P K R JAIN HEALTHCARE INSTITUTE

NASIRPUR, Hissar Road, AMBALA CITY- (Haryana)

A PIONEER DIAGNOSTIC CENTRE

0171-2532620, 8222896961 pkrjainhealthcare@gmail.com

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

NAME	**: Mrs. NIRMAL KAUR**		
AGE/ GENDER	: 63 YRS/FEMALE	**PATIENT ID**	: 1547457
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 122407130003**
REFERRED BY	:	**REGISTRATION DATE**	: 13/Jul/2024 08:39 AM
BARCODE NO.	: 12503570	**COLLECTION DATE**	: 13/Jul/2024 08:56AM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	**REPORTING DATE**	: 13/Jul/2024 01:56PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

HAEMATOLOGY

COMPLETE BLOOD COUNT (CBC)

Test Name	Value	Unit	Biological Reference interval
RED BLOOD CELLS (RBCS) COUNT AND INDICES			
HAEMOGLOBIN (HB) *by CALORIMETRIC*	12	gm/dL	12.0 - 16.0
RED BLOOD CELL (RBC) COUNT *by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE*	4.5	Millions/cmm	3.50 - 5.00
PACKED CELL VOLUME (PCV) ***by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER***	**35.7^{L}**	**%**	**37.0 - 50.0**
MEAN CORPUSCULAR VOLUME (MCV) ***by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER***	**79.4^{L}**	**fL**	**80.0 - 100.0**
MEAN CORPUSCULAR HAEMOGLOBIN (MCH) ***by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER***	**26.7^{L}**	**pg**	**27.0 - 34.0**
MEAN CORPUSCULAR HEMOGLOBIN CONC. (MCHC) *by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER*	33.7	g/dL	32.0 - 36.0
RED CELL DISTRIBUTION WIDTH (RDW-CV) *by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER*	13.4	%	11.00 - 16.00
RED CELL DISTRIBUTION WIDTH (RDW-SD) *by CALCULATED BY AUTOMATED HEMATOLOGY ANALYZER*	40.7	fL	35.0 - 56.0
MENTZERS INDEX *by CALCULATED*	17.64	RATIO	BETA THALASSEMIA TRAIT: < 13.0 IRON DEFICIENCY ANEMIA: >13.0
GREEN & KING INDEX *by CALCULATED*	23.67	RATIO	BETA THALASSEMIA TRAIT: < = 65.0 IRON DEFICIENCY ANEMIA: > 65.0
WHITE BLOOD CELLS (WBCS)			
TOTAL LEUCOCYTE COUNT (TLC) *by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY*	5460	/cmm	4000 - 11000
DIFFERENTIAL LEUCOCYTE COUNT (DLC)			
NEUTROPHILS ***by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY***	**45^{L}**	**%**	**50 - 70**
LYMPHOCYTES ***by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY***	**47^{H}**	**%**	**20 - 40**
EOSINOPHILS	2	%	1 - 6

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

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

NAME	**: Mrs. NIRMAL KAUR**		
AGE/ GENDER	: 63 YRS/FEMALE	**PATIENT ID**	: 1547457
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 122407130003**
REFERRED BY	:	**REGISTRATION DATE**	: 13/Jul/2024 08:39 AM
BARCODE NO.	: 12503570	**COLLECTION DATE**	: 13/Jul/2024 08:56AM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	**REPORTING DATE**	: 13/Jul/2024 01:56PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

Test Name	Value	Unit	Biological Reference interval
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
MONOCYTES	6	%	2 - 12
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
BASOPHILS	0	%	0 - 1
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
ABSOLUTE LEUKOCYTES (WBC) COUNT			
ABSOLUTE NEUTROPHIL COUNT	2457	/cmm	2000 - 7500
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
ABSOLUTE LYMPHOCYTE COUNT	**2566**^{L}	/cmm	800 - 4900
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
ABSOLUTE EOSINOPHIL COUNT	109	/cmm	40 - 440
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
ABSOLUTE MONOCYTE COUNT	328	/cmm	80 - 880
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
ABSOLUTE BASOPHIL COUNT	0	/cmm	0 - 110
by FLOW CYTOMETRY BY SF CUBE & MICROSCOPY			
PLATELETS AND OTHER PLATELET PREDICTIVE MARKERS.			
PLATELET COUNT (PLT)	184000	/cmm	150000 - 450000
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			
PLATELETCRIT (PCT)	0.2	%	0.10 - 0.36
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			
MEAN PLATELET VOLUME (MPV)	11	fL	6.50 - 12.0
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			
PLATELET LARGE CELL COUNT (P-LCC)	64000	/cmm	30000 - 90000
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			
PLATELET LARGE CELL RATIO (P-LCR)	34.8	%	11.0 - 45.0
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			
PLATELET DISTRIBUTION WIDTH (PDW)	16.4	%	15.0 - 17.0
by HYDRO DYNAMIC FOCUSING, ELECTRICAL IMPEDENCE			

NOTE: TEST CONDUCTED ON EDTA WHOLE BLOOD

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

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

NAME	**: Mrs. NIRMAL KAUR**		
AGE/ GENDER	: 63 YRS/FEMALE	**PATIENT ID**	: 1547457
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 122407130003**
REFERRED BY	:	**REGISTRATION DATE**	: 13/Jul/2024 08:39 AM
BARCODE NO.	: 12503570	**COLLECTION DATE**	: 13/Jul/2024 08:56AM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	**REPORTING DATE**	: 13/Jul/2024 04:22PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

GLYCOSYLATED HAEMOGLOBIN (HBA1C)

Test Name	Value	Unit	Biological Reference interval
GLYCOSYLATED HAEMOGLOBIN (HbA1c): WHOLE BLOOD *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	**9H**	**%**	**4.0 - 6.4**
ESTIMATED AVERAGE PLASMA GLUCOSE *by HPLC (HIGH PERFORMANCE LIQUID CHROMATOGRAPHY)*	**211.6H**	**mg/dL**	**60.00 - 140.00**

INTERPRETATION:

AS PER AMERICAN DIABETES ASSOCIATION (ADA):		
REFERENCE GROUP	**GLYCOSYLATED HEMOGLOGIB (HBAIC) in %**	
Non diabetic Adults >= 18 years	<5.7	
At Risk (Prediabetes)	5.7 – 6.4	
Diagnosing Diabetes	>= 6.5	
Therapeutic goals for glycemic control	**Age > 19 Years**	
	Goals of Therapy:	< 7.0
	Actions Suggested:	>8.0
	Age < 19 Years	
	Goal of therapy:	<7.5

COMMENTS:

1.Glycosylated hemoglobin (HbA1c) test is three monthly monitoring done to assess compliace with therapeutic regimen in diabetic patients.

2.Since Hb1c reflects long term fluctuations in blood glucose concentration, a diabetic patient who has recently under good control may still have high concentration of HbAIc. Converse is true for a diabetic previously under good control but now poorly controlled.

3.Target goals of < 7.0 % may be beneficial in patients with short duration of diabetes, long life expectancy and no significant cardiovascular disease. In patients with significant complications of diabetes, limited life expectancy or extensive co-morbid conditions, targetting a goal of < 7.0% may not be appropiate.

4.High HbA1c (>9.0 -9.5 %) is strongly associated with risk of development and rapid progression of microvascular and nerve complications

5.Any condition that shorten RBC life span like acute blood loss, hemolytic anemia falsely lower HbA1c results.

6.HbA1c results from patients with HbSS,HbSC and HbD must be interpreted with caution , given the pathological processes including anemia,increased red cell turnover, and transfusion requirement that adversely impact HbA1c as a marker of long-term gycemic control.

7.Specimens from patients with polycythemia or post-splenctomy may exhibit increse in HbA1c values due to a somewhat longer life span of the red cells.

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

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

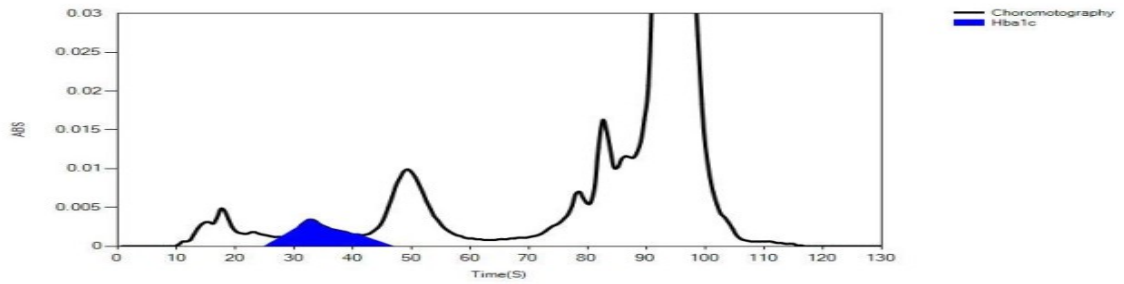
NAME	**: Mrs. NIRMAL KAUR**		
AGE/ GENDER	: 63 YRS/FEMALE	**PATIENT ID**	: 1547457
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 122407130003**
REFERRED BY	:	**REGISTRATION DATE**	: 13/Jul/2024 08:39 AM
BARCODE NO.	: 12503570	**COLLECTION DATE**	: 13/Jul/2024 08:56AM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	**REPORTING DATE**	: 13/Jul/2024 04:22PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

Test Name	Value	Unit	Biological Reference interval

LIFOTRONIC Graph Report

Name :	Case :	Patient Type :	Test Date : 13/07/2024 16:09:10	
Age :	Department :	Sample Type : Whole Blood EDTA	Sample Id : 12503570	
Gender :			Total Area : 10304	

Peak Name	Retention Time(s)	Absorbance	Area	Result (Area %)
HbA0	69	2632	8956	84.9
HbA1c	36	99	952	9.0
La1c	28	17	164	1.5
HbF	21	13	11	0.1
Hba1b	13	49	127	1.2
Hba1a	11	31	94	0.9



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

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

P K R JAIN HEALTHCARE INSTITUTE

NASIRPUR, Hissar Road, AMBALA CITY- (Haryana)

A PIONEER DIAGNOSTIC CENTRE

0171-2532620, 8222896961 pkrjainhealthcare@gmail.com

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

NAME	**: Mrs. NIRMAL KAUR**		
AGE/ GENDER	: 63 YRS/FEMALE	**PATIENT ID**	: 1547457
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 122407130003**
REFERRED BY	:	**REGISTRATION DATE**	: 13/Jul/2024 08:39 AM
BARCODE NO.	: 12503570	**COLLECTION DATE**	: 13/Jul/2024 08:56AM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	**REPORTING DATE**	: 13/Jul/2024 03:44PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

Test Name	Value	Unit	Biological Reference interval
CLINICAL CHEMISTRY/BIOCHEMISTRY			
LIPID PROFILE : BASIC			
CHOLESTEROL TOTAL: SERUM *by CHOLESTEROL OXIDASE PAP*	**220.08 H**	**mg/dL**	**OPTIMAL: < 200.0 BORDERLINE HIGH: 200.0 - 239.0 HIGH CHOLESTEROL: > OR = 240.0**
TRIGLYCERIDES: SERUM *by GLYCEROL PHOSPHATE OXIDASE (ENZYMATIC)*	**373.93 H**	**mg/dL**	**OPTIMAL: < 150.0 BORDERLINE HIGH: 150.0 - 199.0 HIGH: 200.0 - 499.0 VERY HIGH: > OR = 500.0**
HDL CHOLESTEROL (DIRECT): SERUM *by SELECTIVE INHIBITION*	46.87	mg/dL	LOW HDL: < 30.0 BORDERLINE HIGH HDL: 30.0 - 60.0 HIGH HDL: > OR = 60.0
LDL CHOLESTEROL: SERUM *by CALCULATED, SPECTROPHOTOMETRY*	98.42	mg/dL	OPTIMAL: < 100.0 ABOVE OPTIMAL: 100.0 - 129.0 BORDERLINE HIGH: 130.0 - 159.0 HIGH: 160.0 - 189.0 VERY HIGH: > OR = 190.0
NON HDL CHOLESTEROL: SERUM *by CALCULATED, SPECTROPHOTOMETRY*	**173.21 H**	**mg/dL**	**OPTIMAL: < 130.0 ABOVE OPTIMAL: 130.0 - 159.0 BORDERLINE HIGH: 160.0 - 189.0 HIGH: 190.0 - 219.0 VERY HIGH: > OR = 220.0**
VLDL CHOLESTEROL: SERUM *by CALCULATED, SPECTROPHOTOMETRY*	**74.79 H**	**mg/dL**	**0.00 - 45.00**
TOTAL LIPIDS: SERUM *by CALCULATED, SPECTROPHOTOMETRY*	**814.09 H**	**mg/dL**	**350.00 - 700.00**
CHOLESTEROL/HDL RATIO: SERUM *by CALCULATED, SPECTROPHOTOMETRY*	**4.7 H**	**RATIO**	**LOW RISK: 3.30 - 4.40 AVERAGE RISK: 4.50 - 7.0 MODERATE RISK: 7.10 - 11.0 HIGH RISK: > 11.0**
LDL/HDL RATIO: SERUM	2.1	RATIO	LOW RISK: 0.50 - 3.0

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

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

NAME	**: Mrs. NIRMAL KAUR**		
AGE/ GENDER	: 63 YRS/FEMALE	**PATIENT ID**	: 1547457
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 122407130003**
REFERRED BY	:	**REGISTRATION DATE**	: 13/Jul/2024 08:39 AM
BARCODE NO.	: 12503570	**COLLECTION DATE**	: 13/Jul/2024 08:56AM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	**REPORTING DATE**	: 13/Jul/2024 03:44PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

Test Name	Value	Unit	Biological Reference interval
by CALCULATED, SPECTROPHOTOMETRY			MODERATE RISK: 3.10 - 6.0 HIGH RISK: > 6.0
TRIGLYCERIDES/HDL RATIO: SERUM ***by CALCULATED, SPECTROPHOTOMETRY***	**7.98^{H}**	**RATIO**	**3.00 - 5.00**

INTERPRETATION:

1.Measurements in the same patient can show physiological& analytical variations. Three serial samples 1 week apart are recommended for Total Cholesterol, Triglycerides, HDL & LDL Cholesterol.
2. As per NLA-2014 guidelines, all adults above the age of 20 years should be screened for lipid status. Selective screening of children above the age of 2 years with a family history of premature cardiovascular disease or those with at least one parent with high total cholesterol is recommended.
3. Low HDL levels are associated with increased risk for Atherosclerotic Cardiovascular disease (ASCVD) due to insufficient HDL being available to participate in reverse cholesterol transport, the process by which cholesterol is eliminated from peripheral tissues.
4. NLA-2014 identifies Non HDL Cholesterol (an indicator of all atherogeniclipoproteins such as LDL , VLDL, IDL, Lpa, Chylomicron remnants) along with LDL-cholesterol as co- primary target for cholesterol lowering therapy. Note that major risk factors can modify treatment goals for LDL &Non HDL.
5. Additional testing for Apolipoprotein B, hsCRP,Lp(a) & LP-PLA2 should be considered among patients with moderate risk for ASCVD for risk refinement

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

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

P K R JAIN HEALTHCARE INSTITUTE

NASIRPUR, Hissar Road, AMBALA CITY- (Haryana)

A PIONEER DIAGNOSTIC CENTRE

0171-2532620, 8222896961 pkrjainhealthcare@gmail.com

TEST PERFORMED AT KOS DIAGNOSTIC LAB, AMBALA CANTT.

NAME	**: Mrs. NIRMAL KAUR**		
AGE/ GENDER	: 63 YRS/FEMALE	**PATIENT ID**	: 1547457
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 122407130003**
REFERRED BY	:	**REGISTRATION DATE**	: 13/Jul/2024 08:39 AM
BARCODE NO.	: 12503570	**COLLECTION DATE**	: 13/Jul/2024 08:56AM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	**REPORTING DATE**	: 13/Jul/2024 04:26PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

Test Name	Value	Unit	Biological Reference interval
KIDNEY FUNCTION TEST (BASIC)			
UREA: SERUM *by UREASE - GLUTAMATE DEHYDROGENASE (GLDH)*	**50.36 H**	**mg/dL**	**10.00 - 50.00**
CREATININE: SERUM *by ENZYMATIC, SPECTROPHOTOMETERY*	**1.52 H**	**mg/dL**	**0.40 - 1.20**
BLOOD UREA NITROGEN (BUN): SERUM *by CALCULATED, SPECTROPHOTOMETERY*	**23.53 H**	mg/dL	7.0 - 25.0
BLOOD UREA NITROGEN (BUN)/CREATININE RATIO: SERUM *by CALCULATED, SPECTROPHOTOMETERY*	15.48	RATIO	10.0 - 20.0
UREA/CREATININE RATIO: SERUM *by CALCULATED, SPECTROPHOTOMETERY*	33.13	RATIO	
URIC ACID: SERUM *by URICASE - OXIDASE PEROXIDASE*	**7.27 H**	**mg/dL**	**2.50 - 6.80**
NOTE 2	RESULT RECHECKED TWICE		
ADVICE	**KINDLY CORRELATE CLINICALLY**		

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

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

NAME	**: Mrs. NIRMAL KAUR**		
AGE/ GENDER	: 63 YRS/FEMALE	**PATIENT ID**	: 1547457
COLLECTED BY	:	**REG. NO./LAB NO.**	**: 122407130003**
REFERRED BY	:	**REGISTRATION DATE**	: 13/Jul/2024 08:39 AM
BARCODE NO.	: 12503570	**COLLECTION DATE**	: 13/Jul/2024 08:56AM
CLIENT CODE.	: P.K.R JAIN HEALTHCARE INSTITUTE	**REPORTING DATE**	: 13/Jul/2024 04:26PM
CLIENT ADDRESS	: NASIRPUR, HISSAR ROAD, AMBALA CITY - HARYANA		

Test Name	Value	Unit	Biological Reference interval

INTERPRETATION:

Normal range for a healthy person on normal diet: 12 - 20

To Differentiate between pre- and postrenal azotemia.

INCREASED RATIO (>20:1) WITH NORMAL CREATININE:

1.Prerenal azotemia (BUN rises without increase in creatinine) e.g. heart failure, salt depletion,dehydration, blood loss) due to decreased glomerular filtration rate.
2.Catabolic states with increased tissue breakdown.
3.GI hemorrhage.
4.High protein intake.
5.Impaired renal function plus .
6.Excess protein intake or production or tissue breakdown (e.g. infection, GI bleeding, thyrotoxicosis, Cushings syndrome, high protein diet, burns,surgery, cachexia, high fever).
7.Urine reabsorption (e.g. ureterocolostomy)
8.Reduced muscle mass (subnormal creatinine production)
9.Certain drugs (e.g. tetracycline, glucocorticoids)

INCREASED RATIO (>20:1) WITH ELEVATED CREATININE LEVELS:

1.Postrenal azotemia (BUN rises disproportionately more than creatinine) (e.g. obstructive uropathy).
2.Prerenal azotemia superimposed on renal disease.

DECREASED RATIO (<10:1) WITH DECREASED BUN :

1.Acute tubular necrosis.
2.Low protein diet and starvation.
3.Severe liver disease.
4.Other causes of decreased urea synthesis.
5.Repeated dialysis (urea rather than creatinine diffuses out of extracellular fluid).
6.Inherited hyperammonemias (urea is virtually absent in blood).
7.SIADH (syndrome of inappropiate antidiuretic harmone) due to tubular secretion of urea.
8.Pregnancy.

DECREASED RATIO (<10:1) WITH INCREASED CREATININE:

1.Phenacimide therapy (accelerates conversion of creatine to creatinine).
2.Rhabdomyolysis (releases muscle creatinine).
3.Muscular patients who develop renal failure.

INAPPROPIATE RATIO:

1.Diabetic ketoacidosis (acetoacetate causes false increase in creatinine with certain methodologies,resulting in normal ratio when dehydration should produce an increased BUN/creatinine ratio).
2.Cephalosporin therapy (interferes with creatinine measurement).

*** End Of Report ***

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

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