Management and scientific direction of LABFIT is held by two pharmaceutical researchers specialized in the area of Microbiology and Pharmaceutical Technology, also managing partners. Our technical team consists of highly qualified pharmaceutics and biochemists comprising the different areas of operation of the company. LABFIT is a young, highly qualified team motivated to a professional performance that seeks the continuous improvement of all procedures. We guarantee our full commitment with quality and with our customers.

LABFIT is a Portuguese company based in UBIMEDICAL - a health business incubator of Beira Interior University (Covilhã) – with strong links to the university background knowledge.

It has been created in 2012 by two pharmaceutical researchers of the Centro de Investigação em Ciências da Saúde (CICS-UBI), a health and science research centre. It’s a company that promotes scientific knowledge specialized in rendering services of excellence focused in different areas of the manufacturing and transformation industries. Labfit operates in the national and international markets rendering services product characterization and quality control and as well as R&D (research & development) of pharmaceutical products.

Our R&D activity has produced patented innovative products for the pharmaceutical market that stand as a disruptive strategy in the treatment of topical affections and symptoms relief.

LABFIT provides an interesting set of laboratorial tests, including alternatives to the use of animal testing, in a clear commitment to the 3R’s policies and conformity to the current legislation for cosmetics.

Its activity is certified since 2014 for total quality according to the ISO 9001 standard and in 2015, the NP4457 standard has also recognized the expertise of its research, development and innovation along with the ISO13485 standard that acknowledges our skills in the development and characterization of medical devices.

Labfit HPRD
Health Products Research and Development, Lda
Edifício UBIMEDICAL
Estrada Municipal 506
6200-284 Covilhã
Tel. +351 279 241 271
info@labfit.pt
www.labfit.pt

Professional team specialized in pharmaceutical technology, microbiology, chemical characterization, toxicology and integrated quality control systems thus providing highly qualified and specialized customer services.

www.labfit.pt
QUALITY CONTROL OF RAW MATERIALS AND PRODUCTS (PH.EUR., USP)
- PH, VISCOSITY, DENSITY, OSMOLALITY, WATER CONTENT (KARL FISCHER), DRY EXTRACT, REFRACTION INDEX, PEROXIDE INDEX, SOLID CONTENT, ASH CONTENT.

CHEMICAL CHARACTERIZATION
- HPLC and GC-FID quantification of drugs and cosmetic ingredients.
- Quantification of Fe, Heavy metals (Ph. Eur., USP) and residual solvents and other chemicals.
- Acid index, Saponification index, active matter, anionic matter, non ionic active matter, volatile matter.
- Mineral residues, total hydrocarbons, urea, alchohol content, TOC.

SAFETY / TOXICITY ASSAYS
- Drug/ingredient skin permeation (OECD TG 428).
- Skin irritation OECD TG 439.
- Oral and gingival irritation (Skinetic model).
- Skin corrosion OECD TG 431.
- Skin sensitization: DPRA (OECD TG 442), Lu-sens (OECD TG 442D), h-CLAT (OECD TG 442E).

IN VITRO STUDIES
- Eye irritation test - HET CAM (ICCVAM).
- Vaginal irritation test – adapted from HET CAM (Labfit’s innovation).
- Vaginal irritation test (Epivilaginal® model).
- Cytotoxicity (ISO 10993-5), phototoxicity (OECD 432), genotoxicity - micronucleus (OECD TG487), mutagenicity - Ames (OECD 471).
- Biodegradability (OECD 301F).
- In vitro permeation test (Franz Cells, human and animal models - OECD TG 428).

LABFIT HAS A BROAD MICROBIAL STRAINS COLLECTION OBTAINED FROM CLINICAL SAMPLES AND FROM OFFICIAL COLLECTIONS (ATCC®, DSMZ®) THAT ALLOW THE DETERMINATION OF ANTIBIOTIC SUSCEPTIBILITY PROFILES AND BIOACTIVITY OF RAW MATERIALS AND FORMULATIONS TO SUPPORT CLAIMS.
- Antimicrobial activity: minimum inhibitory concentration and minimum lethal concentration determination.
- Preservative profile characterization: studies upon Challenge Test microorganisms.
- Antibiofilm activity: inhibition of metabolic activity and biomass destruction.
- Antibiofilm activity: inhibition of microorganisms related with bad odor.
- Wound healing activity: inhibition of microorganisms responsible for wound infections.
- Anti-acne and anti-lice effect (lice growth inhibition or death; preventive effect - adhesion to hair).
- Cell culture efficacy studies with different human cell lines (keratinocytes, fibroblasts, macrophages, female genital tract cells) and animal cell lines.
- Anti-inflammatory and anti-oxidant effects (colorimetric assay and PCR, enzymatic assays, protein quantification) Photoprotective effect (UVA/UVB radiation and neutral red uptake).
- Anti-ageing effect; healing and regeneration effect.
- Hand desinfection and hygiene (in vivo): EN1499, EN1500, EN12791.
- Assays for claim support of: -detergents, biocides, food products, textiles, shoes, plastic materials and other products: EN1040, EN1276, EN1656, EN13697, EN 13727, EN12054, PR12054, EN1275, EN1657, EN13697, EN13624, EN1650, EN13704; -disinfectant towels (EN16615).
- -plastics and non-porous surfaces (ISO22196).
- shoes (ISO22196) and textiles (ISO20645, ISO20743, ISO13629, NPEN14119, ASTM E2149, AATCC147, AATCC100).

LABFIT ACQUIRED EXPERIENCE ALLOWS US TO PROVIDE A WIDE RANGE OF ANALYTICAL TECHNIQUES IN ORDER TO OFFER OUR CLIENTS A EXTENSIVE RANGE OF TESTS IN DRUG PRODUCTS, MEDICINAL, COSMETICS AND BODY CARE PRODUCTS, FOOD SUPPLEMENTS AND OTHERS.
- High efficiency liquid chromatography, diode array detection (HPLC-DAD).
- Liquid chromatography with mass spectrometry (LC-MS).
- Gas chromatography, FID detection (GC-FID).
- Gas chromatography, mass spectrometry (GC-MS).
- Atomic Absorption Spectrometry: flame and graphite.
- UV / VIS spectrometry.
- Infrared spectrometry.
- Potentiometric titrations.
- Chromatography, Colorimetry.
- Scanning microscopy.
- Electronic Microscopy.
- Confocal microscopy.
- Flow cytometry.
- Stability chambers.
- Franz Cells.
- Microsometer.
- Viscometer.
- Biological Security Chamber.
- Micropipettes.
- Autoclave.
- Colony counter.
- Incubator hatcher.
- Water baths.
- Fridges.

EFFICACY/BIOACTIVITY ASSAYS
- Personal Care Products
  - Report for claim substantiation (Reg (EU) 655/2013 and guidelines)
  - Label review
  - Product Information File – PIF (Reg (EC) 2233/2009
  - Electronic notification to EU authorities (CPNP)
  - Safety data and technical sheets of ingredients (Reg 1907/2006)
  - Bibliography search to support the development of new products
  - Implementation of Quality Systems.