## **Hellenic Accreditation System**



## Annex G1/17 to the Certificate No. 822-6

## SCOPE of ACCREDITATION

of the

Clinical laboratory

of

## "GENEKOR Medical S.A."

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used	
Molecular Genetics			
1. Peripheral blood Saliva	<ul> <li>1.Mutation detection in BRCA1 &amp; BRCA2 genes (Breast Cancer susceptibility genes 1 and 2)</li> <li>(Full coding sequence, splice sites and 20bp flanking intronic sequences)</li> </ul>	Target Enrichment Method based on capture approach KAPA HyperExplore MAX 3Mb T1 RUO (NimbleGen, Roche) * (KAPA HyperCap workflow v3.0 07939493001 02/20) (OE_MD_14, Version D.0, 01/01/2022) Library preparation was carried out using the automated system MGISP-960. (Automation version: V2.0) For the above method sequencing was carried out using Next Generation Sequencing with MiSeq (Illumina) and DNBSEQ-G50, (MGI) genetic analyzers. (Document # 15039740 v10, 2019 Illumina, Inc.) (DNBSEQ-G50 User Manual version:A3) Data analysis was carried out using the analysis software SeqPilot (JSI Medical System).	

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
2. Peripheral blood Saliva	2. Detection of large genomic rearrangements in <i>BRCA1 &amp; BRCA2</i> genes (Breast Cancer susceptibility genes 1 and 2)	2A.Multiplex Ligation- Dependent Probe Amplification (MLPA) CE-IVD SALSA MLPA P002 <i>BRCA1</i> probemix and CE-IVD SALSA MLPA P045 <i>BRCA2/CHEK2</i> probemix (MRC-Holland)* (MDP version-007; Issued on 01 March 2019 (MLPA)) (OE_MD _12, Version C.0, 01/08/2018)
		2B. Computational using the program SeqPilot (JSI Medical System) for test 1A and with the use of SeqPilot (JSI Medical System) and panelcn.MOPS (Hum Mutat. 2017, 38:889-897) for test 1B. Verification is carried out with the use of Multiplex Ligation-Dependent Probe Amplification (MLPA) CE-IVD SALSA MLPA P002 <i>BRCA1</i> probemix and CE-IVD SALSA MLPA P045 <i>BRCA2/CHEK2</i> probemix (MRC-Holland)*
		(Version: 4.4.0 Build 505 (JSI), MDP version-007; Issued on 01 March 2019 (MLPA)
<ol> <li>Peripheral blood Saliva</li> </ol>	3. Detection and analysis of known familial mutation in <i>BRCA1</i> & Analysis <i>BRCA2</i> genes (Breast Cancer susceptibility genes 1 and 2)	<ul><li>3A. DNA sequencing by capillary electrophoresis with SeqStudio Genetic Analyzer (ThermoFisher)</li><li>(MAN0017464, Rev.B 2019)</li></ul>
		3B. Multiplex Ligation- Dependent Probe Amplification (MLPA) CE-IVD SALSA MLPA P002 <i>BRCA1</i> probemix and CE-IVD SALSA MLPA P045 <i>BRCA2/CHEK2</i> probemix (MRC-Holland)* (MDP version-007; Issued on 01 March 2019 (MLPA)) (OE_MD _05, Version C.0, 01/08/2018)

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
4.Paraffin-embedded tissue, cytology specimens	1. Somatic mutation-analysis in exons 18, 19, 20, 21 of EGFR gene	In-house method with Ion AmpliSeq <sup>™</sup> Panel primers (Thermo Fisher Scientific) and Next Generation Sequencing (NGS) with Ion Proton (Thermo Fisher Scientific) (Ion Ampliseq Library kit, MAN0006735, Revision F.0, 2019) (OE_MD_08, Version C.0, 01/08/2018)
	2. Somatic mutation analysis in exons 2, 3, 4 of <i>KRAS</i> and <i>NRAS</i> genes	
	3. Somatic mutation analysis in exons 11 and 15 of <i>BRAF</i> gene	
	4. Somatic mutation analysis in exons 9, 11, 13 and 17 of <i>KIT</i> gene	
	5. Somatic mutation analysis in exons 12, 14 and 18 of <i>PDGFRA</i> gene	
	6. Somatic mutation analysis in exons 2 and 3 of <i>HRAS</i> gene	
5A. Paraffin embedded tissue, peripheral blood, buccal swab	1. Analysis of DNA Microsatellite Instability (MSI)	1AIn-housemultiplexfluorescent PCR method in fivemicrosatellitelociandfragmentanalysisby capillaryelectrophoresiswithSeqStudioGeneticAnalyzer(ThermoFisher)(MAN0017464, Rev.B 2019)
5B. Paraffin embedded tissue		1B <i>In-house method</i> with Ion AmpliSeq <sup>TM</sup> Panel primers (Thermo Fisher Scientific) and Next Generation Sequencing (NGS) with Ion Proton (Thermo Fisher Scientific) (Ion Ampliseq Library kit, MAN0006735, Revision F.0, 2019) (OE_MD_15, Version C.0, 23/07/2019)
6. Paraffin embedded tissue	1. Detection and quantification of the ALK gene rearrangements	Fluorescent in situ hybridization (FISH) with ZytoVision CE-IVD kit (ZytoLight SPEC ALK Dual Color Break Apart Probe and ZytoLight FISH Tissue Implementation Kit)* (Version 1.3GB, 2019-01-28) (O3_MD_10, Version C.0, 01/08/2018)

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
7. Paraffin embedded tissue	1. Detection and quantification of the overexpression of the HER2/NEU gene	Fluorescent in situ hybridization (FISH) with ZytoVision CE-IVD kit (ZytoLight SPEC ERBB2/CEN17 Dual Color Probe and ZytoLight FISH Tissue Implementation Kit)* Version 1.3GB, 2018-11-21) (OE_MD_11 Version C.0, 01/08/2018)
8. Paraffin-embedded tissue, cytology specimens	1. Somatic mutation-analysis in exons 7, 9, 13, and 20 of <i>PIK3CA</i> gene	In-house method with Ion AmpliSeq <sup>™</sup> Panel primers (Thermo Fisher Scientific) and Next Generation Sequencing (NGS) with Ion Proton (Thermo Fisher Scientific)(Ion Ampliseq Library kit, MAN0006735, Revision F.0, 2019)(OE_MD_16, Version C.0, 15/01/2020)
9. Paraffin embedded tissue	1.Analysis of somatic mutations in <i>BRCA1 &amp; BRCA2</i> genes	In-house method with the Oncomine BRCA Research Assay (Thermo Fisher Scientific) and Next Generation Sequencing (NGS) with Ion Proton (Thermo Fisher Scientific) (Oncomine BRCA Research Assay, MAN0014634, Revision B.0) (OE_MD_17, Version C.0, 15/01/2020)

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used	
Immunohistochemistry examinations			
1. Paraffin embedded tissue	1. Immunohistochemical detection of the PD-L1 protein using the anti-PD-L1 monoclonal antibody (SP263, Ventana)	<u>Special staining -</u> <u>IMMUNOHISTOCHEMISTRY</u> Automated Immunohistochemistry using IVD detection kits - Ventana BenchMark GX Autostainer*	
	Non Small Cells Lung Cancer (NSCLC) Urothilial Cancer (UC) Gastric Cancer Head and Neck squamous cell cancinoma Cervical Cancer	Microscopic Evaluation – Interpretation of Results. (OE_MD_18, Version C.0, 15/01/2020) PD-L1 SP263	
2. Paraffin embedded tissue	1. Immunohistochemical detection of the PD-L1 protein using the anti-PD-L1 monoclonal antibody (SP142, Ventana)	1015350EN Rev A         Special staining -         IMMUNOHISTOCHEMISTRY         Automated         Immunohistochemistry         IVD detection kits         - Ventana BenchMark GX         Autostainer*	
	Triple Negative Breast Cancer (TNBC) Urothilial Cancer (UC)	Microscopic Evaluation – Interpretation of Results. (OE_MD_18, Version C.0, 15/01/2020) PD-L1 SP142 1018624EL Rev A	

\*The use of the genetic analyser's brand name/kit refers to a specific analytical method and the corresponding experimental protocol

Site of assessment: Permanent laboratory premises, 52 Spaton Avenue, 15344, Gerakas, Attiki, Greece. Approved signatories: G. Nasioulas, V. Mariatou-Metaxa, I. Papadopoulou, K. Agiannitopoulos, K. Tsantikidi, T. Bourkoula, G.Pepe, G. Kapetsis, E. Patsea, D. Apostolopoulou, D. Bouzarelou.

This scope of Accreditation replaces the previous one dated 16.05.2022. The Accreditation Certificate No. **822**-6, to ELOT EN ISO 15189:2012, is valid until 24.06.2024.

Athens, September 05, 2022

Christos Nestoras CEO of ESYD