## TITLE: Calculations Performed by LIS

## PRINCIPLE:

This procedure provides the formulas for calculations performed by the LIS. These formulas are available in the event the LIS is down for an extended period of time.

## SPECIMEN COLLECTION/TREATMENT:

1. Serum or plasma – separated from cells by a gel or aliquoted to a pour off tube.

## QUALITY CONTROL:

Follow the instrument procedures for running tests required for calculations.

## STEPWISE PROCEDURE:

1. Calculations for urine chemistry are listed in the Urine Chemistry procedure.
2. Serum Calculations:
3. Globulin and A/G Ratio

Globulin = Total Protein – Albumin

A/G Ratio = Albumin

Globulin

B. Bun/Creat Ratio = BUN

###### Creat

C. LDL/HDL Ratio = LDL

HDL

D. CHOL/HDL Ratio = CHOL

###### HDL

E. Calculated LDL = Chol – (HDL + Trig)

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1. CK- MB Index = CK – MB

Total CK x 100

1. Iron Sat = Iron/TIBC X 100
2. Anion Gap (AGAP) = Sodium – (Chloride + CO2)
3. Indirect Bilirubin = Total Bilirubin - Direct Bilirubin
4. Non-HDL Cholesterol = Cholesterol - HDL

## REPORTING RESULTS:

1. Refer to Urine Chemistry Procedure for urine results.
2. Serum Calculations
3. Globulin and A/G Ratio are report to one decimal place.
4. BUN/Creat ratio is reported as a whole number.
5. LDL/HDL is reported to one decimal place.
6. CHOL/HDL is reported to one decimal place.
7. Calculated LDL is reported as a whole number.
8. CK MB Index is reported to one decimal place.
9. Iron Saturation is reported as a %.
10. Anion Gap is reported as a whole number.
11. Indirect Bilirubin is reported to one decimal place.