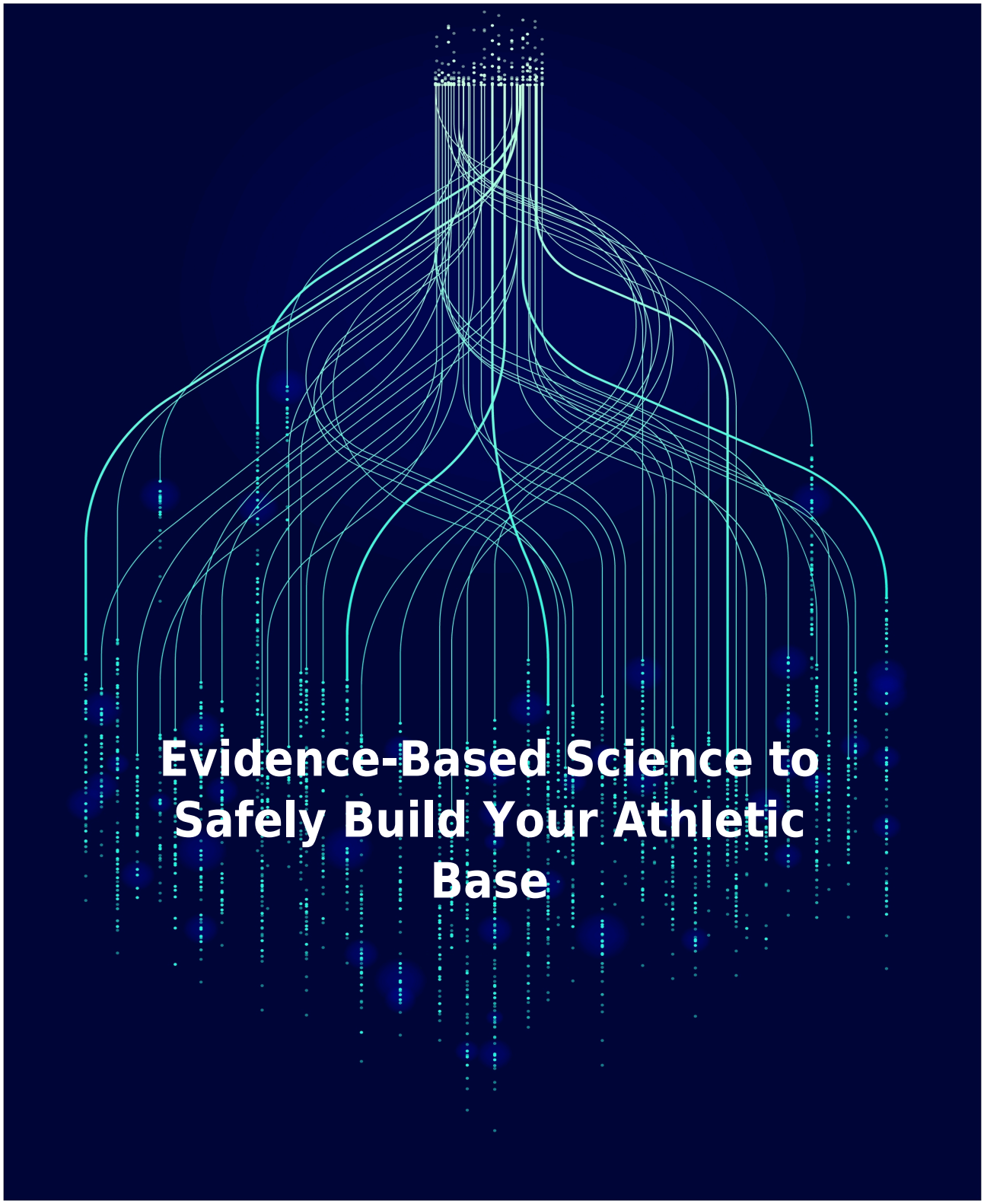
Athletic Starting Checkup

Detect, Act, Live Longer



Blueberry Diagnostics, S.L.
Benet Mateu, 40
08034 Barcelona (Spain)
hello@blueberrydx.com
www.blueberrydx.com

TERMS AND CONDITIONS

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.

THIS REPORT CONTAINS A SERIES OF INTERPRETATIVE COMMENTS DEVELOPED FROM THE BEST AVAILABLE SCIENTIFIC EVIDENCE RELATED TO ATHLETIC PERFORMANCE AND PHYSICAL CAPACITY, AS WELL AS THE LATEST MEDICAL AND CLINICAL ADVANCES, IN ORDER TO PROVIDE AN UPDATED AND SUBSTANTIATED OVERVIEW OF YOUR FUNCTIONAL RESERVE AND METABOLIC STATUS. BY CONTINUING TO READ THIS REPORT, YOU ACKNOWLEDGE YOUR ACCEPTANCE OF THE TERMS AND CONDITIONS ESTABLISHED HEREIN, AS WELL AS ALL WARNINGS AND LIMITATIONS CONTAINED WITHIN IT, EXPRESSLY RELEASING THE COMPANY FROM ALL LIABILITY.

Blueberry Diagnostics

XXES-117002094-00000004c

Report with Interpretative Commenting

Patient Information

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Identification Data		Personal Data	
Patient ID:	ES-XXXXXXXX	Gender at Birth:	Male
Patient Name:	JOHN	Date of Birth (day/month/year):	12/10/1971
Patient Surname:	SAMPLE	Age (years):	54
Blood Collection Date:	18/03/2026		

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

Hemogram	Value	Min	Max	Visual Score
RBC Count (x10^12/L):	4.69	4.20	5.80	
Hgb (g/dL):	15.30	13.00	17.50	
HCT (%):	44.50	40.00	55.00	
HCT-to-Hgb Ratio:	2.91		3.20	

Red Blood Cell Indices	Value	Min	Max	Visual Score
MCV (fL):	94.88	80.00	101.00	
MCH (pg):	32.62	25.00	35.00	
MCHC (g/dL):	34.38	28.00	37.00	
RDW (%):	16.00		22.00	

Electrolytes	Value	Min	Max	Visual Score
Calcium (mg/L):	95.70	83.00	106.00	
Chloride (mmol/L):	106.00	102.00	111.00	
Potassium (mmol/L):	4.25	3.50	5.10	
Sodium (mmol/L):	143.00	136.00	145.00	

Corrected Electrolytes	Value	Min	Max	Visual Score
Corrected Chloride (mmol/L):	106.00	102.00	111.00	

Electrolytic Ratios	Value	Min	Max	Visual Score
Na-to-K Ratio:	33.65	30.00	50.00	

Proteins	Value	Min	Max	Visual Score
Cystatin C (mg/L):	0.89	0.62	1.11	
Ferritin (ng/mL):	37.80	22.00	322.00	

Hepatic Enzymes	Value	Min	Max	Visual Score
ALT (IU/L):	16.00		49.00	

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

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Sterols & Fatty Acids	Value	Min	Max	Visual Score
Total Cholesterol (mg/dL):	170.00		200.00	
HDL-c (mg/dL):	46.00	40.00		
Non-HDL-c (mg/dL):	124.00		150.00	
LDL-c (mg/dL):	104.00		130.00	
VLDL-c (mg/dL):	20.00	15.00	70.00	
Triglycerides (mg/dL):	100.00		150.00	

Hormones	Value	Min	Max	Visual Score
Total Testosterone (ng/mL):	6.38	1.88	6.84	
TSH (mIU/L):	1.15	0.55	4.78	
T4 Free (ng/dL):	1.06	0.89	1.76	

Vitamins	Value	Min	Max	Visual Score
Vitamin D 25-OH (ng/mL):	42.28	30.00	100.00	

Other Serum Analytes	Value	Min	Max	Visual Score
Creatinine (mg/dL):	0.97	0.70	1.30	
eGFR (mL/min/1.73m^2):	96.60	90.00		
Creatinine-to-Cystatin C Ratio:	1.09↓	1.10		
Glucose (mg/dL):	100.00	74.00	106.00	
Serum Iron (µg/dL):	94.00	65.00	175.00	

Technical Interferences

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.

Technical Validation of Laboratory Results

Laboratory: Laboratorio Echevarne, S.A.

Coefficients, Indices and Ratios Descriptions

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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.

Evaluation and Adaptation Criteria

NOTE ON EVALUATION CRITERIA: IT IS COMPLETELY NORMAL TO RECEIVE AN ADAPTATION NOTICE IN ANY SCORE PILLAR IN THE FOLLOWING PAGES EVEN IF INDIVIDUAL ANALYTES FALL WITHIN THE NORMAL RANGE OF THE TRADITIONAL LABORATORY, AS TRADITIONAL LABORATORY RANGES ARE SOLELY DESIGNED TO RULE OUT PATHOLOGY OR CLINICAL DISEASE IN THE GENERAL POPULATION.

IN CONTRAST, THE CRITERIA FOR THIS TEST EVALUATE THE READINESS AND INITIAL HOMEOSTATIC RESPONSE OF THE BODY WHEN RESUMING PHYSICAL ACTIVITY AFTER A PERIOD OF INACTIVITY, DETECTING PREMATURE PHYSIOLOGICAL STRESS.

CONSEQUENTLY, AN ALERT IN ANY BLOCK DOES NOT INDICATE DISEASE, BUT RATHER POINTS TO A TRANSIENT HOMEOSTATIC DEFICIT OR ADAPTIVE SATURATION AS THE SYSTEM READJUSTS TO PHYSICAL WORKLOADS.

Athletic Performance Score (APS)

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Summary Results (Athletic Performance Score: 90.00)

Adaptation notice: variables have been detected that require attention before subjecting the body to higher demand efforts. It is common to find certain pillars below optimal thresholds after a prolonged period of inactivity, particularly regarding blood sugar, lipids, or oxygen transport. This does not prevent the start of movement, but it indicates the advisability of opting for progressive, well-regulated workouts while the affected physiological or structural baselines are reinforced.

Athletic Performance Score (APS) Description

The Athletic Performance Score (APS) offers an overview of foundational physical capacity. The APS analyzes oxygenation status (iron transport), electrolyte balance (hydration and neuromuscular function), the primary endocrine axis (testosterone and thyroid function), and the muscular baseline (relative muscle mass and structural condition).

An optimal score indicates that performance life-support and structural systems are correctly aligned, allowing for a robust workload capacity.

However, if this score is lower than expected, the cause usually lies in an imbalance of the hydroelectrolytic baseline, a sub-optimization of iron levels—which limits oxygen delivery during exertion—or a delicate structural baseline due to low relative muscle mass.

In summary, the Athletic Performance Score (APS) measures functional reserve, structural stability, and metabolic capacity to sustain physical efforts based on the following pillars:

Oxygenation and Transport Pillar Results (Score: 95.42)

Oxygen transport capacity and iron stores are within an adequate range for the activity. This means that, despite the period of inactivity, the body retains a good capability to carry oxygen to the muscles, providing a sufficient biological base to begin training while reducing the likelihood of experiencing a premature feeling of shortness of breath.

Hydroelectrolytic Pillar Results (Score: 83.33)

Actual hydration level and cellular mineral balance are well-balanced. This state represents a good condition to return to training, as it provides the muscles with the elasticity and electrical conduction necessary to work on a regular basis, decreasing the risk of cramps or weakness during the first sessions. However, it is important to perform stretching exercises at the end of the workout, especially after the initial sessions.

Endocrine and Metabolic Pillar Results (Score: 99.55)

Metabolic, lipid, and endocrine systems are in an adequate state of balance. The body retains a sufficient biological response despite the time of detraining, showing proper baseline blood sugar management and lipid profiles. This condition provides the baseline energy, muscle strength, and cardiovascular stability necessary to help break the inertia of inactivity and face new physical stimuli safely.

Muscular Pillar Results (Score: 68.18)

The biomarker profile indicates a delicate physical foundation with low relative muscle mass, common after an extended period of inactivity. Starting physical activity from this baseline requires extra caution to protect joints and prevent premature structural fatigue. Incorporating progressive light resistance work is highly advised to safely rebuild this muscular foundation.

Recovery & Fatigue Score (RFS)

CE

Summary Results (Recovery & Fatigue Score: 99.00)

The overall biological recovery capacity is in an adequate state of balance. The body shows a proper disposition to manage energetic substrates, transport oxygen, and restore baseline physiological levels on a regular basis, providing a sufficient safety condition to advance in the physical reactivation process.

Recovery & Fatigue Score (RFS) Description

The Recovery & Fatigue Score (RFS) assesses immediate tissue repair capacity. Through this score, it can be determined whether the body is successfully overcoming the weekly workload by monitoring ferritin, markers of organic damage, and key hormonal levels.

A high score reflects a state of supercompensation where there is readiness to receive new training stimuli.

On the other side, a decrease in this score serves as a preventive alert for accumulated fatigue, indicating that the regenerative systems require nutritional intervention or a period of physical deloading to prevent overtraining.

In summary, the Recovery & Fatigue Score (RFS) quantifies accumulated fatigue and cellular regeneration capacity following training stress based on the following pillars:

Oxygenation Pillar Results (Score: 94.50)

Oxygen transport capacity and iron stores are within an adequate range for the activity. This indicates that the body has the necessary elements (hemoglobin and ferritin) for tissue oxygenation and muscle recovery after the initial exercise sessions, decreasing the likelihood of starting routines with a feeling of heaviness or premature fatigue.

Organic Stress Pillar Results (Score: 100.00)

Internal organic filtration and clearance systems are in an adequate state of balance. The body shows a regular capacity to process and mitigate the normal waste and muscle inflammation derived from starting physical activity, which favors a steady assimilation of the initial sessions.

Metabolic Pillar Results (Score: 99.42)

The metabolic, lipid, and vitamin environment is within an adequate range for cellular regeneration. The body shows stable baseline glucose management, balanced cholesterol fractions, and necessary cofactors (Vitamin D) for nutrient assimilation and molecular reconstruction processes. This supports efficient post-exercise recovery, rapid energy replenishment, and progressive adaptation.

Endocrine Pillar Results (Score: 100.00)

Hormonal signaling is in an adequate state of balance for general recovery. Baseline endocrine levels show a sufficient response to coordinate tissue repair and protein synthesis during rest hours, facilitating a return to exercise under healthy conditions.

Supplements

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Disclaimer: About Supplement Safety

ALTHOUGH SUPPLEMENTS ARE GENERALLY SAFE FOR MOST ADULTS WHEN USED AT RECOMMENDED DOSES AND DURATIONS, EXCESSIVE INTAKE MAY CAUSE GASTROINTESTINAL DISCOMFORT. IN THIS WAY, CAUTION IS NEEDED WHEN COMBINING SUPPLEMENTS WITH MULTIVITAMIN OR MULTIMINERAL COMPLEXES, AS OVERLAPPING INGREDIENTS MAY LEAD TO EXCESSIVE INTAKE.

ALWAYS READ THE PRODUCT LABEL CAREFULLY, INCLUDING EXCIPIENTS AND ADDITIVES, AND CONSULT YOUR DOCTOR OR PHARMACIST IF IN DOUBT. THIS IS ESPECIALLY IMPORTANT FOR INDIVIDUALS WITH A HISTORY OF ALLERGIES, AUTOIMMUNE CONDITIONS, GASTROINTESTINAL DISORDERS, OR THOSE ON CHRONIC MEDICATION.

BEFORE STARTING ANY SUPPLEMENTATION, WE SUGGEST GENERAL PRACTITIONER (GP) CONSULTATION IF YOU HAVE HEART CONDITIONS, LIVER OR KIDNEY DISEASE, A HISTORY OF KIDNEY STONES, EPILEPSY OR BIPOLAR DISORDER. IT IS NOT RECOMMENDED TO INITIATE SUPPLEMENTATION WITH MINERALS, VITAMINS, OR ANY OTHER NUTRACEUTICAL WITHOUT PRIOR CLINICAL OR LABORATORY EVALUATION —SUCH AS THE ONE INCLUDED IN THIS TEST—, TO JUSTIFY ITS NECESSITY —UNNECESSARY USE MAY LEAD TO SEVERE SIDE EFFECTS—.

Warning: Supplements do not Replace a Proper Diet

While nutritional supplements can help correct deficiencies, enhance specific functions, or support targeted treatments, they should not replace a healthy, varied, and balanced diet. In this way, recent studies emphasize the importance of consuming up to 40 different foods per week from the following categories: vegetables rich in fiber, vitamins, and antioxidants; fruits that provide fiber, water, and micronutrients; nuts, seeds, and legumes; healthy animal and plant-based proteins; whole grains, tubers, and natural derivatives; dairy and fermented options; healthy fats; and natural herbs and spices.

Finally, once serum levels are normalized by improving your diet or recommended supplementation, reducing to a maintenance dose —or stopping completely—, may be appropriate, depending on ongoing clinical and laboratory evaluation.

Recommended Supplements to Enhance Athletic Performance Score (APS) CE

Supplementation to Enhance the Muscular Pillar

To establish a solid structural foundation and support muscle adaptation, we suggest Sports Medical Doctor or General Practitioner (GP) consultation to evaluate starting supplementation with the simultaneous combination of Creatine Monohydrate and Whey Protein or Essential Amino Acids (EAA), defining the dosage according to your needs. Creatine increases intracellular hydration —acting as a hydraulic buffer to protect deconditioned tendons—, while protein provides the essential building blocks to safely reverse disuse atrophy.

On the other hand, if symptoms of joint stiffness, clicking, or discomfort in your knees, ankles, or lower back were to appear when restarting movement, adding Hydrolyzed Collagen or UC-II Collagen would help restore elasticity and structural integrity to your connective tissues.

Recommended Supplements to Enhance Recovery & Fatigue Score (RFS) CE

No Supplementation Required Across All Pillars of the Recovery & Fatigue Score

The recovery systems are functioning efficiently, showing no signs of systemic stress or early exhaustion from initial exertion. The organism is successfully managing cellular repair, oxygen transport, and nutrient utilization during rest periods.

Exogenous recovery compounds are not needed, as your baseline lifestyle choices are providing perfect physiological restoration.

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Benet Mateu, 40
08034 Barcelona (Spain)
hello@blueberrydx.com
www.blueberrydx.com

Supporting Scientific Literature

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Peer-Reviewed Studies and Clinical Evidence Underwriting our Scoring Algorithms

The following is a selection of indexed scientific literature and international consensus statements underpinning the development of our analytical models. These references validate the optimized thresholds for athletes, ensuring that the assessment of their homeostasis, metabolic profile, and adaptive capacity is conducted under the highest standards of contemporary sports medicine.

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Technical note: Bibliographic references are formatted in accordance with international Vancouver/American Medical Association (AMA) biomedical standards.

Blueberry Diagnostics, S.L.
Benet Mateu, 40
08034 Barcelona (Spain)
hello@blueberrydx.com
www.blueberrydx.com