

REFERENCE VALUES CHANGE MML NEW ENGLAND

NOTIFICATION DATE: February 8, 2011 **EFFECTIVE DATE:** March 10, 2011

SEX HORMONE-BINDING GLOBULIN (SHBG), SERUM #200065

EXPLANATION: Effective March 10, 2011 there will be reference value changes for #200065 Sex hormone-Binding Globulin (SHBG), Serum.

CURRENT REFERENCE VALUES:

CHILDREN*					
Males					
Tanner Stages#	Mean Age	Reference Range (nmol/L)			
Stage I	7.1	28-150			
Stage II	11.5	44-160			
Stage III	13.6	5.5-163			
Stage IV	15.1	13-88			
Stage V	18.0	10-60			

*Puberty onset (transition from Tanner stage I to Tanner stage II) occurs for boys at a median age of 11.5 (+/-2) years. For boys, there is no definite proven relationship between puberty onset and body weight or ethnic origin. Progression through Tanner stages is variable. Tanner stage V (young adult) should be reached by age 18.

Females

Tanner Stages#	Mean Age	Reference Range (nmol/L)
Stage I	7.1	39-176
Stage II	10.5	7.2-107
Stage III	11.6	28-171
Stage IV	12.3	28-149
Stage V	14.5	20-130

#Puberty onset (transition from Tanner stage I to Tanner stage II) occurs for girls at a median age of 10.5 (+/-2) years. There is evidence that it may occur up to 1 year earlier in obese girls and in African American girls.

Progression through Tanner stages is variable. Tanner stage V (young adult) should be reached by age 18.

NEW REFERENCE VALUES:

CHILDREN*					
Males					
Tanner Stages*#	Mean Age	Reference Range (nmol/L)			
Stage I	7.1	31-167			
Stage II	11.5	49-179			
Stage III	13.6	5.8-182			
Stage IV	15.1	14-98			
Stage V	18.0	10-57			

*Puberty onset (transition from Tanner stage I to Tanner stage II) occurs for boys at a median age of 11.5 (+/-2) years. For boys, there is no definite proven relationship between puberty onset and body weight or ethnic origin. Progression through Tanner stages is variable. Tanner stage V (young adult) should be reached by age 18.

Females

Tanner Stages*#	Mean Age	Reference Range (nmol/L)
Stage I	7.1	43-197
Stage II	10.5	7.7-119
Stage III	11.6	31-191
Stage IV	12.3	31-166
Stage V	14.5	18-144

*#Puberty onset (transition from Tanner stage I to Tanner stage II) occurs for girls at a median age of 10.5 (+/-2) years. There is evidence that it may occur up to 1 year earlier in obese girls and in African American girls. Progression through Tanner stages is variable. Tanner stage V (young adult) should be reached by age 18.

*Elmlinger MW, Kuhnel W, Ranke MB: Reference ranges for serum concentrations of lutropin (LH), follitropin (FSH), estradiol (E2), prolactin, progesterone, sex hormonebinding globulin (SHBG), dehydroepiandrosterone sulfate (DHEAS), cortisol and ferritin in neonates, children and young adults. Clin Chem Lab Med 2002;40(11):1151-1160

ADULTS

Males: 10-60 nmol/L

Females (non-pregnant): 20-130 nmol/L Assuming a molecular weight of 90,000 Daltons, the conversion factor to mass units

is: nmol/L/9=ug/dL.

ADULTS

Males: 10-57 nmol/L

Females (non-pregnant): 18-144 nmol/L

NOTE: CPT codes and Fees will remain unchanged

QUESTIONS: Contact your Mayo Medical Laboratories' Regional Manager Mary Erath, Mayo Medical Laboratories' Technologist Support Telephone: 800-533-1710