#### **BMC**

# **Specimen Type**

Serum or Plasma (Glucose Only) Gold or Red top tube

#### **Alternate Container**

Green top tube (glucose only)

## **Minimum Volume**

0.5 mL Serum or Plasma for Glucose0.5 mL Serum for Growth Hormone Suppression Test

## **Storage Requirements**

Sample tubes should be centrifuged within 2 hour of collection followed by transfer of the serum (red or gold top) or plasma (green top) to a labeled plastic, aliquot tube. See Causes of Rejection for temperature requirements.

#### **Transportation Needs**

Deliver specimen to laboratory within 1 hour of collection if unspun. If not possible see "storage Requirements".

#### **Causes for Rejection**

Mislabeled or unlabeled specimen Less than 50% draw for vacutainer tubes Serum stored on clot more than 4 hours

- > 3 days refrigerated
- > 8 hours room temperature
- > 5 days frozen

Hemolysis > 500 mg/dL HgB

Lipemia > 700 mg/dL Trig

Bilirubin > 40 mg/dL Bili

Patient not fasting prior to start of GTGH

Stressed patient (surgery, infection, corticosteroids)

Specimen not labeled with hourly times

Blood stored on clot for more than 4 hours

#### Reference Values

Diagnosis of Diabetes and Pre-diabetes (2GTT) (75 gram dose)						
Two or more glucose concentrations must exceed the reference range						
Specimen	Normal Reference Range (mg/dL)	Pre-Diabetes	Diabetes			
Fasting	70-100	110 - 125	126			
2 hour	95 - 130	140 - 199	200			

Diagnosis criteria for 3 Hr GTT (3GTTL) (100 gram dose)				
Two or more glucose concentrations must exceed the reference range				
Specimen	Normal Reference Range (mg/dL)			
Fasting	70-100			
1 hour	105 - 160			
2 hour	95 - 130			
3 hour	70 - 110			

# Glucose Tolerance Tests for OB patients

(2011 ACOG Clinical Practice Recommendations)

Diagnosis of Gestational Diabetes (OBGTT) (75 gram dose)					
Two or more glucose concentrations must exceed the reference range					
Specimen	Normal Reference Range (mg/dL)	High Critical Value	Low Critical Value		
Fasting	70-95	450	< 40		
1 hour	96 -179	450	< 40		
2 hour	100-152	450	< 40		

Growth Hormone, Adult Reference Range		
Males	0.01 - 0.97 ng/mL	
Females	0.01 - 3.61 ng/mL	

Reference intervals have not been formally verified in-house for pediatric and adolescent patients. The published literature indicates that reference intervals for adult, pediatric, and adolescent patients are comparable.

Fasting Glucose Reference Ranges						
(2012 ADA Clinical Practice Recommendations)						
Age	Interpretation	Value	High Critical Value	Low Critical Value		
1 week	Normal Fasting	70-100		<45		
≤1 week	Normal Fasting	45-99	>450	<45		

## **Available STAT**

No

# Methodology

See individual tests GLUC and GH

## **CPT Code**

See GLUC and GH