
NAS	Sodium, S	1	84295	Yes	Yes
CL	Chloride, S	1	82435	Yes	Yes
HCO3	Bicarbonate, S	1	82374	Yes	Yes
AGAP	Anion Gap			Yes	No
BUN	Bld Urea Nitrog(BUN), S	1	84520	Yes	Yes
CRTS1	Creatinine with eGFR, S	1	82565	Yes	Yes
CA	Calcium, Total, S	1	82310	Yes	Yes
GLURA	Glucose, Random, S	1	82947	Yes	Yes

CPT Code Information:

84132
84295
82435
82374
84520
82565
82310
82947

Reference Values:

SODIUM
<1 year: Not established
> or =1 year: 135-145 mmol/L

POTASSIUM
<1 year: Not established
> or =1 year: 3.6-5.2 mmol/L

CHLORIDE
<1 year: Not established
1-17 years: 102-112 mmol/L
> or =18 years: 98-107 mmol/L

BICARBONATE
Males:
<1 year: Not established
1-2 years: 17-25 mmol/L
3 years: 18-26 mmol/L
4-5 years: 19-27 mmol/L
6-7 years: 20-28 mmol/L
8-17 years: 21-29 mmol/L
> or =18 years: 22-29 mmol/L

Females:
<1 year: Not established
1-3 years: 18-25 mmol/L
4-5 years: 19-26 mmol/L
6-7 years: 20-27 mmol/L
8-9 years: 21-28 mmol/L
> or =10 years: 22-29 mmol/L

ANION GAP
<7 years: Not established
> or =7 years: 7-15

BLOOD UREA NITROGEN
Males:
<12 months: Not established
1-17 years: 7-20 mg/dL
> or =18 years: 8-24 mg/dL

Females:
<12 months: Not established
1-17 years: 7-20 mg/dL
> or =18 years: 6-21 mg/dL

CREATININE
Males:
0-11 months: 0.17-0.42 mg/dL
1-5 years: 0.19-0.49 mg/dL
6-10 years: 0.26-0.61 mg/dL
11-14 years: 0.35-0.86 mg/dL
> or =15 years: 0.74-1.35 mg/dL

Females:
0-11 months: 0.17-0.42 mg/dL
1-5 years: 0.19-0.49 mg/dL
6-10 years: 0.26-0.61 mg/dL
11-15 years: 0.35-0.86 mg/dL
> or =16 years: 0.59-1.04 mg/dL

ESTIMATED GLOMERULAR FILTRATION RATE (eGFR)
>= 18 years old: > or =60 mL/min/BSA (body surface area)
Estimated GFR calculated using the 2021 CKD-EPI creatinine equation
Note: eGFR results will not be calculated for patients younger than 18 years old.

CALCIUM
<1 year: 8.7-11.0 mg/dL

1-17 years: 9.3-10.6 mg/dL
18-59 years: 8.6-10.0 mg/dL
60-90 years: 8.8-10.2 mg/dL
>90 years: 8.2-9.6 mg/dL

GLUCOSE
0-11 months: Not established
> or =1 year: 70-140 mg/dL