



WHO WE ARE

VECTORB2B was established in 2019

as an organisation for research, innovation and development

The shareholders are a strong and complementary set of renowed academic and industrial partners within the Portugal health sector















Together we form a robust asset of **Knowledge** and **Innovation**







ONE-STOP SHOP

Clinical Research Roadmap from Preclinical to Clinical



DISCOVERY
& SCREENING
Proof of Concept Studies
in Vitro & in Vivo



TOXICOLOGY

GLP/non-GLP

Rodents & Non-Rodents



CMC
From Lab Scale to GMP
Small Molecules & Biologics



CRO
Phase I-III Clinical Trials
Phase IV After Market
including Epidemiological
and Observational Studies



R&DPORTFOLIO
MANAGEMENT

TARGET

HIT

LEAD

CANDIDATE

DRUG/ MEDICAL DEVICE/ HEALTH PRODUCT





Services

Discovery services span across multiple therapeutic areas and classes of molecules

VECTORB2B offers the scientific expertise and technical capabilities required to support your drug/ health product discovery projects from target identification all the way through IND submission

High scientific and technological knowledge in the innovation and development of health products

Accelerate the research and development of our clients potential solutions in health



DISCOVERY

Main therapeutic areas

ONCOLOGY

- In vitro and in vivo studies in cancer models, including lymphoma, glioblastoma, breast cancer, lung cancer and other customizable models
- Xenograft models
- Syngeneic models
- Metastasis models

INFECTIOUS DISEASES

- Evaluation of Minimum Inhibitory (MIC) and Minimum Bactericidal Concentration (MBC)
- Antiviral drug screening under Biosafety Levels 2 and 3
- Antiviral activity in tissue-specific cell lines
- Antiviral activity in textiles and plastics
- Custom-tailored assays

OPHTHALMOLOGY

- In vitro and in vivo models of injury, inflammation, diabetic retinopathy, glaucoma and age-related macular degeneration
- Retina cell cultures (including organotypic cell cultures)
- Cell lines from mouse and human (including endotelial, retinal Muller and microglial cell lines)
- Porcine Corneal explants to assess wound healing
- Customized models

NEUROSCIENCE

- ► Cell cultures, including primary cell cultures, cell lines, organotypic, 3D cell cultures
- In vivo models, including Alzheimer's and Parkinson's diseases, Epilepsy, Multiple Sclerosis, Amyotrophic Lateral Sclerosis
- Customized models
- Behavioral and functional assays available, including electrophysiology and preclinical imaging (including MRI, PET, SPECT)







Main therapeutic areas

ANTIBODIES

- High throughput free immobilization immunoassays and antibody screening
- Antibody assessment and engineering (affinity, concentration, kinetics, protein interactions, stability, solubility, humanization, single-domain antibodies-SdAb)
- Mechanism Of Action (FcRn binding assays, ADCC & ADCP assays, agonist/blocking assays, cell reporter assays)

CAR-T CELL THERAPY

- ► CAR design, expression
- ► CAR function & characterization/assessment
- CAR activation & specificity
- CAR cytotoxicity
- CAR exhaustion

IMMUNOGENICITY

- Anti-drug antibodies (ADA) screening
- Detection of neutralizing ADA (Nab)
- Drug tolerant assays to detect ADA immune complexes
- Binding affinity and ADA serum concentration in clinical samples
- Customized PK assays to support therapeutic drug management
- Characterization of ADA response in long-term enzyme replacement therapies

BARRIER MODELS

- ► In vitro Blood Brain Barrier (BBB)drug translocation assays and evaluation of BBB integrity
- Caco-2 (human colon adenocarcinoma cell line) model to evaluate intestinal barrier drug translocation
- ▶ TEER measurement
- Determination of Apparent Permeability (Papp) of test compounds in both directions (detection through fluorescence or HPLC)







TOXICOLOGY

Services

We design and execute your preclinical GLP/ non-GLP toxicology studies, ensuring the success of your drug/ health product development program while meeting global standards and specifications for quality and compliance

GLP certified facilities





TOXICOLOGY

Services

GENERAL IN VIVO TOXICOLOGY

- Acute Toxicity
- Sub-acute (28 days) toxicity
- Sub-chronic (90 days) toxicity
- Chronic Toxicity

SAFETY PHARMACOLOGY

- Central Nervous System Irwin Test
- Cardiovascular System hERG and Purkinje studies
- Respiratory System whole body plethysmography

IN VITRO STUDIES

- Skin sensitization (OECD TG 442C,D,E)
- ► Skin absorption (OECD TG 428)
- Skin irritation (OECD TG 439)
- ► Eye irritation (OECD TG 492)
- Skin corrosion (OECD TG 431)
- Phototoxicity (OECD TG 432, 498)

GENOTOXICITY

- ► Bacterial Reverse mutation test (OECD TG 471, ICH S2 (R1)
- ► In vitro Micronucleous Test (OECD TG 487, ICH S2 (R1)
- Mammalian chromosome aberration in vitro – OECD TG 473





Chemistry Manufacturing & Controls

Services

We offer fully customized programs to meet all our client's requirements: complete manufacturing solutions, risk assessment, regulatory support and DS/DP batch release

- Process Development
- ► GMP
- Manufacturing
- Quality Control
- **▶** Formulation









Contract Research Organization

Service

VECTORB2B is a **full-service CRO** with privileged access to a broad network of clinical sites in Portugal and recognized KOLs across different therapeutic areas

The collaborative network of academic and industrial partners within the Portuguese Health sector framework ensures

VECTORB2B full flexibility and competitiveness

We offer functional service providing

Data Protection, Al and Compliance landscape consultant & assessment services in Health

A Portuguese organization along with the experience of a **Global CRO**





CROFull Service

Strategic Consulting Regulatory Affairs

Clinical Operations

- Project Management
- ► Feasability & Site Selection
- ► Site Management & Engagement
- Monitoring
- ▶ Patient Recruitment & Retention

Medical Affairs & Medical Writing

- ▶ Data Review Committees
- Medical Monitoring
- Medical Coding

Data Management & Biostatistics

Pharmacovigilance & Risk Management

GCP Training





CROFull Service

Clinical Trial Planning and Conduct

- ► EARLY-PHASE (Phase I)
 Clinical Development
- ► LATE-PHASE (Phase II-III)
 Clinical Development
- INVESTIGATIONAL STUDIES for Medical Devices
- ► PHASE IV
 Clinical Trials and Real World Evidence Projects

The CRO PARTNER OF CHOICE for Hospitals Investigation Centers





R&D PORTFOLIO MANAGEMENT

Services

VECTORB2B R&D STRATEGIC CONSULTING SERVICES CAN OFFER A NEW PERSPECTIVE AND APPROACH TO YOUR PORTFOLIO

WE HAVE THE RESOURCES TO DELIVER A DETAILED PLAN FOR YOU AS WELL AS TO EXECUTE IT TILL THE DESIRED SOLUTION

- ► R&D support
- **▶** Reformulation
- **▶** Repurposing
- **▶ New Products**



BENCH 2 BEDSIDE

Looking forward to working together in the future

Please contact us: info@vectorb2b.com

Avenida da Liberdade, n.º 258, 6.º 1250-149 Lisboa, Portugal

vectorb2b.com









