April 2026

ESSENCE LINE

RELIABLE PLACE FOR COMPLEX BUT MEANINGFUL DIAGNOSIS

Product Portfolio

Microbiome, Genetic & Advanced Diagnostic Testing

DNA & GENETIC Testing

We provide **advanced genetic testing solutions** designed to deliver actionable insights for personalized healthcare, prevention, and treatment optimization.
Our portfolio includes **pharmacogenetic analysis** and **carrier screening**, enabling informed clinical and lifestyle decisions.

OVERVIEW

Precision at the molecular level — from a single sample to a lifetime of informed decisions.

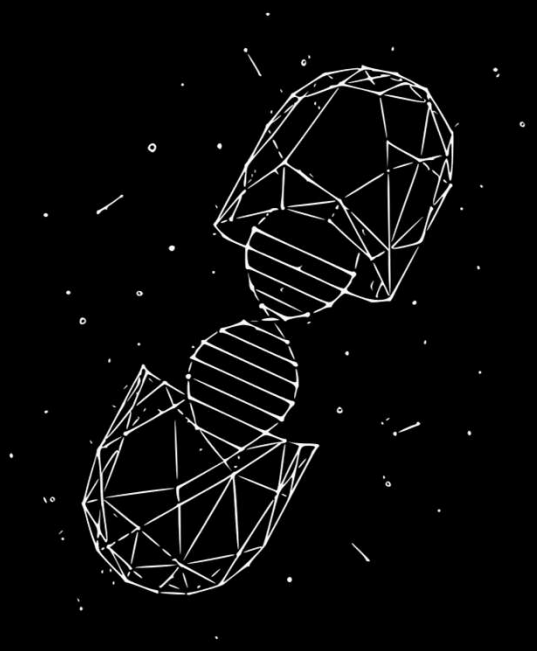
Genetic information is among the most powerful tools available in modern medicine. Our Essence Line genetic portfolio bridges the gap between raw genomic data and meaningful clinical action, offering validated assays across two core disciplines: pharmacogenomics and reproductive carrier screening. Each solution is designed for seamless integration into clinical workflows, with clear, structured reporting tailored to both specialists and patients.

„Empowering clinicians with the genetic context to make every treatment decision a precisely informed one.“

Each report is structured for direct integration into the clinical decision-making process.

PHARMACO-GENETICS

Analysis of genetic variants influencing individual drug metabolism, efficacy, and adverse reaction risk. Supports evidence-based prescribing across oncology, psychiatry, cardiology, and pain management.



90
DRUGS ANALYSED

22
GENOTYPES TESTED

10
THERAPY AREAS

Blood
THERAPY AREAS

PharmEssence combines genotype analysis and copy number variation (CNV) testing into a single, comprehensive report. Each result is translated into a clear metaboliser classification — enabling clinicians to adjust dosing, select safer alternatives, or anticipate adverse reactions before treatment begins.

HOW IT WORKS

01

SAMPLE

Buccal swab or blood draw — minimal invasive collection, no special preparation required.

02

GENOTYPING

NGS analysis of 17 gene loci + CNV analysis of 5 additional genes (CYP2A6, CYP2D6, GSTM1, GSTT1, UGT2B17).

03

ANALYSIS

Automated phenotype prediction — Poor, Intermediate, Normal, or Ultra-rapid Metaboliser classification.

04

REPORT

Structured clinical report with drug-specific guidance across all 10 therapy areas, ready for prescribing decisions.

THERAPY AREAS

ONCOLOGY

DPYD for fluoropyrimidine toxicity risk, TPMT & NUDT15 for thiopurine safety, UGT1A1 for irinotecan dose guidance.

Fluorouracil · Kapecitabin · Irinotekan · Tamoxifen · Merkaptopurin · Thioguanin · Azathioprin · Tegafur · Dronabinol

HIGH-IMAPCT

PSYCHIATRY

The largest therapy area in the panel — CYP2D6 and CYP2C19 profiling covers the majority of antidepressants and antipsychotics.

Amitriptylin · Aripiprazol · Citalopram · Escitalopram · Haloperidol · Klomipramin · Paroxetin · Risperidon · Venlafaxin · Vortioxetin + 15 others

MOST REQUESTED

ANALGETICS · CARDIOLOGY · NEUROLOGY · GASTROENTEROLOGY · HEMATOLOGY · INFECTIOUS DISEASES · RHEUMATOLOGY · TRANSPLANTATION & ANESTHESIOLOGY

SELECTED GENE PANEL

GENE	PRIMARY FUNCTION	KEY DRUGS / AREAS	ANALYSIS TYPE
ABCG2	Urate & drug transporter	Alopurinol, Rosuvastatin	VARIANT
CYP2C19	PPI & antiplatelet & SSRI metabolism	Klopidogrel, Omeprazol, SSRIs, Vorikonazol	VARIANT
CYP2D6	Largest single drug-metabolising enzyme	Kodein, Tramadol, Antidepressants, Antipsychotics	VARIANT CNV
CYP4F2	Vitamin K metabolism	Warfarin	VARIANT

Full panel of 22 genotypes available on request. Table shows a representative selection.

„The right drug, at the right dose, for the right patient — guided by their unique genetic profile.“

Report structured for direct use in clinical decision-making across all 10 therapy areas, interpretable by clinician and patient alike.

AVAILABLE TESTS

STARTER PANEL

3-GENE PHARMACOGENETIC PANEL

An accessible entry point to pharmacogenomics — three key metabolising genes covering a broad range of commonly prescribed drugs across cardiology, psychiatry, and gastroenterology.

GENES INCLUDED

CYP2C9	*NSAIDs, anticoagulants, antiepileptics*
VKORC1	*Vitamin K cycle · warfarin sensitivity*
CYP2C19	*PPIs, antidepressants, clopidogrel*

Blood · Buccal swab · Saliva

3 GENES

LIFESTYLE · NUTRITION

LACTOSE INTOLERANCE

Genetic determination of lactase persistence — identifying variants in the LCT gene that predict lifelong ability or inability to digest lactose. Covers a comprehensive panel of 27 variants for reliable population-wide detection.

GENE & VARIANT COVERAGE

LCT	*27 variants · lactase persistence / non-persistence*

Blood · Buccal swab · Saliva

27 VARIANTS

SAFETY · CARDIOLOGY

WARFARIN SENSITIVITY

Warfarin has one of the narrowest therapeutic windows of any commonly used drug. Variants in CYP2C9 and VKORC1 directly determine individual dose requirements — reducing the risk of bleeding or thrombotic events from the very first dose.

VARIANTS ANALYSED

CYP2C9	**2 · *3 — reduced enzyme activity*
VKORC1	*c.-1639G>A — vitamin K cycle sensitivity*

Blood · Buccal swab · Saliva

3 VARIANTS

SAFETY · CARDIOLOGY

CYP2C19 TOXICITY PANEL

CYP2C19 variants determine whether clopidogrel is converted to its active form and how mavacamten is metabolised. Poor metabolisers on clopidogrel face inadequate platelet inhibition; ultrarapid metabolisers on mavacamten risk supratherapeutic exposure.

VARIANTS ANALYSED

CYP2C19	**2 · *3 — loss of function (poor metaboliser)*
CYP2C19	**17 — gain of function (ultrarapid metaboliser)*

Blood · Buccal swab · Saliva

3 VARIANTS

„Targeted testing delivers the specific answer a clinical decision needs — without unnecessary complexity.“

EssenceBIOM Microbiom

Your microbiome is **a fingerprint unlike any other** — a living ecosystem of billions of microorganisms shaping your digestion, immunity, and wellbeing. EssenceBiom delivers a comprehensive picture of its balance, composition, and functional capacity, from **a simple home collection kit**.

> EssenceBIOM analyses the **entire microbial community** and its balance — quantifying both protective and risk-associated microorganisms. The result is a structured, clinically meaningful report that goes far beyond a simple pathogen screen.

HOW IT WORKS

01
ORDER

A home collection kit is dispatched directly to the client — everything needed for a self-sample.

02
COLLECT

Self-collection at home — a simple interdental brush sampling (Dental) or stool collection (Gut). No clinic visit required.

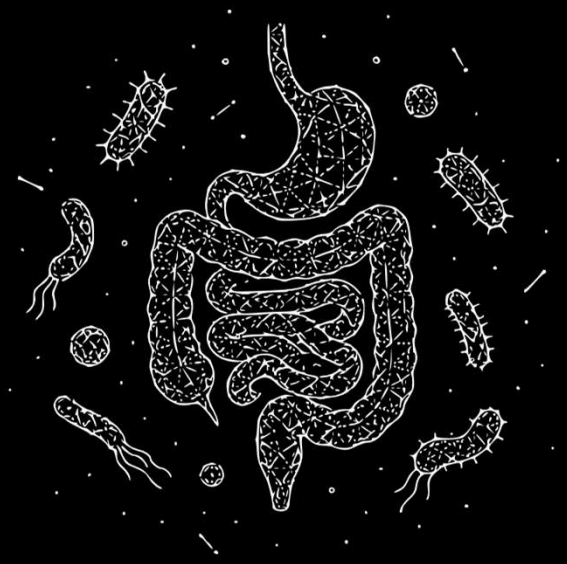
03
RETURN

The sealed sample is returned to our laboratory by post. Pre-paid return packaging included in every kit for clients within the Czech Republic.

04
REPORT

Deep sequencing analysis of the full microbial community. A clear, structured report is delivered to the client.

EssenceBIOM Gut



Comprehensive profiling of the intestinal microbiome — from bacterial diversity and strain balance to short-chain fatty acid producers, probiotic bacteria, and gastrointestinal pathogens.

5
BACTERIAL PHYLA

11
PATHOGENS SCREENED

Stool
SAMPLE TYPE

Home
SELF-COLLECTION

WHAT THE REPORT COVERS

01

MICROBIAL DIVERSITY

Shannon and Simpson indices measure species richness and evenness — higher diversity signals a more resilient, stable microbiome.

02

F/B RATIO

The Firmicutes/Bacteroidetes ratio reflects metabolic balance. Elevated values are associated with increased energy absorption and weight gain tendency.

03

BACTERIAL PHYLA

Quantification of 5 key phyla — Bacillota, Bacteroidota, Actinomycetota, Pseudomonadota, Verrucomicrobiota — each with distinct roles in gut health.

04

PROBIOTIC BACTERIA

Assessment of *Lactobacillus*, *Bifidobacterium*, *S. thermophilus*, and *Enterococcus faecium* — the cornerstone species of a healthy gut flora.

05

SCFA PRODUCERS

Short-chain fatty acid bacteria — *Roseburia*, *Blautia*, *F. prausnitzii*, *Akkermansia* — protect the gut lining and reduce systemic inflammation.

06

PATHOGEN SCREEN

Targeted detection of 11 clinically relevant gastrointestinal pathogens — including *C. difficile*, *Salmonella*, *Campylobacter*, and EHEC.

„A balanced gut microbiome is the foundation of digestive health, strong immunity, and lasting vitality.“

Sample collected at home, returned via post. Report delivered digitally.

EssenceBIOM Dental

The first test to deliver a full functional picture of the oral microbiome — protective capacity, caries risk, periodontal risk, and halitosis profile in a single report.

6
AREAS OF INSIGHT

3
PERIODONTAL INDICES

Interdental plaque
SAMPLE TYPE

Home
SELF-COLLECTION

WHAT THE REPORT COVERS

01

PROTECTIVE CAPACITY

Your oral microbiome contains bacteria that actively defend your mouth — maintaining stable pH, crowding out harmful species, and reducing the risk of both cavities and gum inflammation.

02

ACIDOGENIC POTENTIAL

Every time you eat sugar, certain bacteria ferment it and release acid that slowly wears down enamel. This module measures how dominant those bacteria are in your mouth.

03

CARIOGENIC INDEX (CKI)

A complete picture of your cavity risk — not just whether harmful bacteria are present, but whether your protective species are strong enough to keep them in check.

04

PERIODONTAL RISK

Certain bacteria trigger chronic inflammation deep in the gum tissue, often silently and without early symptoms. This module detects them before damage becomes visible.

05

HALITOSIS PROFILE

Bad breath is almost always bacterial in origin. Specific microbes produce sulphur compounds as a byproduct of their activity — this module identifies which ones are present and at what level.

06

DIVERSITY INDEX

A rich, varied microbiome is a stable one. The more diverse your oral ecosystem, the harder it is for harmful bacteria to gain a foothold — and the more resilient your mouth is over time.

„Oral health is a window to whole-body health — and it starts with understanding what lives in your mouth“

Tooth-surface swab collected at home. Report structured for patient and dentist alike.

ESSENCE LINE · HOME DIAGNOSTICS

Dry Blood Spot Home Testing

Clinical-grade biomarker testing from a **single fingerprick at home.** Dry blood spot technology delivers laboratory accuracy without a clinic visit — enabling proactive health monitoring for stress, metabolism, immunity, and more.

> A fingerprick onto a collection card, left to dry, and posted back to our laboratory. No needles, no clinic, no waiting room. Results are delivered digitally — giving you the same data as a blood draw, on your own schedule.

HOW IT WORKS

01

ORDER

Collection kit dispatched to your address — lancet, DBS card, and return envelope included.

02

COLLECT

A single drop of blood from the fingertip onto the collection card. Takes under two minutes.

03

RETURN

The sealed sample is returned to our laboratory by post. Pre-paid return packaging included in every kit for clients within the Czech Republic.

04

REPORT

Laboratory analysis with digital results delivery — including interpretation and reference ranges.

X

AVAILABLE TESTS

STRESS & SLEEP

Cortisol Test

Cortisol regulates the body's response to stress, metabolism, immunity, and sleep rhythm. Chronically elevated or suppressed levels — or a disrupted diurnal pattern — can drive burnout, sleep disorders, and chronic fatigue. The test captures both the morning peak and evening decline, revealing any dysregulation of the HPA axis.

BONES & IMMUNITY

Vitamin D Test

Vitamin D is essential for bone density, immune defence, and mood regulation. Deficiency is widespread, particularly in Central Europe. Our test measures both forms of vitamin D separately — giving you the precision to know exactly whether supplementation is needed and at what dose.

DIABETES & GLYCAEMIA

HbA1c Test

HbA1c reflects average blood glucose over the preceding 2–3 months and is the key indicator of type 2 diabetes risk. Early detection of prediabetes creates a meaningful window to reverse the trajectory before serious complications develop. Quarterly monitoring recommended.

ENERGY & CELLULAR HEALTH

NAD Level Test

NAD is a coenzyme essential for energy metabolism, DNA repair, and cellular function. Levels decline naturally with age, manifesting as fatigue and reduced cognitive performance. If you are considering NR, NMN, or NAD infusion supplementation, this test establishes your baseline and verifies the real-world effect.

„The same data as a clinic blood draw — from the comfort of your own home, on your own schedule.“

All tests use validated dry blood spot technology. Results include reference ranges and clinical interpretation.

OmegaESSENCE
Fatty Acid Profile

The balance between omega-3 and omega-6 fatty acids profoundly influences **cardiovascular health, systemic inflammation, brain function**, and immune regulation. An imbalanced ratio — common in modern diets — can quietly drive heart disease, autoimmune conditions, and skin disorders over years. This test measures your precise ratio and gives you the data to correct it through nutrition or supplementatio.

5
INDEXES MEASURED

26
FATTY ACIDS PROFILED

DBS
HOME COLLECTION

WHAT THE REPORT COVERS

OMEGA-3 INDEX · OMEGA-6 : OMEGA-3 RATIO · AA : EPA RATIO
TRANS FAT INDEX · OMEGA-9 INDEX

WHAT AN IMBALANCED PROFILE CAN INDICATE

— Increased systemic and cardiovascular inflammation

— Higher risk of coronary artery disease and related mortality

— Impaired immune regulation and wound healing

— Risk of non-alcoholic fatty liver disease (NAFLD)

— Potential contribution to mood disorders and cognitive decline

WHAT THE REPORT DELIVERS

— All 5 indices with values, reference ranges, and interpretation

— Complete profile of 26 individual fatty acids

— Omega-3, -6, -7, -9 breakdown plus saturated fat levels

— Dietary and supplementation guidance per result

— Recommended monitoring interval

GENETIC ADD-ON

Fatty Acid Metabolism Test

While the Fatty Acid Profile Test tells you where you are today, the genetic panel tells you why — and what that means for the long term.

WHAT THIS TEST ADDS

A fatty acid imbalance can have two very different causes — a diet that can be corrected, or a genetic predisposition that requires long-term management. Without genetic context, it is impossible to tell which one you are dealing with. This panel screens for variants in four genes that directly govern how your body processes, stores, and utilises dietary fats — providing the missing piece that transforms a snapshot into a complete clinical picture.

Can be ordered as a standalone test or combined with the Fatty Acid Profile Test.

01

GENETIC PREDISPOSITION

Whether your fatty acid imbalance has a genetic component that will persist regardless of dietary changes — requiring targeted long-term strategy.

02

SUPPLEMENTATION RESPONSE

Whether omega-3 supplementation is likely to be effective — genetic variants in conversion enzymes directly determine how well your body utilises EPA and DHA from supplements.

03

SILENT LIVER RISK

Early identification of NAFLD genetic risk — enabling preventive dietary and lifestyle intervention before the condition becomes clinically detectable.

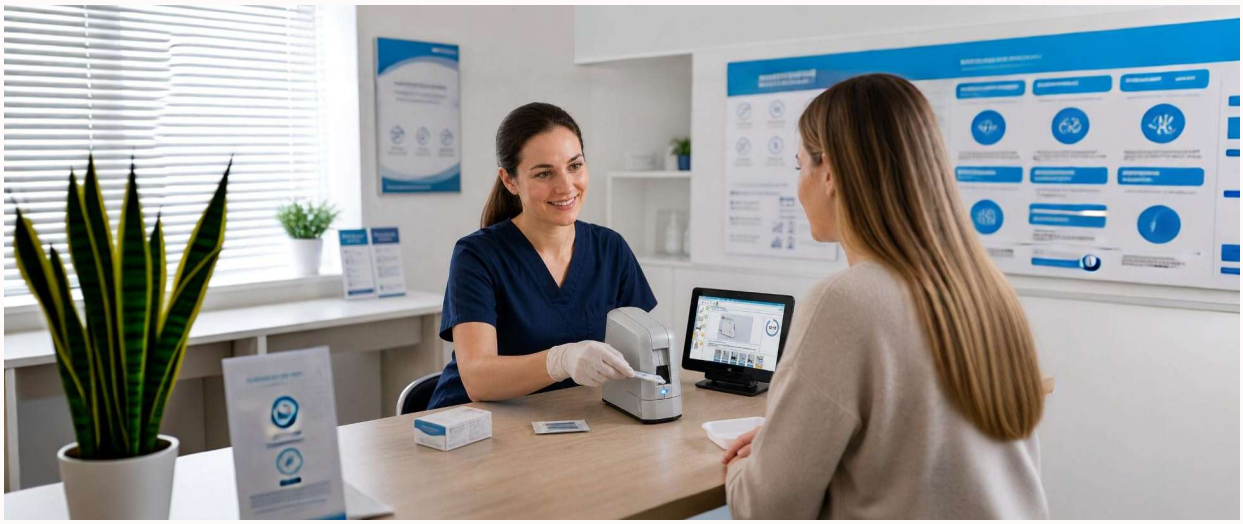
RECOMMENDED COMBINATION

Fatty Acid Profile Test + Fatty Acid Metabolism Genetic Panel — biochemical measurement of where you are today, combined with the genetic context of why. The most complete picture of your fatty acid health available from a single home collection.

+ Bundle

Point-of-Care Testing

Laboratory-grade diagnostic results at the moment and place of care — without sending samples away, without waiting days, and without losing the clinical window when it matters most.



Point-of-care testing brings molecular diagnostic capability directly to the clinical setting — the dental chair, the consultation room, the GP practice. The result is available before the patient leaves, enabling an immediate, evidence-based clinical decision in the same appointment.

TRADITIONAL LABORATORY	POINT-OF-TESTING
— Sample collected and sent to external laboratory — results in 3–7 days	— Fully automated analysis at the practice — result within the same appointment
— Treatment planning postponed to a second appointment	— Treatment plan created and communicated to the patient on the same day
— Patient motivation often lost in the waiting period — compliance drops	— Visible result at the chairside — immediate patient understanding and buy-in
— Logistics, packaging, and courier costs add to the overall expense	— No logistics, no external invoicing — simple integration into standard workflow