

See cells

Change lives



Mauna Kea Technologies



Mauna Kea Technologies

See Cells



Change Lives



OUR MISSION

At Mauna Kea Technologies, we are committed to advancing human health by providing unparalleled insights into the human body

Our innovative imaging tools enable precise diagnosis and treatment, leading to better outcomes and enhanced well-being for patients worldwide

CELLVIZIO® , A BREAKTHROUGH TECHNOLOGY TO VISUALIZE CELLS IN VIVO

REAL-TIME VISUALIZATION OF CELLS AND CELLULAR ARCHITECTURE

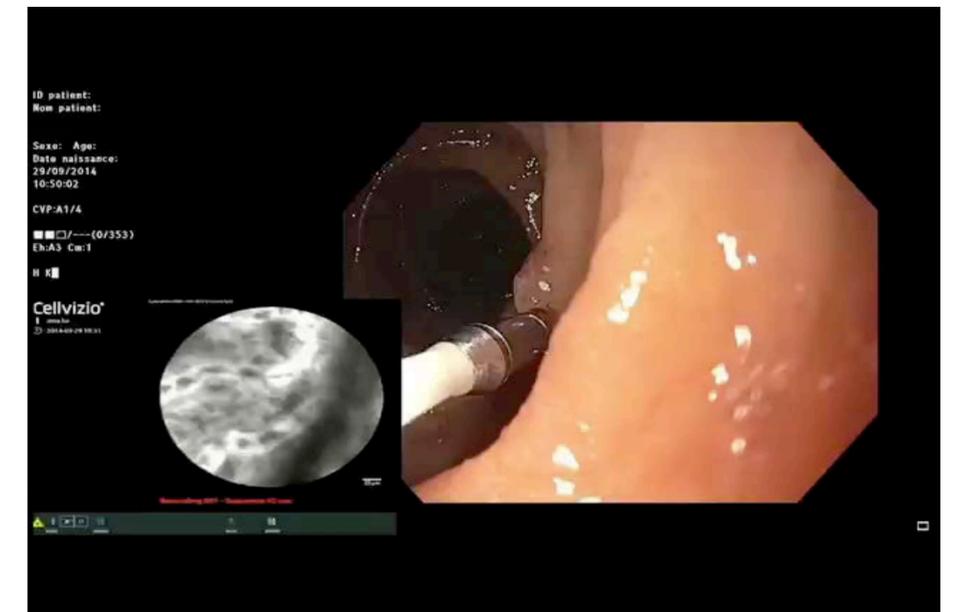
BROAD APPLICATIONS IN ONCOLOGY AND IMMUNOLOGY

- ✓ > 80,000 patient procedures
- ✓ > 1,200 clinical papers
- ✓ > 20 FDA clearances, CE mark, Category 1 CPT Codes



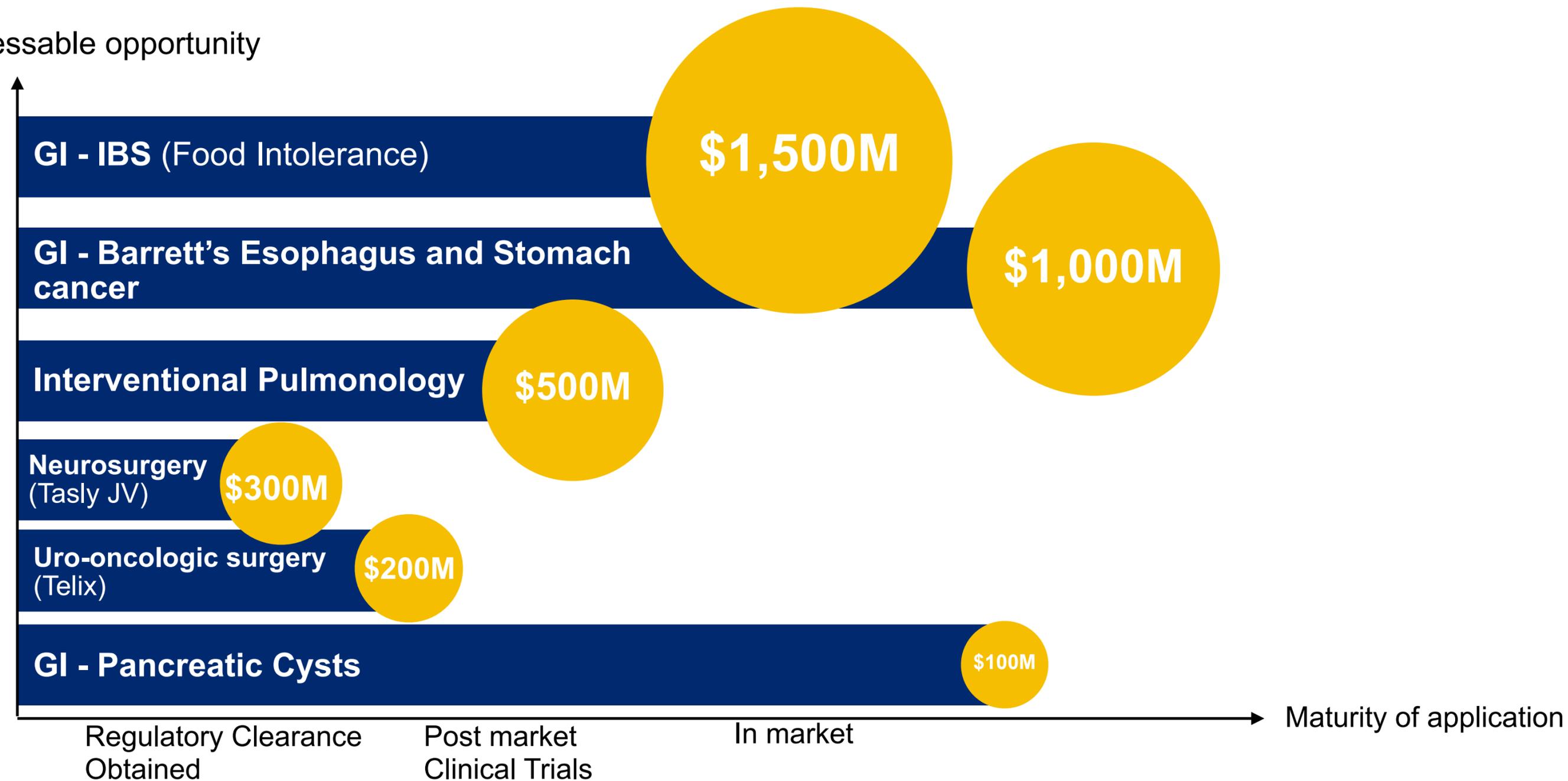
TINY ULTRA-SOPHISTICATED MICROSCOPE

HUNDREDS OF LIVE MICROSCOPIC IMAGES PER MINUTE



HUGE ADDRESSABLE MARKETS WITH MULTI-BILLION DOLLAR ANNUAL OPPORTUNITIES

Annual addressable opportunity



2023: A PIVOTAL YEAR LAYING THE GROUNDWORK FOR SUCCESS

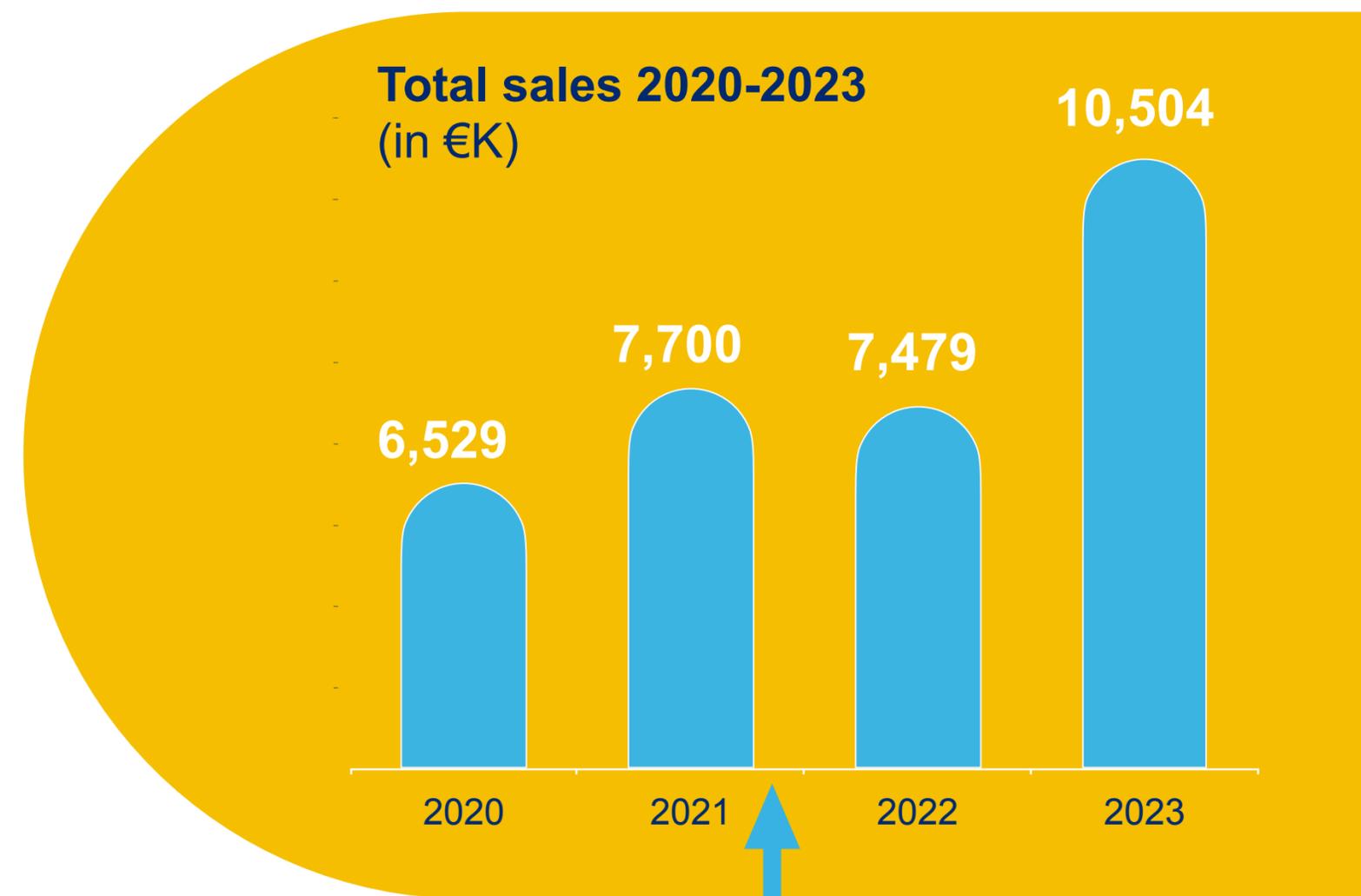
2nd BEST SALES YEAR IN THE GROUP'S HISTORY

- ✓ **Strong uplift of the U.S. PPU business in ASCs** generated steady and recurring revenues

+57% PPU sales growth in 2023

- ✓ **First contribution from Tasly JV** in 2023

€4.3m revenue contribution in 2023



Strategic repositioning / Dramatic reduction of commercial footprint

AN EXPERIENCED AND VISIONARY LEADERSHIP POWERING SUCCESS



Sacha Loiseau, Ph.D.
Chairman and CEO, Founder



Nathalie Lecoq
Chief Operating Officer



Côme de La Tour du Pin
Chief Financial Officer



Christopher McFadden
Director
Managing Director, KKR



Molly O'Neill
Director
Strategic Director for St
George's University



Bruno Villaret
VP, International Sales



François Lacombe, Ph.D.
Chief Scientific Officer



Jacquélien ten Dam
Director
CFO Mimetas



Claire Biot
Director
VP Life Sciences,
Dassault Systèmes



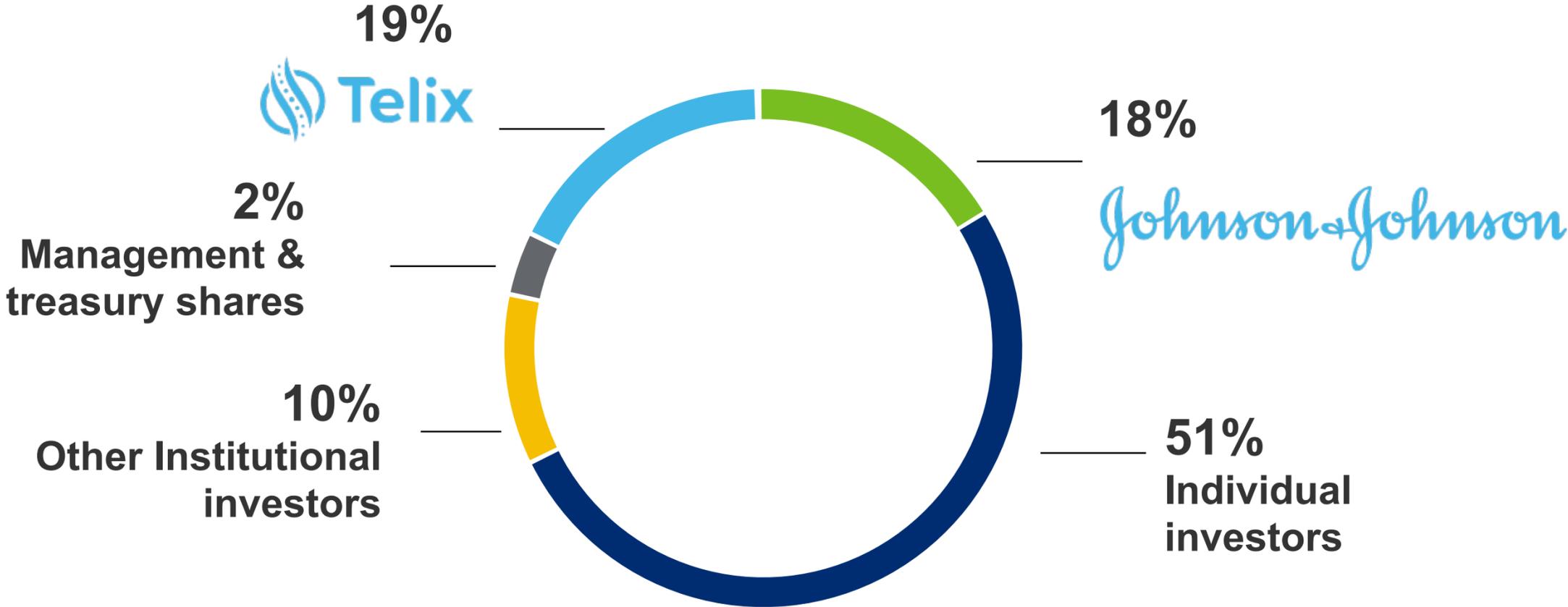
Daryl Donatelli
VP, Global Marketing & U.S. Sales



Frédéric Banégas, Ph.D., MBA
Chief Technology Officer



A LONG TERM VISION SHARED BY MAJOR STRATEGIC SHAREHOLDERS



3 MAJOR EQUITY INVESTMENTS SINCE 2019

- ✓ **Johnson & Johnson** invested twice in 2019 and 2021
- ✓ **Telix Pharmaceuticals** invested in 2023

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INVESTMENT THESIS: A MAJOR GROWTH OPPORTUNITY WITH SEVERAL FREE UPSIDES



**FOOD
INTOLERANCE**



**GI
ENDOSCOPY**



**INTERVENTIONAL
ONCOLOGY
INDICATIONS**



**Establish the global
gold standard for food
intolerance detection**



**Support the growing
adoption and scaling of
the GI legacy business**



**Invest alongside industry
leaders to develop the next
generation technologies**

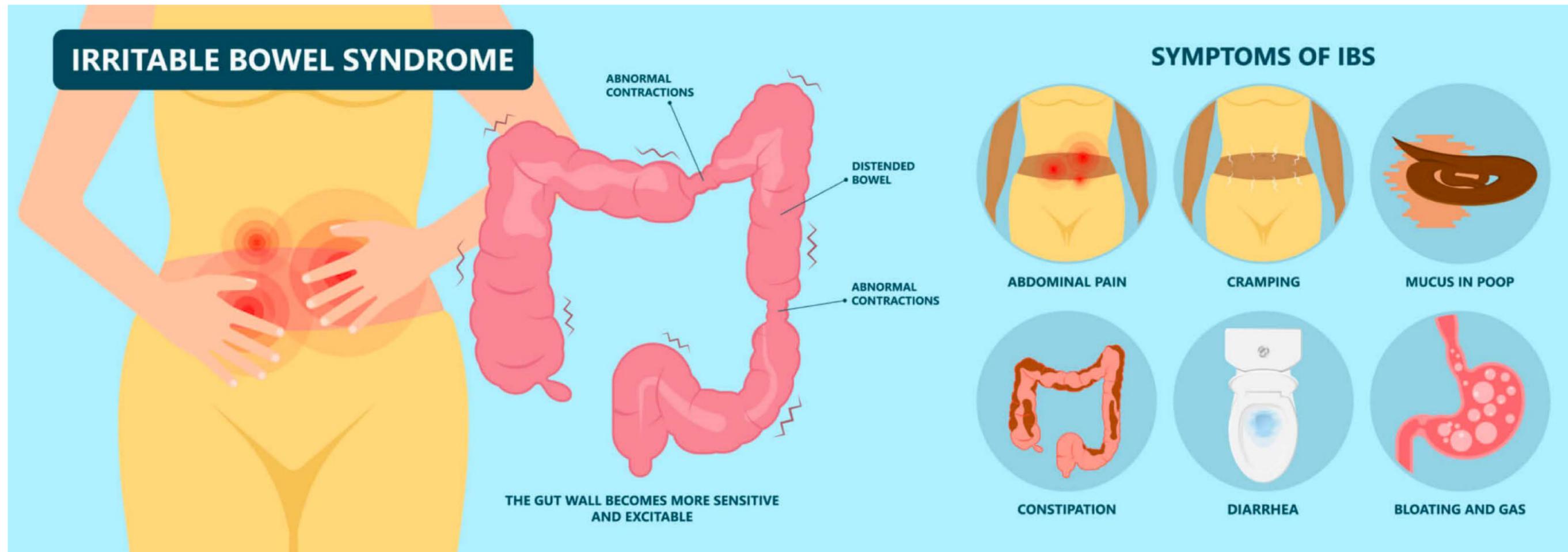
A ONCE-IN-A-LIFETIME OPPORTUNITY IN THE BOOMING FOOD INTOLERANCE MARKET

Food Intolerance



Our ambition is to **set the gold standard in food intolerance** characterization, empowering patients with unparalleled accuracy and insight, enabling them to take control of their health and dietary well-being

IBS IS A DAILY PROBLEM FOR MILLIONS OF PATIENTS AND IS DIRECTLY LINKED TO FOOD INTOLERANCE



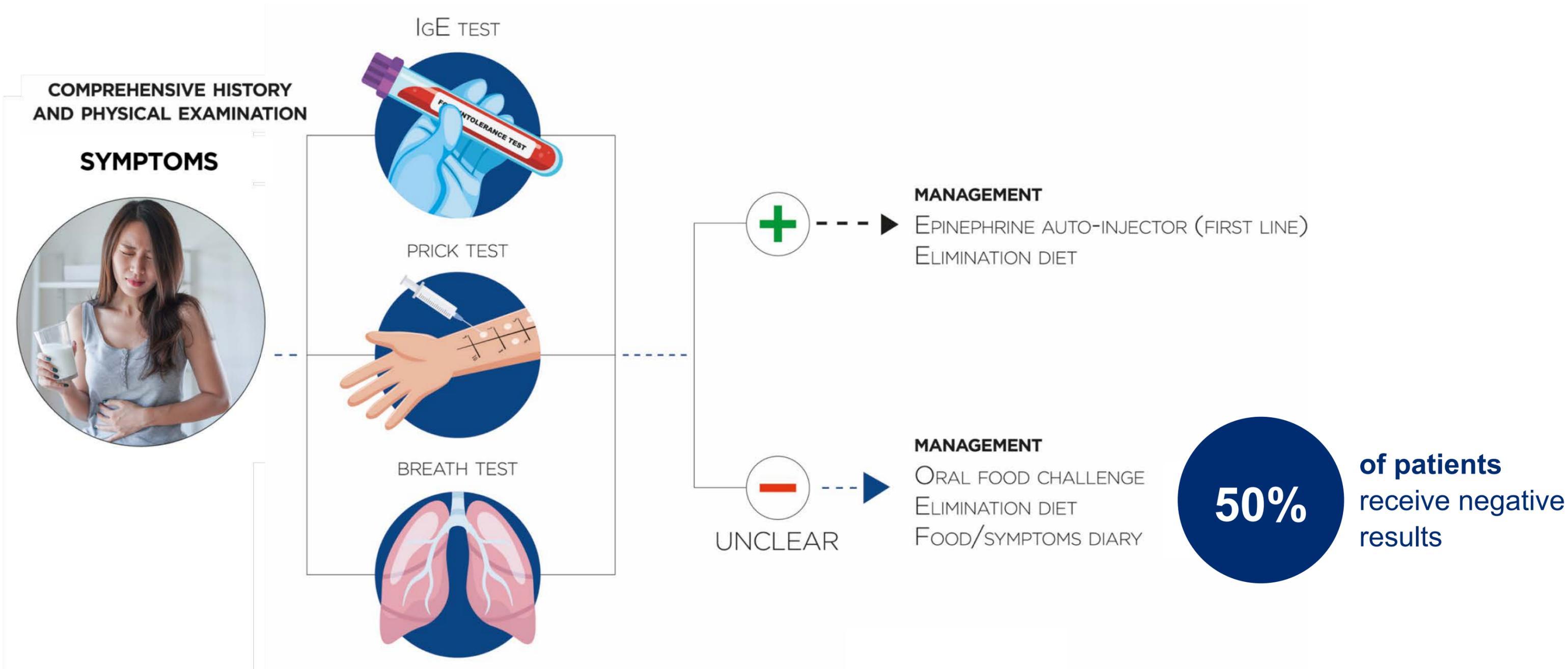
10%
worldwide
population¹

7th
most common diagnosis
by all physicians²

1st
diagnosis made by
gastroenterologists²

31
Significant impact on
quality of life

CURRENT TESTS ARE UNABLE TO DETECT ATYPICAL FOOD INTOLERANCE IN IBS PATIENTS



MILLIONS OF PATIENTS DESPERATELY LOOKING FOR SOLUTIONS TO ALLEVIATE THEIR SYMPTOMS

2x

INTERNET SEARCHES FOR FOOD INTOLERANCE SOLUTIONS VS WEIGHT LOSS



PATIENT SPEND SIGNIFICANT AMOUNTS OF MONEY IN DIAGNOSTICS AND TREATMENTS WITH QUESTIONABLE EFFICACY AND POTENTIAL SIDE EFFECTS



DIETARY MODIFICATIONS

COST (per year)



PROBIOTICS



GUT-DIRECTED HYPNOTHERAPY



COGNITIVE BEHAVIORAL-THERAPY



AN UNPRECEDENTED BOOM IN THE FOOD INTOLERANCE MARKET WITH VERY STRONG INVESTOR APPETITE

everlywell

- Home health tests incl. food sensitivity
- **\$330M** raised from BlackRock, The Chernin Group, Foresite Capital
- **>\$1.3Bn** valuation

allergy amulet

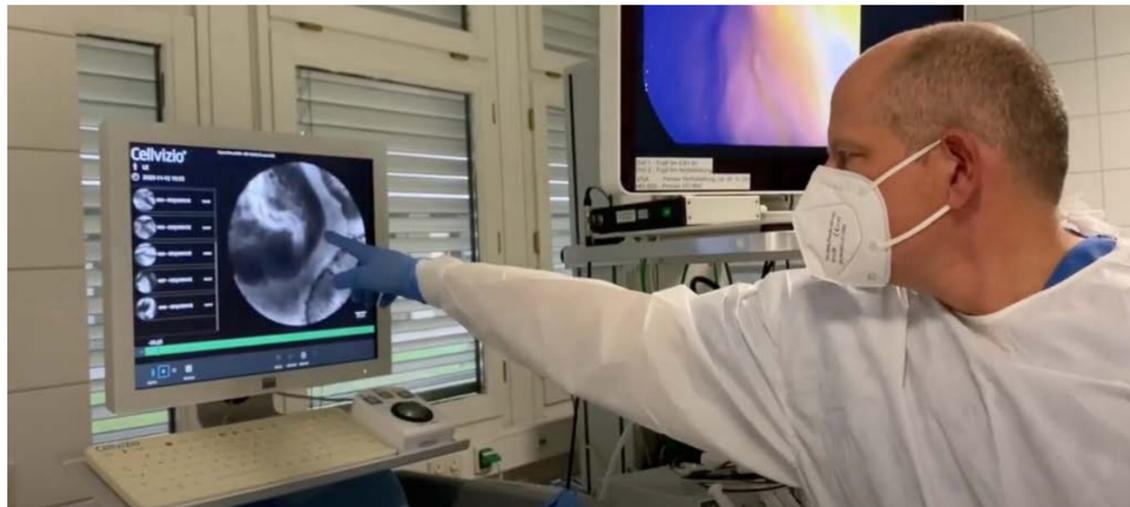


allergenis®

OUR C-FIT PROCEDURE: VALIDATED AND POISED TO BECOME THE GOLD STANDARD FOR FOOD INTOLERANCE DETECTION AND CHARACTERIZATION

C-FIT, A UNIQUE AND SIMPLE VISUAL TEST TO ACCURATELY DETECT FOOD INTOLERANCE

A unique direct visual functional test of the **microscopic intestinal barrier** allowing precise characterization of food intolerances



15 YEARS & €50M+ OF R&D INVESTMENT, CLINICAL DEVELOPMENT AND REGULATORY APPROVALS

- ✓ **No R&D or regulatory** investment needed
- ✓ **Proven technology** with high clinical accuracy
- ✓ **Ready for market expansion** with minimal investment

C-FIT IS A \$1.5B+ / YEAR OPPORTUNITY READILY ACCESSIBLE BY THE COMPANY

C-FIT IN PRACTICE WITH PROF. RALF KIESSLICH



[Click to watch](#)

C-FIT IS ROOTED IN DEEP SCIENCE AND 10 YEARS OF CLINICAL TRIALS

PROSPECTIVE STUDIES PUBLISHED IN 2014 AND 2019 IN GASTROENTEROLOGY¹ (#1 JOURNAL IN THE FIELD)

Many Patients With Irritable Bowel Syndrome Have Atypical Food Allergies Not Associated With Immunoglobulin E



Annette Fritscher-Ravens,¹ Theresa Pflaum,¹ Marie Mössinger,¹ Zino Ruchay,¹ Christoph Röcken,² Peter J. Milla,³ Melda Das,¹ Martina Böttner,⁴ Thilo Wedel,⁴ and Detlef Schuppan^{5,6}

¹Unit Experimental Endoscopy, Department of Internal Medicine I, University Hospital Schleswig-Holstein, Campus Kiel, Kiel, Germany; ²Department of Pathology, University Hospital Schleswig-Holstein, Campus Kiel, Kiel, Germany; ³UCL Institute of Child Health, University College London, London, United Kingdom; ⁴Department of Anatomy, Christian Albrecht University, Kiel, Germany; ⁵Institute of Translational Immunology, University Medical Center, Mainz, Germany; and ⁶Division of Gastroenterology, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, Massachusetts

- 155 patients with IBS received challenges with 5 common food components followed by CLE
- Patients with responses to food allergens during CLE (CLE+) were compared to nonreactive (CLE-) patients and healthy controls (HC)

50-60%

of IBS patients may have an **atypical food intolerance**

96%

of CLE+ patients experienced an **improvement in symptoms**

68%

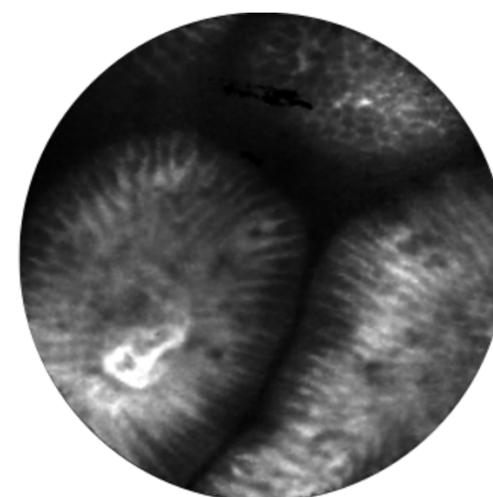
of CLE+ patients experienced **>80% improvement in 3-6 months of allergen exclusion**

SEEING IS BELIEVING: PATIENTS CAN SEE THEIR OWN REACTION RESULTS CONFIRMED W. REAL WORLD EVIDENCE

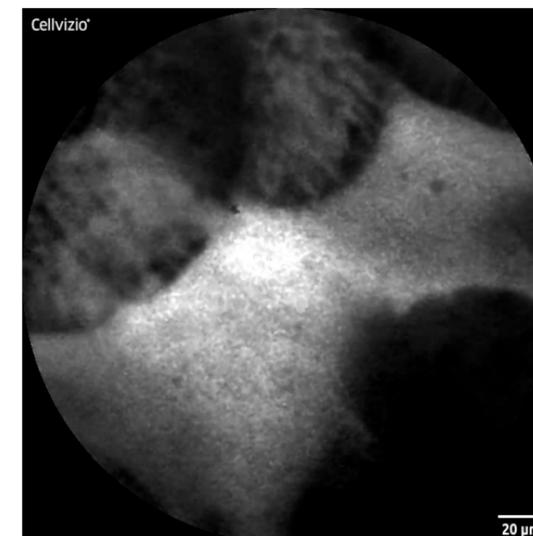
85% IMPROVED SYMPTOMS IN REAL WORLD PRACTICE¹

Results of endoscopic diagnosis of food related reactions

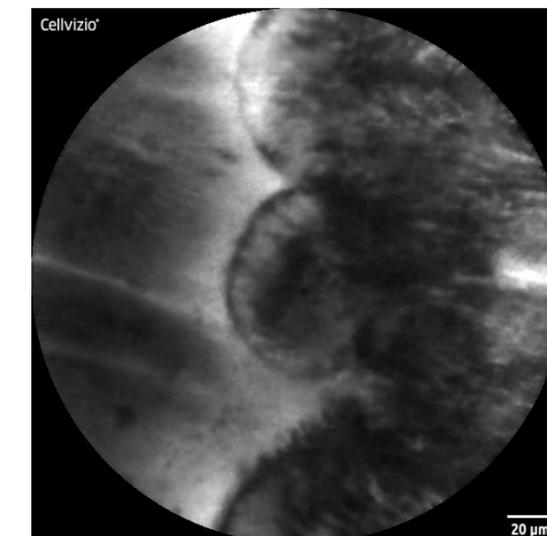
	Food induced leaky gut	Food independent leaky gut	No mucosal reaction
N = 56 (female 44)	33 (58,9%)	3 (5,4%)	20 (35,7%)
Wheat/soy/yeast/milk	22/7/2/2	0	
Improved symptoms after diet	28/33 (84,8%)	4/23 (17,4%)	p<0.05



Negative
No reaction



Positive: Cell Shedding - Leakage



WHERE WE STAND: 25 ACTIVE CENTERS ALREADY PROPOSING C-FIT

ALREADY ACTIVE IN THE U.S., FRANCE AND GERMANY

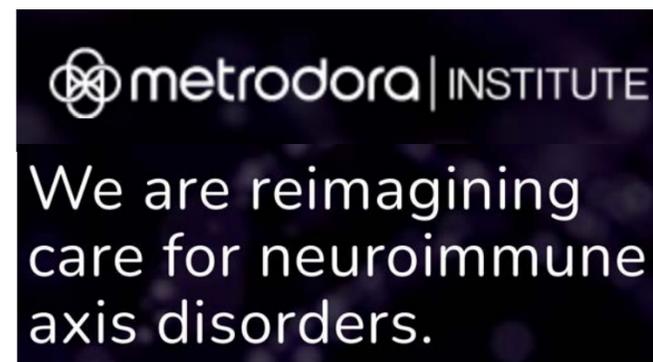
- ✓ Modest installed base achieved with **no commercial investment**
- ✓ **Solid physician** and KOL support
- ✓ **Rapidly expanding practice** adoption despite limited marketing efforts with



Press release

FINALLY HELP WITH A NEW PROCEDURE

Patient lived with diarrhea for 50 years



Mauna Kea Technologies Partners with Metrodora to Create First U.S. Center of Excellence for the Use of Cellvizio® to Identify and Treat Food Intolerance in Adults

A HUGE ADDRESSABLE MARKET WITH NO DIRECT COMPETITION

RESTRICTIVE PATIENT FUNNEL YET LEADING TO A HUGE MARKET POTENTIAL OF 3 MILLION PATIENTS
IN THE U.S. & EU ONLY

U.S. & EU population

550M

IBS prevalence (10%)¹

55M

Consulting for symptoms (30%)²

16M

Unsatisfied with therapies (66%)³

11M

Suffer from atypical non IgE mediated food allergy (50%)⁴

6M

Negative to gluten free diet (50%)⁴

3M

3M patients
x €500 /
procedure
= €1.5B TAM

A GO-TO-MARKET PLAN LED BY A RECOGNIZED MARKETING & COMMERCIALIZATION EXPERT

BENOIT CHARDON APPOINTED SENIOR ADVISOR TO SCALE THE BUSINESS



- ✓ **>20 years experience** in medical aesthetics and direct to patient marketing approach
- ✓ **Proven track record** in the launch and scaling of successful new category creation
- ✓ **Solid achievements** as former Chief Commercial Officer of Allurion
 - ▶ **Expanded activity** across > 50 countries
 - ▶ **Generated 100% CAGR** in 2018-2023

Past experience

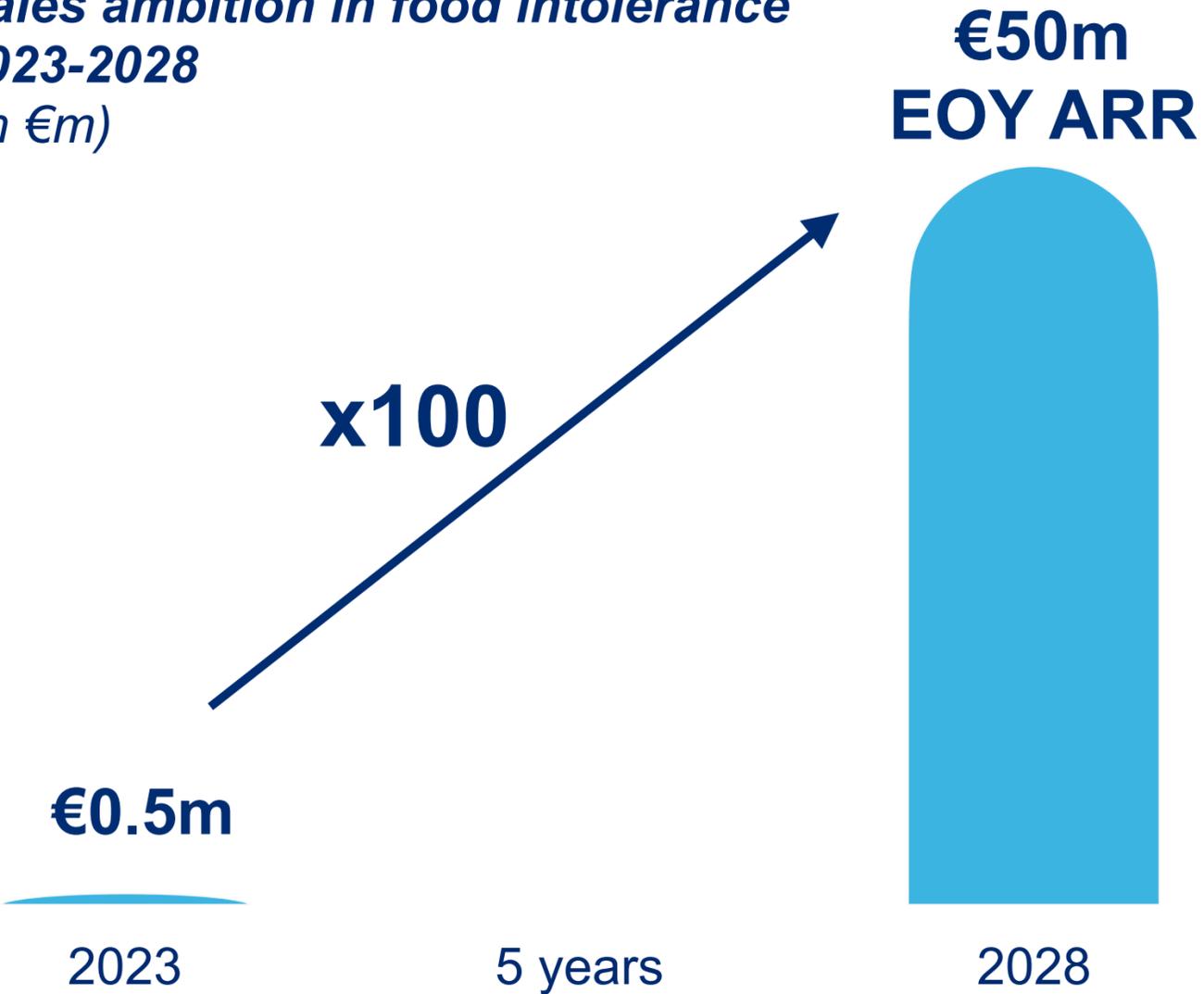


Allurion



A VERY STRONG GROWTH AMBITION YET REASONABLE GIVEN THE MARKET SIZE

**Sales ambition in food intolerance
2023-2028**
(in €m)



KEY METRICS END OF 2028

- ✓ **300 centers** operational for regular Cellvizio C-FIT procedure with 20 procedures / month
- ✓ **€600 per procedure** for Mauna Kea
- ✓ **3-5% market penetration**
- ✓ **Priority markets:** France, Germany, U.S.
- ✓ **Growth reservoir:** Latin America, Middle East

A REVITALIZED LEGACY BUSINESS IN GI ENDOSCOPY, POISED FOR SCALE-UP AND PARTNERING

GI Endoscopy



Our ambition is to become the standard of care in early esophageal and gastric cancer detection and pancreatic lesion characterization, enabling major benefits for patients, providers and payers.

THE HEAVY TOLL OF DIAGNOSTIC UNCERTAINTIES IN GASTROINTESTINAL CANCER CARE

CANCERS REPRESENT A HUGE BURDEN ON PATIENTS AND HEALTHCARE SYSTEMS DUE TO **LACK OF ADEQUATE VISUALIZATION LEADING TO POOR DIAGNOSIS AND INCOMPLETE TREATMENTS**

Esophageal & Stomach cancers

91%

of esophageal cancer cases **missed during treatable pre-cancerous stage of Barrett's**¹

Pancreatic cysts

60%

of patients with benign cysts **undergo unnecessary surgery**²

IMPROVED PROFITABILITY PROFILE THANKS TO U.S. SALES GROWTH

U.S. NOW ACCOUNTS FOR \$5M IN SALES AND 72% OF TOTAL SALES¹

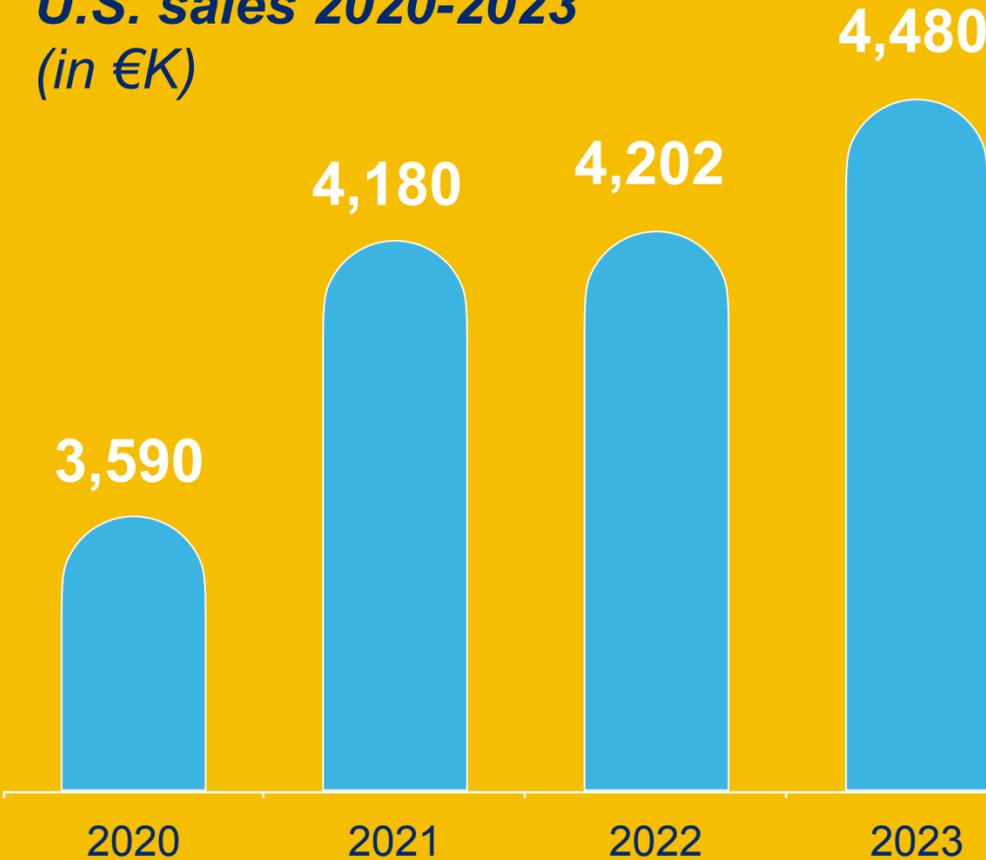
✓ **Stronger gross margin profile** thanks to the growing weight of U.S. sales

+12 pts share of U.S. sales in 2023

✓ **Improved operational efficiency** as sales increased while sales force was reduced by 50%

x2.2 productivity in 2023 vs 2020

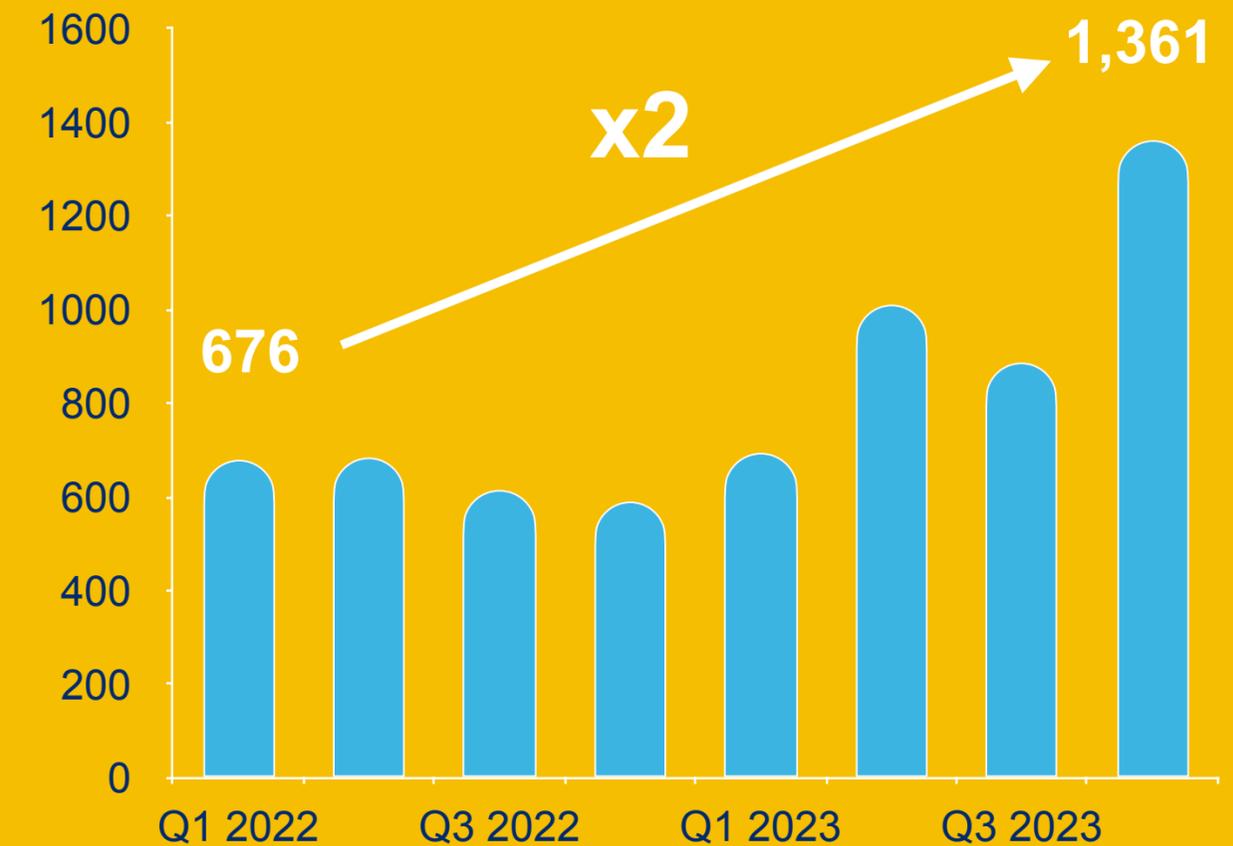
U.S. sales 2020-2023
(in €K)



A SUSTAINABLE PPU BUSINESS IN ESOPHAGEAL CANCER ACCOUNTING FOR 63% OF U.S. SALES

- ✓ **Rationalization of the customer base** in 2022 to focus on the most active and profitable accounts
- ✓ **Increased monthly usage and acquisition of new accounts** with a strong immediate ramp-up
- ✓ **Focus on community hospitals and ASCs** (vs Academic Medical Centers previously) leading to stronger volume and greater sustainability
- ✓ **Increased sales productivity** with 50% sales force reduction vs 2021

Number of quarterly procedures

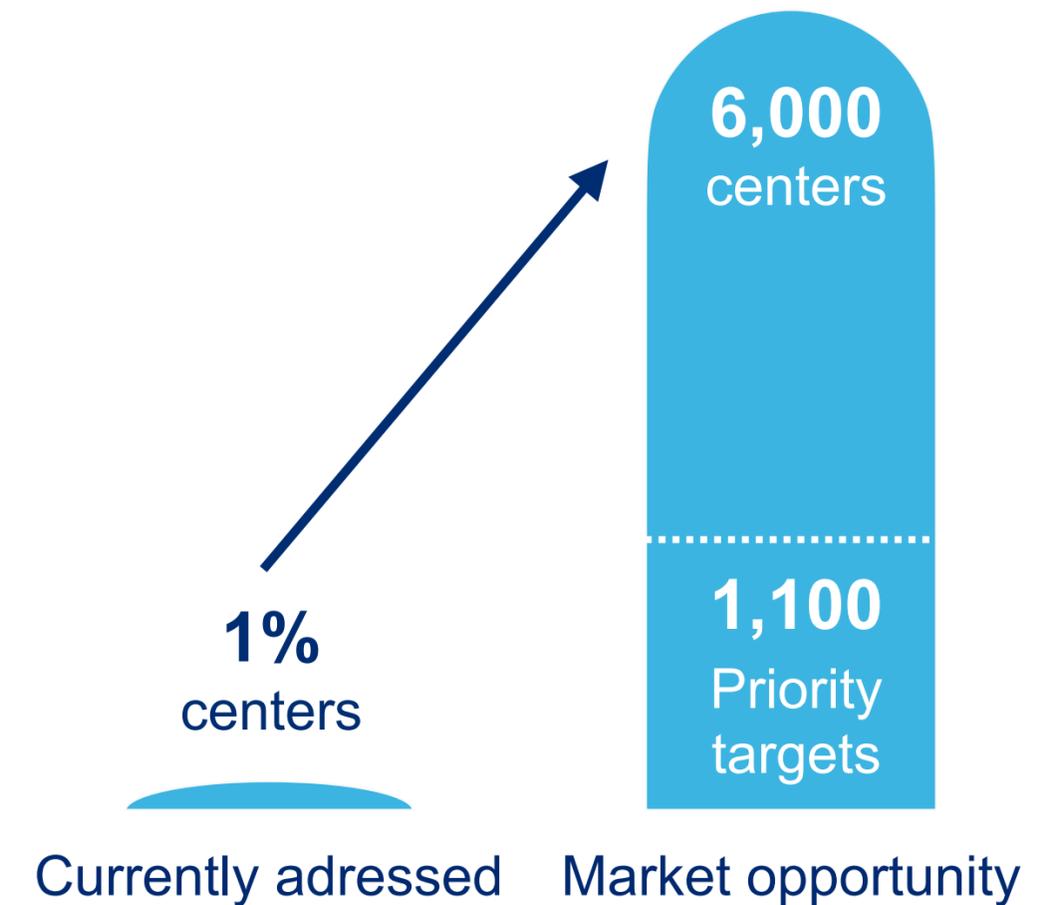


STRONG OPPORTUNITY FOR EXPANSION IN ASCs STILL LARGELY UNTAPPED

A FAVORABLE STRUCTURAL SHIFT FROM HOSPITAL TO ASCs IN THE U.S.

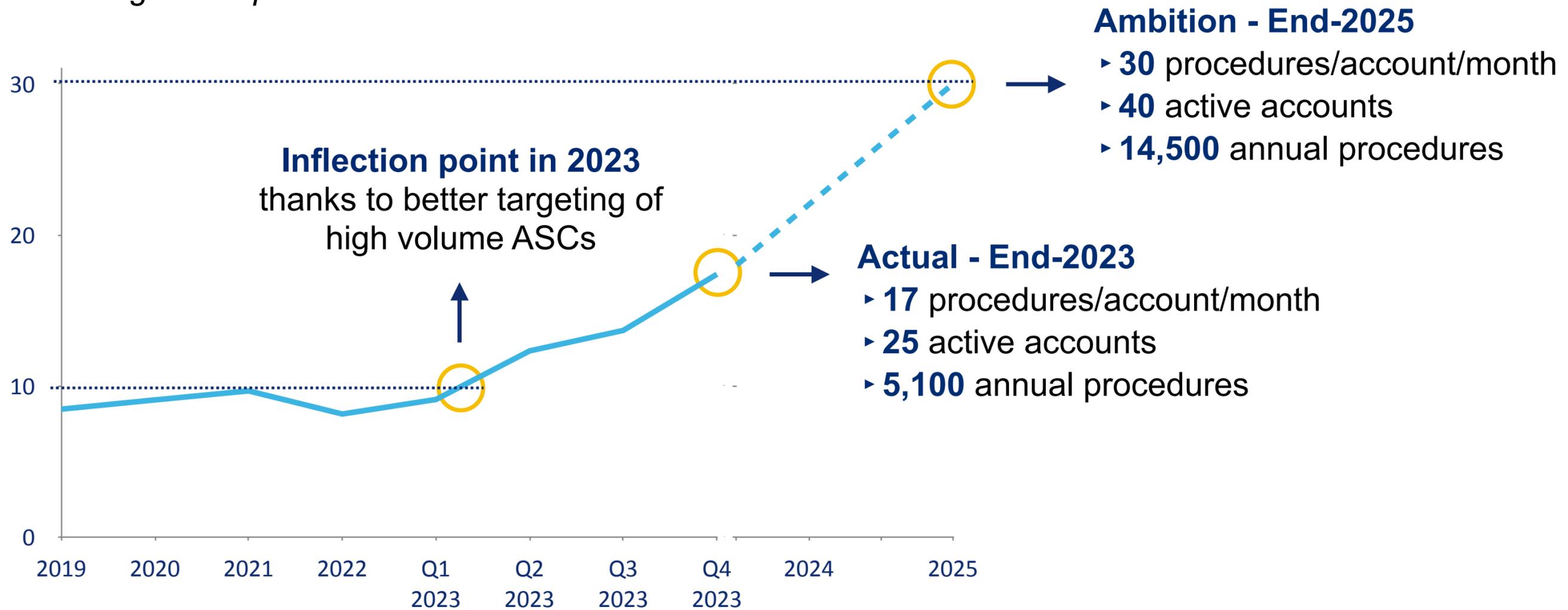
- ✓ **14M** GI endoscopy procedures in ASCs in 2023¹
- ✓ **+22%** expected growth by 2033²
- ✓ **Upper GI endoscopy** identified as the highest potential procedure for transition from hospital to ASCs²

HUGE RESERVOIR OF GROWTH



BUILDING ON STRONG GROWTH MOMENTUM TO TRIPLE PPU PROCEDURES BY END 2025

Average PPU procedures /account / month



CLIMB PIVOTAL STUDY TO MAKE CELLVIZIO THE STANDARD OF CARE FOR PANCREATIC CYST DIAGNOSIS

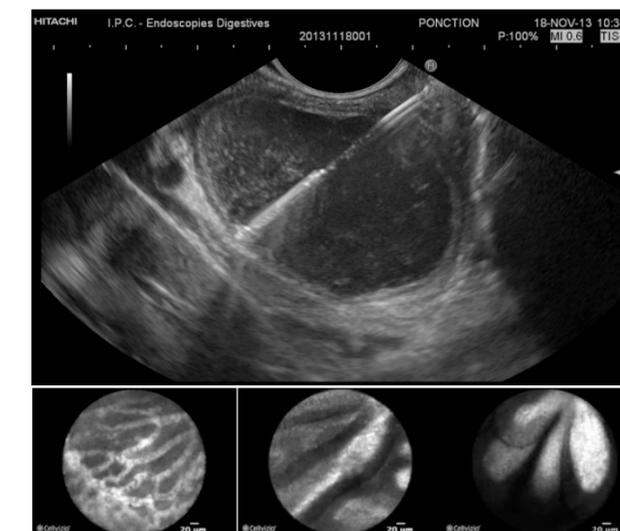
SIGNIFICANT MARKET TRACTION FOR CELLVIZIO EXPECTED AFTER CLINICAL RESULTS

- **Investigator Initiated Study** (The Ohio State University) in 10 centers, 500 patients
- **Prospective study** with definitive diagnostic accuracy compared to all other techniques as endpoint
- **Expected enrollment** completion date in 2024

A PARADIGM SHIFT FOR PANCREATIC CYSTS MANAGEMENT

- ✓ **100% specificity** in Mucinous Cystic Lesions and Serous Cystadenomas characterizations^{1,2}
- ✓ **FDA cleared** in 2013
- ✓ **Reimbursed** with Category 1 CPT® Code

Cellvizio miniprobe inspecting the cyst wall through a needle during EUS-FNA procedure



Serous Cystadenoma Mucinous Cystadenoma IPMN

STRATEGIC ROADMAP: ACCELERATING GROWTH IN THE U.S. TO ACHIEVE PROFITABILITY

1. ACCELERATE PPU GROWTH IN ESOPHAGEAL CANCER

- Optimize and increase monthly use
- Expand installed base

2. EXPAND CELLVIZIO USE IN PANCREATIC CYSTS

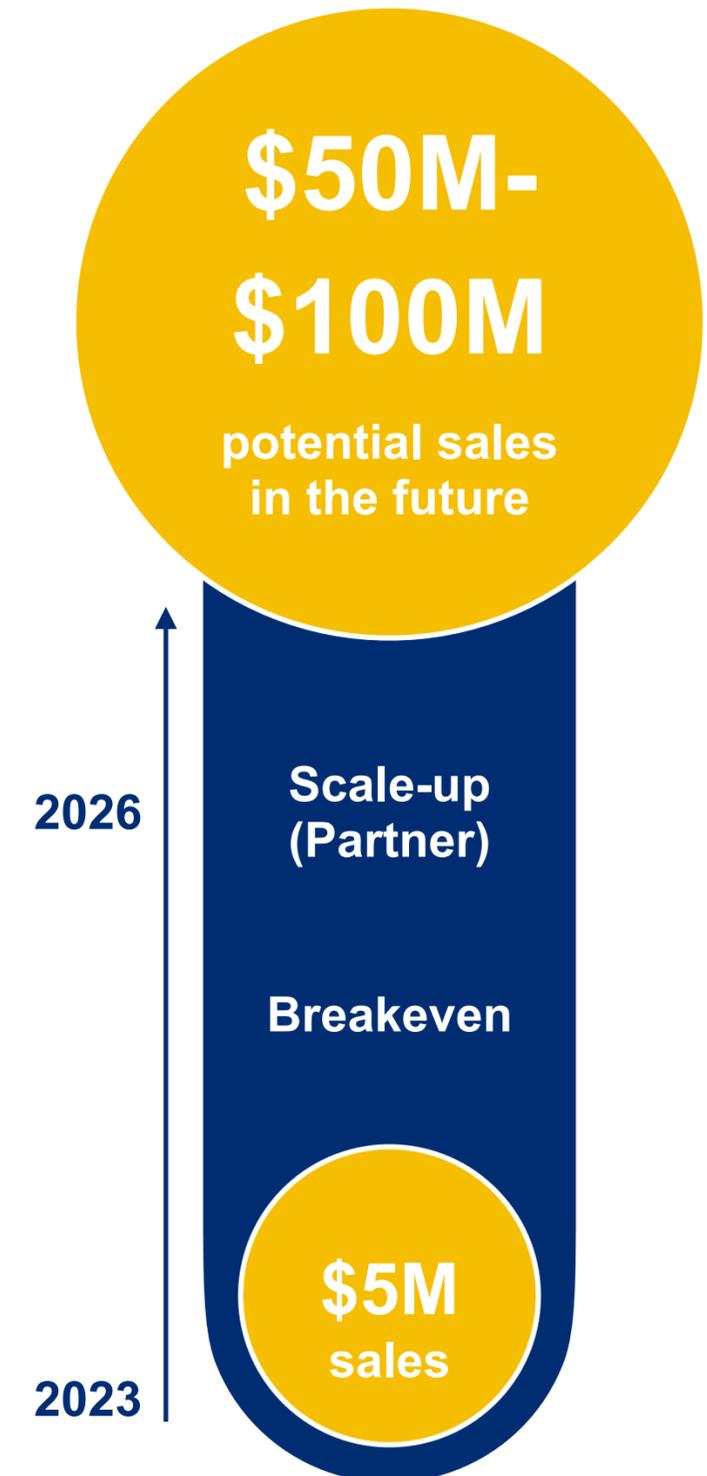
- Expand commercial reach in niche market
- Leverage compelling clinical results from CLIMB study to promote adoption

3. EXPLORE COMMERCIAL PARTNERSHIP

- Private label with a MedTech to leverage strong commercial infrastructure
- Discussions ongoing

4. LAUNCH AI-BASED FEATURES AND SOLUTIONS

- Presentation of AI solution in pancreatic cyst in May 2024
- Ongoing discussions with AI partners / in-house developments



CHINA: EXPAND INTO THE CHINESE MARKET THROUGH THE JV WITH TASLY

MAUNA KEA OWNS 44% OF A JV WITH TASLY PHARMACEUTICAL,
A CHINESE PHARMA COMPANY WITH \$1.5bn SALES



GROWTH STRATEGY

- **Capitalize on Solid** installed base of c.50 systems and the support of KOL support in Eastern China
- **Leverage Tasly Pharmaceutical's** expertise and extensive network for accelerated growth
- **Anticipate expansion** of installations across Tier 3A and Tier 2 hospitals



FINANCIAL CONSIDERATIONS

- **Licensing rights** for the development & commercialization of Cellvizio in China and in neurology worldwide
- **\$10m cash** payment from the JV to Mauna Kea
- **5-year** purchasing commitments for Cellvizio and probes by the JV

TRANSFORMATIVE PARTNERSHIPS RECENTLY SIGNED TO LEVERAGE CELLVIZIO IN OTHER INDICATIONS

Johnson & Johnson

\$380bn
Market cap

- ✓ **R&D collaboration**
in Interventional
pulmonology
- ✓ Complement
MONARCH™
platform

 **Telix**

\$2bn
Market cap

- ✓ **R&D collaboration**
in Urologic Oncologic
surgery
- ✓ Complement
radiopharmaceutical
agents

 **TASLY**

\$3bn
Market cap

- ✓ **Commercial license**
in China
- ✓ **R&D collaboration**
in neurology and
neurosurgery

Conclusion

- ✓ New strategy validated with recent Tasly Pharmaceutical and Telix partnerships, strong top-line growth and positive net financial results in H1 2023
- ✓ Improved corporate profile, leadership, and liquidity
- ✓ Multi-billion market opportunities addressed by proprietary Cellvizio® platform
- ✓ Strong pipeline of strategic partners to address large additional markets based on portfolio of regulatory / clinical / product assets
- ✓ Multiple growth catalysts de-risking the company and providing significant potential upsides