Hellenic Accreditation System

Annex G1/9 to the Certificate No.**882**-3

SCOPE of ACCREDITATION

of the

Biopathological Center
Ioannis A. Goulionis

Tested materials/products	Types of test/Properties	Applied standards/Techniques
Biochemical Testing		
Biological Fluids	**Determination of 26 parameters**	**Automated biochemical analyzer, Architect Plus Ci 8200 E.410-1/3/21-9-21**
Blood serum	1. Glucose	Enzymatic (HKGGP-DH)
	2. Calcium	Colorimetric (Arsenazo III)
	3. Phoshporus	Colorimetric (ammonium heptamolybdate)
	4. Albumin	Colorimetric (BCG)
	5. Protein (total)	Colorimetric (biuret)
	6. Urea	Enzymatic (urease, UV)
	7. Creatinine	Colorimetric (Jaffe, no deproteinization)
	8. Uric acid	Enzymatic (uricase- PAP)
	9. Magnesium	Colorimetric (xylidylblue)
	10. Bilirubin (total)	DPD
	11. Bilirubin (direct)	DPD
	12. Iron	Ferrozine
	13. Cholesterol (total)	Enzymatic (CHOD – POD)
	14. HDL-Cholesterol	a) Selective Immunointerference, b) Enzymatic - colorimetric
	15. Triglycerides	Enzymatic (GPO – PAP)
	16. Amylase	**IFCC (EPS)
	17. Alkaline phosphatase	**IFCC
	18. γ-GT	**IFCC

Blood serum (Cont.)	19. Creatinine kinase	**IFCC
	20. LDH → P	**IFCC/***DGKC
	21. ALT/SGPT	**IFCC/***DGKC
	22. AST/GOT	**IFCC/***DGKC
	23. Sodium	Direct potentiometric, ISE
	24. Potassium	Direct potentiometric, ISE
	25. Chloride	Direct potentiometric, ISE
	26. Ferritine	Turbidity
Immunochemical Testing		
Blood serum	**Determination of 5 parameters**	**Automated immunochemical analyzer Architect Plus Ci 8200 E.410-1/3/21-9-21**
	1. Thyrotropin Hormone (TSH)	CLIA
	2. Triidothyronine total (T3)	
	3. Thyroxin total (T4)	
	4. Free Thyroxin (FT4)	
	Determination of 8 parameters	**Automated immunochemical analyzer Architect Plus Ci 8200 E.410-1/3/21-9-21**
	1. B-Human Chorionic gonadotropin (b-ThCG)	CLIA
	2. Vitamine B12	
	3. Follate acid	
	4. CA 15-3	
	5. Prostatic Specific Antigen (PSA)	
	6. Follicle stimulating hormone (FSH)	
	7. Luteinizing hormone (LH)	
	8. Prolactin (PRL)	
	Determination of 5 parameters	**Automated Immunochemical analyzer VIDAS Biomerieux* E.410-1/3/21-9-21**
	1. CA 19-9	ELFA
	2. CA 125	
	3. Progesterone (PRG)	
	4. Carcinoembryonic Antigen (CEA)	
	5. Estradiol (E_2)	

Immunochemical Testing		
Blood serum	**Determination of 3 parameters**	**Automated Immunochemical analyzer AIA-600 II TOSOH* E.410-1/3/21-9-21**
	1. Cortisol	FEIA
	2. A-Fetoprotein (AFP)	
Blood plasma	1. Parathormone (parathyroid hormone	
Hematological tests		
Whole Blood (EDTA)	**Determination of 17 parameters**	**Automated analyzerADVIA 2120 SIEMENS* E.410-1/3/21-9-21**
	1. Hematocrit (HCT)	Calculated
	2. White Blood Cells (WBC)	Flow Cytometry method
	3. Haemoglobin (HGB)	Photometry
	4. Red Blood Cells (RBC)	Flow Cytometry method
	5. Platelets (PLTs)	
	6. Mean Cell Volume (MCV)	Calculated
	7. Mean Cell hemoglobin (MCH)	
	8. Mean Cell Hemoglobin Concentration (MCHC)	
	9. Red Blood cell Distribution Width (RDW)	
	10. Mean platelets Volume (MPV)	
	11. Neutrophils	Flow Cytometry method
	12. Monocytes	Flow Cytometry method
	13. Lymphocytes	
	14. Eosinophils	
	15. Basophils	
	Differential Leykocyte count	**MicroscopeOlympus BH E.410-1/3/21-9-21**
	1. Rod Neutrophils	Blood Smear / Giemsa stain
	2. Eosinophils	
	3. Basophils	
	4. Lymphocytes	
	5. Neutrophils	
	6. Monocytes	
	7. Red cells Morphology	
Whole Blood (Citric	**Heamostasis tests (Determination of**	**Automated analyzer SYSMEXCA 500***

Sodium)	**3 parameters)**	**E.410-1/3/21-9-21**
	1. Activated Partial Thromboplastin time (APTT)	Turbidity
	2. Prothrombine Time (PT sec)	
	3. Prothrombine Time (INR)	
Whole Blood (EDTA)	Glycated HaemoglobinAnalysis (HbA_{1C})	**Automated analyzer HPLC Menarini HA-8160 E.410-1/3/21-9-21**
Urinalysis **E.410-1/3/21-9-21**		
Urine Sediment	**Biochemistry tests (8 parameters)**	**MACHEREY NAGEL URINE TEST STRIPS (10 parameters) E.410-1/2**
	1. pH	
	2. Specific gravity	
	3. Proteins	
	4. Glucose	
	5. Ketones	
	6. Bilirubin	
	7. Urobilinogen	
	8. Nitrate	
	Urine Sediment Microscopy (11 parameters)	**Microscope Olympus BH E.410-1/2**
	1. White blood cells	Microscopic Analysis
	2. Red blood cells.	
	3. Epithelial cells	
	4. Mucus	
	5. Uric acid salts	
	6. Phosphate salts	
	7. Calcium Oxalate crystals.	
	8. Uric acid crystals	
	9. Phosphate/Magnesium crystals	
	10. Casts	
	11. Microorganisms	

**Reference to the commercial name of a specific analyzer, refers to a specific analytical method and protocol*
***IFCC: International Federation of Clinical Chemistry*
****DGKC: Deutsche Geselschaft fur Klinische Chemie*

Site of asseseement : **Laboratory Permanent premises, Sidiras Merarchias 27, Nafplion, Greece.**
Approved signatories : **Ioannis A. Goulionis**

This Scope of Accreditation replaces the previous one dated 24.12.2021
The Accreditation Certificate No. **882**-3, to ELOT EN ISO 15189:2012, is valid until 25.07.2025

Athens, 3.02.2022

Christos Nestoras
CEO of ESYD