Glossary

100 points clinical response

Percentage of patients achieving a 100-point decrease in CDAI score during a clinical trial in CD patients

ACR

American College of Rheumatology

ACR20 (ACR 20/50/70)

American College of Rheumatology 20% response rate signifies a 20% or greater improvement in the number of swollen and tender joints as well as a 20% or greater improvement in three out of five other disease-activity measures. ACR50 and ACR70 reflect the same, for 50% and 70% response rates, respectively

ADPKD

Autosomal dominant polycystic kidney disease, a disease where typically both kidneys become enlarged with fluid-filled cysts, leading to kidney failure. Other organs may be affected as well

ADS

American Depositary Share; Galapagos has a Level 3 ADS listed on Nasdaq with ticker symbol GLPG and CUSIP number 36315X101. One ADS is equivalent to one ordinary share in Galapagos NV

AFM

Dutch Authority for the Financial Markets

Anemia

Condition in which the patient has an inadequate number of red blood cells to carry oxygen to the body's tissues

Anti-TNF

Tumor necrosis factor. An anti-TNF drug acts by modulation of TNF

Assays

Laboratory tests to determine characteristics

Attrition rate

The historical success rate for drug discovery and development, based on publicly known development paths. Statistically seen, investment in at least 12 target-based programs is required to ensure that at least one of these will reach a Phase 3 study. Most new drug R&D programs are discontinued before reaching Phase 3 because they are not successful enough to be approved

BID dosing

Twice-daily dosing (bis in die)

Bioavailability

Assessment of the amount of product candidate that reaches a body's systemic circulation after (oral) administration

Biomarker

Substance used as an indicator of a biological process, particularly to determine whether a product candidate has a biological effect

Black & Scholes model

A mathematical description of financial markets and derivative investment instruments that is widely used in the pricing of European options and subscription rights

Bridging trial

Clinical trial performed to "bridge" or extrapolate one dataset to that for another situation, i.e. to extrapolate data from one population to another for the same drug candidate, or to move from IV to subcutaneous dosing

CALOSOMA

Phase 1 program with GLPG3970 in psoriasis

CDAI

Crohn's Disease Activity Index, evaluating patients on eight different factors, each of which has a pre-defined weight as a way to quantify the impact of CD

CDAI remission

In the FITZROY trial, the percentage of patients with CD who showed a reduction of CDAI score to <150

CFTR

Cystic fibrosis transmembrane conductance regulator (CFTR) is a membrane protein and chloride channel in vertebrates that is encoded by the CFTR gene. It is hypothesized that inhibition of the

CFTR channel might reduce cyst growth and enlargement for patients with ADPKD. GLPG2737 is a CFTR inhibitor

CHIT1/AMCase

Chitotriosidase (CHIT1) is a protein coding gene, and AMCase is an inactive acidic mamalian chitinase. CHIT1 is predominantly involved in macrophage activation. Inhibition of chitinase activity translates into a potential therapeutic benefit in lung diseases like IPF, as shown in preclinical models. GLPG4716 is a CHIT1/AMCase inhibitor targeting a key pathway in tissue remodeling

CHMP

Committee for Medicinal Products for Human Use is the European Medicines Agency's (EMA) committee responsible for human medicines and plays a vital role in the authorization of medicines in the European Union (EU)

CIR

Crédit d'Impôt Recherche, or research credit. Under the CIR, the French government refunds up to 30% of the annual investment in French R&D operations, over a period of three years. Galapagos benefits from the CIR through its operations in Romainville, just outside Paris

CRP

C-reactive protein is a protein found in the blood, the levels of which rise in response to inflammation

Cash position

Current financial investments and cash and cash equivalents

Chitinase

Chitinase is an enzyme that degrades chitin, involved in the human innate immunity. Inhibition of chitinase activity translates into a potential therapeutic benefit in lung diseases like IPF, as shown in preclinical models

Clinical Proof of Concept (PoC)

Point in the drug development process where the product candidate first shows efficacy in a therapeutic setting

Complete Response Letter (CRL)

A letter send by the FDA to indicate that the review cycle for an application is complete and the application is not ready for approval in its present form

Compound

A chemical substance, often a small molecule with drug-like properties

Contract research organization (CRO)

Organization which provides drug discovery and development services to the pharmaceutical, biotechnology and medical devices industry

Corticosteroids

Any of a group of steroid hormones produced in the adrenal cortex or made synthetically. They have various metabolic functions and some are used to treat inflammation

Crohn's disease (CD)

An IBD involving inflammation of the small and large intestines, leading to pain, bleeding, and ultimately in some cases surgical removal of parts of the bowel

Cytokine

A category of small proteins which play important roles in signaling in processes in the body

DARWIN

Phase 2 program for filgotinib in RA. DARWIN 1 explored three doses, in twice-daily and once-daily administration, for up to 24 weeks in RA patients with insufficient response to methotrexate (MTX) and who remained on their stable background treatment with MTX. DARWIN 2 explored three once-daily doses for up to 24 weeks in RA patients with insufficient response to methotrexate (MTX) and who washed out of their treatment with MTX. DARWIN 1 and 2 were double-blind, placebo-controlled trials which recruited approximately 900 patients globally and for which results were reported in 2015. DARWIN 3 is a long term extension trial in which all patients are on 200 mg filgotinib, except for U.S. males who are on 100 mg. The week 156 results from DARWIN 3 were reported in 2019

DAS28 (CRP)

DAS28 is an RA Disease Activity Score based on a calculation that uses tender and swollen joint counts of 28 defined joints, the physician's global health assessment and a serum marker for inflammation, such as C- reactive protein. DAS28 (CRP) includes the C-reactive protein score calculation: scores range from 2.0 to 10.0, with scores below 2.6 being considered remission

DDI study

Drug-drug interaction study. This type of study will assess if there is a change in the action or side effects of a drug caused by concomitant administration with another drug

DIVERGENCE

Phase 2 programs with filgotinib in Crohn's disease. DIVERGENCE 1 was an exploratory study in small bowel CD and DIVERGENCE 2 in fistulizing CD

DIVERSITY

Phase 3 program evaluating filgotinib in CD

DMARDs

Disease modifying anti rheumatic drugs; these drugs address the disease itself rather than just the symptoms

Deep venous thrombosis (DVT)

The formation of one or more blood clots in one of the body's large veins, most commonly in the lower limbs. The blood clots can travel to the lung and cause a pulmonary embolism

Degradation

The process by which proteins are lost through the use of drugs such as PROTACs or small molecules

Development

All activities required to bring a new drug to the market. This includes preclinical and clinical development research, chemical and pharmaceutical development and regulatory filings of product candidates

Discovery

Process by which new medicines are discovered and/or designed. At Galapagos, this is the department that oversees target and drug discovery research through to nomination of preclinical candidates

Disease-modifying

Addresses the disease itself, modifying the disease progression, not just the symptoms of the disease

Dose-range finding study

Phase 2 clinical study exploring the balance between efficacy and safety among various doses of treatment in patients. Results are used to determine doses for later studies

Double-blind

Term to characterize a clinical trial in which neither the physician nor the patient knows if the patient is taking placebo or the treatment being evaluated

EC

European Commission

EMA

European Medicines Agency, in charge of European market authorization of new medications

Efficacy

Effectiveness for intended use

Endoscopy

A non-surgical procedure involving use of an endoscope to examine a person's digestive tract

FDA

The U.S. Food and Drug Administration is an agency responsible for protecting and promoting public health and in charge of American market approval of new medications

FIH

First-in-human clinical trial, usually conducted in healthy volunteers with the aim to assess the safety, tolerability and pharmacokinetics of the product candidate

FILOSOPHY

Phase 4 program evaluating filgotinib in RA

FINCH

Phase 3 program evaluating filgotinib in RA

FITZROY

A double-blind, placebo controlled Phase 2 trial with filgotinib in 177 CD patients for up to 20 weeks. Full results were published in The Lancet in 2016

FORM 20-F

Form 20-F is an SEC filing submitted to the US Securities and Exchange Commission

FSMA

The Belgian market authority: Financial Services and Markets Authority, or Autoriteit voor Financiële Diensten en Markten

FTE

Full-time equivalent; a way to measure an employee's involvement in a project. For example, an FTE of 1.0 means that the equivalent work of one full-time worker was used on the project

Fast Track

A designation by the FDA of an investigational drug for expedited review to facilitate development of drugs which treat a serious or life-threatening condition and fill an unmet medical need

Fee-for-service

Payment system where the service provider is paid a specific amount for each procedure or service performed

Filgotinib

Formerly known as GLPG0634, commercial name is Jyseleca. Small molecule preferential JAK1 inhibitor, approved in RA and UC in European Union, Great Britain, and Japan. Filgotinib is partnered with Gilead. Filgotinib currently is in Phase 3 trials in CD, and in a Phase 4 trial in RA

Fistulizing CD

Fistulae are inflammatory tracts that most often occur between the distal colon and the perianal region. Fistulae are one of the most severe sequelae of luminal CD and the lifetime risk of occurrence is close to 50% of those with active CD

Futility analysis

Analysis of the likelihood of a trial to meet its primary endpoint, based on a subset of the total information to be gathered. The term 'futility' is used to refer to the low likelihood of a clinical trial to achieve its objectives. In particular, stopping a clinical trial when the interim results suggest that it is unlikely to achieve statistical significance can save resources that could be used on more promising research

G&A expenses

General & administrative expenses

GLIDER

Phase 2 Proof of Concept trial with SIK2/3 inhibitor GLPG3970 in Sjögren's syndrome

GLPG0555

A JAK1 inhibitor currently in Phase 1b in osteoarthritis

GLPG0634

Molecule number currently known as filgotinib and Jyseleca

GLPG1690

Autotaxin inhibitor discovered by us and currently known as ziritaxestat. All development with ziritaxestat was discontinued in February 2021

GLPG2737

A compound currently in Phase 2 in ADPKD. This compound is part of the CF collaboration with AbbVie but Galapagos retained rights outside of CF

GLPG3121

A compound currently in Phase 1 targeting JAK1/TYK2 directed toward inflammation (IBD)

GLPG3667

A TYK2 kinase inhibitor discovered by us, topline results from the Phase 1b in psoriasis reported in July 2021

GLPG3970

A SIK2/3 inhibitor currently in multiple Phase 2 Proof of Concept studies. Topline results from the studies in UC, psoriasis and RA reported in July 2021

GLPG4399

A SIK3 inhibitor currently in Phase 1 directed toward inflammation

GLPG4586

A compound with undisclosed mode of action currently in the preclinical phase directed toward fibrosis. This is the first preclinical candidate to emerge from the collaboration with Fibrocor

GLPG4605

A SIK2/3 inhibitor in the preclinical phase, currently directed toward fibrosis

GLPG4716

A chitinase inhibitor inlicensed from OncoArendi in preparation for Phase 2 in IPF

Genome

An organism's complete set of genetic information needed to build that organism and allow it to grow and develop

HDL

High-density lipoprotein. HDL scavenges and reduces low-density lipoprotein (LDL) which contributes to heart disease at high levels. High levels of HDL reduce the risk for heart disease, while low levels of HDL increase the risk of heart disease

Hemoglobin

A protein inside red blood cells that carries oxygen from the lungs to tissues and organs in the body and carries carbon dioxide back to the lungs

Histology

Study of the microscopic structures of tissues

Histopathology

Microscopic examination of tissues for manifestations of a disease

IBD

Inflammatory Bowel Disease. This is a general term for an autoimmune disease affecting the bowel, including CD and UC. CD affects the small and large intestine, while UC affects the large intestine. Both diseases involve inflammation of the intestinal wall, leading to pain, bleeding, and ultimately, in some cases, surgical removal of part of the bowel

IPF

Idiopathic pulmonary fibrosis. A chronic and ultimately fatal disease characterized by a progressive decline in lung function. Pulmonary fibrosis involves scarring of lung tissue and is the cause of shortness of breath. Fibrosis is usually associated with a poor prognosis. The term "idiopathic" is used because the cause of pulmonary fibrosis is still unknown

In vitro

Studies performed with cells outside their natural context, for example in a laboratory

In vivo

Studies performed with animals in a laboratory setting

In-/out-licensing

Receiving/granting permission from/to another company or institution to use a brand name, patent, or other proprietary right, in exchange for a fee and/or royalty

Inflammatory diseases

A large, unrelated group of disorders associated with abnormalities in inflammation

Intellectual property

Creations of the mind that have commercial value and are protected or protectable, including by patents, trademarks or copyrights

Intersegment

Occurring between the different operations of a company

Investigational New Drug (IND) Application

United States Federal law requires a pharmaceutical company to obtain an exemption to ship an experimental drug across state lines, usually to clinical investigators, before a marketing application for the drug has been approved. The IND is the means by which the sponsor obtains this exemption, allowing them to perform clinical studies

JAK

Janus kinases (JAK) are critical components of signaling mechanisms utilized by a number of cytokines and growth factors, including those that are elevated in RA. Filgotinib is a preferential JAK1 inhibitor

Jyseleca®

Jyseleca® is the brand name for filgotinib

LADYBUG

Phase 2 program with GLPG3970 in rheumatoid arthritis

LDL

Low-density lipoprotein. LDL contributes to heart disease at high levels

Lipoprotein

Lipoproteins are substances made of protein and fat that carry cholesterol through your bloodstream. There are two main types of cholesterol: High-density lipoprotein (HDL), or "good" cholesterol and Low-density lipoprotein (LDL), or "bad" cholesterol

Liver enzymes

Inflamed or injured liver cells secrete higher than normal amounts of certain chemicals, including liver enzymes, into the bloodstream

Lymphocyte

Type of white blood cell that is part of the immune system

MACE

Major adverse cardiovascular events; a composite endpoint frequently used in cardiovascular research

MANGROVE

Phase 2 program with GLPG2737 in autosomal dominant polycystic kidney disease

MANTA

A Phase 2 semen parameter trial with filgotinib in male patients with CD or UC

MANTA-RAy

Phase 2 semen parameter trial with filgotinib in male patients with RA, PsA, or AS

MHLW

Japanese Ministry of Health, Labor and Welfare (MHLW), in charge of Japanese market authorization of new medications

MHRA

Medicines and Healthcare products Regulatory Agency in Great Britain

MTX

Methotrexate; a first-line therapy for inflammatory diseases

Mayo Score

Mayo Score is a Disease Activity Score for ulcerative colitis. It is a composite of subscores from four categories, including stool frequency, rectal bleeding, findings of flexible proctosigmoidoscopy or colonoscopy, and physician's global assessment, with a total score ranging from 0–12

Milestone

Major achievement in a project or program; in our alliances, this is usually associated with a payment

Modulation

The process by which the function of proteins is changed through the use of drugs such as small molecules, peptides, antibodies or cell therapy

Molecule collections

Chemical libraries, usually consisting of drug-like small molecules that are designed to interact with specific target classes. These collections can be screened against a target to generate initial "hits" in a drug discovery program

NDA

New Drug Application

NICE

The National Institute for Health and Care Excellence; an independent public body that provides national guidance and advice to improve health and social care in the UK

NK cells

Natural killer cells, type of white blood cell with granules of enzymes which can attack tumors or viruses

Neutrophil

Type of immune system cell which is one of the first cell types to travel to the site of an infection in the body. Neutrophils are another type of white blood cell which fight infection by ingesting and killing microorganisms

Oligonucleotide

Short DNA or RNA molecule that can be used as research tools or therapeutic drug to change protein expression

Oral dosing

Administration of medicine by the mouth, either as a solution or solid (capsule, pill) form

Osteoarthritis (OA)

The most common form of arthritis, usually occurring after middle age, marked by chronic breakdown of cartilage in the joints leading to pain, stiffness, and swelling

Outsourcing

Contracting work to a third party

PASI

Psoriasis Area and Severity Index; an index used to express the severity of psoriasis. It combines the severity (erythema, induration and desquamation) and percentage of affected area

PRAC

Pharmacovigilance Risk Assessment Committee of the European Medicines Agency, responsible for assessing all aspects of risk management of human medicines

PROTAC

Proteolysis targeting chimera, a special small molecule capable of removing unwanted proteins that play a role in disease processes

Pharmacokinetics (PK)

Study of what a body does to a drug; the fate of a substance delivered to a body. This includes absorption, distribution to the tissues, metabolism and excretion. These processes determine the blood concentration of the drug and its metabolite(s) as a function of time from dosing

Phase 1

First stage of clinical testing of an investigational drug designed to assess the safety and tolerability, pharmacokinetics of a drug, usually performed in a small number of healthy human volunteers

Phase 2

Second stage of clinical testing, usually performed in no more than several hundred patients, in order to determine efficacy, tolerability and the dose to use

Phase 3

Large clinical trials, usually conducted in several hundred to several thousand patients to gain a definitive understanding of the efficacy and tolerability of the candidate treatment; serves as the principal basis for regulatory approval

Phenotypic screening

Phenotypic screening is a strategy used in drug discovery to identify molecules with the ability to alter a cell's disease characteristics. Animal models and cell-based assays are both strategies used to identify these molecules. In contrast to target-based drug discovery, phenotypic screening does not rely on knowing the identity of the specific drug target or its hypothetical role in the disease. A key benefit this approach has over target-based screening, is its capacity to capture complex biological mechanisms that are not otherwise achievable

Pivotal trials

Registrational clinical trials

Placebo

A substance having no pharmacological effect but administered as a control in testing a biologically active preparation

Preclinical

Stage of drug research development, undertaken prior to the administration of the drug to humans. Consists of *in vitro* and *in vivo* screening, pharmacokinetics, toxicology, and chemical upscaling

Preclinical candidate (PCC)

A new molecule and potential drug that meets chemical and biological criteria to begin the development process

Product candidate

Substance that has satisfied the requirements of early preclinical testing and has been selected for development, starting with formal preclinical safety evaluation followed by clinical testing for the treatment of a certain disorder in humans

Proof of Concept (POC)

A clinical trial in which first evidence for efficacy of a candidate drug is gathered. A Proof of Concept trial is usually with a small number of patients and for short duration to get a first impression of drug activity

Proof of Concept study

Phase 2 patient study in which activity as well as safety in patients is evaluated, usually for a new mechanism of action

Psoriasis

A chronic skin disease which results in scaly, often itchy areas in patches

Psoriatic arthritis (PsA)

Psoriatic arthritis or PsA is an inflammatory form of arthritis, affecting up to 30% of psoriasis patients. Psoriatic arthritis can cause swelling, stiffness and pain in and around the joints, and cause nail changes and overall fatigue

Pulmonary embolism

A blockage in one of the pulmonary arteries in the lungs

QD dosing

Once-daily dosing (qd from the Latin quaque die)

R&D operations

Research and development operations; unit responsible for discovery and developing new product candidates for internal pipeline or as part of risk/reward sharing alliances with partners

Replication

The process by which DNA is copied to produce two identical DNA molecules during the process of cell division

Rheumatoid arthritis (RA)

A chronic, systemic inflammatory disease that causes joint inflammation, and usually leads to cartilage destruction, bone erosion and disability

S&M expenses

Sales and marketing expenses

SEA TURTLE

Phase 2 program with GLPG3970 in ulcerative colitis

SEC

Securities and Exchange Commission in the US

SELECTION

Phase 3 program evaluating filgotinib in UC patients. Full results were published in The Lancet in 2021

SES-CD scores

Simple endoscopic score for CD, involving review of five pre-defined bowel segments, assigning values from 0 (unaffected) to 3 (highly affected)

SIK

Salt-inducible kinase. This is the target family for the portfolio of molecules in the Toledo program

Screening

Method usually applied at the beginning of a drug discovery campaign, where a target is tested in a biochemical assay against a series of small molecules or antibodies to obtain an initial set of "hits" that show activity against the target. These hits are then further tested or optimized

Short interfering RNA

A research tool that is used to silence the activity of specific genes

Sjögrens syndrome

Sjögren's Syndrome is a systemic inflammatory disease which can be felt throughout the body, often resulting in chronic dryness of the eyes and mouth

Small bowel CD (SBCD)

CD causes chronic inflammation and erosion of the intestines. It can affect different regions of gastrointestinal tract including the stomach and small and large intestines. While isolated SBCD is an uncommon presentation of CD, involvement of some portion of the small bowel, particularly the ileum, is common

Statin

Statins are a class of lipid-lowering medications that reduce illness and mortality in those who are at high risk of cardiovascular disease. They are the most common cholesterol-lowering drugs. Low-density lipoprotein (LDL) carriers of cholesterol play a key role in the development of atherosclerosis and coronary heart disease via the mechanisms described by the lipid hypothesis

Systemic lupus erythematosus

An autoimmune disease, with systemic manifestations including skin rash, erosion of joints or even kidney failure

TAPINOMA

Phase 1b Proof of Concept trial with SIK2/3 inhibitor GLPG3970 in SLE. The study was terminated in October 2021

TEAE

Treatment Emergent Adverse Event, is any event not present prior to the initiation of the treatments or any event already present that worsens in either intensity or frequency following exposure to the treatments

TYK

Tyrosine kinase is an enzyme that can transfer a phosphate group from ATP to the tyrosine residues of specific proteins inside a cell. It functions as an "on" or "off" switch in many cellular functions. Tyrosine kinases belong to a larger class of enzymes known as protein kinases which also attach phosphates to other amino acids such as serine and threonine. GLPG3667 is a reversible and selective TYK2 kinase domain inhibitor

Target

Proteïn that has been shown to play a role in a disease process and that forms the basis of a therapeutic intervention or discovery of a medicine

Target discovery

Identification and validation of proteins that have been shown to play a role in a disease process

Technology access fee

License payment made in return for access to specific technology (e.g. compound or virus collections)

Toledo

Toledo is the program name for the target family of SIK inhibitors

Topical corticosteroids

Corticosteroids which are administered through the skin using an ointment

Transcription

The process of making an RNA copy of a DNA gene sequence

Translation

The process by which a protein is synthetized from mRNA

Ulcerative colitis (UC)

UC is an IBD causing chronic inflammation of the lining of the colon and rectum (unlike CD with inflammation throughout the gastrointestinal tract)

Venous thrombotic events

When a blood clot breaks loose and travels in the blood, this is called a venous thromboembolism (VTE). The abbreviation DVT/PE refers to a VTE where a deep vein thrombosis (DVT) has moved to the lungs (PE or pulmonary embolism)

Ziritaxestat

Formerly known as GLPG1690. Ziritaxestat is a novel drug candidate targeting autotaxin; all development with ziritaxestat was discontinued in February 2021

Financial calendar

04 August 2022

First half year 2022 results

03 November 2022

Third quarter 2022 results

23 February 2023

Full year 2022 results

Colophon

Concept, design and online programming
nexxar GmbH, Vienna – Online annual reports and online sustainability reports
www.nexxar.com

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