

Dr. Vinay Chopra  
 MD (Pathology & Microbiology)  
 Chairman & Consultant Pathologist

Dr. Yugam Chopra  
 MD (Pathology)  
 CEO & Consultant Pathologist

|                       |                                        |                          |                        |
|-----------------------|----------------------------------------|--------------------------|------------------------|
| <b>NAME</b>           | : Mrs. BALJINDER KAUR                  | <b>PATIENT ID</b>        | : 1770918              |
| <b>AGE/ GENDER</b>    | : 46 YRS/FEMALE                        | <b>REG. NO./LAB NO.</b>  | : 012502260015         |
| <b>COLLECTED BY</b>   | :                                      | <b>REGISTRATION DATE</b> | : 26/Feb/2025 12:03 PM |
| <b>REFERRED BY</b>    | :                                      | <b>COLLECTION DATE</b>   | : 26/Feb/2025 12:04PM  |
| <b>BARCODE NO.</b>    | : 01526159                             | <b>REPORTING DATE</b>    | : 26/Feb/2025 12:28PM  |
| <b>CLIENT CODE.</b>   | : KOS DIAGNOSTIC LAB                   |                          |                        |
| <b>CLIENT ADDRESS</b> | : 6349/1, NICHOLSON ROAD, AMBALA CANTT |                          |                        |

| Test Name | Value | Unit | Biological Reference interval |
|-----------|-------|------|-------------------------------|
|-----------|-------|------|-------------------------------|

## HAEMATOLOGY

### COMPLETE BLOOD COUNT (CBC)

#### RED BLOOD CELLS (RBCS) COUNT AND INDICES

|                                                                                                   |                   |              |                                                                  |
|---------------------------------------------------------------------------------------------------|-------------------|--------------|------------------------------------------------------------------|
| HAEMOGLOBIN (HB)<br><i>by CALORIMETRIC</i>                                                        | 11.5 <sup>L</sup> | gm/dL        | 12.0 - 16.0                                                      |
| RED BLOOD CELL (RBC) COUNT<br><i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i>              | 4.38              | Millions/cmm | 3.50 - 5.00                                                      |
| PACKED CELL VOLUME (PCV)<br><i>by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER</i>                 | 36.1 <sup>L</sup> | %            | 37.0 - 50.0                                                      |
| MEAN CORPUSCULAR VOLUME (MCV)<br><i>by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER</i>            | 82.6              | fL           | 80.0 - 100.0                                                     |
| MEAN CORPUSCULAR HAEMOGLOBIN (MCH)<br><i>by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER</i>       | 26.3 <sup>L</sup> | pg           | 27.0 - 34.0                                                      |
| MEAN CORPUSCULAR HEMOGLOBIN CONC. (MCHC)<br><i>by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER</i> | 31.9 <sup>L</sup> | g/dL         | 32.0 - 36.0                                                      |
| RED CELL DISTRIBUTION WIDTH (RDW-CV)<br><i>by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER</i>     | 16.3 <sup>H</sup> | %            | 11.00 - 16.00                                                    |
| RED CELL DISTRIBUTION WIDTH (RDW-SD)<br><i>by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER</i>     | 49.9              | fL           | 35.0 - 56.0                                                      |
| MENTZERS INDEX<br><i>by CALCULATED</i>                                                            | 18.86             | RATIO        | BETA THALASSEMIA TRAIT: < 13.0<br>IRON DEFICIENCY ANEMIA: >13.0  |
| GREEN & KING INDEX<br><i>by CALCULATED</i>                                                        | 30.79             | RATIO        | BETA THALASSEMIA TRAIT:<= 65.0<br>IRON DEFICIENCY ANEMIA: > 65.0 |

#### WHITE BLOOD CELLS (WBCS)

|                                                                                              |      |      |              |
|----------------------------------------------------------------------------------------------|------|------|--------------|
| TOTAL LEUCOCYTE COUNT (TLC)<br><i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>          | 6040 | /cmm | 4000 - 11000 |
| NUCLEATED RED BLOOD CELLS (nRBCS)<br><i>by AUTOMATED 6 PART HEMATOLOGY ANALYZER</i>          | NIL  |      | 0.00 - 20.00 |
| NUCLEATED RED BLOOD CELLS (nRBCS) %<br><i>by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER</i> | NIL  | %    | < 10 %       |



  
 DR. VINAY CHOPRA

CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY & MICROBIOLOGY)

  
 DR. YUGAM CHOPRA

CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY)



**Dr. Vinay Chopra**  
 MD (Pathology & Microbiology)  
 Chairman & Consultant Pathologist

**Dr. Yugam Chopra**  
 MD (Pathology)  
 CEO & Consultant Pathologist

|                       |                                        |                          |                        |
|-----------------------|----------------------------------------|--------------------------|------------------------|
| <b>NAME</b>           | : Mrs. BALJINDER KAUR                  | <b>PATIENT ID</b>        | : 1770918              |
| <b>AGE/ GENDER</b>    | : 46 YRS/FEMALE                        | <b>REG. NO./LAB NO.</b>  | : 012502260015         |
| <b>COLLECTED BY</b>   | :                                      | <b>REGISTRATION DATE</b> | : 26/Feb/2025 12:03 PM |
| <b>REFERRED BY</b>    | :                                      | <b>COLLECTION DATE</b>   | : 26/Feb/2025 12:04PM  |
| <b>BARCODE NO.</b>    | : 01526159                             | <b>REPORTING DATE</b>    | : 26/Feb/2025 12:28PM  |
| <b>CLIENT CODE.</b>   | : KOS DIAGNOSTIC LAB                   |                          |                        |
| <b>CLIENT ADDRESS</b> | : 6349/1, NICHOLSON ROAD, AMBALA CANTT |                          |                        |

| Test Name                                                                                   | Value              | Unit | Biological Reference interval |
|---------------------------------------------------------------------------------------------|--------------------|------|-------------------------------|
| <b><u>DIFFERENTIAL LEUCOCYTE COUNT (DLC)</u></b>                                            |                    |      |                               |
| NEUTROPHILS<br><i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>                         | 77 <sup>H</sup>    | %    | 50 - 70                       |
| LYMPHOCYTES<br><i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>                         | 17 <sup>L</sup>    | %    | 20 - 40                       |
| EOSINOPHILS<br><i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>                         | 2                  | %    | 1 - 6                         |
| MONOCYTES<br><i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>                           | 4                  | %    | 2 - 12                        |
| BASOPHILS<br><i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>                           | 0                  | %    | 0 - 1                         |
| <b><u>ABSOLUTE LEUKOCYTES (WBC) COUNT</u></b>                                               |                    |      |                               |
| ABSOLUTE NEUTROPHIL COUNT<br><i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>           | 4651               | /cmm | 2000 - 7500                   |
| ABSOLUTE LYMPHOCYTE COUNT<br><i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>           | 1027               | /cmm | 800 - 4900                    |
| ABSOLUTE EOSINOPHIL COUNT<br><i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>           | 121                | /cmm | 40 - 440                      |
| ABSOLUTE MONOCYTE COUNT<br><i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>             | 242                | /cmm | 80 - 880                      |
| ABSOLUTE BASOPHIL COUNT<br><i>by FLOW CYTOMETRY BY SF CUBE &amp; MICROSCOPY</i>             | 0                  | /cmm | 0 - 110                       |
| <b><u>PLATELETS AND OTHER PLATELET PREDICTIVE MARKERS.</u></b>                              |                    |      |                               |
| PLATELET COUNT (PLT)<br><i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i>              | 378000             | /cmm | 150000 - 450000               |
| PLATELETCRIT (PCT)<br><i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i>                | 0.37 <sup>H</sup>  | %    | 0.10 - 0.36                   |
| MEAN PLATELET VOLUME (MPV)<br><i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i>        | 10                 | fL   | 6.50 - 12.0                   |
| PLATELET LARGE CELL COUNT (P-LCC)<br><i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i> | 96000 <sup>H</sup> | /cmm | 30000 - 90000                 |
| PLATELET LARGE CELL RATIO (P-LCR)<br><i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i> | 25.4               | %    | 11.0 - 45.0                   |
| PLATELET DISTRIBUTION WIDTH (PDW)<br><i>by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE</i> | 16.1               | %    | 15.0 - 17.0                   |

NOTE: TEST CONDUCTED ON EDTA WHOLE BLOOD



  
**DR. VINAY CHOPRA**  
 CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY & MICROBIOLOGY)

  
**DR. YUGAM CHOPRA**  
 CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY)



**Dr. Vinay Chopra**  
 MD (Pathology & Microbiology)  
 Chairman & Consultant Pathologist

**Dr. Yugam Chopra**  
 MD (Pathology)  
 CEO & Consultant Pathologist

|                       |                                        |                          |                        |
|-----------------------|----------------------------------------|--------------------------|------------------------|
| <b>NAME</b>           | : Mrs. BALJINDER KAUR                  | <b>PATIENT ID</b>        | : 1770918              |
| <b>AGE/ GENDER</b>    | : 46 YRS/FEMALE                        | <b>REG. NO./LAB NO.</b>  | : 012502260015         |
| <b>COLLECTED BY</b>   | :                                      | <b>REGISTRATION DATE</b> | : 26/Feb/2025 12:03 PM |
| <b>REFERRED BY</b>    | :                                      | <b>COLLECTION DATE</b>   | : 26/Feb/2025 12:04PM  |
| <b>BARCODE NO.</b>    | : 01526159                             | <b>REPORTING DATE</b>    | : 26/Feb/2025 12:28PM  |
| <b>CLIENT CODE.</b>   | : KOS DIAGNOSTIC LAB                   |                          |                        |
| <b>CLIENT ADDRESS</b> | : 6349/1, NICHOLSON ROAD, AMBALA CANTT |                          |                        |

| Test Name | Value | Unit | Biological Reference interval |
|-----------|-------|------|-------------------------------|
|-----------|-------|------|-------------------------------|



  
 DR.VINAY CHOPRA  
 CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY & MICROBIOLOGY)

  
 DR.YUGAM CHOPRA  
 CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY)



Dr. Vinay Chopra  
 MD (Pathology & Microbiology)  
 Chairman & Consultant Pathologist

Dr. Yugam Chopra  
 MD (Pathology)  
 CEO & Consultant Pathologist

|                       |                                        |                          |                        |
|-----------------------|----------------------------------------|--------------------------|------------------------|
| <b>NAME</b>           | : Mrs. BALJINDER KAUR                  | <b>PATIENT ID</b>        | : 1770918              |
| <b>AGE/ GENDER</b>    | : 46 YRS/FEMALE                        | <b>REG. NO./LAB NO.</b>  | : 012502260015         |
| <b>COLLECTED BY</b>   | :                                      | <b>REGISTRATION DATE</b> | : 26/Feb/2025 12:03 PM |
| <b>REFERRED BY</b>    | :                                      | <b>COLLECTION DATE</b>   | : 26/Feb/2025 12:04PM  |
| <b>BARCODE NO.</b>    | : 01526159                             | <b>REPORTING DATE</b>    | : 26/Feb/2025 12:46PM  |
| <b>CLIENT CODE.</b>   | : KOS DIAGNOSTIC LAB                   |                          |                        |
| <b>CLIENT ADDRESS</b> | : 6349/1, NICHOLSON ROAD, AMBALA CANTT |                          |                        |

| Test Name | Value | Unit | Biological Reference interval |
|-----------|-------|------|-------------------------------|
|-----------|-------|------|-------------------------------|

### ERYTHROCYTE SEDIMENTATION RATE (ESR)

ERYTHROCYTE SEDIMENTATION RATE (ESR) **94<sup>H</sup>** mm/1st hr 0 - 20  
 by RED CELL AGGREGATION BY CAPILLARY PHOTOMETRY

#### INTERPRETATION:

1. ESR is a non-specific test because an elevated result often indicates the presence of inflammation associated with infection, cancer and auto-immune disease, but does not tell the health practitioner exactly where the inflammation is in the body or what is causing it.
2. An ESR can be affected by other conditions besides inflammation. For this reason, the ESR is typically used in conjunction with other test such as C-reactive protein
3. This test may also be used to monitor disease activity and response to therapy in both of the above diseases as well as some others, such as systemic lupus erythematosus

#### CONDITION WITH LOW ESR

A low ESR can be seen with conditions that inhibit the normal sedimentation of red blood cells, such as a high red blood cell count (polycythaemia), significantly high white blood cell count (leucocytosis), and some protein abnormalities. Some changes in red cell shape (such as sickle cells in sickle cell anaemia) also lower the ESR.

#### NOTE:

1. ESR and C - reactive protein (C-RP) are both markers of inflammation.
2. Generally, ESR does not change as rapidly as does CRP, either at the start of inflammation or as it resolves.
3. **CRP is not affected by as many other factors as is ESR, making it a better marker of inflammation.**
4. If the ESR is elevated, it is typically a result of two types of proteins, globulins or fibrinogen.
5. Women tend to have a higher ESR, and menstruation and pregnancy can cause temporary elevations.
6. Drugs such as dextran, methyldopa, oral contraceptives, penicillamine procainamide, theophylline, and vitamin A can increase ESR, while aspirin, cortisone, and quinine may decrease it





DR.VINAY CHOPRA  
 CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY & MICROBIOLOGY)



DR.YUGAM CHOPRA  
 CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY)





**Dr. Vinay Chopra**  
 MD (Pathology & Microbiology)  
 Chairman & Consultant Pathologist

**Dr. Yugam Chopra**  
 MD (Pathology)  
 CEO & Consultant Pathologist

|                       |                                        |                          |                        |
|-----------------------|----------------------------------------|--------------------------|------------------------|
| <b>NAME</b>           | : Mrs. BALJINDER KAUR                  | <b>PATIENT ID</b>        | : 1770918              |
| <b>AGE/ GENDER</b>    | : 46 YRS/FEMALE                        | <b>REG. NO./LAB NO.</b>  | : 012502260015         |
| <b>COLLECTED BY</b>   | :                                      | <b>REGISTRATION DATE</b> | : 26/Feb/2025 12:03 PM |
| <b>REFERRED BY</b>    | :                                      | <b>COLLECTION DATE</b>   | : 26/Feb/2025 12:04PM  |
| <b>BARCODE NO.</b>    | : 01526159                             | <b>REPORTING DATE</b>    | : 26/Feb/2025 01:20PM  |
| <b>CLIENT CODE.</b>   | : KOS DIAGNOSTIC LAB                   |                          |                        |
| <b>CLIENT ADDRESS</b> | : 6349/1, NICHOLSON ROAD, AMBALA CANTT |                          |                        |

| Test Name | Value | Unit | Biological Reference interval |
|-----------|-------|------|-------------------------------|
|-----------|-------|------|-------------------------------|

## CLINICAL CHEMISTRY/BIOCHEMISTRY

### SGOT/SGPT PROFILE

|                                                                |      |     |              |
|----------------------------------------------------------------|------|-----|--------------|
| SGOT/AST: SERUM<br><i>by IFCC, WITHOUT PYRIDOXAL PHOSPHATE</i> | 18.2 | U/L | 7.00 - 45.00 |
| SGPT/ALT: SERUM<br><i>by IFCC, WITHOUT PYRIDOXAL PHOSPHATE</i> | 26.7 | U/L | 0.00 - 49.00 |
| SGOT/SGPT RATIO<br><i>by CALCULATED, SPECTROPHOTOMETRY</i>     | 0.68 |     |              |

#### INTERPRETATION

**NOTE:-** To be correlated in individuals having SGOT and SGPT values higher than Normal Reference Range.

**USE:-** Differential diagnosis of diseases of hepatobiliary system and pancreas.

#### INCREASED:-

|                                              |                            |
|----------------------------------------------|----------------------------|
| DRUG HEPATOTOXICITY                          | > 2                        |
| ALCOHOLIC HEPATITIS                          | > 2 (Highly Suggestive)    |
| CIRRHOSIS                                    | 1.4 - 2.0                  |
| INTRAHEPATIC CHOLESTATIS                     | > 1.5                      |
| HEPATOCELLULAR CARCINOMA & CHRONIC HEPATITIS | > 1.3 (Slightly Increased) |

#### DECREASED:-

1. Acute Hepatitis due to virus, drugs, toxins (with AST increased 3 to 10 times upper limit of normal)
2. Extra Hepatic cholestasis: 0.8 (normal or slightly decreased).

#### PROGNOSTIC SIGNIFICANCE:-

|                      |           |
|----------------------|-----------|
| NORMAL               | < 0.65    |
| GOOD PROGNOSTIC SIGN | 0.3 - 0.6 |
| POOR PROGNOSTIC SIGN | 1.2 - 1.6 |



  
**DR. VINAY CHOPRA**  
 CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY & MICROBIOLOGY)

  
**DR. YUGAM CHOPRA**  
 CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY)



Dr. Vinay Chopra  
 MD (Pathology & Microbiology)  
 Chairman & Consultant Pathologist

Dr. Yugam Chopra  
 MD (Pathology)  
 CEO & Consultant Pathologist

|                       |                                        |                          |                        |
|-----------------------|----------------------------------------|--------------------------|------------------------|
| <b>NAME</b>           | : Mrs. BALJINDER KAUR                  | <b>PATIENT ID</b>        | : 1770918              |
| <b>AGE/ GENDER</b>    | : 46 YRS/FEMALE                        | <b>REG. NO./LAB NO.</b>  | : 012502260015         |
| <b>COLLECTED BY</b>   | :                                      | <b>REGISTRATION DATE</b> | : 26/Feb/2025 12:03 PM |
| <b>REFERRED BY</b>    | :                                      | <b>COLLECTION DATE</b>   | : 26/Feb/2025 12:04PM  |
| <b>BARCODE NO.</b>    | : 01526159                             | <b>REPORTING DATE</b>    | : 26/Feb/2025 12:50PM  |
| <b>CLIENT CODE.</b>   | : KOS DIAGNOSTIC LAB                   |                          |                        |
| <b>CLIENT ADDRESS</b> | : 6349/1, NICHOLSON ROAD, AMBALA CANTT |                          |                        |

| Test Name | Value | Unit | Biological Reference interval |
|-----------|-------|------|-------------------------------|
|-----------|-------|------|-------------------------------|

**CREATININE**

|                                 |      |       |             |
|---------------------------------|------|-------|-------------|
| CREATININE: SERUM               | 0.81 | mg/dL | 0.40 - 1.20 |
| by ENZYMATIC, SPECTROPHOTOMETRY |      |       |             |



  
 DR.VINAY CHOPRA  
 CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY & MICROBIOLOGY)

  
 DR.YUGAM CHOPRA  
 CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY)



Dr. Vinay Chopra  
 MD (Pathology & Microbiology)  
 Chairman & Consultant Pathologist

Dr. Yugam Chopra  
 MD (Pathology)  
 CEO & Consultant Pathologist

|                       |                                        |                          |                        |
|-----------------------|----------------------------------------|--------------------------|------------------------|
| <b>NAME</b>           | : Mrs. BALJINDER KAUR                  | <b>PATIENT ID</b>        | : 1770918              |
| <b>AGE/ GENDER</b>    | : 46 YRS/FEMALE                        | <b>REG. NO./LAB NO.</b>  | : 012502260015         |
| <b>COLLECTED BY</b>   | :                                      | <b>REGISTRATION DATE</b> | : 26/Feb/2025 12:03 PM |
| <b>REFERRED BY</b>    | :                                      | <b>COLLECTION DATE</b>   | : 26/Feb/2025 12:04PM  |
| <b>BARCODE NO.</b>    | : 01526159                             | <b>REPORTING DATE</b>    | : 26/Feb/2025 12:50PM  |
| <b>CLIENT CODE.</b>   | : KOS DIAGNOSTIC LAB                   |                          |                        |
| <b>CLIENT ADDRESS</b> | : 6349/1, NICHOLSON ROAD, AMBALA CANTT |                          |                        |

| Test Name | Value | Unit | Biological Reference interval |
|-----------|-------|------|-------------------------------|
|-----------|-------|------|-------------------------------|

### IMMUNOPATHOLOGY/SEROLOGY C-REACTIVE PROTEIN (CRP)

|                                                                   |                          |      |           |
|-------------------------------------------------------------------|--------------------------|------|-----------|
| C-REACTIVE PROTEIN (CRP) QUANTITATIVE:<br>SERUM<br>by NEPHLOMETRY | <b>11.43<sup>H</sup></b> | mg/L | 0.0 - 6.0 |
|-------------------------------------------------------------------|--------------------------|------|-----------|

**INTERPRETATION:**

1. C-reactive protein (CRP) is one of the most sensitive acute-phase reactants for inflammation.
2. CRP levels can increase dramatically (100-fold or more) after severe trauma, bacterial infection, inflammation, surgery, or neoplastic proliferation.
3. CRP levels (Quantitative) has been used to assess activity of inflammatory disease, to detect infections after surgery, to detect transplant rejection, and to monitor these inflammatory processes.
4. As compared to ESR, CRP shows an earlier rise in inflammatory disorders which begins in 4-6 hrs, the intensity of the rise being higher than ESR and the recovery being earlier than ESR. Unlike ESR, CRP levels are not influenced by hematologic conditions like Anemia, Polycythemia etc.,
5. Elevated values are consistent with an acute inflammatory process.

- NOTE:**
1. Elevated C-reactive protein (CRP) values are nonspecific and should not be interpreted without a complete clinical history.
  2. Oral contraceptives may increase CRP levels.

\*\*\* End Of Report \*\*\*



  
 DR. VINAY CHOPRA  
 CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY & MICROBIOLOGY)

  
 DR. YUGAM CHOPRA  
 CONSULTANT PATHOLOGIST  
 MBBS, MD (PATHOLOGY)

