



Sample UID No. **Patient Name** : Ms. RAHMA ABDALLAH : EB4088150

Age / Gender : 25 Y / Female **Sample Collected On** : 17-06-2025 20:43 Patient ID : QLD087963 Registered On : 17-06-2025 22:41 18-06-2025 06:44 Referred By Reported on : PESHAWAR

: 47174 **Referral Client External Patient ID** CITICARE MEDICAL CENTER

Emirates ID / Passport No : **Print Version** : V.1

### Department of BIOCHEMISTRY

# **GLYCATED HEMOGLOBIN (Hba1c)**

<u>Investigation</u>	<u>Results</u>	<u>Flag</u>	<u>Units</u>	<b>Biological Reference Interval</b>	<u>Method</u>
Sample: EDTA Whole Blood					
GLYCATED HEMOGLOBIN (HbA1C) ^	5.5		%	<5.7 non-diabetic 5.7-6.4 Pre-Diabetic >6.4 Diabetic	HPLC
Average Blood Glucose	111.2		mg/dl	90-120 Good Control 121-150 Fair Control 151-180 Unsatisfactory Control >180 Poor Control	Calculated

### Comments:

False elevated levels may be due to hypertriglyceridemia, iron deficiency anemia, B12 deficiency, vit C supplement usage, uremia, hemoglobinopathies. In such cases recommended to evaluate the value using alternative index like fructosamine, glycated albumin or continuous glucose monitoring

### **CLINICAL IMPLICATIONS:**

- 1) Glycated hemoglobin reflects average blood sugar level for 2 to 3 month period and useful for evaluating diabetic medications and to track the control of blood glucose in milder cases.
- 2) Increase in Glycated hemoglobin occurs in non diabetic conditions like Iron deficiency anemia, splenectomy, alcohol toxicity. Decrease in Glycated Hemoglobin in hemolytic anemia, chronic blood loss, pregnancy and chronic renal failure.
- 3) Improvement in the glucose control occurring in the 4 weeks before drawing of the sample is not well reflected in the result since the formation of glycated haemoglobin is irreversible.

# **INTERFERING FACTORS:**

- 1) Presence of HbF and HbH cause falsely elevated values.
- 2) Presence of Hb S, C, E, D, G and Lepore cause falsely decrease results.
- 3) If test results are not consistent with clinical finding check the patient for HbF which elevates HbA1c results.
- 4) Haemolytic blood samples may cause falsely low results because of increased erythrocyte turnover.

### REFERENCE:

- 1) Manual of Laboratory and Diagnostics -Frances Fischbach Marshall B. Dunning III [9th Edition]
- 2) Tietz clinical guide to Laboratory tests(Fourth edition) ALAN H.B.WU

- END OF REPORT -

"QLabs compliance with ISO 15189:2022 standards"

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