Jaguar Health, Inc.
(NASDAQ: JAGX)

Overview – January 2025

Forward-Looking Statements

This presentation contains forward-looking statements. All statements other than statements of historical facts contained in this presentation, including statements regarding plans by Jaguar Health, Inc. ("Jaguar" or the "Company") and Napo Therapeutics (formerly known as "Napo EU") to develop and commercialize crofelemer in Europe for HIV-related diarrhea, short bowel syndrome, congenital diarrheal disorders, and other indications, expectations related to the timing of the commercial launch of products in any market, the expectation that Magdalena Biosciences will leverage Jaguar's proprietary medicinal plant library and Filament Health's proprietary drug development technology, the expectation that US$1,000,000 will be invested in Magdalena Biosciences by One Small Planet, the expectation that Magdalena Biosciences may develop a potential plant-based alternative drug for adult ADHD or other indications that is both safe and efficacious, Jaguar's plans to pursue additional business development deals, plans to expand the geography for commercialization of crofelemer, statements related to the powder formulation of crofelemer, related to NP-300, the timing of the initiation, completion, results, and publication of Phase 2 studies, Phase 3 studies, proof-of-concept studies, field studies, investigator-initiated trials, sponsored studies, and other studies, statements about possible eligibility for, and possible participation in, revenue generating early access programs, statements about the planned submission of Investigational New Drug (IND) applications to FDA, statements about plans to pursue a Priority Review Voucher (PRV), statements about the possible future market size/potential of indications, and expected milestones appearing on the list of "Upcoming Milestones", are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "aim," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions. The forward-looking statements in this presentation are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this presentation and are subject to a number of risks, uncertainties and assumptions, some of which cannot be predicted or quantified and some of which are beyond our control. Please see the risk factors identified in our Annual Report on Form 10-K and our other filings with the SEC. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Readers are also advised that our projected sales do not take into account the royalties and other payments we will need to make to our licensors and strategic partners. Moreover, we operate in a dynamic industry and economy. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties that we may face. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

What We Do: Develop New Ways and Novel Plant-based Medicines to Treat Gastrointestinal Disorders

From Tree to Bottle

Crofelemer was discovered through the science of ethnobotany

Canalevia®-CA1 is conditionally approved by the FDA for the treatment of chemotherapy-induced diarrhea in dogs

Mytesi (crofelemer 125mg delayed-release tablets) is FDA-approved for symptomatic relief of noninfectious diarrhea in adults with HIV/AIDS on antiretroviral therapy

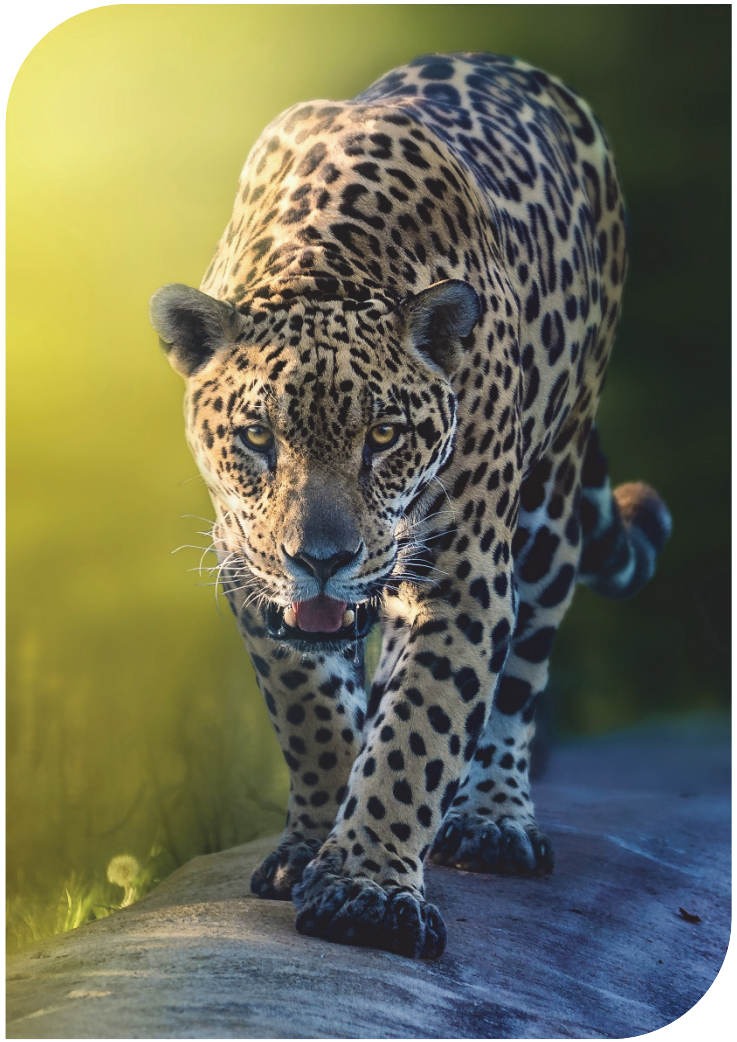
Jaguar/Napo Product Portfolio – Crofelemer Pipeline in a Product

PRODUCT	INDICATIONS EVALUATED	DEVELOPMENT STAGE					
		PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	APPROVED (US)	GEOGRAPHIC FOCUS OF CLINICAL STUDIES
Mytesi (crofelemer)	Noninfectious diarrhea in adults with HIV/AIDS antiretroviral therapy						US
Crofelemer	Cancer therapy-related diarrhea (CTD)					*Phase 3 OnTarget trial completed*	Global
Highly concentrated liquid formulation of crofelemer	Adult short bowel syndrome with intestinal failure (SBS-IF)						US, EU MENA
Highly concentrated liquid formulation of crofelemer	Pediatric microvillus inclusion disease (MVID), an ultrarare congenital diarrheal disorder (CDD)						US, EU & MENA
Crofelemer	IBS - Diarrhea Predominant (IBS-D)				*Oct 2024: Poster at American College of Gastroenterology Annual Meeting*		US
Crofelemer	Chronic idiopathic diarrhea in non-HIV patients				*Oct 2024: Poster at American College of Gastroenterology Annual Meeting*		US
NP-300*	Symptomatic relief of diarrhea from cholera		*See footnotes below*		*US IND in effect with FDA*		US

*NP-300 and crofelemer have a similar physiological anti-secretory mechanism of action to reduce chloride ion secretion into the gut lumen and improve stool consistency. The Company has previously presented Phase 2 data on crofelemer for the treatment of devastating dehydration in cholera patients from the renowned International Centre for Diarrhoeal Disease Research (icddr,b) in Bangladesh.
*Potential opportunity for Priority Review Voucher (PRV)

Catalysts and Robustness: Financially, Clinically, Commercially

- **Financial Robustness:** Net Q3 2024 revenue increased 14% versus net Q2 2024 revenue
- **Clinical Robustness/Near-Term Catalysts:**
  - Crofelemer in development for multiple possible follow-on indications:
    - Three proof-of-concept (POC) IITs
    - Two global Phase 2 studies: SBS-IF and MVID
    - Availability of first POC IIT result potentially late Q1 2025
    - **Cancer Therapy-Related Diarrhea: Statistically significant** Phase 3 data in prespecified subgroup of breast cancer
  - Two investigator-initiated significant results in IBS-D; Data presented at October 2024 American College of Gastroenterology Annual Meeting
  - Proprietary anti-secretory antidiarrheal drug for cholera-related diarrhea (potential opportunity for FDA tropical disease priority review voucher) – IND approved
  - Jaguar JV Magdalena Biosciences opportunity to file IND for 3 psychoactive botanical drug candidates in 2025
- **Commercial Robustness:** October 2024 commercial launch of the FDA-approved oral mucositis prescription product Gelclair in U.S.



Jaguar Reports Statistically Significant Improvement in Breast Cancer Patients in OnTarget

Goal: Submit supplemental NDA for crofelemer (Mytesi) to FDA, target mid/late-2025, for breast cancer patients on targeted therapy

- Crofelemer achieved **statistical significance** in **prespecified subgroup of adult patients with breast cancer** from OnTarget
- Data presented at SABCS will serve as cornerstone of briefing package Napo plans to submit to FDA
- Breast cancer patients accounted for 63% of patients in trial (183 of 287)
- Potential impact on outcome of cancer treatment: 60-100% of breast cancer patients on placebo had to adjust their dose due to diarrhea
- OnTarget breast cancer results are a **responder analysis**, as was the primary endpoint in phase 3 ADVENT trial that led to FDA approval of crofelemer for currently commercialized indication of HIV-related diarrhea

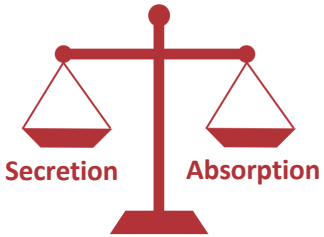
Increasing Market Value: Progression from Supportive Care to Impact on Outcome/Cost of Care to Treatment Modifying

Indication	# of Competitors	Market Size/Potential
HIV-related diarrhea	0	Jaguar estimates the U.S. market revenue potential for Mytesi® to be ~$30-$50 million in gross annual sales
Cancer therapy-related diarrhea (CTD)	0	Projected to be 2.0 million new cancer cases in US in 2024[2] >18 million cancer survivors in US Comparable supportive care (CINV) global market projected to reach **$4.3 billion by 2031**[4]
Short bowel syndrome (SBS) with intestinal failure / Microvillus inclusion disease (MVID), a congenital diarrheal disorder (CDD)	0	~Global SBS market projected to reach **$4.6 billion by 2027** with a CAGR of 26% from 2020 to 2027[5] (doesn't include potential contribution from crofelemer's novel mechanism of action)
IBS - diarrhea predominant (IBS-D)	3	~15% of adult population Most IBS products have estimated revenue potential >$1.0 billion[6]
Symptomatic relief and treatment of diarrhea from cholera and other pathogens	0	*Potential opportunity for Priority Review Voucher (PRV) PRVs are transferable, and in past transactions by other companies have sold for values ranging from $67 million to $350 million[7]

[1] Research and Markets 2017 report: "Global Gastrointestinal agents Market Size, Market Share, Application Analysis, Regional Outlook, Growth Trends, Key Players, Competitive Strategies and Forecasts, 2017 to 2025"
[2] American Cancer Society. Cancer Facts & Figures 2024. Atlanta: American Cancer Society; 2024
[3] https://www.cdc.gov/cancer/preventinfections/providers.htm#print
[4] https://www.ihealthcareanalyst.com/global-chemotherapy-induced-nausea-vomiting-drugs-market/
[5] https://www.mynewsdesk.com/us/medical-technology-news/pressreleases/short-bowel-syndrome-market-global-industry-analysis-size-share-trends-revenue-forecast-2020-to-2027-3069433
[6] http://247wallst.com/healthcare-business/2015/04/27/key-analyst-sees-nearly-30-upside-in-ironwood & https://www.benzinga.com/analyst-ratings/analyst-color/17/03/9224181/analyst-synergy-pharma-could-achieve-sustainable-profita
[7] https://www.raps.org/regulatory-focus/news-articles/2017/12/regulatory-explainer-everything-you-need-to-know-about-fdas-priority-review-vouchers

How Crofelemer Works

- **Crofelemer is a non-opioid that works differently from other treatments for GI dysfunction**



With crofelemer, it's about waterflow

Crofelemer normalizes waterflow in the GI tract

Less water flowing into your GI tract = less watery diarrhea = greater nutrient absorption opportunity

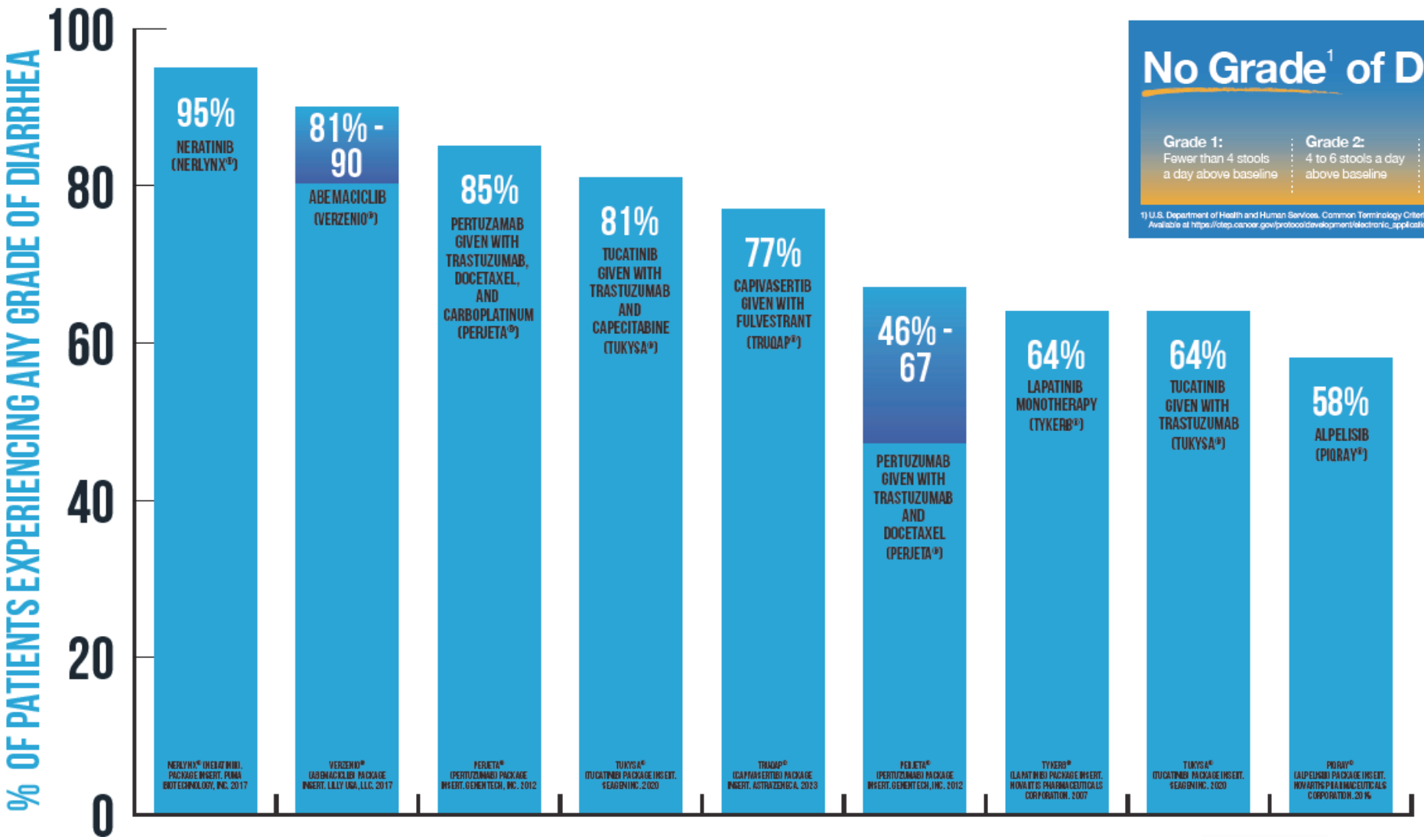
Crofelemer acts locally in the GI tract

Opioid medicines (i.e., Imodium, loperamide) work by slowing down your GI tract, i.e., opioid constipation risk

Crofelemer is a non-opioid, non-antibiotic, non-addictive drug approved in the US for a chronic use

Our crofelemer clinical development programs

Diarrhea Rates Among Breast Cancer Targeted Therapies*



No Grade[1] of Diarrhea is Acceptable!

Grade 1:	Grade 2:	Grade 3:	Grade 4:
Fewer than 4 stools a day above baseline	4 to 6 stools a day above baseline	7 or more stools a day above baseline, may need treatment in a hospital or clinic	Life-threatening condition requiring immediate medical care

1) U.S. Department of Health and Human Services. Common Terminology Criteria for Adverse Events (CTCAE) – Version 5.0. Page 25. Published: November 27, 2017. Available at https://ctep.cancer.gov/protocoldevelopment/electronic_applications/docs/ctcae_v5_quick_reference_8.5x11.pdf

*Not inclusive of all potential therapies. Rates are for any grade diarrhea.

Diarrhea Rates Among Breast Cancer Targeted Therapies

- **EMBER-3:** Study in estrogen receptor positive (ER+), human epidermal growth factor receptor 2 negative (HER2-) advanced breast cancer. Trial evaluated imlunestrant alone or in combination with **Verzenio** (abemaciclib; CDK4/6 inhibitor), in patients who were pretreated with endocrine therapy, with or without a CDK4/6 inhibitor.
  - ClinTrials page for Ember 3: https://clinicaltrials.gov/study/NCT04975308
- Lilly's Dec 11, 2024 press release about Ember 3 presentation at SABCS: https://investor.lilly.com/news-releases/news-release-details/lillys-imlunestrant-oral-serd-significantly-improved-progression
  - From the release: "Safety in the imlunestrant-abemaciclib arm was consistent with the known safety profile of fulvestrant in combination with abemaciclib, with mostly low-grade adverse events including diarrhea (86%), nausea (49%), neutropenia (48%) and anemia (44%), and had a low discontinuation rate (6.3%)"
- **Verzenio** is typically prescribed for a two-year treatment period
  - Studies have shown sustained benefits in at the four-year mark
- **Truqap** (capivasertib) diarrhea rate: Severe diarrhea associated with dehydration occurred in patients who received Truqap. Diarrhea occurred in 72% of patients.

Other interesting future targets: GLP-1 gastro effects?

- **Weight-loss drug Zepbound** (tirzepatide) diarrhea rate: In a pool of Study 1 and 2, gastrointestinal adverse reactions occurred more frequently among patients receiving Zepbound (5 mg 56%, 10 mg 56%, 15 mg 56%) than placebo (30%).

July 23, 2024: Jaguar Reported Phase 3 OnTarget Trial Results for its Cancer Supportive Care Drug Crofelemer

- A growing and urgent unmet medical need exists for novel non-opioid chronic agents to treat CTD.
- Unprecedented trial included patients, prophylaxis, with 10 different tumor types and 24 different targeted agents, with and without multiple standard cytotoxic chemotherapies.
- Study did not meet prespecified analysis of primary endpoint for all tumor types.
- **Phase 3 data with significant results in prespecified subgroup of adult patients with breast cancer**
  - Patients with CTD 40% more likely to discontinue chemotherapy or targeted therapy than those without CTD[1]
  - The cost of care of CTD patients is estimated to be 2.9 times higher than for patients who are not experiencing CTD[2]
  - Strong patient advocacy
- Company expects to engage with FDA: Goal file sNDA for breast cancer patients

[1] Pablo C. Okhuysen, M.D. *Impact of Cancer-Related Diarrhea on Changes in Cancer Therapy Patterns: Real World Evidence*
[2] Eric Roeland, M.D., FAAHPM. *Healthcare Utilization and Costs Associated with Cancer-Related Diarrhea*

Importance of the Patient Voice in Managing Cancer Care Effectively

Paradigm shifting treatment with crofelemer

- Strength of that voice as patients continue targeted therapies for months and years- indefinitely for metastatic patient
- Patient dignity and comfort paramount; ability to maintain cancer therapy
- Cancer patients = everyday people—parents, children, at school, in the workforce

Napo Pharmaceuticals' *Make Cancer Less Shitty* Patient Engagement Program

A NEGLECTED PROBLEM

People with cancer experience numerous challenges – including **treatment-related side effects** – that can impact their quality of life (QoL). Supportive care is critical to addressing these challenges.

In a study of patient-reported chemotherapy side effects,

6 in 10 participants reported having at least one debilitating side effect.[1]

81% of cancer survivors reported they had unmet supportive care needs and reported dissatisfaction with current supportive care services.[2]

In a survey of oncology community stakeholders (researchers, nurses, medical oncologists, administrators, surgical and radiation oncologists, patient advocates, and nonphysician providers), patient QoL was ranked the most important metric over survival, access to care, and cost.[3]

There remains an **urgent need** to enhance supportive care as part of overall cancer care to best protect the dignity and QoL of those living with cancer.

REFERENCES
1 Pearce A, Haas M, Viney R, et al. Incidence and severity of self-reported chemotherapy side effects in routine care: A prospective cohort study. PLoS ONE. 2017;12(10):e0184360.
2 Moore TH, King AJ, Evans M, Sharp D, Persad R, Huntley AL. Supportive care for men with prostate cancer: why are the trials not working? A systematic review and recommendations for future trials. Cancer Med. 2015;4(8):1240-1251.
3 Allen CJ, Snyder RA, Horn DM, et al. Defining Priorities in Value-Based Cancer Care: Insights From the Alliance for Clinical Trials in Oncology National Cooperative Group Survey. JCO Oncol Prac. 2023;19(10):932-938.

Patient Advocacy: *Make Cancer Less Shitty D*igital Campaign

SAB Members and KOLs for Different R&D Programs at Napo Pharmaceuticals and Napo Therapeutics S.p.A (Jaguar Health Subsidiaries)

- **Crofelemer 125 mg delayed-release tablet clinical programs KOLs**
  - HIV indication: Drs. David Asmuth, Trevor Hawkins, Jihad Slim
  - CTD indication: Drs. Lee Schwartzberg, Eric Roeland, Sandra Swain, Hope Rugo, Pablo Okhuysen
  - Patient advocate SAB members (for CTD): Stacey Tinianov, Dr. Kelly Shanahan
  - IBS-D indication: Drs. Brooks Cash, Anthony Lembo, Judy Nee
- **Crofelemer lyophilized oral powder for solution programs KOLs**
  - Adult SBS-IF indication: Drs. Corey Siegel, Wolfgang Fischbach, Lindsey Russell, Fabrizio Pasanisi, Loris Pironi, Ulrich-Frank Pape, Martin von Websky, Georg Lamprecht
  - Pediatric MVID & SBS-IF indications: Drs. Mohamad Miqdady, Lissette Jimenez, Antonella Diamanti, Christos Tzivinikos, Antonino Morabito, Cecile Lambe, Merit Tabbers, Jay Thiagarajah
- **NP-300 Infectious Diarrhea program KOLs**
  - Cholera and Infectious diarrhea KOLs: Drs. Pradip Bardhan, Herbert DuPont

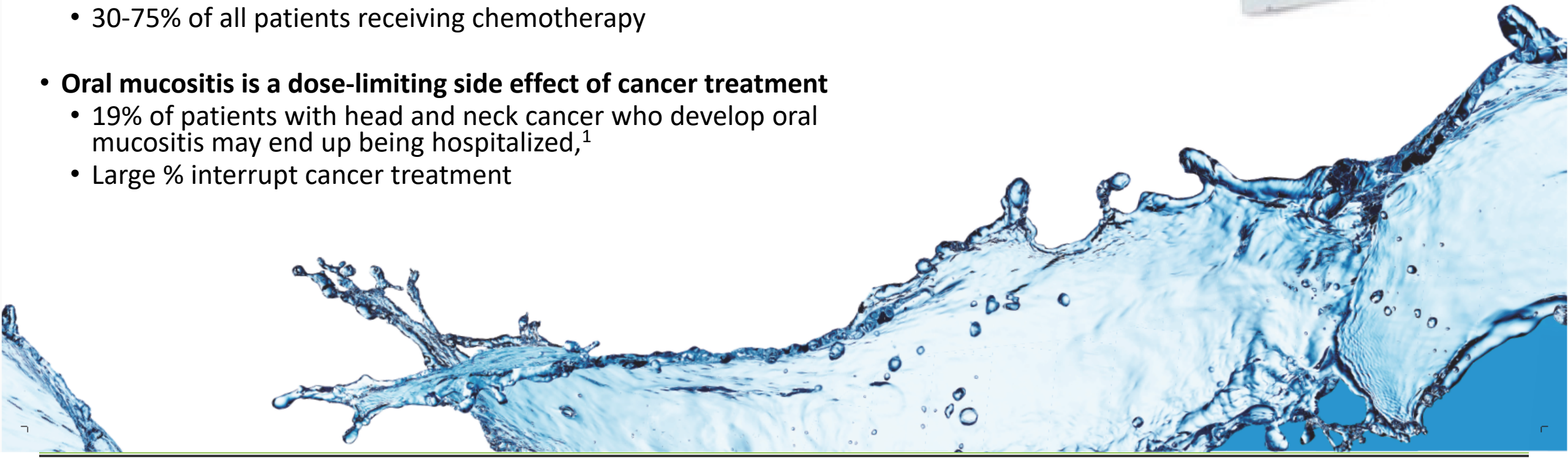
October 2024 Commercial Launch of Gelclair—Jaguar's 3rd Commercialized Prescription Product

- **Oral mucositis is defined as the most significant adverse event in oncology**
  - Gelclair is an FDA-approved mucoprotective gel that coats the surface of the mouth to provide long-lasting relief

- **Who suffers from oral mucositis?**
  - 90% incidence in head and neck radiation[1] and bone marrow transplant
  - 30-75% of all patients receiving chemotherapy

- **Oral mucositis is a dose-limiting side effect of cancer treatment**
  - 19% of patients with head and neck cancer who develop oral mucositis may end up being hospitalized,[1]
  - Large % interrupt cancer treatment

- **NO** alcohol or heavy metals
- **NO** stinging or irritation
- **NO** numbing agents
- **NO** known drug interactions



[1] Pulito C, Cristaudo A, Porta C, Zapperi S, Blandino G, Morrone A, Strano S. *Oral mucositis: the hidden side of cancer therapy*. J Exp Clin Cancer Res. 2020 Oct 7;39(1):210. doi: 10.1186/s13046-020-01715-7. PMID: 33028357; PMCID: PMC7542970.

Ongoing Gelclair Campaign

US Oral Mucositis Market Size and Opportunity

- **Oral mucositis often leads to dose reductions or interruptions in cancer therapy,** which can adversely affect overall treatment outcomes.
- Hospitalizations for pain management, nutritional support, and treatment modifications can lead to additional healthcare costs ranging from **$17,000 to $42,000 per patient over the course of treatment**.
    - Significant downstream costs
- The global market for oral mucositis treatments is projected to reach approximately **$2.4 billion by 2027, with North America being the largest market**.
- Net revenue for Mytesi in 2023 was $9.6 million. To match Mytesi 2023 sales, we would need about 3,500 Gelclair patients to be on the product for 30 days each in 2024. This represents about **3.8% of the addressable US market**.

Canalevia®-CA1 (Crofelemer): A New Standard of Care For Treatment of Chemotherapy-induced Diarrhea (CID) in Dogs Launched April 2022

Canalevia-CA1 received conditional approval in December 2021—the first and only product indicated for CID in dogs to receive any type of approval from FDA

Canalevia®-CA1
(crofelemer delayed-release tablets)

Approximately 1 in 4 dogs will, at some stage in their life, develop neoplasia. Almost half of dogs over the age of 10 will develop cancer. ~6 million new cancer diagnoses are made in dogs each year in the U.S.

Pet owners' willingness to pay for life saving treatments and procedures increases with patient comfort.

For the most part, dogs receive human chemotherapeutic agents during treatment and suffer the same side effects as humans, which means ~40% of treated dogs may have their chemotherapy reduced, changed, or discontinued due to diarrhea—which can compromise the full benefit of the chemotherapy agent.

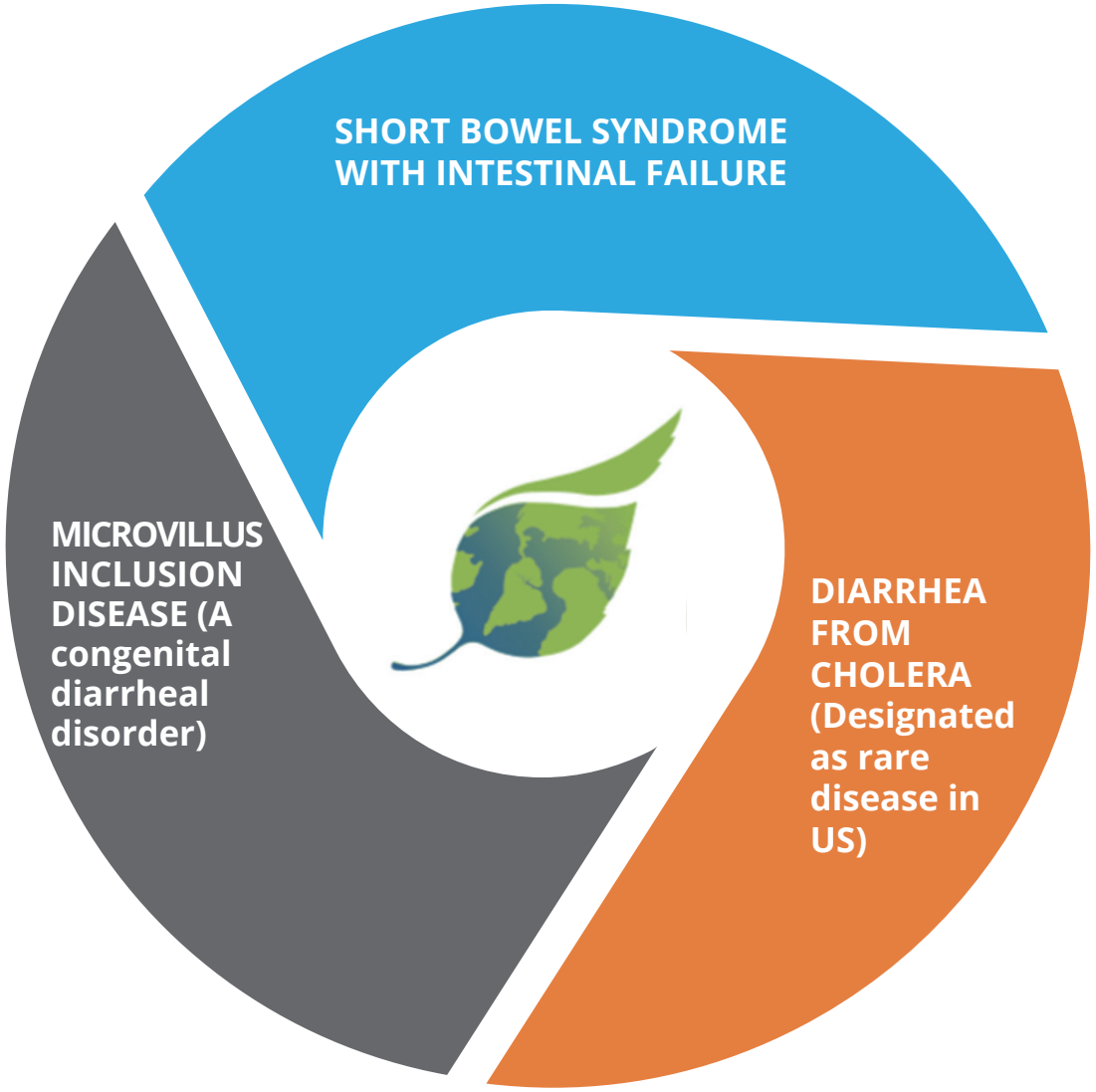
Similar dynamics to human specialty market, but with greater correlation between gross and net revenue with pet owner paying out of pocket.

Conditional approval in dogs is similar to orphan drug designation in humans.

Jaguar Animal Health

https://www.avma.org/resources/pet-owners/petcare/cancer-pets

Jaguar Health's Strategic Focus on Rare Diseases



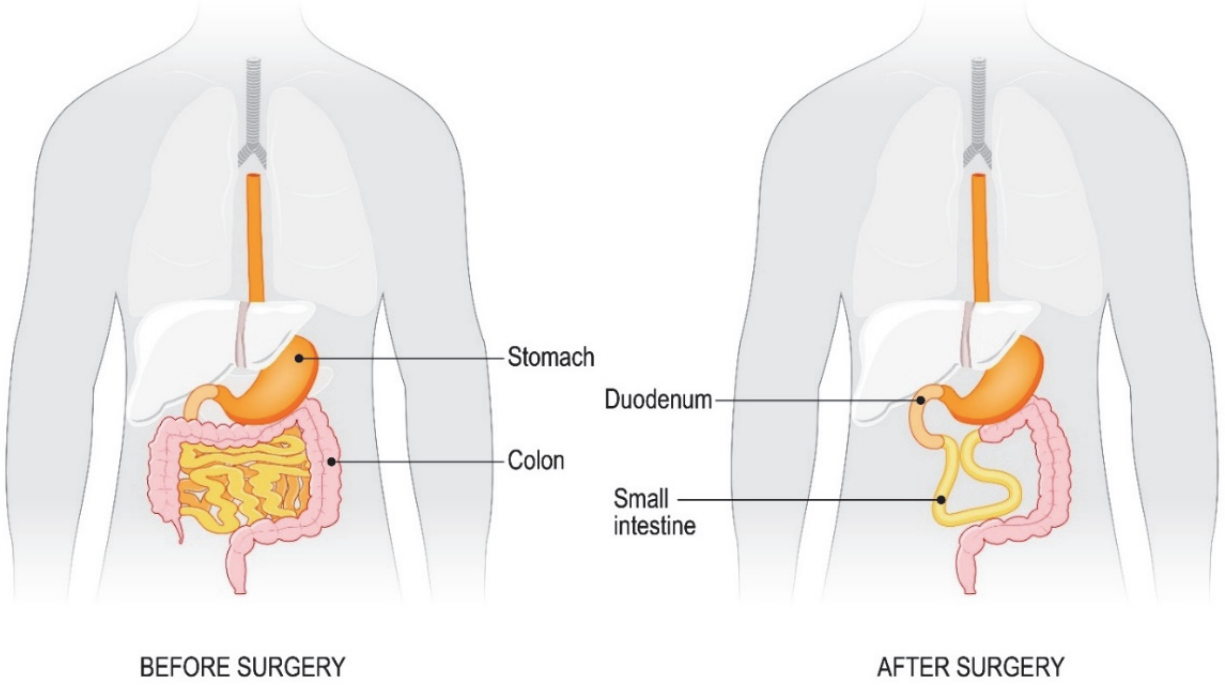
Rare diseases, when taken together, are not that rare at all

- **30 million Americans**[1], or 10 percent of the population, have one of the approximately **7,000 known rare diseases**[2]
- An estimated **30 to 40 million people in the EU**[3] and **400 million worldwide**[4] have a rare disease
- Definition of a rare or orphan disease by region:
  - **US:** When a disease affects **<200,000** people[5]
  - **EU:** When a disease affects **<1 in 2,000** people[6]
    - **EU:** "Ultra-rare disease": When a disease affects **no more than 1 in 50,000** people[7]
- Reimbursement coverage is often available due the rare disease's high morbidity and mortality rates, and as a result of support from patient activist groups

[1 & 2] Source: https://phrma.org/Scientific-Innovation/Progress-in-Fighting-Rare-Diseases
[3] Source: Harari S. Why We Should Care About Ultra-Rare Disease. Eur Respir Rev. 2016 Jun;25(140):101-3. doi: 10.1183/16000617.0017-2016
[4] Source: https://rarediseases.org/rare-disease-day-2022-advancing-the-conversation-around-health-equity/
[5] Source: https://www.fda.gov/patients/rare-diseases-fda#
[6] Source: https://www.eurordis.org/information-support/what-is-a-rare-disease/
[7] Source: European Commission Regulation (EU) No.536/2014 of the European Parliament and of the Council of April 16, 2014 on clinical trials on medicinal products for human use, and repealing Directive 2001/20/EC. 2014. Available from: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0536&qid=1421232837997&from=EN

Short Bowel Syndrome – Loss of Bowel with Quality-of-Life Changes

- **SBS**: Catastrophic loss of bowel often due to surgical resection of diseased or necrotic bowel (normal 15-25 feet to 5 or less feet) in adults/children (also may be congenital in children).
- **SBS with Intestinal Failure (SBS-IF)**: A condition in which your body is unable to absorb enough nutrients from the foods you eat because you do not have enough small intestine. Patients suffer from malnutrition, dehydration, imbalances of fluids and salts, excessive intestinal fluid output, and risk of organ failure.
  - Life-long parenteral nutrition (PN) may be required
  - No “standard of care” drug intervention



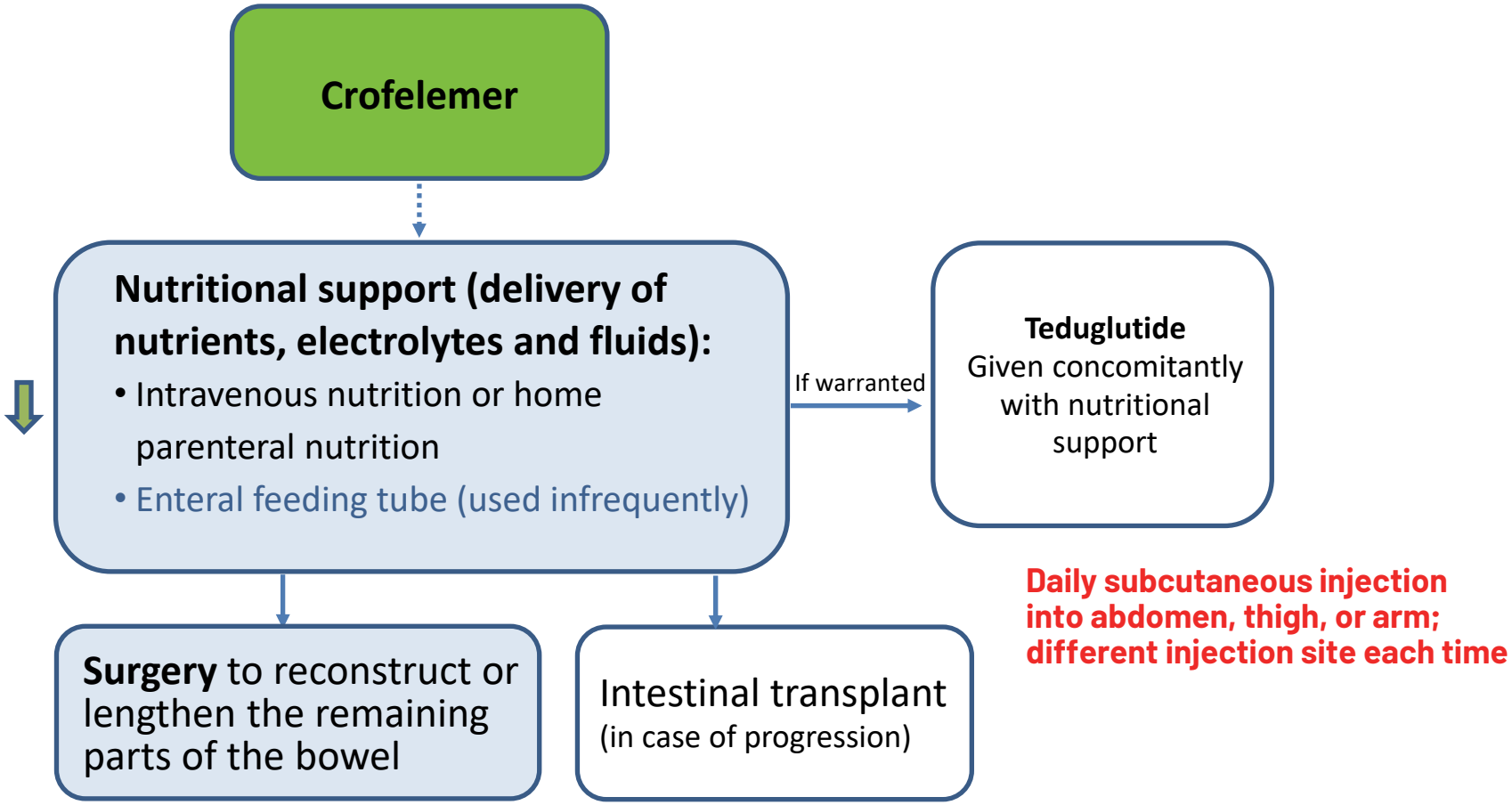
Parenteral nutrition backpack for patients with intestinal failure

A Global Opportunity

- SBS Patient Population:
  - ~10,000 to 20,000 in US
  - ~10,000 to 20,000 in Europe
- Despite limited treatment options, the global SBS market exceeded $568 million in 2019 and is expected to reach **$4.6 billion by 2027**[1]
  - Gattex (teduglutide; growth hormone):
    - Estimated share of US market: ~1-2%[3]
    - Annual cost in US: ~$485,400[4]
    - Multiple biosimilars in development by other companies
      - Zealand Pharma Complete Response Letter
    - "**Gattex** can make abnormal cells that are already in your body grow faster. There is an increased risk that abnormal cells could become **cancer**."
  - Non-hospitalized parenteral nutrition in the US is approximately $150,000-500,000 per year[5]
  - Frequent hospitalizations for infections

[1] https://www.mynewsdesk.com/us/medical-technology-news/pressreleases/short-bowel-syndrome-market-global-industry-analysis-size-share-trends-revenue-forecast-2020-to-2027-3069433
[2] Jaguar estimate based on projected Gattex 2020 revenue of 554.9M USD (based on Takeda financial reports) divided by annual per-patient expenditure for Gattex of $376.2K in 2016 (figure sourced from https://www.ahip.org/documents/HighPriceDrugsReport.pdf)
[3] Jaguar estimate based on an estimated US SBS population of 10,000-20,000 people (www.crohnscolitisfoundation.org/sites/default/files/legacy/assets/pdfs/short-bowel-disease-crohns.pdf)
[4] 10 priciest drugs in America (https://www.benefitspro.com/2020/08/24/10-priciest-drugs-in-america/?slreturn=20221021163553)
[5] https://nutritionequity.org/wp-content/uploads/2018/05/mnea-factsheet-sbs.pdf

Proposed Treatment Pathway: Crofelemer May Reduce Need for Parenteral Nutrition (PN) in SBS-IF Patients– aiming to become standard of care with PN



Daily subcutaneous injection into abdomen, thigh, or arm; different injection site each time

Reduction of parenteral nutrition would lead to improvement of **patients' quality of life as well as improved outcome in IF**

Microvillus Inclusion Disease (MVID): An Ultra Rare CDD

MVID is an ultra rare congenital diarrheal disorder (CDD) that affects newborns and children and leads to significant morbidity and mortality from **severe secretory diarrhea, intestinal failure**

Key Milestones:

- Dec 2024: **Phase 2 study initiated to evaluate crofelemer for MVID**
  - **QoL for family as well as patient**
- **Investigational New Drug (IND) application for crofelemer for MVID activated by FDA** in August 2023
- Single digit number of patients treated to receive approval?

* Adverse events could negatively affect the timeliness of submitting the Investigational New Drug (IND) application. There is a probability that the FDA may not approve Company's IND application.

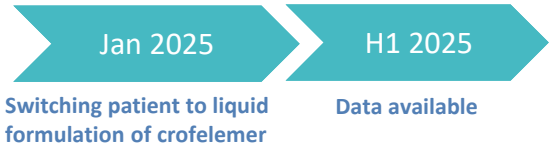
Timelines for Orphan/Rare Disease Studies—Potential POC Data Mid-2025

ACTIVE INDEPENDENT, INVESTIGATOR-INITIATED PROOF-OF-CONCEPT TRIALS FOR MVID AND/OR SBS-IF

Indication: Pediatric MVID & SBS-IF
Location: Sheikh Khalifa Medical City, UAE
Number of Patients: 6
Trial Type: Unblinded
Principal Investigator: Dr. Mohamad Miqdady

Indication: Adult SBS-IF
Location: Cleveland Clinic, US
Number of Patients: 6
Trial Type: Unblinded
Principal Investigator: Dr. Lindsey Russell

Indication: Adult SBS-IF
Location: Powers Family Medicine, Farmington Hills, MI
Number of Patients: 1
Trial Type: Unblinded
Principal Investigator: Dr. William Powers, DO
2022 Crofelemer Case Report by Dr. Powers*: Improved Electrolyte and Fluid Balance Results in Control of Diarrhea with Crofelemer in Patient with Short Bowel Syndrome: A Case Report*. Journal of Clinical Gastroenterology and Treatment, Volume 8, Issue 1



MVID PHASE 2 CLINICAL TRIAL

Trial Type: Double blind, placebo-controlled
Number of Patients: 6-8
Orphan Drug Designation in US and EU

SBS-IF PHASE 2 CLINICAL TRIAL

Trial Type: Double blind, placebo-controlled
Number of Patients: 18
Orphan Drug Designation in US and EU

Napo Therapeutics: Jaguar's European Footprint for Rare diseases

> 90% owned by Jaguar

- **Napo Therapeutics' Mission:** Rare disease business model
- ***Initial orphan target indications:*** Short bowel syndrome (SBS) with intestinal failure, and microvillus inclusion disease (MVID), a congenital diarrheal disorder (CDD)
  - Pursue accelerated conditional marketing authorization from the European Medicines Agency (EMA) under orphan drug designation
  - Publication of POC data from these trials could support early patient access to crofelemer for SBS or CDD in specific EU countries
  - Early access programs, which do not exist in the US, are revenue generating, and reimbursable for participating patients
  - Leadership: Massimo Radaelli, PhD, CEO of Napo Therapeutics

napo therapeutics

* There is a probability that accelerated conditional marketing authorization may not be granted, which may negatively impact Company's business operations and projected revenue

NP-300 Drug Candidate for the Symptomatic Relief of Diarrhea from Cholera

Cholera is designated as a rare disease in the United States, where nearly all reported cases are acquired during international travel

Our NP-300 Orphan Designated Drug Candidate:

- Second-generation anti-secretory drug
- Same source plant as crofelemer

- Clinical proof-of-concept demonstrated by crofelemer for the reduction of diarrhea-associated dehydration in cholera patients: International Centre for Diarrhoeal Disease Research (icddr,b) in Bangladesh
- IND activated
- Plan to pursue Priority Review Voucher (PRV) (PRVs have sold for values ranging from $67M - $350M)

Jaguar and Filament Health, with Funding from One Small Planet, Form Joint Venture *Magdalena Biosciences* to Develop Botanical Pharmaceutical Drug Candidates for Mental Health Illnesses

Magdalena currently valued at US$5.0 million based on initial funding of US$1.0 million from One Small Planet

- Magdalena Biosciences leverages Jaguar's proprietary 2300 medicinal plant library
- Jaguar currently owns ~40% of Magdalena
- **Goal of Collaboration:** To extend the botanical drug development capabilities of Jaguar to:
  - Develop pharmaceutical-grade, standardized drug candidates for mental health disorders **including attention-deficit/hyperactivity disorder (ADHD) in adults**
  - **Partner with a potential future licensee** to develop and commercialize these novel plant-based drugs

Jaguar Health
Bringing Plant-based Medicines to Life™

Filament Health

ONE SMALL PLANET

Three IND ready candidates (ADHD, schizophrenia, anxiety). Non dilutive financing

Magdalena Biosciences

Program to support the discovery and development of **novel psychoactive medicines derived from plants** for mental health and CNS disorders

- Leverage Company's proprietary library of ~2,300 plants and ~3,500 plant extracts with ethnomedicinal investigation
- Seeking next generation first-in-class agents, novel mechanisms of action, disease modifying agents

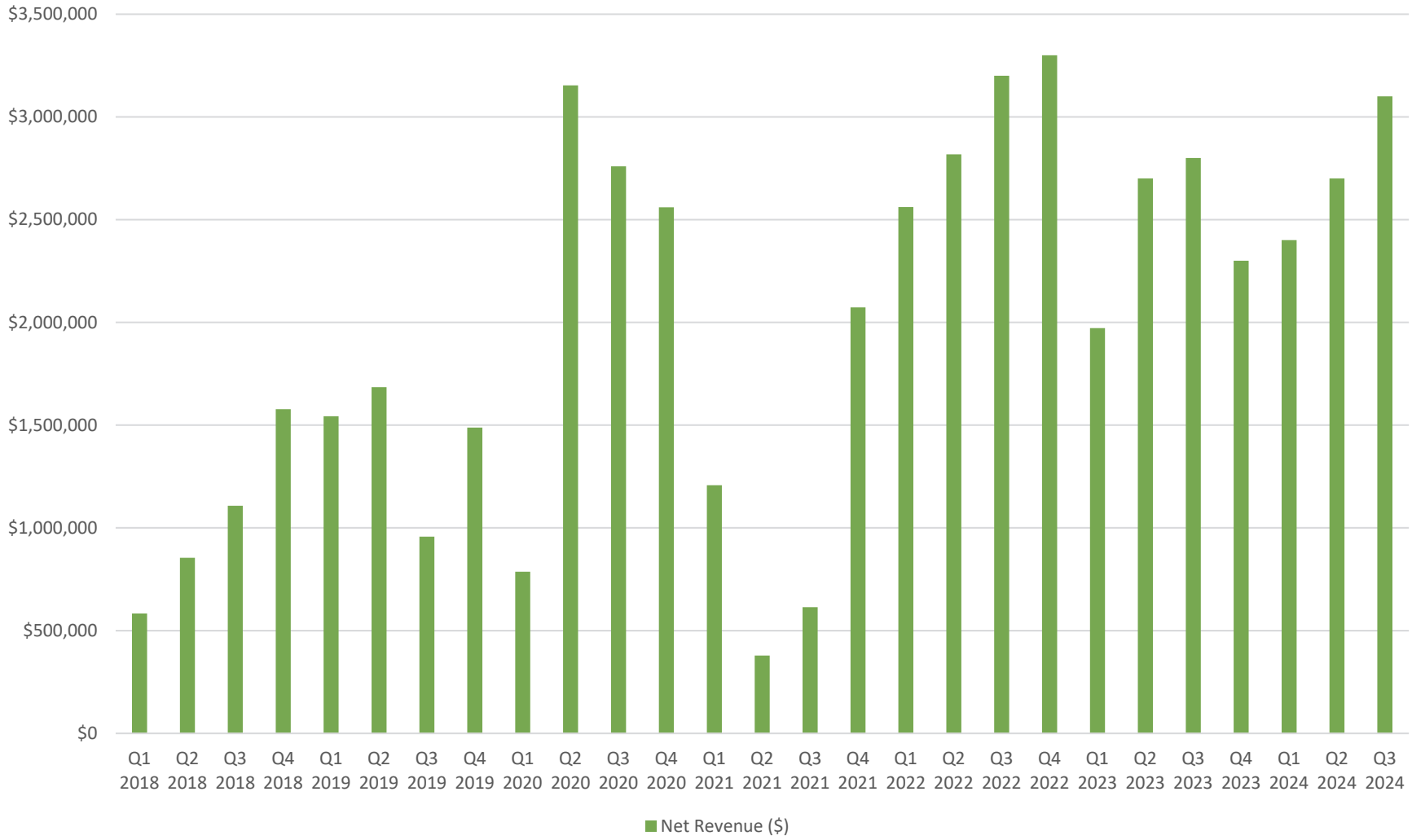
Picralima nitida plant, the source of the active ingredient alstonine

Eight key agents being pursued by psychedelic-focused companies:

- LSD and derivatives
- Psilocybin and derivatives (mushrooms in the genus *Psilocybe)*
- Iboga and derivatives
- Toad sections from *Bufus Alvarius* 5-MeO-DMT
- MDMA (referred to as ecstasy or Molly)
- Ketamine
- Mescaline and derivatives (peyote is most well-known source but not only source)
- DMT and derivatives (most well-known source is the *Banisteriopisis* and *Psychotria viridis* mixture known as Ayahuasca)

Peyote (*Lophophora williamsii*), a source of mescaline

Net Revenue: Q3 2024 Net Revenue Increased Approximately 14% Versus Net Q2 2024 Revenue



Expected Upcoming Catalysts – Financial, Clinical & Commercial

- **Ongoing:** Commercial launch (began Oct 2024) of FDA-approved Gelclair product for oral mucositis
- **Jan 2025:** Initiation of crofelemer IIT in Abu Dhabi in pediatric patients with SBS-IF or MVID
- **Dec 2024:** Initiation of crofelemer IIT at Cleveland Clinic in adult SBS-IF patients
- **Jan 2025:** Initiation by Napo Therapeutics of global Phase 2 study of crofelemer in adult SBS-IF patients
- **Q1 2025:** Initiation of additional crofelemer IIT for SBS – change formulation
- **Q1 2025:** Potential availability of first POC IIT result for crofelemer for SBS-IF and/or MVID in support of potential early patient access in specific EU countries
- **H1 2025:** Briefing package submitted to FDA on OnTarget results in breast cancer patients for CTD
- **Mid-2025:** Business development deal for development and commercialization of company's NP300 prescription drug candidate for general diarrhea in dogs
- **Mid-2025:** Meeting with FDA to obtain clarity regarding possible pathways to make crofelemer available as efficiently as possible to breast cancer patients for CTD; target filing of sNDA
- **2025:** Jaguar mental health-focused joint venture Magdalena Biosciences to initiate clinical development for botanical drug candidate
- **1H 2026:** End of Phase 2 trials of crofelemer in SBS-IF and MVID

gelclair®

OnTarget

Magdalena Biosciences

* Key milestones are based on management estimates. Adverse events could negatively affect their business and the timeliness of achieving key milestones.

Jaguar/Napo Pharmaceuticals Executive Management Team

Name / Title	Experience
Lisa Conte Founder & CEO	• 30+ years of industry experience • Obtained first anti-secretory human product FDA approval • Board of Directors of Healing Forest Conservancy • Raised over $400 mm
Carol Lizak, MBA Chief Financial Officer	• 20 years corporate controllership and financial planning and analysis experience under U.S. GAAP & IFRS • 10+ years with public companies including foreign subs (5 years in biopharma)
Steven King, PhD Chief Sustainable Supply, Ethnobotanical Research & IP Officer	• Served as head of sustainable supply, ethnobotanical research & IP: 1989-2020 • Board of Directors of Healing Forest Conservancy
Pravin Chaturvedi, PhD Chief Scientific Officer Chair of Scientific Advisory Board	• 25+ years drug development experience • Co-Founded Scion, IndUS and Oceanyx Pharmaceuticals • Successfully developed Mytesi® (first pivotal adaptive design) and 7 pharmaceutical products
Massimo Radaelli, PhD President of Jaguar International & CEO of Napo Therapeutics	• European pharmaceutical industry leader and entrepreneur with 35+ years' experience in the biopharmaceutical sector and innovation in therapies dedicated to rare diseases • Founded Noventia Pharma in 2009 and serves as its Chairman, President, and CEO; founded Pint Pharma Group and Ferrer Italia, was co-founder of a Dupont-Merck JV Italian subsidiary
Karen J. Brunke, PhD Executive VP, Corporate & Business Development	• 30+ years experience in research, operations and BD in pharma/biotech • Primary responsibility in deals with MedImmune, Astellas; closed GSK deal • Successfully developed GMOs at Sandoz while Research Director
Darlene Horton, M.D. Chief Medical Officer	• Biopharmaceutical veteran and leading clinical development expert • 25 years experience in development of investigational and commercialized biopharmaceutical and drug-device combination products; experienced in design of SBS clinical programs
David Sesin, PhD Chief Manufacturing Officer	• Pharmaceutical scientist with experience from drug discovery through manufacturing • Developed crofelemer manufacturing process
Jonathan Wolin, JD, MBA Chief of Staff, Chief Compliance Officer & General Counsel	• Extensive experience providing legal advice and guidance to public and private companies in the healthcare and biotechnology industries
Ian H. Wendt, MBA Chief Commercial Officer	• Has held commercial leadership roles across sales, marketing and operations at some of the largest brands in the pharmaceutical industry over past 25 years
Allison A. Shrier, M.D. Napo Pharmaceuticals VP, Clinical Research & Medical Affairs	• Physician-scientist-entrepreneur with expertise in oncology & metabolism • Expertise in end-to-end drug discovery & development including population identification, target product profiles development, hit design, selection & optimization, preclinical & clinical study planning

Investment Highlights

Mytesi (Crofelemer): FDA-Approved Human Drug	• Only FDA-approved diarrhea treatment that's been studied specifically in adults with HIV / AIDS • Supply chain in place
Planned Crofelemer Expansion	**Progression from supportive care to impact on outcome/cost of care to treatment modifying** • CTD– target sNDA filing for breast cancer patients on targeted therapy based on ss Phase 3 results • Intestinal failure – SBS and MVID– 5 clinical catalysts • Early patient access
Strategic Focus on Rare Diseases	• SBS with intestinal failure • Initial CDD target indication: Microvillus inclusion disease (MVID) • Cholera
Canalevia-CA1 for Chemotherapy-Induced Diarrhea (CID) in Dogs	• Canalevia-CA1 FDA conditionally approved December 2021 • Estimated 6 million new cancer diagnoses in dogs each year in US; 25-40% experience diarrhea • Management of CID in dogs is a comfort issue for dogs and may also help dogs better tolerate chemo and improve the home/living environment for owners • Predictive of human situation
Strategic Partnerships	• Unencumbered global commercial rights to Mytesi/crofelemer pipeline • License deals completed in Europe, Canada, Middle East • Magdalena Biosciences leveraging proprietary 2,300-plant ethnobotanical database
Strong Management Team	• Key management has been with the team for >20 years • Chairman of board and key investors have invested for >30 years
Proprietary Position	• ~193 patents (majority do not expire until 2027 - 2031) and ~41 patents pending • Sustainable supply of commercial scale of raw material sourcing • Botanical guidance protection – no practical generic pathway

Jaguar Health

Bringing Plant-based Medicines to Life™

Jaguar Health, Inc. (NASDAQ: JAGX)

Contact:
hello@jaguar.health