



Sample Report CMI40

SEX: Male

DOB: 08/29/1996

AGE: 22

CLIENT #: 38596

DOCTOR:

Regenerus Laboratories Ltd

Aero 14 Redhill Aerodrome Kings Mill Lane
Redhill, Surrey, RH1 5YP UNITED KINGDOM*Metabolomic Profile; serum*

	RESULT / UNIT		REFERENCE INTERVAL	RISK				
				LOW	MODERATE	HIGH		
CRP(hs)	0.7	mg/L	< 1.0					
				HIGH	MOD	RISK LOW	MOD	HIGH
Glucose	89.2	mg/dL	60.0– 126					
Glycomark (1,5-Anhydroglucitol)	13	ug/mL	10– 32					
Insulin	N/A	uIU/mL	2.3– 23.0					
*Leptin	0.5	ng/mL	1.8– 20					
*Adiponectin	1.0	ug/mL	3.0– 16					
Leptin : Adiponectin ratio	0.5		0.4– 2.0					
Body Mass Index (BMI)	20.4		18.5– 30.0					
Cystatin C	1.1	mg/L	0.5– 1.5					
Creatinine	1.0	mg/dL	0.7– 1.5					
eGFR (calculated)	96	mL/min	> 60					

SPECIMEN DATA

Comments:

Date Collected: 03/13/2019

Time Collected: 09:00 AM

<dl: less than detection limit

Date Received: 03/19/2019

Fasting:

Date Completed: 03/25/2019

*For Research Use Only. Not for use in diagnostic procedures

Methodology: CRP: Chemistry Analyzer; Insulin: Chemiluniescent; Leptin, Adiponectin: Enzyme Immunoassay

Leptin Low

The level of leptin is lower than expected in this sample. Leptin is a hormone produced by adipocytes to provide a satiety signal to the hypothalamus. The net action of leptin is to inhibit appetite, stimulate thermogenesis, enhance fatty acid oxidation, decrease glucose, and reduce body fat. Abnormally low leptin levels may be associated with very low body mass index (BMI), and low leptin levels may also predict cardiovascular mortality due to an increased rate of cardiac cell apoptosis.

Approximately 10% of obese patients may have low leptin levels; this may reflect an inherited leptin deficiency. Leptin may also be decreased pharmacologically by pindolol, valsartan, ramipril, candesartan, efonidipine, bunazosin hydrochloride, atorvastatin, metformin and amlodipine medications.

Adiponectin Low

Low levels of adiponectin are associated with marked increases in risk for developing metabolic syndrome, type II diabetes and coronary artery disease. Adiponectin is a hormone /adipokine produced by fat cells, and is normally one of the most abundant hormones in circulation. However, with excess adiposity less adiponectin is released into circulation. Adiponectin has a major role in the regulation of blood glucose, insulin sensitivity, fatty acid oxidation, and triglyceride and lipoprotein metabolism. It also has anti-inflammatory, anti-atherogenic, anti-diabetic, anti-oxidative properties, and facilitates proper endothelial functioning. Lifestyle changes that decrease body fat mitigate low adiponectin and the associated metabolic consequences.

