

NAME	: MRS K.JALAJA	REFERRED BY	: SELF	VISIT NO	: VNHA25031540
AGE	: 58Y 0M 0D	NAVATA CLINIC		COLLECTED ON	: 07-11-2025 00:09
GENDER	: Female			RECEIVED ON	: 07-11-2025 12:21
OP / IP / DG #	:			APPROVED ON	: 07-11-2025 12:43
				REPORT STATUS	: Final Report

Test Name	Result	Biological Ref. Interval	Unit
BIOCHEMISTRY			
Iron Binding Capacity - Total (TIBC) (Serum)			
Iron <i>FerroZine Colorimetric Assay</i>	39.0 L	59-158	μg/dL
Unsaturated Iron Binding Capacity (UIBC) <i>Direct determination with FerroZine</i>	355.0 H	125 - 345	μg/dL
Iron Binding Capacity - Total (TIBC) <i>Calculation</i>	394.0	228-428	μg/dL
Transferrin Saturation Index (TSI) <i>Calculation</i>	9.9 L	16-45	

Interpretation:

Iron is an essential trace mineral element which forms an important component of hemoglobin, metallocompounds and Vitamin A. Deficiency of iron, leads to microcytic hypochromic anemia. The toxic effects of iron are deposition of iron in various organs of the body and hemochromatosis. Total iron-binding capacity (TIBC) is an essential test used for the diagnosis of iron deficiency anemias and other disorders of iron metabolism. Iron binding capacity is the capacity of transferrin to bind with iron. Iron binding capacity is of two types, TIBC and unsaturated iron-binding capacity (UIBC). TIBC is the total of serum iron and UIBC. When iron stores are depleted, the transferrin levels increase in the blood. As only one-third of transferrin is saturated with iron, so the transferrin present in serum has an extra binding capacity. This is unsaturated iron-binding capacity.

Increases in iron-binding capacity are observed with the following:

- Iron deficiency states
- Acute liver damage
- Acute and chronic blood loss
- Late pregnancy
- Progesterone birth control pills

Decreases in iron-binding capacity are associated with the following:

- Hemochromatosis
- Hemosiderosis
- Thalassemia
- Hyperthyroidism
- Nephrotic syndrome

Anemia of chronic diseases **Transferrin Saturation** occurs in Idiopathic hemochromatosis and Transfusional hemosiderosis where no unsaturated iron binding capacity is available for iron mobilization. Similar condition is seen in congenital deficiency of Transferrin.



Dr V V N Sravani
Consultant Pathologist

Disclaimer:

1. All results released pertain to the specimen as received by the lab for testing and under the assumption that the patient indicated or identified on the bill/test requisition form is the owner of the specimen.
2. Clinical details and consent forms, especially in Genetic testing, histopathology, as well as wherever applicable, are mandatory to be accompanied with the test requisition form. The non-availability of such information may lead to delay in

ID : N25447

Name : Mrs K.jalaja (F, 58y)

Referred By : Dr. Pujitha Chowdary Duggirala

Sample Collected on : 08-Nov-2025 03:20 PM

Report Approved on : 08-Nov-2025 03:22 PM

Report Out on : 08-Nov-2025 03:23 PM

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TEST PARAMETER	RESULT	BIOLOGICAL REF. INTERVAL
<u>HAEMATOLOGY</u>		
Complete Blood Count - CBC		
Haemoglobin (Hb)	9.5 * Gms %	Male : 13.0 - 17.0 Female : 12.0 - 15.0
Total WBC Count	11,300 * Cells/cu mm	4,000 - 11,000 cells/cu mm
Neutrophils	51 %	40 - 75 %
Lymphocytes	42 * %	20 - 40 %
Eosinophils	02 %	1 - 6 %
Monocytes	05 %	2 - 10 %
Total Red Cell Count (RBC)	3.98 * Million Cells/cu mm	Women: 3.8 - 4.8 Men : 4.5 - 5.5
Platelets Count	3.63 lakh/cu mm	1.50 - 4.10 lakh/cu mm
Haematocrit (PCV)	31.9 * %	Women: 36 - 47 (%) Men: 40 - 52 (%)
Mean Corpuscular Volume (MCV)	80.2 fL	75 - 95
Mean Corpuscular Haemoglobin (MCH)	23.8 * pg	26 - 32
Mean Corpuscular Haemoglobin Concentration (MCHC)	29.7 * %	31 - 35 %

---- END OF REPORT -----