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Final report

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HEMATOLOGY

	Results	Reference range*	Antecedents
► COMPLETE BLOOD COUNT (CBC) (Cytochemistry-Impedance and Optical, Whole Blood-EDTA, Pentra 80XL, Horiba) (Reference range: Hematocell.fr (CHU - Angers, France)/ Full blood count normal reference values according to age)			
White blood cells	7,6 G/L	(4,0 - 11,0)	
Red blood cells	5,59 T/L	(4,5 - 5,8)	
Hemoglobin	16,2 g/dL	(13 - 17)	
Hematocrit	47,8 %	(40 - 50)	
M.C.V. (Volume)	86 fL	(80 - 95)	
M.C.H. (Hemoglobin)	29,0 pg	(26 - 34)	
M.C.H.C. (Hb concentration)	33,9 %	(32 - 36)	
► LEUKOCYTE DIFFERENTIAL COUNT			
Neutrophils	56,9 %	4,32 G/L	(1,5 - 7)
Eosinophils	2,2 %	0,17 G/L	(< 0,50)
Basophils	0,7 %	0,05 G/L	(0 - 0,11)
Lymphocytes	33,5 %	2,55 G/L	(1,5 - 4)
Monocytes	6,7 %	0,51 G/L	(0,18 - 1,0)
Platelets	159 G/L	(150 - 450)	

IMMUNOHEMATOLOGY

	Results	Reference range*	Antecedents
BLOOD GROUP (Whole blood, Beth-Vincent and Simonin blood group test) (Whole blood, DiaClon ABO/D, Bio-Rad, Institut Jacques Boy)			
BLOOD GROUP	O		
Rhesus	Positive		

BLOOD BIOCHEMISTRY

Results	Reference range*	Antecedents
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Medical Examinations
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► **Fasting Blood Sugar**

(Plasma, Colorimetry, Pentra C400, HORIBA)

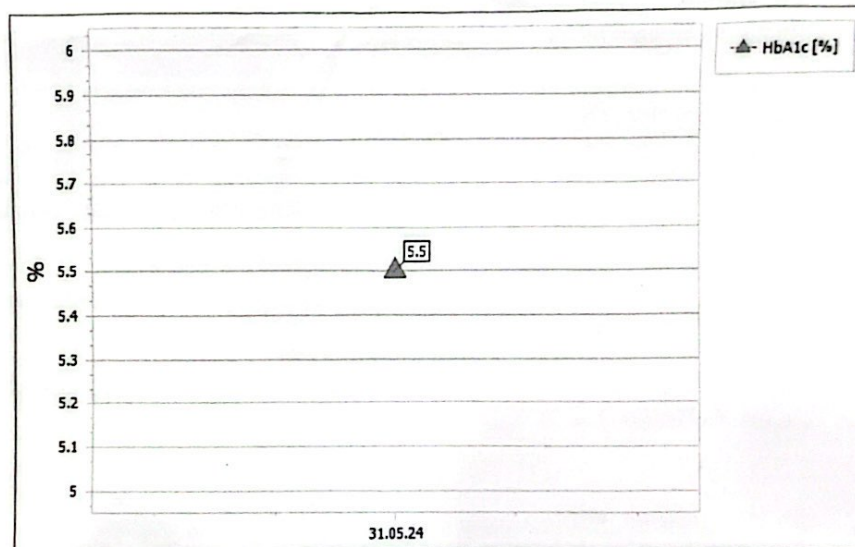
6,12 mmol/L (4,10 - 5,90)
1,10 g/L (0,74 - 1,06)

Must be considered diabetic, anyone who on 2 occasions and after at least 8 hours of fasting, has a fasting blood glucose greater than 1.26 g/L (7 mmol/L). In pregnant women, fasting blood glucose should be less than 0.92 g/L (5.1 mmol/L) (reference: WHO).

Glycated hemoglobin (HbA1c)

(EDTA Whole blood, Electrophoresis, Minicap Flex Piercing, SEBIA)

5,50 %
36,00 mmol/mol (20 - 42)



For most patients with diabetes type 2 an HbA1c target = 7% is recommended.
(French National Authority for Health - HAS - recommendations 2013)

► **LIPID PROFILE**

(Plasma, Colorimetry, Pentra C400, HORIBA)

Appearance of serum

Aspect

Limpid

12h fasting

Fasting before sampling

Respected

Reference values are for a strict 12-hour fast

► **Total Cholesterol**

2,91 mmol/L (< 5,18)
1,13 g/L (< 2,00)



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► HDL Cholesterol

0,99 mmol/L (0,77 - 1,81)
0,38 g/L (0,30 - 0,70)

Cardiovascular risk score (Atherogenic Index)

2,94

Cholesterol Total/HDL	MEN	< 4,97 no risk 4,97 < Risk x2 < 9,50 > 9,50 Risk x3	WOMEN	< 4,44 no risk 4,44 < Risk x2 < 7,00 > 7,00 Risk x3
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► Calculated LDL cholesterol

(Friedewald's formula)

0,89 mmol/L (< 4,14)
0,34 g/L (< 1,61)

► Triglycerides

2,27 mmol/L (< 1,71)
1,99 g/L (< 1,50)

Conclusion:

Hypertriglyceridemia secondary to hyperglycemia.

Sodium

(Plasma, Potentiometry, Exias e1)

139 mmol/L (135 - 145)

Potassium

(Plasma, Potentiometry, Exias e1)

4,1 mmol/L (3,5 - 5,1)

Chloride

(Plasma, Potentiometry, Exias e1)

104 mmol/L (98 - 107)

► Uric Acid

(Plasma, Colorimetry, Pentra C400, HORIBA)

406 µmol/L (208 - 428)
68 mg/L (35 - 72)

► Creatinine

(Plasma, Colorimetry, Pentra C400, HORIBA)

73 µmol/L (71 - 115)
8,2 mg/L (8,0 - 13,0)

Glomerular filtration rate (GFR) (Creatinine clearance)

101,9 mL/min/1,73m²



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Modification of Diet in Renal Disease (MDRD)

Stage	GFR	Description
1	> 90	Normal kidney Glomerular Filtration Rate (GFR)
2	60 - 89	Mild decrease in Glomerular Filtration rate (GFR)
3	30 - 59	Moderate decrease in Glomerular Filtration rate (GFR)
4	15 - 29	Severe decrease in Glomerular Filtration rate (GFR)
5	< 15	Renal failure

Chronic kidney disease is defined as either kidney damage or $GFR < 60 \text{ mL/min/1.73m}^2$ for ≥ 3 months.

► Blood Urea and Blood Urea Nitrogen (BUN)

(Plasma, Colorimetry, Pentra C400, HORIBA)

Urea

3,78 mmol/L (3,00 - 9,20)

0,23 g/L (0,18 - 0,55)

Blood Urea Nitrogen (BUN)

(Calculated)

10,6 mg/dl (8,4 - 25,8)

ENZYMOLOGY

Results Reference range* Antecedents

► Gamma-Glutamyl Transferase (GGT)

(Plasma, Colorimetry, Pentra C400, HORIBA)

20 U/L (< 56)

► Aspartate Amino Transferase (SGOT)

(Plasma, Colorimetry, Pentra C400, HORIBA)

21 U/L (< 35)

► Alanine Amino Transferase (SGPT)

(Plasma, Colorimetry, Pentra C400, HORIBA)

17 U/L (< 46)

URINE BIOCHEMISTRY

Results Reference range* Antecedents

URINALYSIS, Roche Urisys 1100 Urine Analyzer

Specific Gravity

1 010

pH

5,0

Leukocytes

Absence

Nitrites

Absence

Proteinuria

Absence

Glucose

Absence

Ketones

Absence

Urobilinogen

Absence



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Bilirubin
Blood

Absence
Absence

HORMONOLOGY

► **TSH Ultrasensible**

(Serum, ECLIA, Elecsys e411, ROCHE)

Results

Reference range*

Antecedents

3,22 mUI/L

(0,27 - 4,20)

Note: Possible interference with thyroid hormone assay for patients taking high doses of biotin.



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