



Laboratory Investigation Report

Mr. ALEXANDROS MAVRAKIS Ref No. 43359

DOB 06/11/1973 Sample No. 2406429123 Age / Gender 50 Y 7 M / Male **Collected** 12/06/2024 11:00

Referred by Peshawar Medical Center LLC Registered 12/06/2024 15:11 Peshawar Medical Center LLC 12/06/2024 18:38 Centre Reported

BIOCHEMISTRY

Flag Unit Test Result **Reference Range** Methodology

BICARBONATE 22 - 29 Enzymatic 19 mmol/L

> Please note change. Source: Roche IFU.

Interpretation Notes:

Name

Bicarbonate are anions in serum or plasma (bicarbonate (HCO3 -) and carbonate (CO3 2-) ions). At the physiological pH of blood, the concentration of carbonate is 1/1000 that of bicarbonate. The bicarbonate content of plasma/serum is a significant indicator of electrolyte dispersion and anion deficit. PH determination and bicarbonate measurements are used in the diagnosis and treatment of numerous potentially serious disorders associated with acid base imbalance in the respiratory and metabolic systems. Increase in acid can lead to acidosis. The main function of kidneys is retaining or excreting of the bicarbonate ion (HCO3). This is the ion which neutralizes the excess acid in the blood. A high level of bicarbonate in your blood can be from metabolic alkalosis as well, a condition that causes a pH increase in tissue. Metabolic alkalosis can happen from a loss of acid from your body, such as through vomiting and dehydration.

Reference:

- Scott MG, Heusel JW, LeGrys VA, et al. Electrolytes and blood gases, in Tietz NW. Textbook of Clinical Chemistry. 3rd ed. Philadelphia, PA: WB Saunders Co 1.
- Natelson S. Microtechniques of Clinical Chemistry. Springfield, II: Charles C Thomas 1975;147.
- Segal MA. A rapid electrotitrimetric method for determining CO2 combining power in plasma or serum. Am J Clin Path 1955;25:1212-1216.

Sample Type:

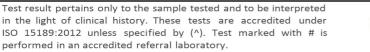
End of Report

Dr. Vyoma V Shah Dr. Adley Mark Fernandes M.D (Pathology) M.D (Pathology) **Pathologist Clinical Pathologist**

This is an electronically authenticated report

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ACCREDITED



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