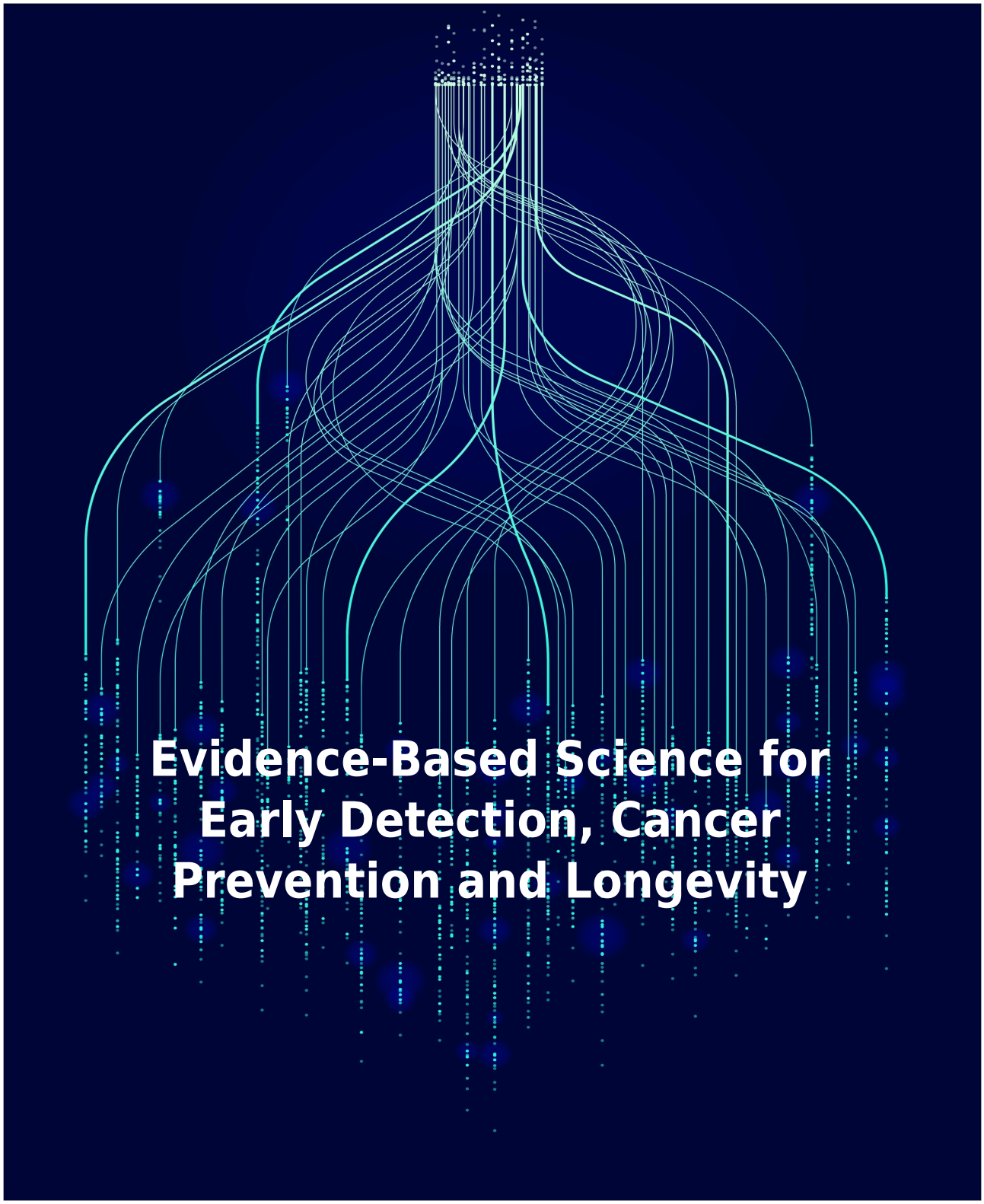
Ovarian Cancer Screening Test (Basic)

Detect, Act, Live Longer



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TERMS AND CONDITIONS

THIS TEST IS NOT INTENDED TO SUBSTITUTE OR REPLACE MEDICAL VISITS; ON THE CONTRARY, IT AIMS TO ENHANCE AND ENRICH THEM, PROVIDING PREVENTIVE AND COMPLEMENTARY INFORMATION THAT HELPS BOTH INDIVIDUALS AND HEALTHCARE PROFESSIONALS MAKE BETTER DECISIONS.

THE TRADITIONAL HEALTHCARE MODEL, CHARACTERISTIC OF MEDICINE 2.0, HAS HISTORICALLY BEEN FOCUSED ON DISEASE: IT CONCENTRATES ON DIAGNOSING AND TREATING ONCE SYMPTOMS APPEAR. ALTHOUGH THIS APPROACH HAS ENABLED MAJOR THERAPEUTIC ADVANCES, IT PRESENTS IMPORTANT LIMITATIONS: IT OFTEN ARRIVES TOO LATE, IS MORE REACTIVE THAN PREVENTIVE, AND FREQUENTLY DOES NOT TAKE INTO ACCOUNT THE INDIVIDUALITY OF EACH PERSON. IN CONTRAST, ALL OUR TESTS ARE BASED ON THE PRINCIPLES OF MEDICINE 3.0, A FAR MORE ADVANCED MODEL. MEDICINE 3.0 IS FOUNDED ON THE 4 "P'S" —PREDICTION, PREVENTION, PERSONALIZATION, AND PATIENT PARTICIPATION—. THIS MEANS ANTICIPATING RISKS BEFORE THEY TURN INTO DISEASES, INTERVENING EARLY WITH STRATEGIES GROUNDED IN SCIENTIFIC EVIDENCE, AND TAILORING RECOMMENDATIONS TO EACH INDIVIDUAL. MOREOVER, IT EMPOWERS PEOPLE TO TAKE AN ACTIVE ROLE IN MANAGING THEIR OWN HEALTH.

IN THIS WAY, OUR TESTS DO NOT REPLACE MEDICAL CONSULTATION; INSTEAD, THEY PROVIDE ADDED VALUE BY OFFERING A MORE COMPREHENSIVE AND PREVENTIVE PERSPECTIVE THAT STRENGTHENS THE DOCTOR–PATIENT RELATIONSHIP AND IMPROVES THE QUALITY OF CLINICAL DECISION-MAKING.

ALTHOUGH THIS TEST CAN DETECT SEVERAL OVARIAN CANCER TYPES, SUCH AS EPITHELIAL OVARIAN CARCINOMA (EOC) OR MUCINOUS EPITHELIAL OVARIAN CARCINOMA (MEOC), AMONG OTHERS, LIKE SECONDARY OVARIAN MALIGNANCY FROM COLORECTAL OR GASTROINTESTINAL (GI) ORIGIN, EVEN IN PRECLINICAL STAGES —WHEN NO SYMPTOMS OR SIGNS ARE YET PRESENT—, IT IS IMPORTANT TO HIGHLIGHT THAT FALSE POSITIVES (FP) AND, TO A LESSER EXTENT, FALSE NEGATIVES (FN) CAN OCCUR. HOWEVER, THE RESULTS OBTAINED CAN PROVIDE VALUABLE CLUES THAT GUIDE EARLY DETECTION, ENABLING TIMELY REFERRAL AND A MORE COMPLETE MEDICAL EVALUATION, SOMETHING THAT IS ESPECIALLY IMPORTANT IN OVARIAN CANCER, ALSO KNOWN AS THE "SILENT KILLER", BECAUSE THE FIRST SYMPTOMS MAY APPEAR WHEN THE CANCER IS ALREADY IN A VERY ADVANCED STAGE OR HAS ALREADY SPREAD TO OTHER PARTS OF THE BODY.

THIS TEST CAN CAUSE OVERDIAGNOSIS. ON THE OTHER HAND, IF YOU FEEL —BOTH PERSISTENT OR INTERMITTENT—, DISCOMFORT, IMPAIRMENT OR PAIN, PLEASE GO TO THE EMERGENCY ROOM AS IT COULD BE DUE TO AN ACUTE DISORDER AS WELL AS TO A PSYCHOSOMATIC CAUSE.

THE NEGATIVITY OF THE TUMOR MARKERS DOES NOT EXCLUDE 100 PERCENT THE POSSIBILITY OF A MALIGNANT TUMOR OF EPITHELIAL ORIGIN.

THIS REPORT CONTAINS A SERIES OF INTERPRETATIVE COMMENTS BASED ON THE BEST AVAILABLE SCIENTIFIC EVIDENCE, AS WELL AS THE LATEST MEDICAL AND CLINICAL ADVANCES, WITH THE AIM OF PROVIDING AN UPDATED AND EVIDENCE-BASED OVERVIEW OF YOUR HEALTH STATUS. BY CONTINUING TO READ THIS REPORT, YOU ACKNOWLEDGE YOUR AGREEMENT WITH THE TERMS AND CONDITIONS SET FORTH HEREIN, AS WELL AS WITH ALL WARNINGS AND LIMITATIONS OF LIABILITY CONTAINED THEREIN, AND YOU EXPRESSLY RELEASE THE COMPANY FROM ANY AND ALL RESPONSIBILITY.

Blueberry Diagnostics

XXES-308018010-00000006c

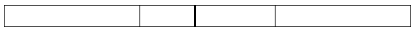
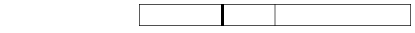
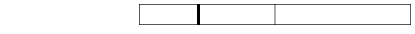
Report with Interpretative Commenting

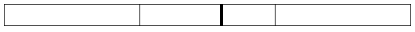
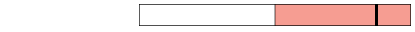
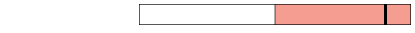
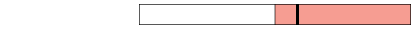
Patient Information

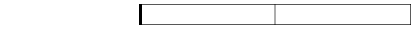
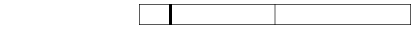
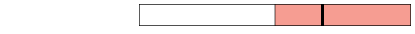
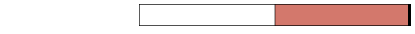
CE

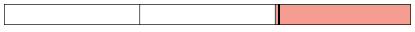
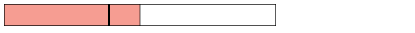
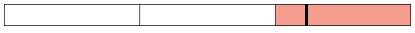
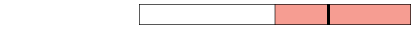
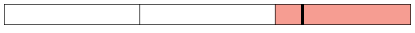
Identification Data		Personal Data	
Patient ID:	ES-YYYYYYYY	Gender at Birth:	Female
Patient Name:	JANE	Date of Birth (day/month/year):	17/10/1987
Patient Surname:	SAMPLE	Age (years):	38
Blood Collection Date:	10/01/2026		
Urine Collection Date:	10/01/2026		

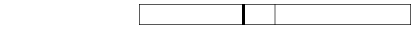
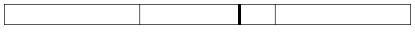
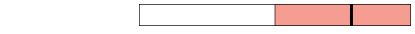
Laboratory Results (with Advanced Coefficients, Indices and/or Ratios)

Hepatic Enzymes	Value	Min	Max	Visual Score
ALP (IU/L):	63.00	35.00	104.00	
AST (IU/L):	22.00		34.00	
ALT (IU/L):	23.00		49.00	
GGT (IU/L):	31.00		38.00	
LDH (IU/L):	114.00↓	120.00	246.00	

Tumor Markers	Value	Min	Max	Visual Score
CA 19.9 (U/mL):	23.43	3.00	37.00	
CA 125 (U/mL):	114.30↑		35.00	
CEA (ng/mL):	17.28↑		5.00	
HE4 (pmol/L):	102.30↑		70.00	

Tumor Marker Ratios	Value	Min	Max	Visual Score
CA 19.9-to-CEA Ratio:	1.36		29.77	
CA 125-to-CEA Ratio:	6.61		25.00	
Copenhagen Index:	14.19↑		7.00	
ROMA (pre-menopausal):	33.43↑		7.40	
ROMA (post-menopausal):	54.78↑		25.30	
Santotoribio Mucinous Index (SMI):	0.09		0.23	

Other Serum Analytes	Value	Min	Max	Visual Score
Creatinine (mg/dL):	1.07↑	0.55	1.02	
eGFR (mL/min/1.73m^2):	68.18↓	90.00		
Total Bilirubin (mg/dL):	2.01↑	0.30	1.20	
Direct Bilirubin (mg/dL):	0.67↑		0.31	
Indirect Bilirubin (mg/dL):	1.34↑	0.30	0.85	

Other Urine Analytes	Value	Min	Max	Visual Score
Urine Albumin (g/L):	0.12		0.15	
Urine Creatinine (g/L):	1.48	0.60	1.80	
Urine ACR (mg/g):	81.08↑		30.00	

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XXES-308018010-00000006c

Technical Interferences

CE

Serum	Value
Hemolyzed Sample:	No
Icteric Sample:	No
Lipemic Sample:	No

Legend

- Values are within the reference range limits.
- Values are outside the reference range limits.
- Values are outside the reference range limits, concretely more than 4 times the normality upper limit.

Coefficients, Indices and Ratios Descriptions

In addition to the results provided by Laboratorio Echevarne, Blueberry Diagnostics has added to this report several innovative coefficients, indices and ratios —calculated and validated by the company itself—, to help your healthcare providers to get a more accurate diagnosis since, they can provide a holistic view of the state of your health by integrating multiple factors that can allow clinicians to have more comprehensive data, potentially leading to better-informed decisions.

Besides, they also can improve the sensitivity and specificity of predictions —by reducing false positives and false negatives—. Moreover, they can also help differentiate between diseases with similar clinical presentations —reducing the probability of misinterpretation or excessive dependence on a single parameter—. Furthermore they can guide treatment decisions to improve patient outcomes.

NOTE: No coefficient, indice or ratio should be used in isolation, since they are specifically designed to provide additional insight when an abnormality is detected. For example, the AST-to-ALT ratio has no clinical value if no liver disease is present —regardless of whether the result is altered—. However, if liver injury exists, the AST-to-ALT ratio can help to differentiate whether the damage is of alcoholic or viral origin, non-alcoholic fatty liver disease (NAFLD), or mild hepatocellular injury. In this way, it is possible that not all coefficients, indices or ratios will be mentioned in the reports, even if their values are altered.

You will find a complete description by scanning the QR code of this section.

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Outcome

Tumor Marker Results

Some tumor markers are outside the reference range and, in the case of an adnexal mass, suggest a potential ovarian carcinoma from colorectal or gastrointestinal (GI) origin.

Visual Risk Scale

Hepatobiliary Function Comments

Total Bilirubin is outside the reference range and could suggest an undetermined mild hyperbilirubinemia —neither conjugated nor unconjugated—, with some hepatic enzymes slightly outside the reference range which, in principle, should not significantly affect the levels obtained for tumor markers.

Renal Function Comments

Both Glomerular Filtrate Rate (GFR) as well as Albumin-to-Creatinine Ratio (ACR) suggest a grade G2/A2 renal function which, in principle, should not affect the levels obtained from tumor markers, as it only signifies a mild reduction in renal function.

Final Comments

It is important to note that the elevation of some tumor markers is not exclusive to malignant processes. Several benign diseases —mainly hepatic or renal disorders, since tumor markers are catabolized in the liver and excreted through the kidneys—, may lead to transient or moderate increases in these markers, which must be taken into account when interpreting results, such as: acute or chronic hepatitis, liver cirrhosis or hepatic regeneration processes for AFP; normal pregnancy or benign trophoblastic disorders for Beta-hCG; pancreatitis, cholangitis, gallstones, liver cirrhosis, and biliary obstruction for CA 19.9; benign gynecological conditions —such as endometriosis, uterine fibroids or benign ovarian cysts, among others—, for CA 125; smokers and benign conditions such as inflammatory bowel disease, pancreatitis, liver cirrhosis or chronic obstructive pulmonary disease (COPD) for CEA; and chronic kidney disease or certain inflammatory states —particularly in older women—, for HE4.

However, in this specific case, the observed pattern, the magnitude of the elevation, and the combination of the analytical results consistently point toward the presence of a malignant process. Specifically, low CA 125/CEA Ratio suggest a secondary ovarian malignancy from colorectal or gastrointestinal (GI) origin.

Conclusions

We suggest general practitioner (GP) consultation or, if it has been more than 6 months since your last visit to a gynecologist, we suggest that you schedule an appointment with him to confirm or discard these findings.

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