

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

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

NAME : Mr. SUNDRUM  
AGE/ GENDER : 47 YRS/MALE  
COLLECTED BY :  
REFERRED BY : LOOMBA HOSPITAL (AMBALA CANTT)  
BARCODE NO. : 01517281  
CLIENT CODE. : KOS DIAGNOSTIC LAB  
CLIENT ADDRESS : 6349/1, NICHOLSON ROAD, AMBALA CANTT

PATIENT ID : 1618150  
REG. NO./LAB NO. : 012409190048  
REGISTRATION DATE : 19/Sep/2024 12:17 PM  
COLLECTION DATE : 19/Sep/2024 12:25PM  
REPORTING DATE : 19/Sep/2024 05:13PM

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

## HAEMATOLOGY

### BLOOD GROUP (ABO) AND RH FACTOR TYPING

ABO GROUP  
by SLIDE AGGLUTINATION  
RH FACTOR TYPE  
by SLIDE AGGLUTINATION

O  
NEGATIVE



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>	: Mr. SUNDRUM	<b>PATIENT ID</b>	: 1618150
<b>AGE/ GENDER</b>	: 47 YRS/MALE	<b>REG. NO./LAB NO.</b>	: 012409190048
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 19/Sep/2024 12:17 PM
<b>REFERRED BY</b>	: LOOMBA HOSPITAL (AMBALA CANTT)	<b>COLLECTION DATE</b>	: 19/Sep/2024 12:25PM
<b>BARCODE NO.</b>	: 01517281	<b>REPORTING DATE</b>	: 19/Sep/2024 02:24PM
<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

#### HEPATITIS C VIRUS (HCV) ANTIBODY: TOTAL

HEPATITIS C ANTIBODY (HCV) TOTAL: SERUM	0.08	S/CO	NEGATIVE: < 1.00
by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)			POSITIVE: > 1.00

HEPATITIS C ANTIBODY (HCV) TOTAL	NON REACTIVE
RESULT	

by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)

#### INTERPRETATION:-

RESULT (INDEX)	REMARKS
< 1.00	NON - REACTIVE/NOT - DETECTED
> =1.00	REACTIVE/ASYMPTOMATIC/INFECTIVE STATE/CARRIER STATE.

Hepatitis C (HCV) is an RNA virus of Favivirus group transmitted via blood transfusions, transplantation, injection drug abusers, accidental needle punctures in healthcare workers, dialysis patients and rarely from mother to infant. 10 % of new cases show sexual transmission. As compared to HAV & HBV , chronic infection with HCV occurs in 85 % of infected individuals. In high risk population, the predictive value of Anti HCV for HCV infection is > 99% whereas in low risk populations it is only 25 %.

#### USES:

- Indicator of past or present infection, but does not differentiate between Acute/ Chronic/Resolved Infection.
- Routine screening of low and high prevalence population including blood donors.

#### NOTE:

- False positive results are seen in Auto-immune disease, Rheumatoid Factor, HYpergammaglobulinemia, Paraproteinemia, Passive antibody transfer, Anti-idiotypes and Anti-superoxide dismutase.
- False negative results are seen in early Acute infection, Immunosuppression and Immuno— incompetence.
- HCV-RNA PCR recommended in all reactive results to differentiate between past and present infection.



  
 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>	: Mr. SUNDRUM	<b>PATIENT ID</b>	: 1618150
<b>AGE/ GENDER</b>	: 47 YRS/MALE	<b>REG. NO./LAB NO.</b>	: 012409190048
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 19/Sep/2024 12:17 PM
<b>REFERRED BY</b>	: LOOMBA HOSPITAL (AMBALA CANTT)	<b>COLLECTION DATE</b>	: 19/Sep/2024 12:25PM
<b>BARCODE NO.</b>	: 01517281	<b>REPORTING DATE</b>	: 19/Sep/2024 02:24PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

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

**ANTI HUMAN IMMUNODEFICIENCY VIRUS (HIV) DUO ULTRA WITH (P-24 ANTIGEN DETECTION)**

HIV 1/2 AND P24 ANTIGEN: SERUM	0.1	S/CO	NEGATIVE: < 1.00 POSITIVE: > 1.00
by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)			

HIV 1/2 AND P24 ANTIGEN RESULT	NON REACTIVE
by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)	

**INTERPRETATION:-**

RESULT (INDEX)	REMARKS
< 1.00	NON - REACTIVE
> = 1.00	PROVISIONALLY REACTIVE

Non-Reactive result implies that antibodies to HIV 1/ 2 have not been detected in the sample . This means that patient has either not been exposed to HIV 1/ 2 infection or the sample has been tested during the "window phase" i.e. before the development of detectable levels of antibodies. Hence a Non Reactive result does not exclude the possibility of exposure or infection with HIV 1/ 2.

**RECOMMENDATIONS:**

1. Results to be clinically correlated
2. Rarely falsenegativity/positivity may occur.



  
 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>	: Mr. SUNDRUM	<b>PATIENT ID</b>	: 1618150
<b>AGE/ GENDER</b>	: 47 YRS/MALE	<b>REG. NO./LAB NO.</b>	: 012409190048
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 19/Sep/2024 12:17 PM
<b>REFERRED BY</b>	: LOOMBA HOSPITAL (AMBALA CANTT)	<b>COLLECTION DATE</b>	: 19/Sep/2024 12:25PM
<b>BARCODE NO.</b>	: 01517281	<b>REPORTING DATE</b>	: 19/Sep/2024 02:24PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

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

### HEPATITIS B SURFACE ANTIGEN (HBsAg) ULTRA

HEPATITIS B SURFACE ANTIGEN (HBsAg): 0.29 S/CO  
 SERUM  
 NEGATIVE: < 1.0  
 POSITIVE: > 1.0

by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)

HEPATITIS B SURFACE ANTIGEN (HBsAg) NON REACTIVE  
 RESULT


by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)


#### INTERPRETATION:

RESULT IN INDEX VALUE	REMARKS
< 1.30	NEGATIVE (-ve)
>=1.30	POSITIVE (+ve)

Hepatitis B Virus (HBV) is a member of the Hepadna virus family causing infection of the liver with extremely variable clinical features. Hepatitis B is transmitted primarily by body fluids especially serum and also spread effectively sexually and from mother to baby. In most individuals HBV hepatitis is self limiting, but 1-2 % normal adolescent and adults develop Chronic Hepatitis. Frequency of chronic HBV infection is 5-10% in immunocompromised patients and 80 % neonates. The initial serological marker of acute infection is HBsAg which typically appears 2-3 months after infection and disappears 12-20 weeks after onset of symptoms. Persistence of HBsAg for more than 6 months indicates carrier state or Chronic Liver disease.



  
**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>	: Mr. SUNDRUM	<b>PATIENT ID</b>	: 1618150
<b>AGE/ GENDER</b>	: 47 YRS/MALE	<b>REG. NO./LAB NO.</b>	: 012409190048
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 19/Sep/2024 12:17 PM
<b>REFERRED BY</b>	: LOOMBA HOSPITAL (AMBALA CANTT)	<b>COLLECTION DATE</b>	: 19/Sep/2024 12:25PM
<b>BARCODE NO.</b>	: 01517281	<b>REPORTING DATE</b>	: 19/Sep/2024 12:52PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

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

VDRL by IMMUNOCHROMATOGRAPHY	NON REACTIVE		NON REACTIVE
---------------------------------	--------------	--	--------------

**INTERPRETATION:**

- Does not become positive until 7 - 10 days after appearance of chancre.
- High titer (>1:16) - active disease.**
- Low titer (<1:8) - biological falsepositive test in 90% cases or due to late or late latent syphilis.**
- Treatment of primary syphilis causes progressive decline to negative VDRL within 2 years.
- Rising titer (4X) indicates relapse, reinfection, or treatment failure and need for retreatment.
- May be nonreactive in early primary, late latent, and late syphilis (approx. 25% of cases).
- Reactive and weakly reactive tests should always be confirmed with FTA-ABS (fluorescent treponemal antibody absorption test).**


**SHORT TERM FALSE POSITIVE TEST RESULTS (<6 MONTHS DURATION) MAY OCCUR IN:**


- Acute viral illnesses (e.g., hepatitis, measles, infectious mononucleosis)
- M. pneumoniae; Chlamydia; Malaria infection.
- Some immunizations
- Pregnancy (rare)

**LONG TERM FALSE POSITIVE TEST RESULTS (>6 MONTHS DURATION) MAY OCCUR IN:**

- Serious underlying disease e.g., collagen vascular diseases, leprosy, malignancy.
- Intravenous drug users.
- Rheumatoid arthritis, thyroiditis, AIDS, Sjogren's syndrome.
- <10 % of patients older than age 70 years.
- Patients taking some anti-hypertensive drugs.



  
 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>	: Mr. SUNDRUM	<b>PATIENT ID</b>	: 1618150
<b>AGE/ GENDER</b>	: 47 YRS/MALE	<b>REG. NO./LAB NO.</b>	: 012409190048
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 19/Sep/2024 12:17 PM
<b>REFERRED BY</b>	: LOOMBA HOSPITAL (AMBALA CANTT)	<b>COLLECTION DATE</b>	: 19/Sep/2024 12:25PM
<b>BARCODE NO.</b>	: 01517281	<b>REPORTING DATE</b>	: 19/Sep/2024 05:12PM
<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 PATHOLOGY

#### SEMEN ANALYSIS/SEMINOGRAM


#### PHYSICAL EXAMINATION


TIME OF SPECIMEN COLLECTION	18-09-2024	AM/PM	
DURATION OF ABSTINENCE	3 DAYS	DAYS	2 - 7
TYPE OF STONE	FRESH		
LIQUIFACTION TIME AT 37°C	< 30 MINS	MINS	30 - 60
VOLUME	1	ML	
COLOUR	WHITISH OPAQUE		WHITISH OPAQUE
VISCOSITY	VISCOUS		VISCOUS
pH	7.5		5.0 - 7.5

#### AUTOMATED SEMEN ANALYSIS, GOLD STANDARD, WHO APPROVED (SQA GOLD)

TOTAL SPERM CONCENTRATION	53.4	Millions/mL	12 - 16
by ELECTRO-OPTICS SIGNAL & COMPUTER ALOGRITHM			
TOTAL MOTILITY (GRADE A + GRADE B + GRADE C)	4	%	> = 42.0
by ELECTRO-OPTICS SIGNAL & COMPUTER ALOGRITHM			
RAPIDLY PROGRESSIVE MOTILITY (GRADE A)	2	%	> = 30.0
by ELECTRO-OPTICS SIGNAL & COMPUTER ALOGRITHM			
SLOWLY PROGRESSIVE MOTILITY (GRADE B)	1	%	> = 30
by ELECTRO-OPTICS SIGNAL & COMPUTER ALOGRITHM			
NON PROGRESSIVE MOTILITY (GRADE C)	1	%	< = 1
by ELECTRO-OPTICS SIGNAL & COMPUTER ALOGRITHM			
IMMOTILE	96	%	
by ELECTRO-OPTICS SIGNAL & COMPUTER ALOGRITHM			
MORPHOLOGY NORMAL	1	%	> = 4.0
by ELECTRO-OPTICS SIGNAL & COMPUTER ALOGRITHM			
MOTILE SPERM CONCENTRATION	2.1	Millions/mL	> = 6.0
by ELECTRO-OPTICS SIGNAL & COMPUTER ALOGRITHM			
RAPIDLY PROGRESSIVE MOTILE SPERM CONCENTRATION	0.3	Millions/mL	> = 5.0
by ELECTRO-OPTICS SIGNAL & COMPUTER ALOGRITHM			
SLOWLY PROGRESSIVE MOTILE SPERM CONCENTRATION	0	Millions/mL	
by ELECTRO-OPTICS SIGNAL & COMPUTER ALOGRITHM			



  
 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>	: Mr. SUNDRUM	<b>PATIENT ID</b>	: 1618150
<b>AGE/ GENDER</b>	: 47 YRS/MALE	<b>REG. NO./LAB NO.</b>	: 012409190048
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 19/Sep/2024 12:17 PM
<b>REFERRED BY</b>	: LOOMBA HOSPITAL (AMBALA CANTT)	<b>COLLECTION DATE</b>	: 19/Sep/2024 12:25PM
<b>BARCODE NO.</b>	: 01517281	<b>REPORTING DATE</b>	: 19/Sep/2024 05:12PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		

Test Name	Value	Unit	Biological Reference interval
FUNCTIONAL SPERM CONCENTRATION <i>by ELECTRO-OPTICS SIGNAL &amp; COMPUTER ALOGRITHM</i>	0	Millions/mL	
VELOCITY (AVERAGE PATH VELOCITY) <i>by ELECTRO-OPTICS SIGNAL &amp; COMPUTER ALOGRITHM</i>	5	Mic/sec	> = 5
SPERM MOTILE INDEX (SMI) <i>by ELECTRO-OPTICS SIGNAL &amp; COMPUTER ALOGRITHM</i>	4		> = 80
<b><u>TOTAL PER EJACULATION</u></b>			
TOTAL SPERM NUMBER <i>by ELECTRO-OPTICS SIGNAL &amp; COMPUTER ALOGRITHM</i>	53.4	Millions/ejc.	> = 39.0
TOTAL MOTILE SPERM <i>by ELECTRO-OPTICS SIGNAL &amp; COMPUTER ALOGRITHM</i>	2.1	Millions/ejc.	> = 16.0
TOTAL PROGRESSIVE MOTILE SPERM <i>by ELECTRO-OPTICS SIGNAL &amp; COMPUTER ALOGRITHM</i>	0.3	Millions/ejc.	> = 12.0
TOTAL FUNCTIONAL SPERM <i>by ELECTRO-OPTICS SIGNAL &amp; COMPUTER ALOGRITHM</i>	0	Millions/ejc.	
TOTAL MORPHOLOGY NORMAL SPERM <i>by ELECTRO-OPTICS SIGNAL &amp; COMPUTER ALOGRITHM</i>	0.5	Millions/ejc.	> = 2.0
<b><u>MANUAL MICROSCOPY AND MORPHOLOGY</u></b>			
VITALITY <i>by MICROSCOPY</i>	54	%	
RED BLOOD CELLS (RBCs) <i>by MICROSCOPY</i>	NOT DETECTED	/HPF	NOT DETECTED
PUS CELLS <i>by MICROSCOPY</i>	6-10	/HPF	0 - 5
AGGLUTINATES <i>by MICROSCOPY</i>	NOT DETECTED		NOT DETECTED
AMORPHOUS DEPOSITS/ROUND CELLS/DEBRIS <i>by MICROSCOPY</i>	NOT DETECTED		NOT DETECTED
BACTERIA <i>by MICROSCOPY</i>	NEGATIVE (-ve)		NEGATIVE (-ve)
HEAD DEFECTS <i>by MICROSCOPY</i>	38	%	
PIN HEADS <i>by MICROSCOPY</i>	9	%	
NECK AND MID-PIECE DEFECTS <i>by MICROSCOPY</i>	28	%	



*[Signature]*

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

*[Signature]*

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>	: Mr. SUNDRUM	<b>PATIENT ID</b>	: 1618150
<b>AGE/ GENDER</b>	: 47 YRS/MALE	<b>REG. NO./LAB NO.</b>	: 012409190048
<b>COLLECTED BY</b>	:	<b>REGISTRATION DATE</b>	: 19/Sep/2024 12:17 PM
<b>REFERRED BY</b>	: LOOMBA HOSPITAL (AMBALA CANTT)	<b>COLLECTION DATE</b>	: 19/Sep/2024 12:25PM
<b>BARCODE NO.</b>	: 01517281	<b>REPORTING DATE</b>	: 19/Sep/2024 05:12PM
<b>CLIENT CODE.</b>	: KOS DIAGNOSTIC LAB		
<b>CLIENT ADDRESS</b>	: 6349/1, NICHOLSON ROAD, AMBALA CANTT		


Test Name	Value	Unit	Biological Reference interval
TAIL DEFECTS by MICROSCOPY	20	%	
CYTOPLASMIC DROPLETS by MICROSCOPY	2	%	
ACROSOME/NUCLEUS DEFECTS by MICROSCOPY	2	%	
<b>CHEMICAL EXAMINATION</b>			
SEMEN FRUCTOSE (QUALITATIVE) by QUALITATIVE METHOD USING RESORCINOL	POSITIVE (+ve)		POSITIVE (+ve)


**INTERPRETATION:**

1. Fructose is the energy source for sperm motility. A positive fructose is considered normal.  
 2. Azoospermia and fructose negative results may indicate an absence of seminal vesicles / vas deferens in the area of seminal vesicles / obstruction of seminal vesicles.

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



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

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

