

# Hellenic Accreditation System



## ACCREDITATION CERTIFICATE

No. 662-7

The Hellenic Accreditation System (ESYD), as the national accreditation body of Greece in accordance with the Law 4468/2017,

### ACCREDITS

the  
Clinical Laboratories of Athens, Thessaloniki,  
Herakleion and Larissa  
of

**PRIVATE COOPERATIVE DIAGNOSTIC  
LABORATORIES MEDISYN MEDICAL S.A.**

located in Athens, Greece

under the terms of the ELOT EN ISO 15189:2012 Standard and the ESYD Criteria, to carry out tests, as specified in the attached Scope of the Accreditation, which may be revised by decisions of ESYD.

The initial assessment was issued on March 22, 2010. This Certificate renews the accreditation and it is valid until March 21, 2022, provided that the accredited body will comply with the above Standard and the ESYD Criteria.

Athens, November 12, 2020



# Hellenic Accreditation System



Annex G1/Γ17 to the Certificate No. **662-7**

## SCOPE of ACCREDITATION

of the  
Clinical Laboratory  
of the  
**PRIVATE COOPERATIVE DIAGNOSTIC  
LABORATORIES MEDISYN MEDICAL S.A.**

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
<b>Immunochemical Tests</b>		
Blood Serum	<b>Determination of 36 parameters</b>	<b>Automated immunology analyzers Centaur SIEMENS * Δ.550, E.550-1, E550-2</b>
	1. β-Human Chorionic Gonadotropine (β-HCG)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 00643953
	2. Progesterone (PRG)	Chemiluminescence (CLIA) (competitive) Ref. 01586287
	3. Estradiol (E2)	Chemiluminescence (CLIA) (competitive) Ref. 10491445
	4. Testosterone Total (TT)	Chemiluminescence (CLIA) (competitive) Ref. 10696863
	5. Free Testo (FTc)]	Calculated from: TT, SHBG, ALB
	6. FAI, Free androgen index	Calculated from: TT, SHBG
	7. Dihydroepiandrosterone Sulfate (DHEA-S)	Chemiluminescence (CLIA) (competitive) Ref. 06489701
	8. Sex hormone-binding globulin (SHBG)	Chemiluminescence (CLIA) (non-competitive) Ref. 10997191
	9. Carcinoembryonic Antigen (CEA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 09788458
	10. Cancer Antigen 19-9 (CA 19-9)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10491244
	11. Cancer Antigen 15-3 (CA 15-3)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 00128609
	12. Cancer Antigen 125 (CA 125)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 01678114
	13. α-Fetoprotein (AFP)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 03305838
	14. Prostate Specific Antigen (PSA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 06862518
	15. Free Prostate Specific Antigen (FPSA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 06862518

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
	16. Ratio: FPSA/ PSA	Calculated from: FPSA and PSA
	17. Ferritin	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 00495776
	18. Vitamin B12	Chemiluminescence (CLIA) (competitive) Ref. 09544818
	19. Folate	Chemiluminescence (CLIA) (competitive) Ref. 06891541
	20. Follicle Stimulating Hormone (FSH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 01360521
	21. Luteinizing Hormone (LH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 02212941
	22. Prolactin (PRL)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 09505871
	23. Thyroid-stimulating hormone (TSH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 06491080
	24. Total Thyroxine (TT4)	Chemiluminescence (CLIA) (competitive) Ref. 09236439
	25. Total Triiodothyronine (TT3)	Chemiluminescence (CLIA) (competitive) Ref. 04779663
	26. Free Thyroxine (FT4)	Chemiluminescence (CLIA) (competitive) Ref. 06490106
	27. Free Triiodothyronine (FT3)	Chemiluminescence (CLIA) (competitive) Ref. 03154228
	28. Cortisol	Electrochemiluminescence (ECLIA) (competitive) Ref. 10994926
	29. Insulin	Chemiluminescence (CLIA) (non-competitive) Ref. 02230141
	30. Insulin Resistance Index HoMA-IR	Calculated from : Ins, Glu
	31. C-peptide	Chemiluminescence (CLIA) (non-competitive) Ref. 03649928
	32. 25-OH Vitamin D	Chemiluminescence (CLIA) (competitive) Ref. 10699533
	33. Anti-thyroglobulin antibodies (anti-TG)	Chemiluminescence (CLIA) (Competitive) Ref. 10492399
	34. Anti-thyroid peroxidase antibodies (anti-TPO)	Chemiluminescence (CLIA) (Competitive) Ref. 10630887
	35. Δ4 Androstenedione	Chemiluminescence (CLIA) (Competitive) Ref. 10997290
Blood serum or blood plasma (EDTA)	36. Intact Parathyroid Hormone (iPTH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10699155
Blood serum	<b>Determination of 2 parameters</b>	<b>Automated immunology analyzer ROCHE e411 * Δ.550, E.550-1, E550-2</b>
	1. Free β-HCG	Electrochemiluminescence (ECLIA) (non-competitive sandwich) Ref.07027303190
	2. PAPP-A	Electrochemiluminescence (ECLIA) (non-competitive sandwich) Ref.07027621190
Blood serum	<b>Determination of 19 parameters</b>	<b>Automated immunology Analyzers Siemens Atellica* Δ.550, E.550-1, E550-2</b>

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
	1. Carcinoembryonic Antigen (CEA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10995524
	2. Cancer Antigen 19-9 (CA 19-9)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10995489
	3. Cancer Antigen 15-3 (CA 15-3)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10995486
	4. Cancer Antigen 125 (CA 125)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10995482
	5. $\alpha$ -Fetoprotein (AFP)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10995442
	6. Prostate Specific Antigen (PSA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10995663
	7. Free Prostate Specific Antigen (FPSA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10995577
	8. Ratio: FPSA/ PSA	Calculated
	9. Ferritin	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10995568
	10. Vitamin B12	Chemiluminescence (CLIA) (Competitive) Ref. 10995715
	11. Folate	Chemiluminescence (CLIA) (Competitive) Ref. 10995573
	12. Thyroid-stimulating hormone (TSH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10995703
	13. Total Thyroxine (TT4)	Chemiluminescence (CLIA) (Competitive) Ref. 10995685
	14. Total Triiodothyronine (TT3)	Chemiluminescence (CLIA) (Competitive) Ref. 10995678
	15. Free Thyroxine (FT4)	Chemiluminescence (CLIA) (Competitive) Ref. 10995588
	16. Free Triiodothyronine (FT3)	Chemiluminescence (CLIA) (Competitive) Ref. 10995584
	17. 25-OH Vitamin D	Chemiluminescence (CLIA) (Competitive) Ref. 10995720
	18. Anti-thyroglobulin antibodies (anti-TG)	Chemiluminescence (CLIA) (Competitive) Ref. 10995462
	19. Anti-thyroid peroxidase antibodies (anti-TPO)	Chemiluminescence (CLIA) (Competitive) Ref. 10995467
Blood serum	<b>Determination of 2 parameter</b>	<b>Automated immunology Analyzer Maglumi Snibe* <math>\Delta</math>.550, E.550-1, E550-2</b>
	1. 17-OH Progesterone	Chemiluminescence (CLIA) (competitive) Ref.130298004M
	2. Free Testosterone (FTc)	Chemiluminescence (CLIA) (competitive) Ref 130202011

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum	<b>Determination of 4 parameters</b>	<b>Automated immunochemical analyzer IMMULITE 2000 SIEMENS* A.550, E.550-1, E550-2</b>
	1. Gastrin	Chemiluminescence (CLIA) (non-competitive) Ref.L2KGA2
	2. Unconjugated estriol (uE3)	Chemiluminescence (CLIA) (competitive) Ref.L2KUE32
	3. Calcitonin (CT)	Chemiluminescence (CLIA) (non-competitive) Ref. L2KCL-2
Blood plasma (EDTA)	4. Adrenocorticotrophic hormone (ACTH)	Chemiluminescence (CLIA) (non-competitive) Ref.L2KAC2
Blood serum	<b>Determination of 3 parameters</b>	<b>Automated immunology Analyzers Liaison DiaSorin express* A.550, E.550-1, E550-2</b>
	1. Aldosterone	Chemiluminescence (CLIA) (competitive) Ref.310450
	2. Growth Hormone (HGH)	Chemiluminescence (CLIA) (non-competitive) 200/007-907, 04 - 2016-04
Blood plasma (EDTA)	3. Renin	Chemiluminescence (CLIA) (non-competitive) Ref.310470
Blood serum	<b>Determination of 13 specific proteins</b>	<b>Automated biochemistry analyzers Siemens ADVIA CHEMISTRY XPT* A.550, E.550-1, E550-2</b>
	1. Complement C3	Immunoturbidimetry (ITA) Ref.3060444
	2. Complement C4	Immunoturbidimetry (ITA) Ref.3060770
	3. Antistreptolysine O (ASTO)	Immunoturbidimetry (ITA) Ref.3055483
	4. Rheumatoid Factor (RF) - quantitative	Immunoturbidimetry (ITA) Ref.655137
	5. C Reactive Protein (CRP) - quantitative	Immunoturbidimetry (ITA) Ref.829585
	6. Immunoglobulin A (IgA)	Immunoturbidimetry (ITA) Ref.2194102
	7. Immunoglobulin G (IgG)	Immunoturbidimetry (ITA) Ref.2193432
	8. Immunoglobulin M (IgM)	Immunoturbidimetry (ITA) Ref.2193483
	9. LpA	Immunoturbidimetry (ITA) Ref.4862528
	10. ApoA1	Immunoturbidimetry (ITA) Ref.3050910
	11. ApoB	Immunoturbidimetry (ITA) Ref.3055068
	12. ApoA1/ApoB	Calculated From: ApoA1, ApoB
	13. $\beta$ 2-Microglobulin	Immunoturbidimetry (ITA) Ref. 4862161
Blood serum	<b>Determination of 1 specific protein</b>	<b>Automated immunology analyzers Centaur SIEMENS* A.550, E.550-1, E550-2</b>
	1. Immunoglobulin E (IgE)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 03359776
	<b>Drug Level Determination of 5 drugs</b>	<b>Automated immunochemical analyzer Abbott ARCHITECTi2000sr * A.550, E.550-1, E550-2</b>
	1. Carbamazepine	Chemiluminescent microparticle immunoassay (CMIA) (competitive) Ref.B1P36G

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum (continued)	2.Valproic Acid (VPA)	Chemiluminescent microparticle immunoassay (CMIA) (competitive) Ref.B1P35G
	3.Digoxin	Chemiluminescent microparticle immunoassay (CMIA) (competitive) Ref.B1P32G
	4.Phenobarbital	Chemiluminescent microparticle immunoassay (CMIA) (competitive) Ref.B1P33G
	5.Phenytoin	Chemiluminescent microparticle immunoassay (CMIA) (competitive) Ref.B1P34G
	<b>Determination of 202 Specific IgE immunoglobulins for allergens</b>	<b>3gAllergy Specific IgE Universal Kit*, Automated immunology analyzer Immulite 2000 SIEMENS* A.550, E.550-1, E550-2</b>
	Quantitative measurement of Allergen-Specific IgE	Specific IgE, Chemiluminescence (CLIA) Ref.L2KUN6
	1. C1 Penicillin G	Specific IgE, Chemiluminescence (CLIA) Ref.L2KUN6
	2. C2 Penicillin V	Specific IgE, Chemiluminescence (CLIA) Ref.C1L2
	3. C70 Insulin, Porcine	Specific IgE, Chemiluminescence (CLIA) Ref.C2L2
	4. C71 Insulin, Bovine	Specific IgE, Chemiluminescence (CLIA) Ref.C70L2
	5. C73 Insulin, Human	Specific IgE, Chemiluminescence (CLIA) Ref.C71L2
	6. C203 Ampicillin	Specific IgE, Chemiluminescence (CLIA) Ref.C73L2
	7. C204 Amoxicillin	Specific IgE, Chemiluminescence (CLIA) Ref.C203L2
	8. D1 House dust mite (Dermatophagoides pteronyssinus)	Specific IgE, Chemiluminescence (CLIA) Ref.C204L2
	9. D2 House dust mite (Dermatophagoides farinae)	Specific IgE, Chemiluminescence (CLIA) Ref.D1L4
	10. D3 House dust mite (Dermatophagoides microceras)	Specific IgE, Chemiluminescence (CLIA) Ref.D2L4
	11. D70 Storage mite (Acarus siro)	Specific IgE, Chemiluminescence (CLIA) Ref.D3L2
	12. D71 Storage mite (Lepidoglyphus destructor)	Specific IgE, Chemiluminescence (CLIA) Ref.D70L2
	13. D72 Storage mite (Tyrophagus putrescentiae)	Specific IgE, Chemiluminescence (CLIA) Ref.D71L2
	14. D73 Storage mite (Glycyphagus domesticus)	Specific IgE, Chemiluminescence (CLIA) Ref.D72L2
15. D74 House dust mite (Euroglyphus maynei)	Specific IgE, Chemiluminescence (CLIA) Ref.D73L2	
16. E1 Cat dander-epithelium	Specific IgE, Chemiluminescence (CLIA) Ref.D74L2	
17. E2 Dog epithelium	Specific IgE, Chemiluminescence (CLIA) Ref.E1L4	
18. E3 Horse dander	Specific IgE, Chemiluminescence (CLIA)	

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum (continued)		Ref.E2L4
	19. E4 Cow dander	Specific IgE, Chemiluminescence (CLIA) Ref.E3L4
	20. E5 Dog dander	Specific IgE, Chemiluminescence (CLIA) Ref.E4L2
	21. E7 Pigeon droppings	Specific IgE, Chemiluminescence (CLIA) Ref.E5L4
	22. E70 Goose feathers	Specific IgE, Chemiluminescence (CLIA) Ref.E7L2
	23. E71 Mouse epithelium	Specific IgE, Chemiluminescence (CLIA) Ref.E70L2
	24. E72 Mouse urine	Specific IgE, Chemiluminescence (CLIA) Ref.E71L2
	25. E78 Burderigar feathers	Specific IgE, Chemiluminescence (CLIA) Ref.E72L2
	26. E80 Goat epithelium	Specific IgE, Chemiluminescence (CLIA) Ref.E78L2
	27. E81 Sheep epithelium	Specific IgE, Chemiluminescence (CLIA) Ref.E80L2
	28. E82 Rabbit epithelium	Specific IgE, Chemiluminescence (CLIA) Ref.E81L2
	29. E85 Chicken feathers	Specific IgE, Chemiluminescence (CLIA) Ref.E82L4
	30. E86 Duck feathers	Specific IgE, Chemiluminescence (CLIA) Ref.E85L2
	31. E201 Canary feathers	Specific IgE, Chemiluminescence (CLIA) Ref.E86L2
	32. F1 Egg white	Specific IgE, Chemiluminescence (CLIA) Ref.E20L2
	33. F2 Milk	Specific IgE, Chemiluminescence (CLIA) Ref.F1L4
	34. F3 Codfish	Specific IgE, Chemiluminescence (CLIA) Ref.F2L4
	35. F4 Wheat	Specific IgE, Chemiluminescence (CLIA) Ref.F3L4
	36. F5 Rye	Specific IgE, Chemiluminescence (CLIA) Ref.F4L4
	37. F6 Barley	Specific IgE, Chemiluminescence (CLIA) Ref.F5L2
	38. F7 Oat	Specific IgE, Chemiluminescence (CLIA) Ref.F6L2
	39. F8 Corn	Specific IgE, Chemiluminescence (CLIA) Ref.F7L2
	40. F9 Rice	Specific IgE, Chemiluminescence (CLIA) Ref.F8L4
	41. F10 Sesame seed	Specific IgE, Chemiluminescence (CLIA) Ref.F9L4
42. F12 Green pea	Specific IgE, Chemiluminescence (CLIA) Ref.F10L2	
43. F13 Peanut	Specific IgE, Chemiluminescence (CLIA) Ref.F12L2	
44. F14 Soybean	Specific IgE, Chemiluminescence (CLIA)	

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum (continued)		Ref.F13L4
45. F15 White bean		Specific IgE, Chemiluminescence (CLIA) Ref.F14L4
46. F17 Hazelnut		Specific IgE, Chemiluminescence (CLIA) Ref.F15L2
47. F18 Brazil nut		Specific IgE, Chemiluminescence (CLIA) Ref.F17L4
48. F20 Almond		Specific IgE, Chemiluminescence (CLIA) Ref.F18L2
49. F23 Crab		Specific IgE, Chemiluminescence (CLIA) Ref.F20L2
50. F24 Shrimp		Specific IgE, Chemiluminescence (CLIA) Ref.F23L2
51. F25 Tomato		Specific IgE, Chemiluminescence (CLIA) Ref.F24L4
52. F26 Pork		Specific IgE, Chemiluminescence (CLIA) Ref.F25L4
53. F27 Beef		Specific IgE, Chemiluminescence (CLIA) Ref.F26L2
54. F31 Carrot		Specific IgE, Chemiluminescence (CLIA) Ref.F27L2
55. F33 Orange		Specific IgE, Chemiluminescence (CLIA) Ref.F31L4
56. F35 Potato		Specific IgE, Chemiluminescence (CLIA) Ref.F33L4
57. F36 Coconut		Specific IgE, Chemiluminescence (CLIA) Ref.F35L2
58. F37 Blue mussel		Specific IgE, Chemiluminescence (CLIA) Ref.F36L2
59. F40 Tuna		Specific IgE, Chemiluminescence (CLIA) Ref.F37L2
60. F41 Salmon		Specific IgE, Chemiluminescence (CLIA) Ref.F40L2
61. F44 Strawberry		Specific IgE, Chemiluminescence (CLIA) Ref.F41L2
62. F45 Baker's wheat		Specific IgE, Chemiluminescence (CLIA) Ref.F44L2
63. F47 Garlic		Specific IgE, Chemiluminescence (CLIA) Ref.F45L2
64. F48 Onion		Specific IgE, Chemiluminescence (CLIA) Ref.F47L2
65. F49 Apple		Specific IgE, Chemiluminescence (CLIA) Ref.F48L2
66. F50 Chub mackerel		Specific IgE, Chemiluminescence (CLIA) Ref.F49L4
67. F59 Octopus		Specific IgE, Chemiluminescence (CLIA) Ref.F50L2
68. F61 Sardine		Specific IgE, Chemiluminescence (CLIA) Ref.F59L2
69. F75 Egg yolk		Specific IgE, Chemiluminescence (CLIA) Ref.F61L2
70. F76 Alpha lactalbumin		Specific IgE, Chemiluminescence (CLIA)



Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum (continued)		Ref.F75L4
	71. F77 Beta Lactoglobulin	Specific IgE, Chemiluminescence (CLIA) Ref.F76L4
	72. F78 Casein	Specific IgE, Chemiluminescence (CLIA) Ref.F77L4
	73. F79 Gluten	Specific IgE, Chemiluminescence (CLIA) Ref.F78L4
	74. F80 Lobster	Specific IgE, Chemiluminescence (CLIA) Ref.F79L4
	75. F81 Cheddar cheese	Specific IgE, Chemiluminescence (CLIA) Ref.F80L2
	76. F82 Cheese,mold	Specific IgE, Chemiluminescence (CLIA) Ref.F81L2
	77. F83 Chicken meat	Specific IgE, Chemiluminescence (CLIA) Ref.F76L4
	78. F84 Kiwi fruit	Specific IgE, Chemiluminescence (CLIA) Ref.F83L2
	79. F85 Celery	Specific IgE, Chemiluminescence (CLIA) Ref.F84L2
	80. F86 Parsley	Specific IgE, Chemiluminescence (CLIA) Ref.F85L2
	81. F87 Melon	Specific IgE, Chemiluminescence (CLIA) Ref.F86L2
	82. F88 Lamb	Specific IgE, Chemiluminescence (CLIA) Ref.F87L2
	83. F89 Mustard	Specific IgE, Chemiluminescence (CLIA) Ref.F88L2
	84. F90 Malt	Specific IgE, Chemiluminescence (CLIA) Ref.F89L2
	85. F92 Banana	Specific IgE, Chemiluminescence (CLIA) Ref.F90L2
	86. F93 Cocoa	Specific IgE, Chemiluminescence (CLIA) Ref.F92L2
	87. F94 Pear	Specific IgE, Chemiluminescence (CLIA) Ref.F93L2
	88. F95 Peach	Specific IgE, Chemiluminescence (CLIA) Ref.F94L2
	89. F105 Chocolate	Specific IgE, Chemiluminescence (CLIA) Ref.F95L2
	90. F202 Cashew	Specific IgE, Chemiluminescence (CLIA) Ref.F105L2
	91. F204 Trout	Specific IgE, Chemiluminescence (CLIA) Ref.F202L2
	92. F208 Lemon	Specific IgE, Chemiluminescence (CLIA) Ref.F204L2
	93. F210 Pineapple	Specific IgE, Chemiluminescence (CLIA) Ref.208L2
	94. F212 Mushroom	Specific IgE, Chemiluminescence (CLIA) Ref.F210L2
	95. F214 Spinach	Specific IgE, Chemiluminescence (CLIA) Ref.F212L2
	96. F215 Lettuce	Specific IgE, Chemiluminescence (CLIA)

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum (continued)		Ref.F214L2
97. F216 Cabbage		Specific IgE, Chemiluminescence (CLIA) Ref.F215L2
98. F221 Coffee		Specific IgE, Chemiluminescence (CLIA) Ref.F216L2
99. F222 Tea		Specific IgE, Chemiluminescence (CLIA) Ref.F221L2
100. F225 Pumpkin		Specific IgE, Chemiluminescence (CLIA) Ref.F222L2
101. F231 Boiled milk		Specific IgE, Chemiluminescence (CLIA) Ref.F225L2
102. F235 Lentil		Specific IgE, Chemiluminescence (CLIA) Ref.F231L2
103. F237 Apricot		Specific IgE, Chemiluminescence (CLIA) Ref.F235L2
104. F242 Cherry		Specific IgE, Chemiluminescence (CLIA) Ref.F237L2
105. F245 Egg		Specific IgE, Chemiluminescence (CLIA) Ref.F242L2
106. F247 Honey		Specific IgE, Chemiluminescence (CLIA) Ref.F245L2
107. F255 Plum		Specific IgE, Chemiluminescence (CLIA) Ref.F247L2
108. F256 Walnut		Specific IgE, Chemiluminescence (CLIA) Ref.F255L2
109. F258 Squid		Specific IgE, Chemiluminescence (CLIA) Ref.F256L2
110. F259 Grape		Specific IgE, Chemiluminescence (CLIA) Ref.F258L2
111. F260 Broccoli		Specific IgE, Chemiluminescence (CLIA) Ref.F259L2
112. F262 Eggplant		Specific IgE, Chemiluminescence (CLIA) Ref.F260L2
113. F284 Turkey meat		Specific IgE, Chemiluminescence (CLIA) Ref.F262L2
114. F291 Cauliflower		Specific IgE, Chemiluminescence (CLIA) Ref.F284L2
115. F299 Chestnut		Specific IgE, Chemiluminescence (CLIA) Ref.F291L2
116. F302 Mandarin (Tangerine)		Specific IgE, Chemiluminescence (CLIA) Ref.F299L2
117. F320 Cray fish		Specific IgE, Chemiluminescence (CLIA) Ref.F302L2
118. F358 Artichoke		Specific IgE, Chemiluminescence (CLIA) Ref.F320L2
119. G1 Sweet Vernal Grass		Specific IgE, Chemiluminescence (CLIA) Ref.F358L2
120. G2 Bermuda grass		Specific IgE, Chemiluminescence (CLIA) Ref.G1L2
121. G3 Orchard grass		Specific IgE, Chemiluminescence (CLIA) Ref.G2L4
122. G4 Meadow fescue		Specific IgE, Chemiluminescence (CLIA)

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum (continued)		Ref.G3L4
123. G5 Perennial rye grass		Specific IgE, Chemiluminescence (CLIA) Ref.G4L2
124. G6 Timothy grass		Specific IgE, Chemiluminescence (CLIA) Ref.G5L4
125. G7 Common reed grass		Specific IgE, Chemiluminescence (CLIA) Ref.G6L4
126. G8 June grass (Kentucky blue)		Specific IgE, Chemiluminescence (CLIA) Ref.G7L2
127. G9 Red top		Specific IgE, Chemiluminescence (CLIA) Ref.G8L4
128. G10 Johnson grass		Specific IgE, Chemiluminescence (CLIA) Ref.G9L2
129. G11 Brome grass		Specific IgE, Chemiluminescence (CLIA) Ref.G10L2
130. G12 Cultivated Rye grass		Specific IgE, Chemiluminescence (CLIA) Ref.G11L4
131. G13 Velvet grass		Specific IgE, Chemiluminescence (CLIA) Ref.G12L4
132. G14 Cultivated Oat grass		Specific IgE, Chemiluminescence (CLIA) Ref.G13L2
133. G15 Cultivated Wheat grass		Specific IgE, Chemiluminescence (CLIA) Ref.G14L2
134. G16 Meadow foxtail grass		Specific IgE, Chemiluminescence (CLIA) Ref.G14L2
135. G70 Wild rye grass		Specific IgE, Chemiluminescence (CLIA) Ref.G16L2
136. G202 Cultivated corn		Specific IgE, Chemiluminescence (CLIA) Ref.G70L2
137. H1 House dust-Greer		Specific IgE, Chemiluminescence (CLIA) Ref.G202L2
138. H2 House dust-Hollister Stier		Specific IgE, Chemiluminescence (CLIA) Ref.H1L4
139. I1 Honeybee venom		Specific IgE, Chemiluminescence (CLIA) Ref.H2L4
140. I2 White-faced hornet		Specific IgE, Chemiluminescence (CLIA) Ref.I1L4
141. I3 Yellow jacket venom		Specific IgE, Chemiluminescence (CLIA) Ref.I2L2
142. I4 Paper wasp venom		Specific IgE, Chemiluminescence (CLIA) Ref.I3L2
143. I5 Yellow hornet		Specific IgE, Chemiluminescence (CLIA) Ref.I4L2
144. I6 Cockroach		Specific IgE, Chemiluminescence (CLIA) Ref.I5L2
145. I71 Mosquito		Specific IgE, Chemiluminescence (CLIA) Ref.I6L2
146. I75 European hornet-Vespa crabro		Specific IgE, Chemiluminescence (CLIA) Ref.I71L2
147. I204 Horsefly		Specific IgE, Chemiluminescence (CLIA) Ref.I75L2
148. K20 Wool		Specific IgE, Chemiluminescence (CLIA)

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum (continued)		Ref.I204L2
149. K74 Silk		Specific IgE, Chemiluminescence (CLIA) Ref.K20L2
150. K82 Latex		Specific IgE, Chemiluminescence (CLIA) Ref.K74L2
151. O1 Cotton		Specific IgE, Chemiluminescence (CLIA) Ref.K82L4
152. O201 Tobacco		Specific IgE, Chemiluminescence (CLIA) Ref.O1L2
153. P1 Ascaris		Specific IgE, Chemiluminescence (CLIA) Ref.O201L2
154. M1 Penicillium notatum		Specific IgE, Chemiluminescence (CLIA) Ref.P1L2
155. M2 Cladosporium herbarum		Specific IgE, Chemiluminescence (CLIA) Ref.M1L4
156. M3 Aspergillus fumigatus		Specific IgE, Chemiluminescence (CLIA) Ref.M2L4
157. M4 Mucor racemosus		Specific IgE, Chemiluminescence (CLIA) Ref.M3L4
158. M5 Candida albicans		Specific IgE, Chemiluminescence (CLIA) Ref.M4L2
159. M6 Alternaria tenuis (Alternata)		Specific IgE, Chemiluminescence (CLIA) Ref.M5L4
160. M7 Botrytis cinerea		Specific IgE, Chemiluminescence (CLIA) Ref.M6L4
161. M8 Helminthosporium halodes		Specific IgE, Chemiluminescence (CLIA) Ref.M7L2
162. M9 Fusarium moniliforme		Specific IgE, Chemiluminescence (CLIA) Ref.M8L2
163. M11 Rhizopus nigricans		Specific IgE, Chemiluminescence (CLIA) Ref.M9L2
164. M15 Trichoderma viride		Specific IgE, Chemiluminescence (CLIA) Ref.M11L2
165. M16 Curvularia lunata		Specific IgE, Chemiluminescence (CLIA) Ref.M15L2
166. T1 Maple		Specific IgE, Chemiluminescence (CLIA) Ref.M16L2
167. T2 Alder		Specific IgE, Chemiluminescence (CLIA) Ref.T1L2
168. T3 Birch		Specific IgE, Chemiluminescence (CLIA) Ref.T2L4
169. T4 Hazelnut		Specific IgE, Chemiluminescence (CLIA) Ref.T3L4
170. T5 Beech		Specific IgE, Chemiluminescence (CLIA) Ref.T4L4
171. T6 Mountain Cedar		Specific IgE, Chemiluminescence (CLIA) Ref.T5L2
172. T7 Oak		Specific IgE, Chemiluminescence (CLIA) Ref.T6L2
173. T8 Elm		Specific IgE, Chemiluminescence (CLIA) Ref.T7L4
174. T9 Olive		Specific IgE, Chemiluminescence (CLIA)

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum (continued)		Ref.T8L2
	175. T10 Walnut	Specific IgE, Chemiluminescence (CLIA) Ref.T9L4
	176. T11 Sycamore	Specific IgE, Chemiluminescence (CLIA) Ref.T10L2
	177. T12 Willow	Specific IgE, Chemiluminescence (CLIA) Ref.T11L2
	178. T14 Cottonwood	Specific IgE, Chemiluminescence (CLIA) Ref.T12L2
	179. T15 White ash	Specific IgE, Chemiluminescence (CLIA) Ref.T14L2
	180. T16 White pine	Specific IgE, Chemiluminescence (CLIA) Ref.T15L2
	181. T18 Eucalyptus	Specific IgE, Chemiluminescence (CLIA) Ref.T16L2
	182. T19 Acacia longifolia	Specific IgE, Chemiluminescence (CLIA) Ref.T18L2
	183. T23 Italian cypress	Specific IgE, Chemiluminescence (CLIA) Ref.T19L2
	184. T70 White Mulberry	Specific IgE, Chemiluminescence (CLIA) Ref.T23L4
	185. T201 Spruce	Specific IgE, Chemiluminescence (CLIA) Ref.T70L2
	186. T210 Privet	Specific IgE, Chemiluminescence (CLIA) Ref.T201L2
	187. W1 Short/Common Ragweed (Ambrosia elatior)	Specific IgE, Chemiluminescence (CLIA) Ref.T219L2
	188. W2 Western Ragweed	Specific IgE, Chemiluminescence (CLIA) Ref.W1L4
	189. W5 Wormwood	Specific IgE, Chemiluminescence (CLIA) Ref.W2L2
	190. W6 Mugwort	Specific IgE, Chemiluminescence (CLIA) Ref.W5L2
	191. W7 Ox-Eye daisy	Specific IgE, Chemiluminescence (CLIA) Ref.W6L4
	192. W8 Dandelion	Specific IgE, Chemiluminescence (CLIA) Ref.W7L2
	193. W9 English plantain	Specific IgE, Chemiluminescence (CLIA) Ref.W8L2
	194. W10 Lamb's quarters	Specific IgE, Chemiluminescence (CLIA) Ref.W9L4
	195. W11 Russian Thistle	Specific IgE, Chemiluminescence (CLIA) Ref.W10L2
	196. W12 Goldenrod	Specific IgE, Chemiluminescence (CLIA) Ref.W11L2
	197. W13 Cocklebur	Specific IgE, Chemiluminescence (CLIA) Ref.W12L2
	198. W14 Rough pigweed	Specific IgE, Chemiluminescence (CLIA) Ref.W13L2
	199. W18 Sheep sorrel	Specific IgE, Chemiluminescence (CLIA) Ref.W14L2
	200. W19 Parietaria officinalis	Specific IgE, Chemiluminescence (CLIA)

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum (continued)		Ref.W18L2
	201. W20 Nettle	Specific IgE, Chemiluminescence (CLIA) Ref.W19L4
	202. W21 Parietaria judaica	Specific IgE, Chemiluminescence (CLIA) Ref.W20L2
	<b>Determination of 20 Specific IgE immunoglobulins mixes for allergens</b>	<b>3gAllergy Specific IgE Universal Kit*, Automated immunology analyzer Immulite 2000 SIEMENS* Δ.550, E.550-1, E550-2</b>
	1.EP1 (EX1) Epidermals mix (Including allergens E1,E3, E4, E5)	Specific IgE, Chemiluminescence (CLIA) Ref.EP1L4
	2.EP2 (EX2) Domestic pets mix (Including allergens E1, E5, E6, E87, E88)	Specific IgE, Chemiluminescence (CLIA) Ref.EP2L4
	3.KP1 (EX5) Bed materials mix (Including allergens E3, E4, E70, E85)	Specific IgE, Chemiluminescence (CLIA) Ref.KP1L4
	4. EP71 (EX71) Farm fowl mix (Including allergens E70, E85, E86, E89)	Specific IgE, Chemiluminescence (CLIA) Ref.EP71L4
	5.FP1 (FX01) Nut mix (Including allergens F13, F17, F18, F20, F36)	Specific IgE, Chemiluminescence (CLIA) Ref.FP71L4
	6.FP2 (FX02) "Fish/Shell mix" (Including allergens F3, F24, F37, F40, F41)	Specific IgE, Chemiluminescence (CLIA) Ref.FP2L4
	7.FP3 (FX03) "Cereal mix" (Including allergens F4, F7, F8, F10, F11)	Specific IgE, Chemiluminescence (CLIA) Ref.FP3L4
	8.FP13 (FX13) "Vegetable mix" (Including allergens F12, F15, F31, F35)	Specific IgE, Chemiluminescence (CLIA) Ref.FP13L4
	9.FP73 (FX04) Meat mix (Including allergens F26, F27, F83, F88)	Specific IgE, Chemiluminescence (CLIA) Ref.FP73L4
	10.FP15 (FX15) Fruit mix 1 (Including allergens F33, F49, F92, F95)	Specific IgE, Chemiluminescence (CLIA) Ref.FP15L4
	11.FP50 (FX16) Fruit mix 2 (Including allergens F84, F91, F92, F210)	Specific IgE, Chemiluminescence (CLIA) Ref.FP50L4
	12.GP1 (GX1) Grass mix (Early blooming) (Including allergens G3, G4, G5, G6, G8)	Specific IgE, Chemiluminescence (CLIA) Ref.GP1L4
	13.GP04 (GX4) Grass mix (Late blooming) (Including allergens G1, G5, G7, G12, G13)	Specific IgE, Chemiluminescence (CLIA) Ref.GP4L4
	14.HP1 (HX1) House mix 1 (Including allergens D1, D2, H1, I6)	Specific IgE, Chemiluminescence (CLIA) Ref.HP1L4
	15.MP1 (MX1) Mold mix (Including allergens M1, M2, M3, M5, M6)	Specific IgE, Chemiluminescence (CLIA) Ref.MP1L4
	16.TP5 (TX5) Tree mix (Early blooming) (Including allergens T2, T4, T8, T12, T14)	Specific IgE, Chemiluminescence (CLIA) Ref.TP5L4
	17.TP6 (TX6) Tree mix (Late blooming) (Including allergens T1, T3, T5, T7, T10)	Specific IgE, Chemiluminescence (CLIA) Ref.TP6L4
	18.WP3 (WX3) Weed mix 1 (Including allergens W6, W9, W10, W12, W20)	Specific IgE, Chemiluminescence (CLIA) Ref.WP3L4
	19.WP5 (WX5) Weed mix 2 (Including allergens W1, W6, W7, W8, W12)	Specific IgE, Chemiluminescence (CLIA) Ref.WP5L4

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum (continued)	20.WP6 (WX6) Weed mix 3 (Including allergens W9, W10, W11, W18)	Specific IgE, Chemiluminescence (CLIA) Ref.WP6L4
	<b>Detection of 16 antibodies</b>	<b>Automated immunochemical analyzer Abbott ARCHITECTi2000sr * A.550, E.550-1, E550-2</b>
	1. Hepatitis C IgG antibodies (Anti-HCV)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C37G
	2. Human immunodeficiency virus type 1/O & 2 (HIV-1/O & 2) antibodies	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B4J2SG
	3. Hepatitis B virus surface antigen (HBsAg)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B2G22G
	4. Hepatitis B virus core total antibodies (HBcAb)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B8L44G
	5. Hepatitis B virus surface antibodies (HBsAb)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B7C1RG
	6. Hepatitis A virus total antibodies (Anti-HAV)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C2QG
	7. Hepatitis A virus IgM antibodies (Anti-HAV IgM)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C3ZG
	8. Anti-cyclic Citrullinated Peptide (Anti-CCP)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B1P65G
	9. Cytomegalovirus IgG antibodies (CMV IgG)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C15G
	10. Cytomegalovirus IgM antibodies (CMV IgM)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C16G
	11. Epstein-Barr IgG antibodies (EBV anti-VCA IgG)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B3P65G
	12 Epstein-Barr IgM antibodies.(EBV anti-VCA IgM)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B3P66G
	13. Toxoplasma IgG antibodies (TOXO IgG)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C19G
14. Toxoplasma IgM antibodies (TOXO IgM)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C20G	
15. Rubella virus IgG antibodies (Rubella IgG)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C1HG	

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
	16. Rubella virus IgM antibodies (Rubella IgM)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C18G
Blood serum	<b>Determination of 3 parameters</b>	<b>Automated immunology Analyzers Liaison DiaSorin express* A.550, E.550-1, E550-2</b>
	1. Herpes I & II IgM antibodies (HSV I & II IgM)	Chemiluminescence (CLIA) (non-competitive) Ref.310820
	2. Herpes I IgG antibodies (HSV I IgG)	Chemiluminescence (CLIA) (non-competitive) Ref.30830
	3. Herpes II IgG antibodies (HSV II IgG)	Chemiluminescence (CLIA) (non-competitive) Ref.310810
<b>Biochemical Tests</b>		
Blood serum	<b>Determination of 41 parameters</b>	<b>Automated Biochemistry analyzers Siemens ADVIA CHEMISTRY XPT* A.550, E.550-1, E550-2</b>
	1.Total Cholesterol(TC)	Enzymatic - Colorimetric (CHOD-PAP) Ref.10376501
	2. HDL Cholesterol (HDL-C)	Enzymatic - Colorimetric (PEG) Ref.6521559
	3. Triglycerides (TGs)	Enzymatic - Colorimetric (GPO-PAP) Ref.10335892
	4. VLDL Cholesterol (VLDL-C)	Calculated from TRIG (Enzymatic - Colorimetric)
	5. Atherogenic index ((TC)/ (HDL-C))	Calculated from: TC, HDL-C
	6.Non-HDL-C	Calculated from: TC, HDL-C
	7. Total Lipids	Calculated from CHOL and TRIG (Enzymatic - Colorimetric)
	8. Phospholipids	Calculated from CHOL (Enzymatic - Colorimetric)
	9. Iron (Fe)	Colorimetric (Ferrozine) Ref.10377510
	10. Transferrin Saturation (TfS)	Calculated from Fe and TIBC (Colorimetric)
	11. Total Iron Binding Capacity (TIBC)	Colorimetric (Chromazurol B) Ref.03940010
	12. Albumin (ALB)	Colorimetric (BCP) Ref. 10711840
	13. Total Proteins (TP)	Colorimetric (Biuret) Ref.1803350
	14.Total globin (SF)	Calculated from: TP, ALB
	15. Albumin/Globin ratio	Calculated from: ALB, SF
	16. Calcium Total (Ca)	Colorimetric (OCPC) Ref. 7506552
	17. Magnesium (Mg)	Colorimetric (Xylidyl blue) Ref. 02271328
	18. Phosphate (P)	Colorimetric (Phosphomolybdate) Ref. 3056927
19. Glucose(GLU)	Enzymatic - Colorimetric (GOD-PAP) Ref. 10492319	



Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum (continued)	20. Creatinine (CREA )	Enzymatic - Colorimetric (Jaffe) Ref. 3039070
	21.Urea	Enzymatic - Kinetic -Colorimetric (Urease) Ref. 3040257
	22. Serum osmolality	Calculated from: GLU, Na, UREA
	23.Nitrogen serum	Calculated from: UREA
	24. Uric Acid (UA)	Enzymatic - Colorimetric (Uricase-Peroxidase) Ref. 03051305
	25. Aspartate Aminotransferase (AST/SGOT)	Colorimetric (IFCC**) Ref. 3039631
	26. Alanine Aminotransferase (ALT/SGPT)	Colorimetric (IFCC**) Ref. 3039631
	27. Gamma-Glutamyl transferase ( $\gamma$ GT)	Enzymatic - Colorimetric ( $\gamma$ -Glutamyl-3-carboxyl-4nitroanilide) Ref. 2011954
	28. Lactate Dehydrogenase (LDH)	Enzymatic - Colorimetric (P - L) (DGKC***) Ref. 3030863
	29. Alkaline Phosphatase (ALP)	Colorimetric (IFCC**) Ref. 10916067
	30. Creatine Kinase (CK/CPK)	Enzymatic - Colorimetric (IFCC**) Ref. 10729780
	31. Total Bilirubin (TBIL)	Colorimetric (DPD) Ref. 2188064
	32. Direct Bilirubin (DBIL)	Colorimetric (DPD) Ref. 2188390
	33. Indirect Bilirubin (IBIL)	Calculated from TBIL and DBIL (Colorimetric)
	34. Amylase (AMY)	Enzymatic - Colorimetric (IFCC**) (G7-PNP) Ref. 3031177
	35.Lipase	Enzymatic –spectrometric 37oC Ref. 1984894
	36.ACE (angiotensin-converting enzyme)	Enzymatic –spectrometric for activity measurement 37oC Ref. 8865
	37.Zinc (Zn)	Chromogenic (5-Br-PAPS, DRC-ICP-MS) – photometric
	38. Potassium (K)	Ion Selective Electrode (ISE) Ref. 6135445
	39. Sodium (Na)	Ion Selective Electrode (ISE) Ref. 3092699
	40. Chlore (Cl)	Ion Selective Electrode (ISE) Ref. 7097504
41.Lithium (Li)	Ion Selective Electrode (ISE) Ref. 141230	
Blood serum	<b>Determination of 37 parameters</b>	<b>Automated Biochemistry analyzers Siemens Atellica * <math>\Lambda</math>.550, E.550-1, E550-2</b>
	1.Total Cholesterol(TC)	Enzymatic - Colorimetric (CHOD - PAP) Ref.11097609
	2. HDL Cholesterol (HDL-C)	Enzymatic - Colorimetric (PEG) Ref.11097630
	3. Triglycerides (TGs)	Enzymatic - Colorimetric (GPO - PAP) Ref.11097591
	4. VLDL Cholesterol (VLDL-C)	Calculated from TRIG (Enzymatic - Colorimetric)

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
	5. Atherogenic index ((TC)/ (HDL-C))	Calculated from Total Cholesterol (TC) / HDL Cholesterol (HDL-C)
Blood serum	6.Non-HDL-C	Calculated from Total Cholesterol (TC) - HDL Cholesterol (HDL-C)
	7. Total Lipids	Calculated from CHOL and TRIG (Enzymatic - Colorimetric)
	8. Phospholipids	Calculated from CHOL (Enzymatic - Colorimetric)
	9. Iron (Fe)	Colorimetric assay (Ferrozine) Ref.11097601
	10. Transferrin Saturation (TfS)	Calculated from Fe και TIBC (Colorimetric)
	11. Albumin (ALB)	Colorimetric assay (BCP) Ref. 11097530
	12. Total Proteins (TP)	Colorimetric assay (Biuret) Ref.11097604
	13.Total globin (SF)	Calculated from: TP - ALB
	14. Albumin/Globin ratio	Calculated from: ALB / SF
	15. Calcium Total (Ca)	Colorimetric assay (OCPC) Ref. 11097595
	16. Magnesium (Mg)	Colorimetric assay (Xylidyl blue) Ref. 11097612
	17. Phosphate (P)	Colorimetric assay (Phosphomolybdate) Ref. 11097611
	18. Glucose(GLU)	Enzymatic - Colorimetric (GOD - PAP) Ref. 11097621
	19. Creatinine (CREA )	Colorimetric assay (Jaffe) Ref. 11097596
	20.Urea	Enzymatic - Kinetic -Colorimetric (Urease) Ref. 11097593
	21. Serum osmolality	Calculated from: GLU, Na, and UREA
	22.Nitrogen serum	Calculated from: UREA
	23. Uric Acid (UA)	Enzymatic - Colorimetric (Uricase - Peroxidase) Ref. 11097608
	24. Aspartate Aminotransferase (AST/SGOT)	Colorimetric assay (IFCC**) Ref. 11097607
	25. Alanine Aminotransferase (ALT/SGPT)	Colorimetric assay (IFCC**) Ref. 11097605
	26. Gamma-Glutamyl transferase (γGT)	Enzymatic - Colorimetric γ-Glutamyl-3-carboxy-4nitroanillide Ref. 11097597
	27. Lactate Dehydrogenase (LDH)	Enzymatic - Colorimetric (P-L) (DGKC***) Ref. 11097594
	28. Alkaline Phosphatase (ALP)	Colorimetric assay (IFCC**) Ref. 11097600
29. Creatine Kinase (CK/CPK)	Enzymatic - Colorimetric (IFCC**) Ref.11097640	
30. Total Bilirubin (TBIL)	Colorimetric assay DPD Ref. 11097531	
31. Direct Bilirubin (DBIL)	Colorimetric assay DPD Ref. 11097532	
32. Indirect Bilirubin (IBIL)	Calculated from TBIL and DBIL (Colorimetric)	
33. Amylase (AMY)	Enzymatic - Colorimetric IFCC** (G7-PNP) Ref. 11097603	

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
	34. Total Iron Binding Capacity (TIBC)	Colorimetric (Chromazurol B) Ref. 11097525
	35. Potassium (K)	Ion Selective Electrode (ISE) Ref. 11099315
	36. Sodium (Na)	Ion Selective Electrode (ISE) Ref. 11099315
	37. Chloride (Cl)	Ion Selective Electrode (ISE) Ref. 11099315
Blood serum	<b>Determination of 1 specific protein</b>	<b>Automated Biochemistry analyzers Siemens Atellica * A.550, E.550-1, E550-2</b>
	High Sensitivity C Reactive Protein (hsCRP) - quantitative	Immunoturbidimetry (ITA) Ref. 11097633
Urine	<b>Determination of 5 parameters</b>	<b>Automated Biochemistry analyzers Siemens ADVIA CHEMISTRY XPT* A.550, E.550-1, E550-2</b>
	1. Calcium Total (Ca)	Colorimetric assay (OCPC) Ref. 7506552
	2. Creatinine (CREA )	Colorimetric assay (Jaffe) Ref. 3039070
	3. Urine Microalbumin	Polyethylene glycol (PEG) enhanced immunoturbidimetric ref 03051194
	4. Phosphate (P)	Phosphomolybdate/UV ref 03056927
	5. Urine Total Protein	Dye binding ref 05000171
	<b>Determination of 5 parameters</b>	<b>Automated Biochemistry analyzers Siemens Atellica* A.550, E.550-1, E550-2</b>
	1. Calcium Total (Ca)	Colorimetric assay (OCPC) Ref. 11097595
	2. Creatinine (CREA )	Colorimetric assay (Jaffe) Ref. 11097596
	3. Urine Microalbumin	Polyethylene glycol (PEG) enhanced immunoturbidimetric ref 11097610
	4. Phosphate (P)	Phosphomolybdate/UV ref. 11097611
	5. Urine Total Protein	Dye binding ref 11097524
Blood serum	<b>Determination of 1 parameter</b>	<b>Automated Electrophoresis System SEBIA Capillary* A.550, E.550-1, E550-2</b>
	Protein Electrophoresis	Capillary Electrophoresis Ref.2003
<b>Hematological Tests</b>		
Blood plasma (EDTA)	<b>Determination of 1 parameter</b>	<b>High performance liquid chromatography (HPLC) analyzers G8, TOSOH Biosciences* A.550, E.550-1, E550-2</b>
	1. Glycated Haemoglobin A1C (HbA1C)	Ion-exchange high performance liquid chromatography (HPLC) Refs:021849-1, 021850-1, 021851-1, 18431L-1, 021848
	<b>Determination of 1 parameter</b>	<b>High performance liquid chromatography (HPLC) analyzers</b>

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
		<b>G11, TOSOH Biosciences* Δ.550, E.550-1, E550-2</b>
	1. Haemoglobins A2, F (HbA2/HbF)	Ion-exchange high performance liquid chromatography(HPLC) Ref. 2702500
	<b>Determination of 10 parameters</b>	<b>Automated haematological analyzers ADVIA 2120i, SIEMENS* Δ.550, E.550-1, E550-2</b>
	1. Haemoglobin (HBG)	Photometric Refs: T01-3623-01 / 8008297
	2. Red blood cells (RBC)	Flow cytometry Refs: T01-3623-01 / 8008297
	3. Mean corpuscular volume (MCV)	Flow cytometry Refs: T01-3623-01 / 8008297
	4. White blood cells (WBC)	Flow cytometry Refs: T01-3623-01 / 8008297
	5. Platelets (PLTs)	Flow cytometry Refs: T01-3623-01 / 8008297
	6. Haematocrit (HCT)	Calculated: % = RBC x MCV/10
	7. Mean corpuscular haemoglobin (MCH)	Calculated: HBG / RBC
	8. Mean cell haemoglobin concentration (MCHC)	Calculated: (HBG / RBC) x MCV
	9. Red blood cell distribution width (RDW)	Flow cytometry Refs: T01-3623-01 / 8008297
	10. Mean platelet volume (MPV)	Flow cytometry Refs: T01-3623-01 / 8008297
<b>Blood Coagulation Tests</b>		
Blood plasma (citrate)	<b>Determination of 7 parameters</b>	<b>Automated Coagulation Analyzer Sysmex CS5100 * Δ.550, E.550-1, E550-2</b>
	1. Prothrombin time (PT sec)	Clot detection Ref. OUHP 49
	2. Prothrombin time (PT %)	Clot detection Ref. OUHP 49
	3. Prothrombin time (International Normalized Ratio, PTINR)	Clot detection Ref. OUHP 49
	4. Activated partial prothrombin time (APPT)	Clot detection Ref. OQGS 35
	5. Fibrinogen activity (FIB)	Clot detection Ref. B4233-27
	6. D-Dimer	Immunoturbidimetric assay Ref. OPBP 07
	7. Antithrombin III (AT III)	Colorimetric assay Ref. OWWR 15
<b>Immunology Tests</b>		
Blood serum	<b>Determination of 1 parameter</b>	<b>AP16IF PLUS / Immunofluorescence microscopy</b>
	Antinuclear antibodies (ANA)	Indirect Immunofluorescence (IFA) Ref. O.540-5
	<b>Determination of 9 parameters</b>	<b>Automated immunology analyzer Zenit Ra MENARINI* Δ.550, E.550-1, E550-2</b>

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
	1. Antibodies to Extractable Nuclear Antigens (anti-ENA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 41412
	2. Anti- double stranded deoxyribonucleic acid antibodies (anti-dsDNA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 41413
	3. Anti-cardiolipin IgG antibodies (aCL IgG)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 41424
	4. Anti-cardiolipin IgM antibodies (aCL IgM)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 41425
	5. Anti-beta-2-glycoprotein I IgG antibodies (α <sub>2</sub> GPI IgG)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 41426
	6. Anti-beta-2-glycoprotein I IgM antibodies IgM (α <sub>2</sub> GPI IgM)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 41427
	7. Anti-Deamidated Gliadin Peptide IgG antibodies (a-DGP IgG)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 41421
	8. Anti-Deamidated Gliadin Peptide IgA antibodies (a-DGP IgA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 41420
	9. Anti-tissue transglutaminase IgA antibodies (anti-tTG IgA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 41422
<b>Molecular diagnosis Tests</b>		
Blood plasma (EDTA)	<b>Determination of 12 parameters</b>	<b>PCR Machine Lightcycler 480ii Lightcycler z480</b>
	1.Detection of ΔF508 p.Phe508del) mutation of CFTR gene	Real-time PCR (qPCR) (LightSNiP CFTR Δ508F, TIB MOLBIOL)* O.590-4
	2.Detection of Factor V G1691A (FV-Leiden) mutation	Real-time PCR (qPCR) (LightMix® in-vitro diagnostics kit Factor V (Leiden)*, TIB MOLBIOL) O.590-5
	3.Detection of Factor II G20210A mutation	Real-time PCR (qPCR) (LightMix® in-vitro diagnostics kit Factor II, TIB MOLBIOL)* O.590-6
	4.Detection of MTHFR C677T mutation	Real-time PCR (qPCR) (LightMix® in-vitro diagnostics kit MTHFR C677T, TIB MOLBIOL)* O.590-7
	5.Detection of MTHFR A1298C mutation	Real-time PCR (qPCR) (LightMix® in-vitro diagnostics kit MTHFR A1298C, TIB MOLBIOL)* O.590-7
	6.Detection of PAI-1 4G/5G mutation	Real-time PCR (qPCR) (LightMix® in-vitro diagnostics kit PAI-1, TIB MOLBIOL)* O.590-8
	7.Diagnostic evaluation of hereditary hemochromatosis	PCR-ανάστροφος υβριδισμός (Haemochromatosis StipAssay B, Vienna Lab)* O.590-9
8. Detection of HLA B27 allele	Real-time PCR (qPCR) (LightMix® in-vitro diagnostics HLA B-27, TIB MOLBIOL)* O.590-16	
Nasopharyngeal, nasal, pharyngeal and / or oral sample, bronchoalveolar lavage.	9. Detection of RNA of SARS-CoV-2 virus / Qualitative	Real-time PCR (qPCR) (LightMix Modular Serbecovirus E-gene / LightMix Modular SARS-CoV-2 (COVID19) RdRP,)* O.590-28
	10. Detection of RNA of SARS-CoV-2 virus / Qualitative	TaqPath™ COVID-19 Combo Kit Thermo Fisher Scientific Inc.

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
		<b>Extraction</b> ZYBIO 3000 ZYBIO 6000 <b>Amplification</b> QuantStudio 5 Quantstudio 5DX
	11. Detection of RNA of SARS-CoV-2 virus / Qualitative	Logix Smart Coronavirus Disease 2019 CO-DIAGNOSTICS, INC. <b>Extraction</b> ZYBIO 3000 ZYBIO 6000 <b>Amplification</b> Cobas 480 z
	12. Detection of RNA of SARS-CoV-2 virus / Qualitative	Roche LightMix Kit SARS-CoV-2 E+N UBC <b>Extraction</b> ZYBIO 3000 ZYBIO 6000 MGI 960 <b>Amplification</b> LightCycler 480II Roche 1 και 2
	<b>Determination of 4 parameters</b>	<b>Roche cobas® 4800 automated PCR system</b>
Blood serum or blood plasma (EDTA)	1. Detection & quantification of hepatitis B virus (HBV)	Real-time PCR (qPCR) (cobas HBV, ROCHE)* O.590-19
	2. Detection & quantification of hepatitis C virus (HCV)	Real-time PCR (qPCR) (cobas HCV, ROCHE)* O.590-20
	3. Detection & quantification of human immunodeficiency virus type 1 (HIV-1)	Real-time PCR (qPCR) (cobas HIV, ROCHE)* O.590-22
Cervical samples collected in cobas®PCR Cell Collection Media (Roche Molecular Systems, Inc.), PreservCyt® (Hologic Corp.), SurePath® (BD Diagnostics-TriPath)	4. Human papillomavirus (HPV) detection & differentiation of high risk strains 16 & 18	Real-time PCR (qPCR) (cobas 4800 HPV Test, ROCHE)* O.590-21
Blood plasma (EDTA)	<b>Determination of 4 parameters</b>	<b>Applied Biosystems 9700 GeneAmp PCR thermal cycler</b>
	1. Molecular typing of HLA-A histocompatibility antigens	PCR-ανάστροφος υβριδισμός (INNOLIPA HLA-A update, Fujirebio)* O.590-32
	2. Molecular typing of HLA-B histocompatibility antigens	PCR-ανάστροφος υβριδισμός (INNOLIPA HLA-B update plus, Fujirebio)* O.590-34
	3. Molecular detection of polymorphisms in the thiopurine-S-methyltransferase (TPMT) gene	PCR-ανάστροφος υβριδισμός (PGX-TPMT StipAssay, Vienna Lab)* O.590-33
	4. Genetic control of 13 predisposing genetic factors for thrombophilia and Venous thromboembolism (VTE)	PCR-ανάστροφος υβριδισμός (CVD StipAssay GRC, Vienna Lab)* O.590-36

\*Η αναφορά της εμπορικής ονομασίας του αναλυτή παραπέμπει σε συγκεκριμένη αναλυτική μέθοδο και ανάλογο πρωτόκολλο εργασίας

\*\* IFCC: International Federation of Clinical Chemistry

\*\*\*Deutsche Gesellschaft für Klinische Chemie

Site of assessment: **Permanent Laboratory premises, 38 Konstantinoupoleos av., GR-11854, Athens, Greece.**  
Approved signatories: **Ch. Dinas, S. Vytiniotis.**

This scope of Accreditation replaces the previous one dated 12.11.2020.  
The Accreditation Certificate No. **662-7**, to ELOT EN ISO 15189:2012, is valid until 21.03.2022.

Athens, November 09, 2021

Spyridon Podaras  
*CEO of ESYD*

# Hellenic Accreditation System



Annex G1/A11 to the Certificate No. **662-7**

## SCOPE of ACCREDITATION

of the  
Clinical Laboratory  
of the  
**PRIVATE COOPERATIVE DIAGNOSTIC  
LABORATORIES MEDISYN MEDICAL S.A.-  
THESSALONIKH BRANCH**

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
<b>Immunochemical Tests</b>		
Blood Serum	<b>Determination of 26 parameters</b>	<b>Automated immunology analyzers Centaur SIEMENS * Λ.550, E.550-1, E550-2</b>
	1. β-Human Chorionic Gonadotropine (β-HCG)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 00643953
	2. Progesterone (PRG)	Chemiluminescence (CLIA) (competitive) Ref. 01586287
	3. Estradiol (E2)	Chemiluminescence (CLIA) (competitive) Ref. 10491445
	4. Carcinoembryonic Antigen (CEA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 09788458
	5. Cancer Antigen 19-9 (CA 19-9)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10491244
	6. Cancer Antigen 15-3 (CA 15-3)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 00128609
	7. Cancer Antigen 125 (CA 125)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 01678114
	8. α-Fetoprotein (AFP)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 03305838
	9. Prostate Specific Antigen (PSA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 02676506
	10. Free Prostate Specific Antigen (FPSA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 06862518
	11. Ratio: FPSA/ PSA	Calculated from: FPSA and PSA
	12. Ferritin	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 00495776
	13. Vitamin B12	Chemiluminescence (CLIA) (competitive) Ref. 09544818
14. Folate	Chemiluminescence (CLIA)	



Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood Serum (continued)		(competitive) Ref. 06891541
	15. Follicle Stimulating Hormone (FSH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 01360521
	16. Luteinizing Hormone (LH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 02212941
	17. Prolactin (PRL)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 09505871
	18. Thyroid-stimulating hormone (TSH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 06491080
	19. Total Thyroxine (TT4)	Chemiluminescence (CLIA) (competitive) Ref. 09236439
	20. Total Triiodothyronine (TT3)	Chemiluminescence (CLIA) (competitive) Ref. 04779663
	21. Free Thyroxine (FT4)	Chemiluminescence (CLIA) (competitive) Ref. 06490106
	22. Free Triiodothyronine (FT3)	Chemiluminescence (CLIA) (competitive) Ref. 03154228
	23. Anti-thyroglobulin antibodies (anti-TG)	Chemiluminescence (CLIA) (Competitive) Ref. 10492399
	24. Anti-thyroid peroxidase antibodies (anti-TPO)	Chemiluminescence (CLIA) (Competitive) Ref. 10630887
	25. 25-OH Vitamin D	Chemiluminescence (CLIA) (competitive) Ref. 10699533
Blood serum or blood plasma (EDTA)	26. Intact Parathyroid Hormone (iPTH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10699155
Blood Serum	<b>Detection of 6 antibodies</b>	<b>Automated immunochemical analyzer Abbott ARCHITECTi2000sr * A.550, E.550-1, E550-2</b>
	1. Cytomegalovirus IgG antibodies (CMV IgG)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C15G
	2. Cytomegalovirus IgM antibodies (CMV IgM)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C16G
	3. Toxoplasma IgG antibodies (TOXO IgG)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C19G
	4. Toxoplasma IgM antibodies (TOXO IgM)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C20G
	5. Rubella virus IgG antibodies (Rubella IgG)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C1HG
	6. Rubella virus IgM antibodies (Rubella IgM)	Chemiluminescent microparticle immunoassay (CMIA) (non-competitive) Ref.B6C18G
Blood Serum	<b>Determination of 8 specific proteins</b>	<b>Automated biochemistry analyzers Siemens Advia 1800* A.550, E.550-1, E550-2</b>
	1. Complement C3	Immunoturbidimetry (ITA) Ref.3060444
	2. Complement C4	Immunoturbidimetry (ITA)

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
		Ref.3060770
	3. Antistreptolysine O (ASTO)	Immunoturbidimetry (ITA) Ref.3055483
	4.Reumatoid Factor (RF) - quantitative	Immunoturbidimetry (ITA) Ref.655137
	5.C Reactive Protein (CRP) - quantitative	Immunoturbidimetry (ITA) Ref.829585
	6. Immunoglobulin A (IgA)	Immunoturbidimetry (ITA) Ref.2194102
	7. Immunoglobulin G (IgG)	Immunoturbidimetry (ITA) Ref.2193432
	8. Immunoglobulin M (IgM)	Immunoturbidimetry (ITA) Ref.2193483
	<b>Determination of 1 specific protein</b>	<b>Automated immunology analyzers Centaur SIEMENS * A.550, E.550-1, E550-2</b>
	1. Immunoglobulin E (IgE)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 03359776
<b>Biochemical Tests</b>		
Blood Serum	<b>Determination of 32 parameters</b>	<b>Automated Biochemistry analyzers Siemens ADVIA 1800* A.550, E.550-1, E550-2</b>
	1.Total Cholesterol(TC)	Enzymatic - Colorimetric (CHOD-PAP) Ref.10376501
	2. HDL Cholesterol (HDL-C)	Enzymatic - Colorimetric (PEG) Ref.6521559
	3. Triglycerides (TGs)	Enzymatic - Colorimetric (GPO-PAP) Ref.10335892
	4. VLDL Cholesterol (VLDL-C)	Calculated from TRIG (Enzymatic - Colorimetric)
	5. Atherogenic index ((TC)/ (HDL-C))	Calculated from: TC, HDL-C
	6.Non-HDL-C	Calculated from: TC, HDL-C
	7. Total Lipids	Calculated from CHOL and TRIG (Enzymatic - Colorimetric)
	8. Phospholipids	Calculated from CHOL (Enzymatic - Colorimetric)
	9. Iron (Fe)	Colorimetric (Ferrozine) Ref.10377510
	10. Albumin (ALB)	Colorimetric (BCP) Ref. 10711840
	11. Total Proteins (TP)	Colorimetric (Biuret) Ref.1803350
	12.Total globin (SF)	Calculated from: TP, ALB
	13. Albumin/Globin ratio	Calculated from: ALB, SF
	14. Calcium Total (Ca)	Colorimetric (OCPC) Ref. 7506552
	15. Magnesium (Mg)	Colorimetric (Xylidyl blue) Ref. 02271328
16. Phosphate (P)	Colorimetric (Phosphomolybdate) Ref. 3056927	

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood Serum (continued)	17. Glucose (GLU)	Enzymatic - Colorimetric (GOD-PAP) Ref. 10492319
	18. Creatinine (CREA )	Enzymatic - Colorimetric (Jaffe) Ref. 3039070
	19. Urea	Enzymatic - Kinetic -Colorimetric (Urease) Ref. 3040257
	20. Serum osmolality	Calculated from: GLU, Na, UREA
	21. Nitrogen serum	Calculated from: UREA
	22. Uric Acid (UA)	Enzymatic - Colorimetric (Uricase-Peroxidase) Ref. 03051305
	23. Aspartate Aminotransferase (AST/SGOT)	Colorimetric (IFCC**) Ref. 3039631
	24. Alanine Aminotransferase (ALT/SGPT)	Colorimetric (IFCC**) Ref. 3039631
	25. Gamma-Glutamyl transferase ( $\gamma$ GT)	Enzymatic - Colorimetric ( $\gamma$ -Glutamyl-3-carboxyl-4-nitroanilide) Ref. 2011954
	26. Lactate Dehydrogenase (LDH)	Enzymatic - Colorimetric (P - L) (DGKC***) Ref. 3030863
	27. Alkaline Phosphatase (ALP)	Colorimetric (IFCC**) Ref. 10916067
	28. Creatine Kinase (CK/CPK)	Enzymatic - Colorimetric (IFCC**) Ref. 10729780
	29. Total Bilirubin (TBIL)	Colorimetric (DPD) Ref. 2188064
	30. Amylase (AMY)	Enzymatic - Colorimetric (IFCC**) (G7-PNP) Ref. 3031177
31. Potassium (K)	Ion Selective Electrode (ISE) Ref. 6135445	
32. Sodium (Na)	Ion Selective Electrode (ISE) Ref. 3092699	
Hematological Tests		
Whole blood (EDTA)	<b>Determination of 1 parameter</b>	<b>High performance liquid chromatography (HPLC) analyzers G8, TOSOH Biosciences* <math>\Delta</math>.550, E.550-1, E550-2</b>
	1. Glycated Haemoglobin A <sub>1c</sub> (HbA <sub>1c</sub> )	Ion-exchange high performance liquid chromatography (HPLC) Refs: 021849-1 021850-1 021851-1 18431L-1 021848
Molecular diagnosis Tests		
Nasopharyngeal, nasal, pharyngeal and / or oral sample, sputum, bronchoalveolar lavage.	<b>Determination of 1 parameter</b>	<b>Extraction: Thermo Scientific™ KingFisher™ Flex Amplification: QuantStudio 5 * <math>\Delta</math>.550, E.550-1, E550-2</b>
	1. Detection of RNA of SARS-CoV-2 virus / Qualitative	TaqPath™ COVID-19 Combo Kit Thermo Fisher Scientific Inc. CE-IVD Method

*\*Reference to the commercial name of a specific analyzer/kit, refers to a specific analytical method and protocol*  
*\*\*IFCC: International Federation of Clinical Chemistry*  
*\*\*\*DGKC: Deutsche Gesellschaft für Klinische Chemie*

Site of assessment : **Permanent Laboratory premises, 42, 26<sup>th</sup> October str., 54627, Thessaloniki, Greece.**  
Approved signatories: **Ch. Dinas, S. Vytiniotis, A. Nalbanti.**

This scope of Accreditation replaces the previous one dated 12.11.2020.  
The Accreditation Certificate No. **662-7**, to ELOT EN ISO 15189:2012, is valid until 21.03.2022.

Athens, November 09, 2021

Spyridon Podaras  
*CEO of ESYD*

# Hellenic Accreditation System



Annex G1/B11 to the Certificate No. **662-7**

## SCOPE of ACCREDITATION

of the  
Clinical Laboratory  
of the  
**PRIVATE COOPERATIVE DIAGNOSTIC  
LABORATORIES MEDISYN MEDICAL S.A.-  
HERAKLION BRANCH**

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Immunochemical Tests		
Blood serum	<b>Determination of 31 parameters</b>	<b>Automated immunology Analyzers Siemens Atellica* Δ.550, E.550-1, E550-2</b>
	1. Carcinoembryonic Antigen (CEA)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995523 & 10995524
	2. Cancer Antigen 19-9 (CA 19-9)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995490 & 10995489
	3. Cancer Antigen 15-3 (CA 15-3)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995485 & 10995486
	4. Cancer Antigen 125 (CA 125)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995481 & 10995482
	5. $\alpha$ -Fetoprotein (AFP)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995441 & 10995442
	6. Prostate Specific Antigen (PSA)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995662 & 10995663
	7. Free Prostate Specific Antigen (FPSA)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995577
	8. Λόγος: FPSA/ PSA	Υπολογιστική
	9. Ferritin	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995569 & 10995568
10. Vitamin B12	Chemiluminescence (CLIA) (Competitive) ref 10995714 & 10995715	

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used	
Blood serum (continued)	11. Folate	Chemiluminescence (CLIA) (Competitive) ref 10995572 & 10995573	
	12. Follicle Stimulating Hormone (FSH)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995580 & 10995581	
	13. Luteinizing Hormone (LH)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995635 & 10995634	
	14. Prolactin (PRL)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995656 & 10995655	
	15. Thyroid-stimulating hormone (TSH)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995703 & 10995704	
	16. Total Thyroxine (TT4)	Chemiluminescence (CLIA) (Competitive) ref 10995684 & 10995685	
	17. Total Triiodothyronine (TT3)	Chemiluminescence (CLIA) (Competitive) ref 10995679 & 10995678	
	18. Free Thyroxine (FT4)	Chemiluminescence (CLIA) (Competitive) ref 10995589 & 10995588	
	19. Free Triiodothyronine (FT3)	Chemiluminescence (CLIA) (Competitive) ref 10995585 & 10995584	
	20. Anti-thyroglobulin antibodies (anti-TG)	Chemiluminescence (CLIA) (Competitive) ref 11201759 & 11201761	
	21. Anti-thyroid peroxidase antibodies (anti-TPO)	Chemiluminescence (CLIA) (Competitive) ref 10995466 & 10995467	
	22. Βιταμίνη D 25-OH	Chemiluminescence (CLIA) (Competitive) ref 10995719 & 10995720	
	23. Cortisol	Chemiluminescence (CLIA) (Competitive) ref 10995538 & 10995537	
	24. Insulin	Χημειοφωταύγεια (CLIA) Μη ανταγωνιστική ref 10995628	
	25. Dihydroepiandrosterone Sulfate (DHEA-S)	Chemiluminescence (CLIA) (Competitive) ref 10995555	
	26. Estradiol (E2)	Chemiluminescence (CLIA) (Competitive) 10995561 & 10995562	
	27. Progesterone (PRG)	Chemiluminescence (CLIA) (Competitive) ref 10995660 & 10995659	
	28. Testosterone Total (TT)	Chemiluminescence (CLIA) (Competitive) ref 10995708 & 10995707	
	29. β-Human Chorionic Gonadotropine (β-HCG)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995690 & 10995689	
	30. Immunoglobulin E (IgE)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995615 & 10995614	
	Ορός ή πλάσμα αίματος (EDTA)	31. Intact Parathyroid Hormone (iPTH)	Chemiluminescence (CLIA) (non-competitive sandwich) ref 10995621 & 10995622

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
<b>Biochemical Tests</b>		
Blood serum	<b>Determination of 34 parameters</b>	<b>Automated Biochemistry analyzers Siemens Atellica * A.550, E.550-1, E550-2</b>
	1. Total Cholesterol(TC)	Enzymatic - Colorimetric (CHOD - PAP) Ref 11097609
	2. Calcium Total (Ca)	Colorimetric (OCPC) Ref 11097595
	3. Phosphate (P)	Colorimetric (Phosphomolybdate) Ref. 11097611
	4. Glucose(GLU)	Enzymatic - Colorimetric (GOD-PAP) Ref. 11097621
	5. Creatinine (CREA)	Colorimetric (Jaffe) Ref. 11097596
	6. Potassium (K)	Ion Selective Electrode (ISE) Ref. 11099315
	7. Sodium (Na)	Ion Selective Electrode (ISE) Ref. 11099315
	8. Chlore (Cl)	Ion Selective Electrode (ISE) Ref. 11099315
	9. Magnesium (Mg)	Colorimetric (Xylidyl blue) Ref. 11097612
	10. Alkaline Phosphatase (ALP)	Enzymatic - Colorimetric (pNPP - AMP) ref 11097600
	11. Alanine Aminotransferase (ALT/SGPT)	Enzymatic - Colorimetric ref 11097605
	12. Aspartate Aminotransferase (AST/SGOT)	Enzymatic - Colorimetric ref 11097607
	13. Creatine Kinase (CK/CPK)	Enzymatic - Colorimetric (IFCC) ref 11097640
	14. Direct Bilirubin (DBIL)	Colorimetric vanadate oxidase ref 11097532
	15. Total Bilirubin (TBIL)	Χρωματομετρική vanadate oxidase ref 11097531
	16. Gamma-Glutamyl transferase (γGT)	Enzymatic - Colorimetric ref 11097597
	17. HDL Cholesterol (HDL-C)	Enzymatic - Colorimetric ref 11097630
	18. Iron (Fe)	Colorimetric ferrozine ref 11097601
	19. Triglycerides (TGs)	Enzymatic - Colorimetric ref 11097591
	20. Uric Acid (UA)	Enzymatic - Colorimetric ref 11097608
	21. Albumin (ALB)	Colorimetric (BCP) Ref. 11097530
	22. Amylase (AMY)	Enzymatic - Colorimetric IFCC** (Ed-G7PNP) Ref. 11097603
	23. Total Proteins (TP)	Colorimetric (Biuret) Ref. 11097604
	24. Total globin (SF)	Calculated from: Total Proteins (TP)- Albumin (ALB)
	25. Albumin/Globin ratio	Calculated from: Albumin (ALB)/ Total globin (SF)
	26. C Reactive Protein (CRP) - quantitative	Immunoturbidimetry (ITA) Ref. 11097631
27. LpA	Immunoturbidimetry (ITA)Ref 11097627	

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood serum (continued)	28. Immunoglobulin G (IgG)	Immunoturbidimetry (ITA) Ref. 11097616
	29. Immunoglobulin M (IgM)	Immunoturbidimetry (ITA) Ref. 11097620
	30. Immunoglobulin A (IgA)	Immunoturbidimetry (ITA) Ref. 11097619
	31. Antistreptolysine O (ASTO)	Immunoturbidimetry (ITA) Ref. 11097634
	32. Reumatoid Factor (RF) - quantitative	Immunoturbidimetry (ITA) Ref. 11097618
	33. Complement C3	Immunoturbidimetry (ITA) Ref. 11097624
	34. Complement C4	Immunoturbidimetry (ITA) Ref. 11097623
<b>Hematological Tests</b>		
Whole Blood (EDTA)	<b>Determination of 1 parameter</b>	<b>High performance liquid chromatography (HPLC) analyzer G7, TOSOH Biosciences* A.550, E.550-1, E550-2</b>
	1. Glycated Haemoglobin A1C (HbA1C)	Ion-exchange high performance liquid chromatography (HPLC) Refs:021849-1, 021850-1, 021851-1, 18431L-1, 021848
Whole Blood (EDTA)	<b>Determination of 1 parameter</b>	<b>High performance liquid chromatography (HPLC) analyzer G8, TOSOH Biosciences* A.550, E.550-1, E550-2</b>
	1. Glycated Haemoglobin A1C (HbA1C)	Ion-exchange high performance liquid chromatography (HPLC) Refs:021849-1, 021850-1, 021851-1, 18431L-1, 021848
<b>Molecular diagnosis Tests</b>		
Nasopharyngeal, nasal, pharyngeal and / or oral sample, sputum, bronchoalveolar lavage.	<b>Determination of 1 parameter</b>	<b>Extraction: Thermo Scientific™ KingFisher™ Flex Amplification: QuantStudio 5 * A.550, E.550-1, E550-2</b>
	1. Detection of RNA of SARS-CoV-2 virus / Qualitative	TaqPath™ COVID-19 Combo Kit Thermo Fisher Scientific Inc. CE-IVD Method

\*Reference to the commercial name of a specific analyzer/kit, refers to a specific analytical method and protocol

\*\*IFCC: International Federation of Clinical Chemistry

\*\*\*DGKC: Deutsche Gesellschaft für Klinische Chemie

Site of assessment : **Permanent Laboratory premises, Archiepiskopou Makariou & Faitaki, GR 71202, Heraklion Crete, Greece.**

Approved signatories: **Ch. Dinas, S. Vytiniotis, G. Paterakis.**

This scope of Accreditation replaces the previous one dated 02.04.2021.

The Accreditation Certificate No. **662-7**, to ELOT EN ISO 15189:2012, is valid until 21.03.2022.

Athens, November 09, 2021

Spyridon Podaras  
CEO of ESYP



# Hellenic Accreditation System



Annex G1/Δ2 to the Certificate No. **662-7**

## SCOPE of ACCREDITATION

of the  
Clinical Laboratory  
of the  
**PRIVATE COOPERATIVE DIAGNOSTIC  
LABORATORIES MEDISYN MEDICAL S.A.-  
LARISSA BRANCH**

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
<b>Immunochemical Tests</b>		
Blood Serum	<b>Determination of 30 parameters</b>	<b>Automated immunology analyzers Centaur SIEMENS * Λ.550, E.550-1, E550-2</b>
	1. Cortisol	Electrochemiluminescence (ECLIA) (competitive) Ref. 10994926
	2. Estradiol (E2)	Chemiluminescence (CLIA) (competitive) Ref. 10491445
	3. Free Prostate Specific Antigen (FPSA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 06862518
	4. Free Triiodothyronine (FT3)	Chemiluminescence (CLIA) (competitive) Ref. 03154228
	5. Free Thyroxine (FT4)	Chemiluminescence (CLIA) (competitive) Ref. 06490106
	6. β-Human Chorionic Gonadotropine (β-HCG)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 00643953
	7. Immunoglobulin E (IgE)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 03359776
	8. Progesterone (PRG)	Chemiluminescence (CLIA) (competitive) Ref. 01586287
	9. Testosterone Total (TT)	Chemiluminescence (CLIA) (competitive) Ref. 10696863
	10. Total Triiodothyronine (TT3)	Chemiluminescence (CLIA) (competitive) Ref. 04779663
	11. Total Thyroxine (TT4)	Chemiluminescence (CLIA) (competitive) Ref. 09236439
	12. Carcinoembryonic Antigen (CEA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 09788458
	13. Cancer Antigen 19-9 (CA 19-9)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10491244
14. Cancer Antigen 15-3 (CA 15-3)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 00128609	

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Blood Serum (continued)	15. Cancer Antigen 125 (CA 125)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 01678114
	16. $\alpha$ -Fetoprotein (AFP)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 03305838
	17. Prostate Specific Antigen (PSA)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 02676506
	18. Ferritin	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 00495776
	19. Vitamin B12	Chemiluminescence (CLIA) (competitive) Ref. 09544818
	20. Folate	Chemiluminescence (CLIA) (competitive) Ref. 06891541
	21. Follicle Stimulating Hormone (FSH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 01360521
	22. Luteinizing Hormone (LH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 02212941
	23. Prolactin (PRL)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 09505871
	24. Thyroid-stimulating hormone (TSH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 06491080
	25. Free Thyroxine (FT4)	Chemiluminescence (CLIA) (competitive) Ref. 06490106
	26. Free Triiodothyronine (FT3)	Chemiluminescence (CLIA) (competitive) Ref. 03154228
	27. Anti-thyroglobulin antibodies (anti-TG)	Chemiluminescence (CLIA) (Competitive) Ref. 10492399
28. Anti-thyroid peroxidase antibodies (anti-TPO)	Chemiluminescence (CLIA) (Competitive) Ref. 10630887	
29. 25-OH Vitamin D	Chemiluminescence (CLIA) (competitive) Ref. 10699533	
Blood serum or blood plasma (EDTA)	30. Intact Parathyroid Hormone (iPTH)	Chemiluminescence (CLIA) (non-competitive sandwich) Ref. 10699155
Biochemical Tests		
Blood Serum	<b>Determination of 13 parameters</b>	<b>Automated Biochemistry analyzers Siemens ADVIA 1800* <math>\Delta</math>.550, E.550-1, E550-2</b>
	1. Total Cholesterol (TC)	Enzymatic - Colorimetric (CHOD-PAP) Ref.10376501
	2. HDL Cholesterol (HDL-C)	Enzymatic - Colorimetric (PEG) Ref.6521559
	3. Triglycerides (TGs)	Enzymatic - Colorimetric (GPO-PAP) Ref.10335892
	4. VLDL Cholesterol (VLDL-C)	Calculated from TRIG (Enzymatic - Colorimetric)
	5. Atherogenic index ((TC)/(HDL-C))	Calculated from: TC, HDL-C
	6. Non-HDL-C	Calculated from: TC, HDL-C
	7. Total Lipids	Calculated from CHOL and TRIG (Enzymatic - Colorimetric)
	8. Phospholipids	Calculated from CHOL (Enzymatic - Colorimetric)

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
	9. Iron (Fe)	Colorimetric (Ferrozine) Ref.10377510
	10. Albumin (ALB)	Colorimetric (BCP) Ref. 10711840
	11. Total Proteins (TP)	Colorimetric (Biuret) Ref.1803350
	12.Total globin (SF)	Calculated from: TP, ALB
	13. Albumin/Globin ratio	Calculated from: ALB, SF
<b>Hematological Tests</b>		
Whole blood (EDTA)	<b>Determination of 1 parameter</b>	<b>High performance liquid chromatography (HPLC) analyzers G8, TOSOH Biosciences* A.550, E.550-1, E550-2</b>
	1. Glycated Haemoglobin A <sub>1C</sub> (HbA <sub>1C</sub> )	Ion-exchange high performance liquid chromatography (HPLC) Refs: 021849-1 021850-1 021851-1 18431L-1 021848

\*Reference to the commercial name of a specific analyzer/kit, refers to a specific analytical method and protocol

\*\*IFCC: International Federation of Clinical Chemistry

Site of assessment : **Permanent Laboratory premises, 119 Sokratous str., P.C. 41336, Larissa, Greece.**  
Approved signatories: **Ch. Dinas, S. Vytiniotis, E.Palaskas.**

This scope of Accreditation replaces the previous one dated 12.11.2020.  
The Accreditation Certificate No. **662-7**, to ELOT EN ISO 15189:2012, is valid until 21.03.2022.

Athens, November 09, 2021

Spyridon Podaras  
CEO of ESYD

# Certificate of Approval

This is to certify that the Management System of:

## PRIVATE COOPERATIVE DIAGNOSTIC LABORATORIES MEDISYN MEDICAL S.A.

38 Konstantinoupoleos Street, 118 54 Athens, Greece

has been approved by Lloyd's Register to the following standards:

**BS EN ISO 9001:2015**

Approval number(s): ISO 9001 – 0064415

**The scope of this approval is applicable to:**

Transportation of biological samples for laboratory analysis tests at the headquarters of the company. Laboratory analysis services on behalf of third parties. Scientific consulting and support of medical laboratories.



**Daniel Oliva Marcilio de Souza**

Area Operations Manager - South Europe

Issued by: Hellenic Lloyd's S.A.

for and on behalf of: Lloyd's Register Quality Assurance Limited



# Hellenic Accreditation System



Annex I1/2 to the Certificate No. 1109

## SCOPE of ACCREDITATION

of

PANHELLENIC PROVIDENT PRODUCTIVE AND CREDIT PARTNERSHIP OF  
LABORATORY DOCTORS OF GREECE "MEDISYN"

as a

**Proficiency Testing Provider**

Properties to be measured (Parameters - Analytes)	Tested control materials	Interlaboratory Test- scheme
Glucose	Lyophilized blood serum of Human origin	Clinical Chemistry Interlaboratory Scheme.
Urea		
Cholesterol		
HDL Cholesterol		
Uric Acid		
Triglycerides		
Creatinine		
AST (GOT)		
ALT (GPT)		
$\gamma$ -GT		
Alkaline Phosphatase (ALP)		
LD (LDH)		
Cholinesterase		
Creatine Kinase (CK)		
Amylase		
Bilirubin Total		
Bilirubin Direct		
Total Proteins		
Albumin		
Iron (Fe)		
Calcium (Ca)		
Magnesium (Mg)		
Phosphate (P Inorganic)		
Copper (Cu)		
Zinc (Zn)		
Sodium (Na)		
Potassium (K)		
Chloride (Cl).		

Properties to be measured (Parameters - Analytes)	Tested control materials	Interlaboratory Test- scheme
Prothrombin time (PT) in seconds	Lyophilized blood plasma of Human origin	Coagulation Interlaboratory Scheme
Prothrombin time (INR)		
activated Partial Thromboplastin Time (aPTT)		
Fibrinogen		

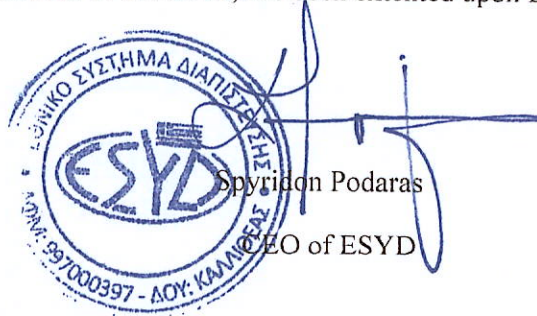
Address of Provider: **38, Konstantinoupoleos Av. Athens 11854 Greece**

Approved Signatories: **S. Axarlis , D. Xanthos**

This scope of Accreditation replaces the previous one dated 5.10.2017

The Accreditation Certificate No. **1109** to ELOT ISO/IEC 17043:2010, has been extended upon ESYD decision, until 4.3.2022

Athens, October 4<sup>th</sup> , 2021



# Certificate of Approval

This is to certify that the Management System of:

## PANHELLENIC PROVIDENT PRODUCTIVE AND CREDIT PARTNERSHIP OF LABORATORY DOCTORS OF GREECE “Medisyn”

38, Konstantinoupoleos Street, 118 54 Athens, Greece

has been approved by Lloyd's Register to the following standards:

**BS EN ISO 9001:2015**

Approval number(s): ISO 9001 – 0028651

**The scope of this approval is applicable to:**

Sales and after sales support of medical equipment, software and consumable supplies for medical laboratories. Consulting services for organizing and supporting of medical laboratories. Design and deployment of external quality assurance schemes and provision of associated consulting services for medical laboratories.



**Daniel Oliva Marcilio de Souza**

Area Operations Manager - South Europe

Issued by: Hellenic Lloyd's S.A.

for and on behalf of: Lloyd's Register Quality Assurance Limited

