SPEXIS

Generating Hope for Rare Disease & Oncology Patients

November 2022

Non-Confidential

Forward-Looking Statement

This presentation (the “Presentation”) has been prepared by Spexis AG (“the Company” and together with its subsidiary, “we”, “us” or the “Group”) solely for informational purposes.

Certain statements in this Presentation are forward-looking statements, beliefs or opinions, including statements relating to, among other things, the Company's business, financial condition, future performance, results of operation, potential new market opportunities, growth strategies, and expected growth in the markets in which the Group operates. In some cases, these forward-looking statements may be identified by the use of forward-looking terminology, including the terms “targets”, “plans”, “believes”, “estimates”, “anticipates”, “ expects”, “intends”, “may”, “will” or “should” or, in each case, their negative or other variations or similar expressions. By their nature, forward-looking statements involve a number of risks, uncertainties and assumptions that could cause actual results or events to differ materially from those expressed or implied by the forward-looking statements. These risks, uncertainties and assumptions could adversely affect the outcome and financial consequences of the plans and events described herein. Actual results may differ materially from those set forth in the forward-looking statements as a result of various factors (including, but not limited to, future global economic conditions, changed market conditions, intense competition in the markets in which the Group operates, costs of compliance with applicable laws, regulations and standards, diverse political, legal, economic and other conditions affecting the Group’s markets, and other factors beyond the control of the Group). Neither the Company nor any of its respective directors, officers, employees, agents, affiliates, advisors or any other person is under any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. You should not place undue reliance on forward-looking statements, which speak of the date of this Presentation. Statements contained in this Presentation regarding past trends or events should not be taken as a representation that such trends or events will continue in the future. Some of the information presented herein is based on statements by third parties, and no representation or warranty, express or implied, is made as to, and no reliance should be placed on, the fairness, accuracy, completeness or correctness of this information or any other information or opinions contained herein, for any purpose whatsoever.

The Spexis Proposition:

Life-changing macrocycle therapeutics for rare disease and oncology patients

Macrocycle focus:
- Extensive macrocycle platform with both peptidic & non-peptidic libraries
- 3 clinical-stage products discovered in-house thus far
- Lead asset ColiFin®: approved (in EU), US Phase 3-ready, also a macrocycle
- Significant molecular glue & protein degrader potential

Early & late-stage cystic fibrosis (CF) pipeline:

Funded and supported by the CF Foundation & IMI

ColiFin®:
- Lead candidate for CF
- EU approved; U.S. Phase 3 ready
- $250M+ projected peak CF sales

1 in-house

Inhaled Murepavadin:
- 9 i.v. clinical trials in ~290 subjects to date
- Inhaled candidate in Phase 1 CF trial
- Data in Q4 2022

2 in-house

Balixafortide:
- 8 clinical trials in >500 subjects to date
- under evaluation for possible next clinical trials

3 in-house

Lonodelestat:
- Phase 2 ready
- Out-licensed to Santhera

Excellent value growth potential:
- Lead asset highly de-risked
- Multiple other clinical shots-on-goal
- Cutting-edge macrocycle platform
- Company trading at significant discount to >$400M invested to date

Spexis' Focus on Macrocycles

Broadly applicable, large clinical data set, partner validated

Macrocycles

- Can target **difficult-to-drug extra- and intracellular structures**
- **Offer unique drug-like profiles** incl. favorable PK/PD parameters, improved oral bioavailability, enhanced metabolic stability and cell permeability[1]
- Since 2014, **19 macrocyclic structures approved by FDA**[1]

Extensive peptidic & non-peptidic libraries, databases & IP

Will fuel pipeline and generate partnering opportunities

- **2 in-house candidates progressed through P3 thus far; additional 1 (ColiFin®) in-licensed & P3-ready**
- Additional candidate out-partnered & entering P2
- Validated by multiple prior **pharma collaborations**

FOSUN PHARMA

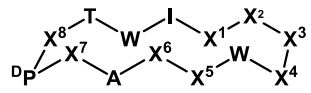
santhera

10k – 200k MW
Biologics

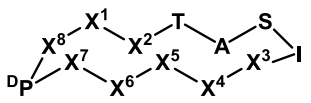
Spexis Macrocycles
500 - 2'000 MW

100 – 500 MW
Small Molecules

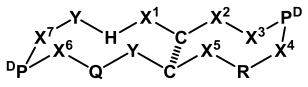
Murepavadin



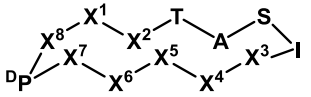
Lonodelestat



Balixafortide

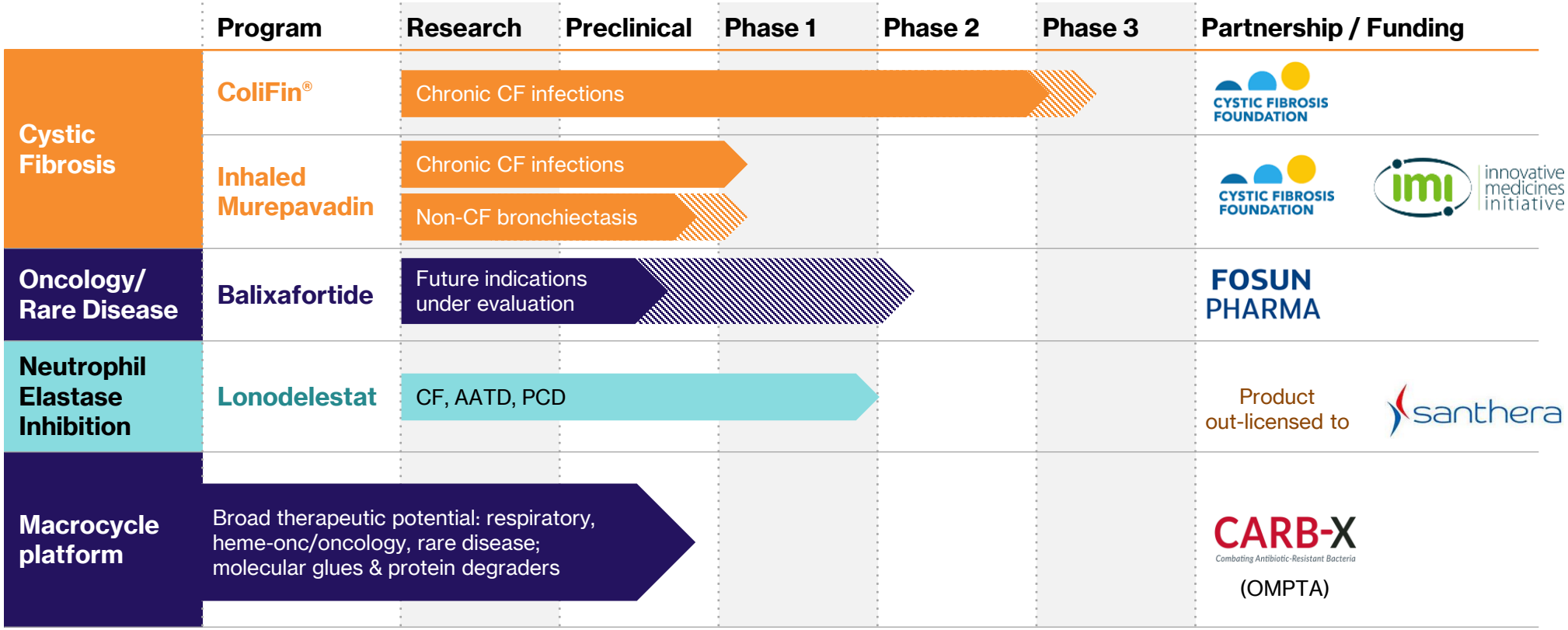


New Candidates



1 https://doi.org/10.3390/molecules27031012

Spexis Pipeline: Multiple "Shots-On-Goal"
Potential for Significant Value Generation



Pipeline Today Readiness if/when initiated

CF – cystic fibrosis; AATD – alpha-1 antitrypsin deficiency; PCD – primary ciliary dyskinesia

ColiFin®

Already de-risked through EU approval, FDA Interactions & CF Foundation ("CFF") support

U.S. Phase 3 Program:

- FDA "Study May Proceed Letter": 1 Phase 3 trial sufficient
- Small 1x daily (QD) dosing cohort in Phase 3 program approved by FDA
- QD dosing favored due to high treatment burden in CF patients
- Continuous use therapy (not 28d on, 28 off): same as ColiFin® EU label
- Phase 3 developed with equity investment by CFF & significant design input from the Therapeutics Development Network – a "must have" for doing trials in the U.S. and Canada

Multiple Phase 3 value-inflection points:

Near-term: COPILOT
open label safety trial to validate QD vs BID dosing

Medium-term: COPA
4w double-blind efficacy
+ 20wk open label safety

Interim readouts midway through each component of trial

Commercial:

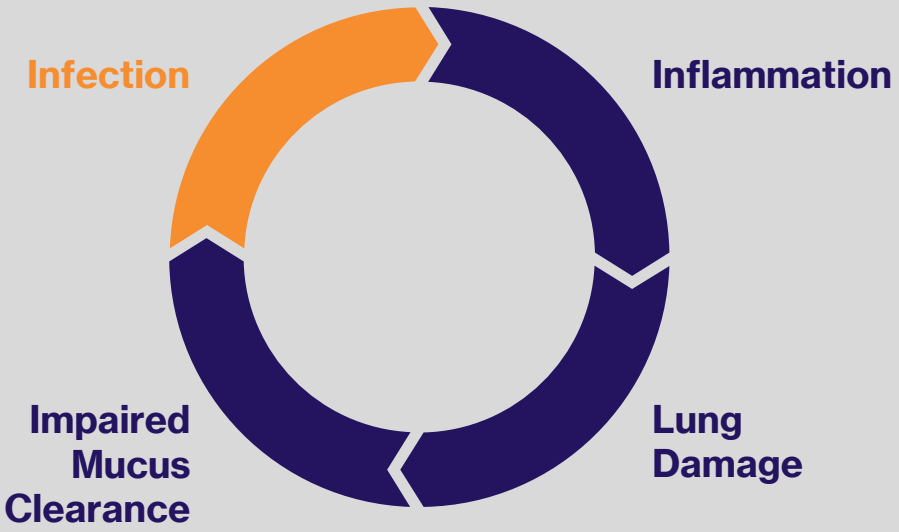
QIDP + Orphan Drug designation = 12 yrs U.S. market exclusivity

Concentrated N. American market: ~130 CF care centers

Small commercial structure sufficient to "go-it-alone"

CF Chronic Infections Promote Lung Damage Progression

Increasing Need for Inhaled Antibiotics



85 % of eligible population receive CFTR modulators – slowing disease progression & improving mucus clearance[1]

5yr data show reduced load BUT chronic infections persist – will remain major issue[2]

- **Ageing CF patient population – a longer, but not healthier life[1]**
- **Chronic lung infections – increased likelihood as patient ages; *P. aeruginosa* predominant ≥ age 33[1]**
- **Increasing need for long-term inhaled antibiotics[1]**

1) https://www.cff.org/sites/default/files/2021-11/Patient-Registry-Annual-Data-Report.pdf;
2) Finke et al; Lenhan et al; Quinn et al.

ColiFin®: Potential to be More Effective, Safer Therapy

Current Treatments in U.S. Not Fully Addressing Need

	TOBI®/Cayston®	ColiFin®
Mechanism of Action	Leads to resistance development	Difficult for *P. aeruginosa* to mutate around
Resistance Development	Increasing, up to 40 % in some regions[1,2]	Rarely exceeding ~5 %[1,2]
Safety	TOBI has significant ototoxicity concerns	Validated in EU: Strong efficacy, minimal serious adverse events in >15K patients dosed to date
Efficacy	Decreased efficacy over time	
Dosing	Continuous b.i.d./t.i.d. alternating therapy ("CAT") (rotation of 28d cycles)	Continuous (i.e., no CAT) b.i.d. dosing with P3 plans for q.d. dosing
U.S. prices typically higher than in Europe – ColiFin® can be priced 5-8x higher than in EU, in line with competitive products in U.S.		
28d AWP Pricing	Between ~$5,400 – 11,000 (generics – branded)	Targeting ~$8,000

Colistin available as I.V. formulation – inhalation unapproved (U.S.)
→ not reimbursed, most patients must pay-out-of pocket

1) doi: 10.1128/AAC.01541-19
2) doi: 10.1128/AAC.02483-20

ColiFin® Phase 3 Program: COPILOT Trial

QD vs BID dosing, open label

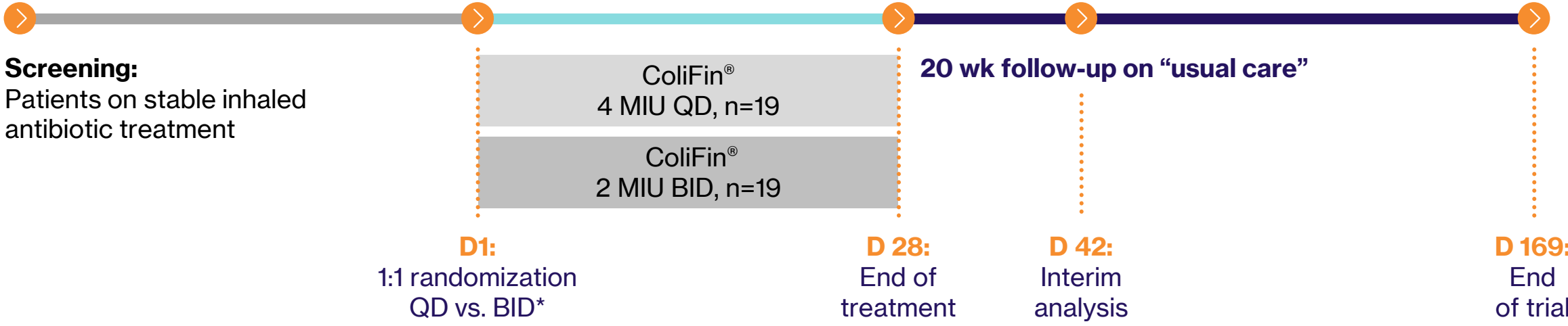
Primary Objective:

- Tolerability and safety of ColiFin®, once-daily (QD) vs twice-daily (BID)
- Interim analysis (Day 42) to support switch from BID to QD dosing in COPA
- Important short-term value inflection point: QD approval could grant USP

Secondary Objectives:

- Assessment of pulmonary function (ppFEV1)
- Clinical events (number/severity of pulmonary exacerbations, hospitalizations)
- Additional antibacterial therapy

To be conducted in Europe; enrollment expected to initiate 1H2023



* Stratification by current use of oral corticosteroids > or <= 10 mg QD or 20 mg QOD (prednisone or prednisolone equivalents)

ColiFin® Phase 3 Program: COPA Pivotal Trial

28d double blind efficacy + 20w open-label safety

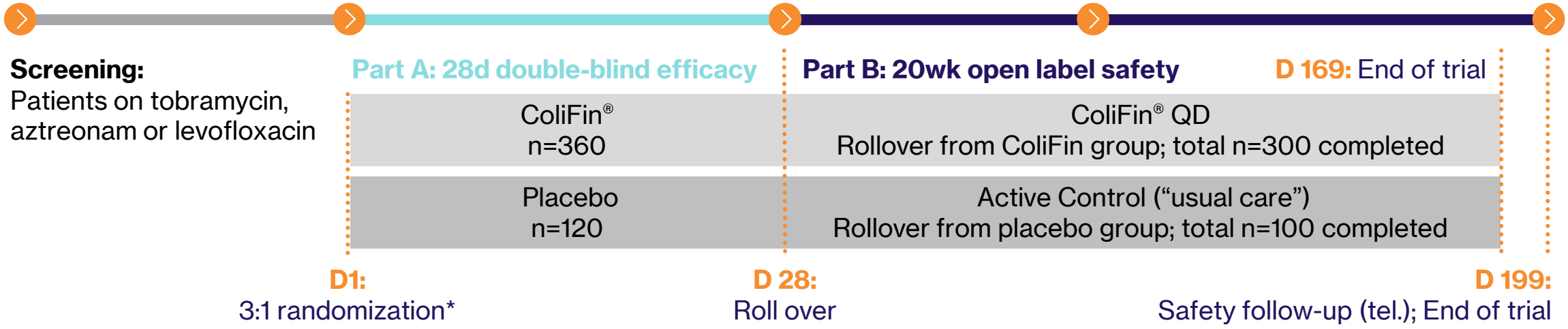
Eligible: Adults/adolescents with CF + chronic *P. aeruginosa (Pae)* lung infection

Therapy: Continuous ColiFin® for 6 months vs. placebo + usual inhaled antibiotics

Primary endpoint: Mean absolute diff. in ppFEV1** (of ≥3 %) in change from baseline to Day 28

Key secondary endpoints throughout 6 months: Difference in CFQ-R respiratory symptom score; exacerbation severity/duration; consistency of treatment response; sputum microbiology: *Pae* density, resistance development (MIC)

Independent Data Monitoring Committee: Interim efficacy analysis after 288 patients complete 28d days of treatment (~12 mos from FPI)



* Stratification of randomization by age (<18, >18 yrs, pp FEV 1 (<70 %;>70 %), prior PEx treated with systemic antibacterials in last 12 months, stable baseline use of CFTR modulators
** ppFEV1: Percent Predicted Forced Expiratory Volume in 1 second

Future ColiFin® Patients Already Use Inhaled Colistin

Current EU Usage

- EU inhaled colistin revenues (all products) **estimated €75M/yr**
- Average EU price per course: €800-1.5K[1]

EU vs. US

- **US pricing 3-5x EU** (per TOBI®, Cayston®, generics)
- EU29 & US CF patient population comparable (~40K vs 30K)

Current US Usage

- ~3600 CF patients use unapproved colistin[2]
- Those patients **will** convert to ColiFin® upon approval[3]
- Reaching **only** those patients:
  - Gross annual **revenues $100-130M**
- EU-like usage at US-like pricing:
  - Annual potential **revenues $180-$280M**

[1] Confidential market information shared
[2] 2020 CFF Registry Report
[3] TOBI® & Cayston® predated by unapproved versions. Both rapidly captured those markets

ColiFin® Life Cycle Management:

Expansion into Non-CFBE, COPD

Non-CF Bronchiectasis & COPD patients also suffer chronic *P. aeruginosa* infections, no proven inhaled standard-of-care

An effective QD ColiFin® would be an attractive therapeutic in both these additional indications

LCM Expands Treatable Patients to >30M Worldwide

3 COPD
50x U.S. CF Market

- 15M US Patients, >250M globally
- 5-15% of patients infected with *P aeru*
- Infections drive exacerbations, deaths

2 Non-CF Bronchiectasis
15x U.S. CF Market

- 1/3rd of patients have 3+ exacerbations/yr
- Most of these have chronic lung infections
- ~30% culture *P aeru*, have worse outcomes

1 Cystic Fibrosis
~10K Treatable US Patients

- Primary indication w/ front-line label
- Very accessible patient population
- Established usage in U.S. & RoW

Inhaled Murepavadin ("iMPV") for Cystic Fibrosis

Novel Class Therapeutic For a Rare Disease

Attractive market

- Peak CF sales 200-400m USD
- Label expansion potential to nCFBE: >$1B market

In Phase 1

- Potent & selective activity against resistant *P. aeruginosa*

Externally validated & partially funded

- Clinical development esternally with substantial funding from: EU Innovative Medicines Initiative (IMI) for Ph. 1a & CF Foundation for Ph. 2

High safety margin

- 9 clinical trials of IV MPV totaling 290 subjects have informed & de-risked the inhalation route
- Low systemic exposure upon inhalation mitigates nephrotoxicity risk
- High safety margin (5- to 10-fold above IV) in GLP tox studies

IP protected

- Market exclusivity through about 2036 via COM/additional IP
- Eligible for QIDP & orphan drug status

2021	2022	2023
	Ph 1a: SAD in HVs → Ph 1b: SAD in CF → Ph 2: CF patients	

Balixafortide: Potent CXCR4 inhibitor

Applicable to wide range of oncology and rare disease indications

Balixafortide

- Potent, highly selective blocker of CXCR4
- CXCR4 is involved in tumor growth and metastasis and is also implicated in a variety of primary immune deficiency and other rare diseases

Clinical proof of concept established

- >500 patients in 8 clinical trials
- Phase 3 study in advanced HER-2 negative breast cancer did not achieve primary endpoint; data analyses ongoing

Good safety and tolerability profile

- Well tolerated by i.v. route of administration
- No limiting safety events identified at top dose given (5.5mg/kg)
- Shown to overcome SoC drug resistance
- Compatible with combination therapies

Evaluating potential new indications

- Extensively profiled in animal models of stem cell mobilization, cancer, inflammatory and rare disease indications
- Synergistic efficacy in combination with docetaxel compared to either drug alone in metastatic prostate cancer model
- Other studies/analyses ongoing and to be reported on ASAP

Spexis Executive Management & Board of Directors

Highly Experienced Team

Jeff Wager, MD CEO & Chairman	30 yrs VC & CEO leadership; >$2.5B in value created since 2000
Hernan Levett CFO	25+ yrs financial leadership in pharma / biotech
Juergen Froehlich, MD CMO	30+ yrs Chief Medical Officer & senior reg affairs experience
Stephan Wehselau COO & President	20+ yrs CEO & CFO experience, ~$400M raised in career
Dennis Ausiello, MD Vice Chair of the Board	17yrs Physician-in-Chief, MGH 8 yrs lead director of the Pfizer board
Kuno Sommer, PhD Director	Former CEO, Berna Biotech (acq. by J&J) Chairman Bachem, Sunstar, Targimmune, more
Robert Clarke, PhD Director	20+ yrs inhaled R & D and CEO experience
Dan Hartman, MD Director	25+yrs R & D leadership; Head of $2B Gates malaria R & D portfolio
Bernard Bollag, MBA Director	Senior finance executive across corporate finance & capital markets

Spexis

Near-term and multiple value inflection points

CF therapeutic proposition addresses important and growing need

Two CF clinical candidates

- ColiFin® – starting Phase 3 1H2023
- Inhaled murepavadin (iMPV) – Phase 1 ongoing with first data expected (Q4-22)

Balixafortide (BLX)

- 8 clinical trials to date; >500 subjects dosed; under evaluation for additional oncology & rare disease indications

Proprietary macrocycle platform poised to build pipeline and fuel corporate partnerships

- Result of >$400M prior investment & multiple alliances
- iMPV, BLX & lonodelestat generated by our macrocycle platform; ColiFin® (in-licensed from PARI) also a macrocycle
- Highly leverageable towards other extracelluar, intracellular & protein-protein interaction targets
- Ideal for targeting protein-protein interactions, molecular glues and targeted therapies

SPEXIS

Thank you!

Key Contact Information

Website link	www.spexisbio.com
IR email	IR@spexisbio.com
Jeff Wager, M.D. **Chairman & CEO**	jeff.wager@spexisbio.com
Stephan Wehselau **President & COO**	stephan.wehselau@spexisbio.com
Hernan Levett **CFO**	hernan.levett@spexisbio.com