LEADING BIOSCIENCES

STOP, PREVENT, HEAL

Defending the intestinal mucosal barrier to treat widespread medical conditions

June 2017

Forward-Looking Statements

This presentation contains forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements reflect management's current knowledge, assumptions, judgment and expectations regarding future performance or events. Although management believes that the expectations reflected in such statements are reasonable, they give no assurance that such expectations will prove to be correct, and actual results could differ materially from the forward-looking statements.

Words such as "will," "expect," "intend," "plan," "predict," "potential," "possible," and similar expressions identify forward-looking statements, including, without limitation, statements related to the scope, progress, expansion, and costs of developing and commercializing our product candidates, anticipated regulatory pathways, anticipated expenses related to development activities, clinical trials and the development and potential commercialization of product candidates.

Forward-looking statements are subject to risks and uncertainties including, but not limited to, the Company's ability to execute its revised strategy and business plan; the ability of the Company to list its common stock on a national securities exchange; the Company's access to limited cash reserves and its ability to obtain additional capital, including the additional capital which will be necessary to complete the clinical trials that the Company has initiated or plans to initiate; the potential timing and outcomes of clinical studies of LB1148 or any other product candidates; the commercial viability of the Company's proposed drug pricing program; the ability of the Company to timely source adequate supply of its development products from third-party manufacturers on whom the Company depends; the potential, if any, for future development of any of its present or future products; the Company's ability to successfully progress, partner or complete further development of its programs; the ability of the Company to identify and develop additional products; the uncertainties inherent in clinical testing; the timing, cost and uncertainty of obtaining regulatory approvals and reaching other development milestones; the Company's ability to apply or receive Priority Review Vouchers; the Company's ability to protect the Company's intellectual property; competition; and changes in the regulatory landscape or the imposition of regulations that affect the Company's products; and the various risks described in the "Risk Factors" and elsewhere in the Company's periodic and other filings with the Securities and Exchange Commission.

You are cautioned not to place undue reliance on any forward-looking statements, which speak only as of the date of this release. The company has no obligation, and expressly disclaims any obligation to update, revise or correct any of the forward-looking statements, whether as a result of new information, future events or otherwise.

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Our Logo: Protect the Body from The GI Tract

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Leading BioSciences Approach

Strong Focus

Commercializing innovative medicines to protect and restore GI mucosal barrier and function. This GI focused approach treating systemic disease and improve health.

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Leading BioSciences Approach

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Strong Pipeline	Robust pipeline of clinical assets based on our Gastrobiome diagnostics and therapeutics addressing exceptionally large markets characterized by high unmet medical need

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Development Pipeline Focused on the Gastrobiome

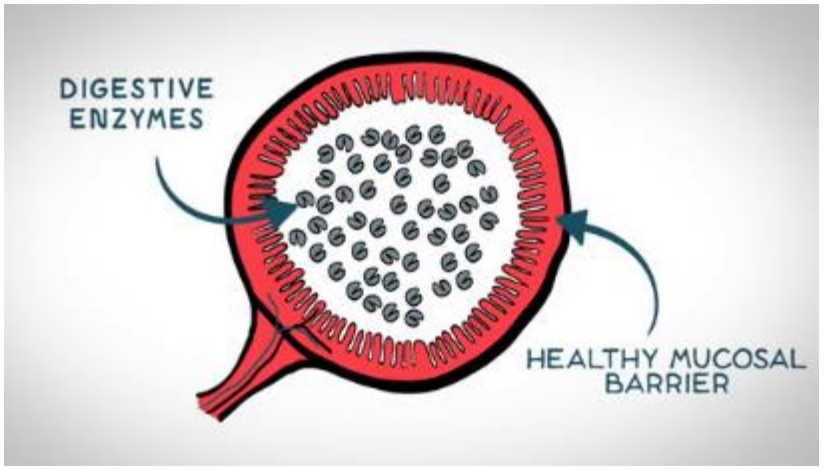
	Drug	Indication	Preclinical	Phase 1	Phase 2	Phase 3
Hospital Based /Acute Care	LB1148	**Postoperative Return of Bowel Function**	Phase 2 Data Expected Q1 2018			
		Adhesions	Phase 2 Data Expected H1 2018			
		Cardiovascular Surgery Complications	Phase 2 Data Expected H1 2018			
		Septic Shock Related to infection	Phase 2 Data Expected H2 2018			
		Hemorrhagic Shock Related to trauma/blood loss	Trial Design Underway with DOD*			
	LB1149	**Anastomotic Leak**	Lead POC			
	Breath Diagnostic	**Mucosal Barrier Breakdown**	Data from 90 Patients: 3 Hospitals			
Chronic Diseases	LB0517	**Diabetes**	Lead POC			
		Hypertension	Lead POC			
	Blood Diagnostic	**Gastrobiome Dx**	Data from 40 Patients: 1 Clinic			

Diagnostic **Disease** Biomarker Development Validation IDE

**Ongoing discussions with DOD to build consortium to fund $15M clinical trial.*

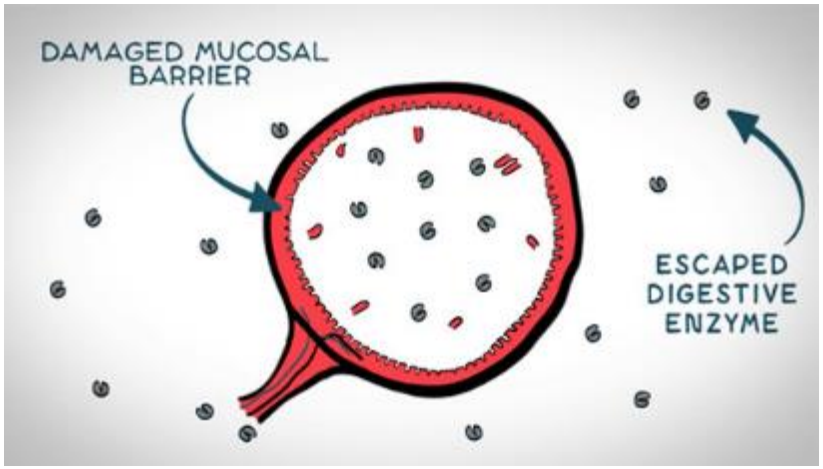
Intestinal Barrier Function is a Driving Factor in Health and Disease

Healthy Intestine



- Mucosal barrier is maintained
- Potent digestive enzymes are actively only in the intestine

Damaged Intestine



- Mucosal barrier breaks down
- Digestive enzyme leak
- Damage GI tract and local tissues
- Disruption of bowel function

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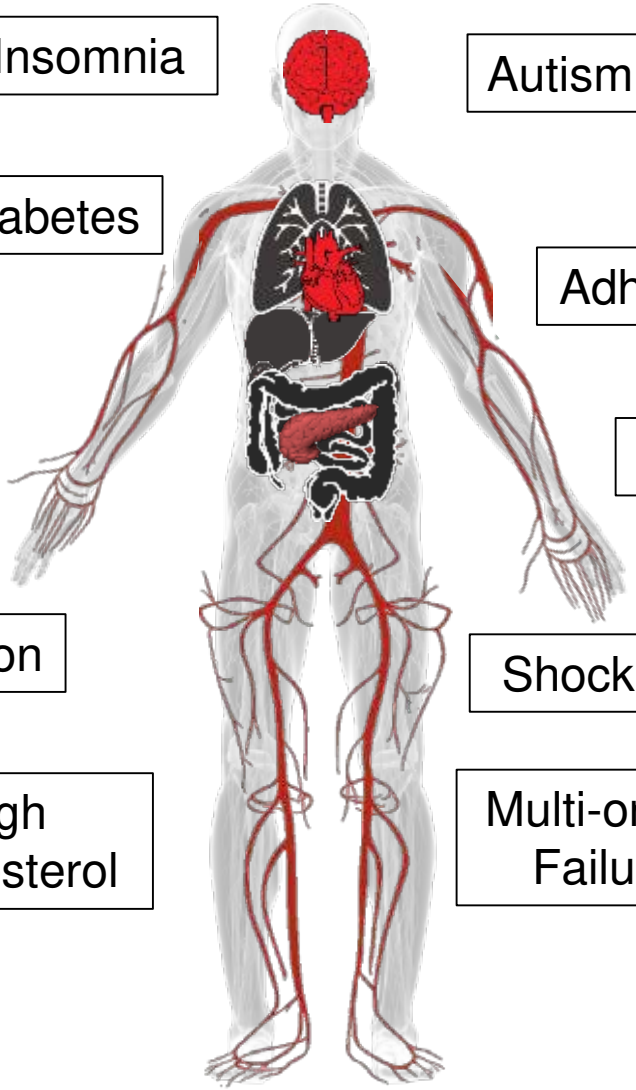
Targeted Therapeutics to the Gastrobiome



Insomnia

Autism

Diabetes

Adhesions

Metabolic Syndrome

Ileus

Hypertension

Shock

High Cholesterol

Multi-organ Failure

Modulating the Gastrobiome has the potential to revolutionize the management of a broad range of therapeutic areas

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LB1148

Lead Candidate LB1148 Benefits

Lead candidate, LB1148, has the potential to be the first FDA-approved treatment to neutralize digestive enzymes and prevent proteolytic damage to the GI tract and organs during GI surgery

- US market size of over 10 million patients
- Decrease hospital length of stay by more than 1 day
- Save billions in hospital costs annually, driving rapid adoption by surgeons, hospital systems, and payers
- Repurposing of known compounds using 505(b)(2) approval pathway
- Protected by strong composition of matter patents

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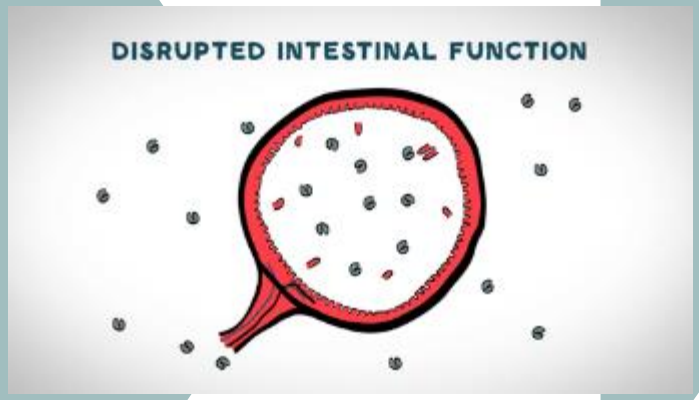
Multiple Acute Conditions Lead to Digestive Enzyme Leak and Disrupted Intestinal Function

- GI Surgery

- Septic Shock

- Cardiovascular Surgery

- Trauma (including Battlefield)



- Inflammation
- Loss of intestinal movement
- Scaring and adhesions
- Reoperations to remove adhesions
- Prolonged hospital stay

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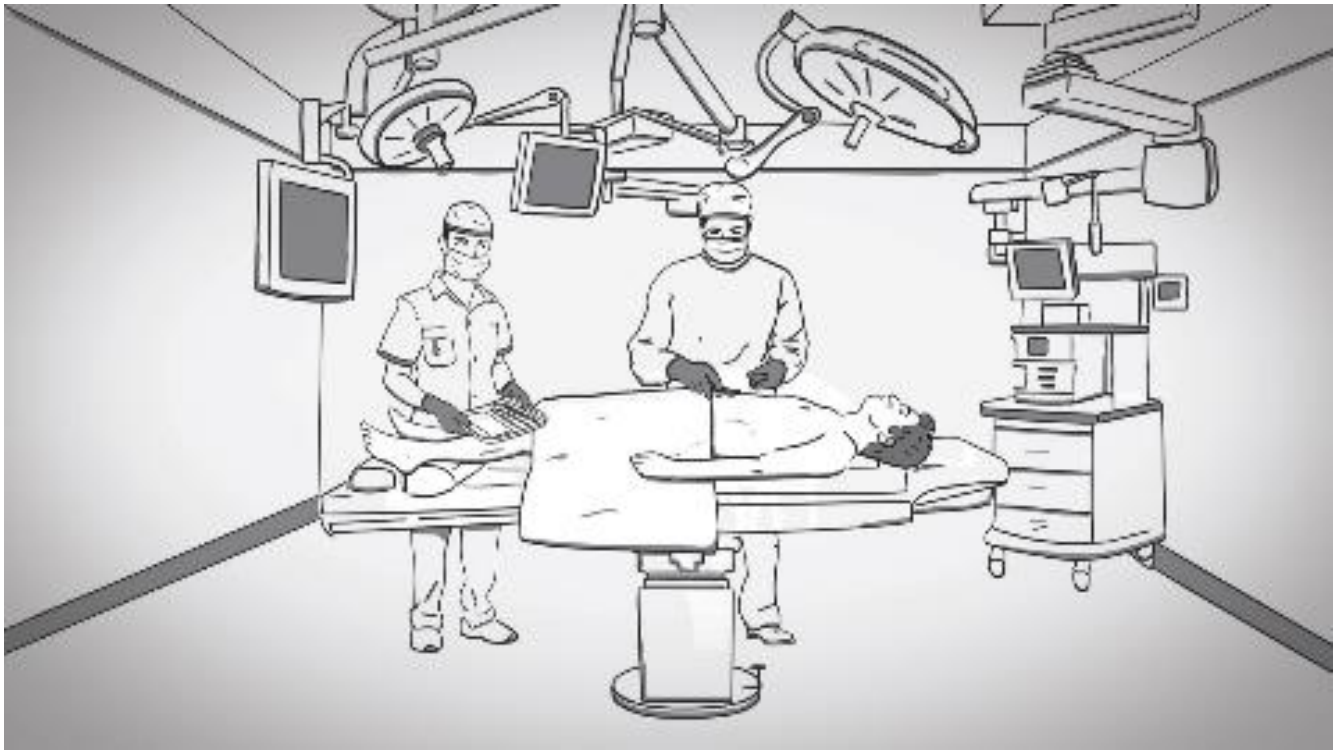
Surgical Adhesions and Post-Op Ileus Market

- 10.5 million patients annually
- Instantaneous break in mucosal barrier



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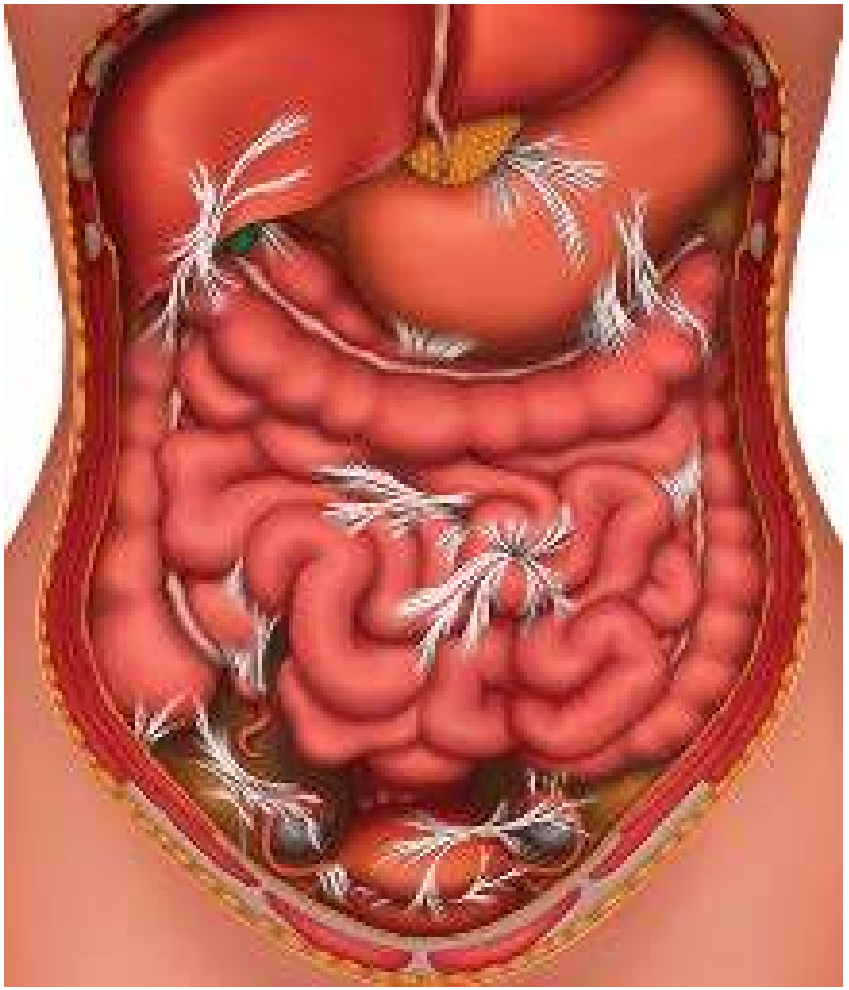
Significant Need to Reduce Complications from GI Surgery

- Surgical adhesions
  - No. 1 preventable cause of infertility in women
  - No. 1 cause of post-operative pain
  - 400,000 cases require surgical correction annually
  - 95% of the surgical procedures at risk of adhesions (CDC)
- Loss of intestinal movement and delayed bowel function
  - Extends hospital stay
  - Increases medical costs



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Following GI Surgery, Patients Are Not Discharged from the Hospital Until They Have a Bowel Movement

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GI Surgery Patients Have Long Hospital Stays Waiting for Bowel Function to Return

DRG Code	Description	Average Hospital Length of Stay
329	Small and Large Bowel Surgery with Major Comorbid Condition	14.4
330	Small and Large Bowel Surgery with Comorbid Condition	8.2
331	Small and Large Bowel Surgery without any Comorbid Conditions	4.6

Potential for Significant Cost Savings Per Day LOS Reduced

Standard GI Surgery LOS Today

1 Day Earlier Discharge

$3500
in Hospital Costs Saved Per Patient

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LB1148 Predicted to Reduce Hospital Stay

- Oral small-molecule therapeutic
  - Used as bowel prep
  - Inhibits 17 digestive enzymes
  - Prevents damage to the intestine
  - Preserves bowel function
  - **Reduces hospital stay**
- Known safety profile
  - FDA-approved components
    - 505(b)2 regulatory pathway
- Patented formulation

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Demonstrated Preclinical Efficacy of LB1148

Preclinical Efficacy Demonstrated in:

26	5	10	4	6
Publications	Different inhibitors*	Preclinical models	Species	Laboratories

Efficacy in mortality, acute morbidity and chronic morbidity
Efficacy demonstrating oral route of administration is required for efficacy
Dose response and PK/PD relationship elucidated

- LB1148 improves return of GI function
  - 6 studies, 3 different labs
- LB1148 decreases abdominal adhesion formation
  - 8 studies, 3 different labs
- LB1148 (and API) improves organ function following shock
  - 26 studies, 6 different labs
- Single perioperative administration is sufficient for efficacy
- Efficacy is consistent across multiple laboratories and animal models

*Selection of safest, most potent inhibitor

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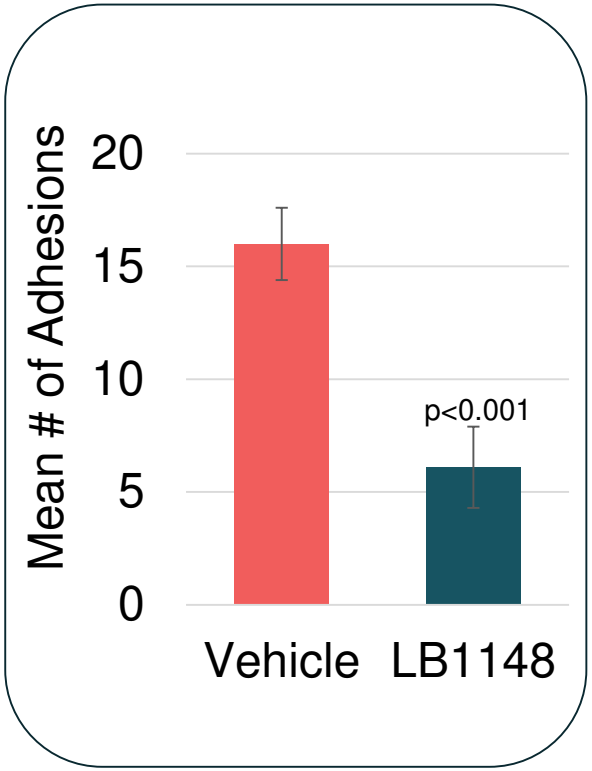
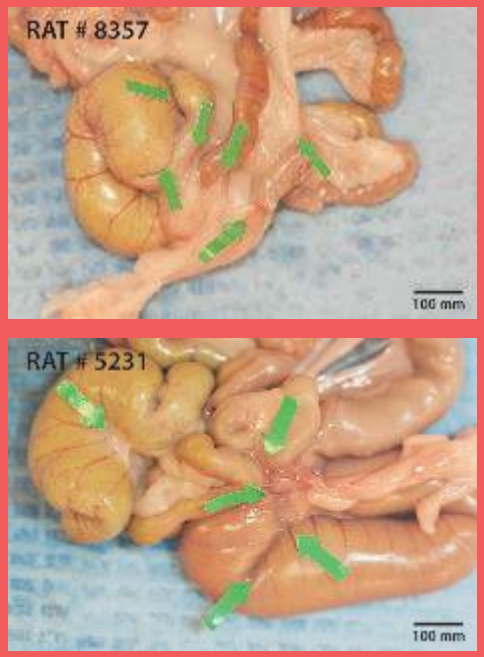
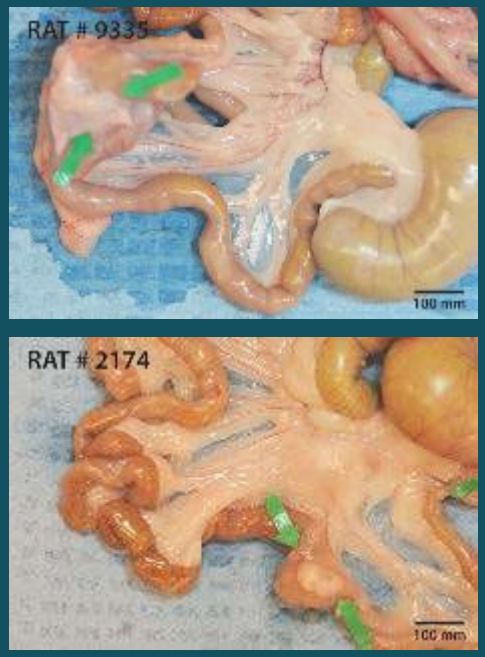
Preoperative LB1148 Prevented Postoperative Abdominal Adhesions Preclinically





Vehicle Treated



LB1148 Treated

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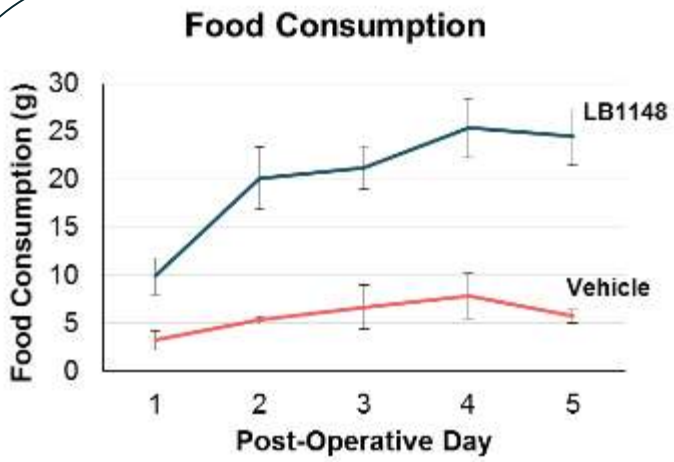
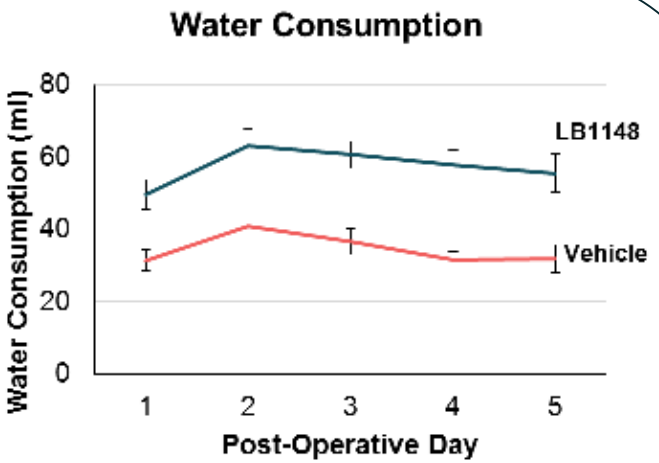
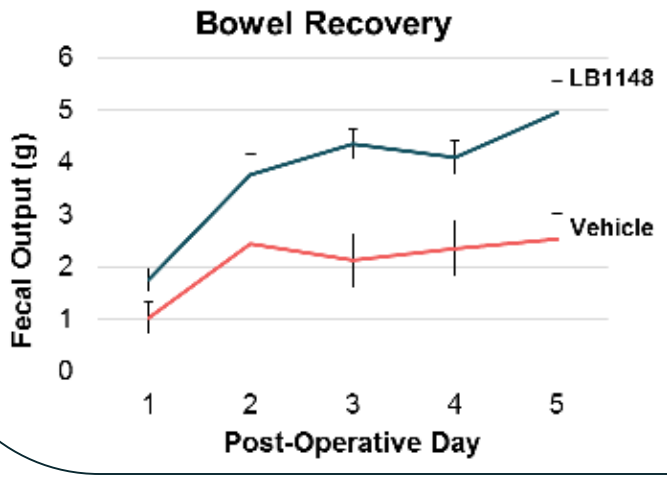
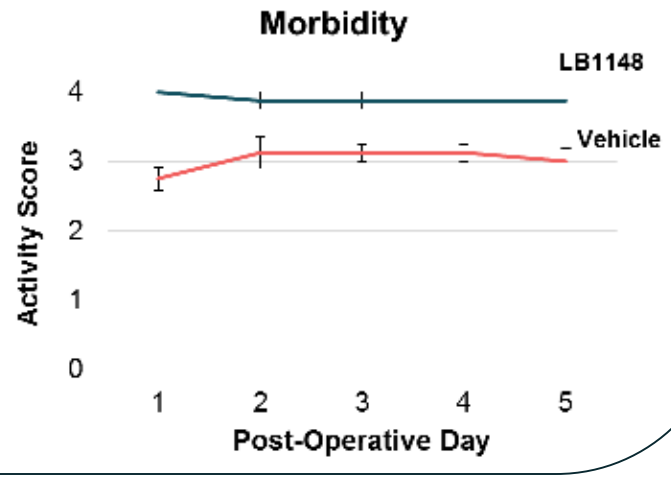
LB1148 Improves Postoperative GI Function following Bowel Resection in Preclinical Models









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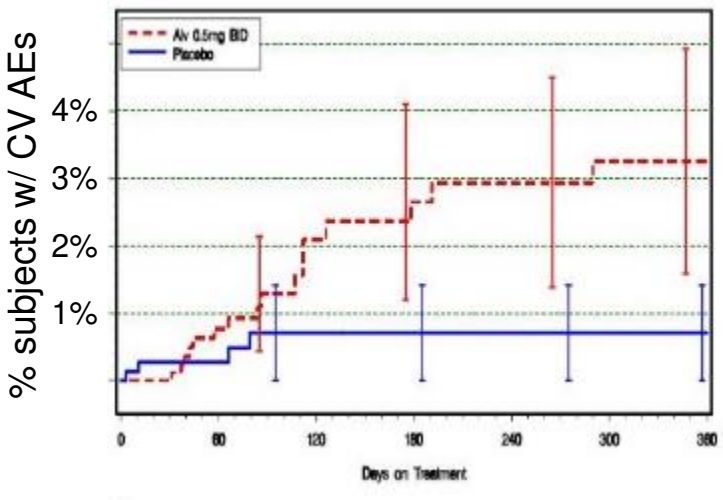
Competitive Landscape: Postoperative Return of Bowel Function

- **Entereg (Alvimopan)**
  - Merck (approved 2008) - indicated to improve time to GI recovery following bowel resection
  - Major Safety Concerns
    - Increased serious cardiovascular (CV) AEs
      - (3.2% vs 0.8% Placebo)
    - Increased incidence of neoplasms
      - (5.1% vs 1.5% Placebo)
    - Increased incidence of bone fractures
      - (3.7% vs 1.1% Placebo)
  - Special hospital RISK mitigation strategy required
    - Utilized in few hospitals
  - Price = $780 for a course of therapy
  - Cubist purchased Entereg for $415M

ENTEREG® (alvimopan)



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Architects of The GI Surgery Phase 2 Clinical Trial: Designed for Success by World Class KOLs

Steven Wexner, MD
Cleveland Clinic, FL

Conor Delaney, MD
Cleveland Clinic, OH

Mark Talamini, MD
Stony Brook

David Hoyt, MD
Am Col Surgeons

Sonia Ramamoorthy, MD
Univ Cal SD

James Fleshman, MD,
Baylor Univ Med Ctr

George Chang, MD
MD Anderson

Michael Stamos, MD
Univ Cal Irvine

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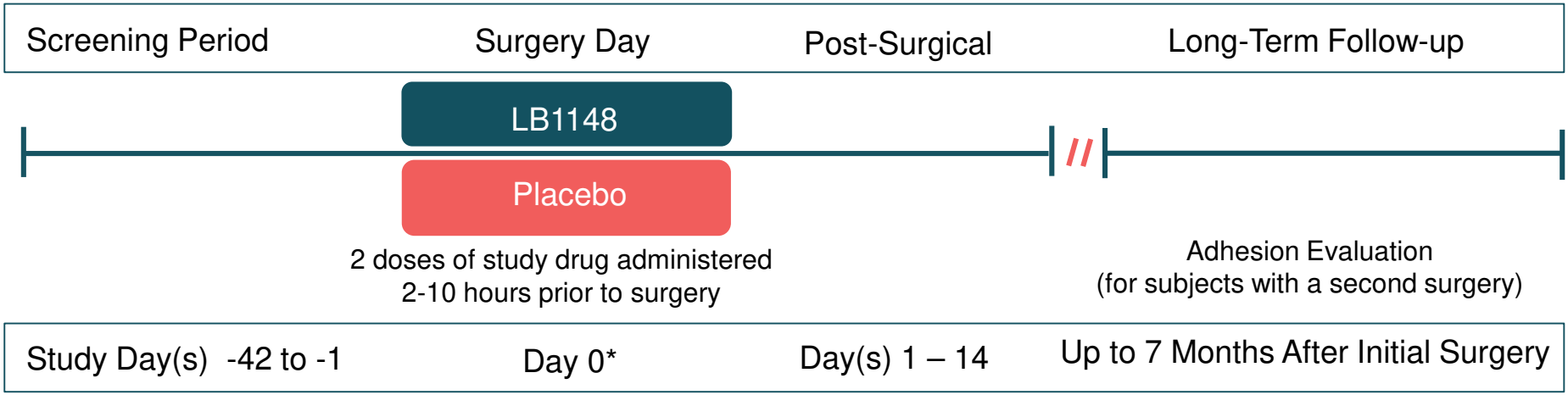
Phase 2: GI Surgery (PROFILE) Study Design



- **Primary objective:** Determine if LB1148 will improve GI dysfunction following elective bowel resection
  - Secondary objectives: composite GI function scores (GI2), length of stay, ileus
  - Exploratory objectives: postoperative pain, opioid usage, readmission rate
- **Study design:** Randomized, double-blind, placebo-controlled, proof of concept, adaptive design
- **Treatment:** LB1148 or placebo
  - Consumed orally 2-10 hours prior to surgery
- **Sub-study:** measure extent and severity of abdominal adhesions
  - In subjects who will undergo a planned second surgery (~50% of subjects)

* Study Day 0 is the day of surgery. Study dosing could occur on Day -1 and/or up to 2 hours prior to surgery on Day 0.

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Phase 1: Promising Safety and Efficacy Signals From Cardiovascular Surgery Study

- Heart Center Cheng Hsin Hospital, Taiwan
- All incoming cardiovascular surgery patients were eligible
  - 60% CABG
  - Others valve repair/replacement

Cardiovascular Surgery

- No safety issues observed

- 5 efficacy indicators observed
  - Hospital length of stay reduced by average of 2 days (NS)
  - Less liver impairment ($p<0.02$)
  - Fewer days with WBC > 10,000 ($p<0.03$)
  - Less chest tube drainage (physician reported)
  - Improvement in return of bowel function (physician reported)

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LB1148 Regulatory Path Significantly De-Risked

Regulatory

- Open INDs with 2 divisions of the FDA
- Well described 505(b)(2) pathway to approval
- Known approval endpoint in GI2
- Likely only one Phase 3 trial required for approval

Clinical Efficacy

- Physician reported improvements in bowel function in Phase 1
- Strong preclinical efficacy
- Models known to translate in the clinic
- World class clinical team

Clinical Safety

- All components of LB1148 are FDA approved
- Well described pharmacology profile with acceptable safety and tolerability
- FDA “We don’t expect any interactions between components”

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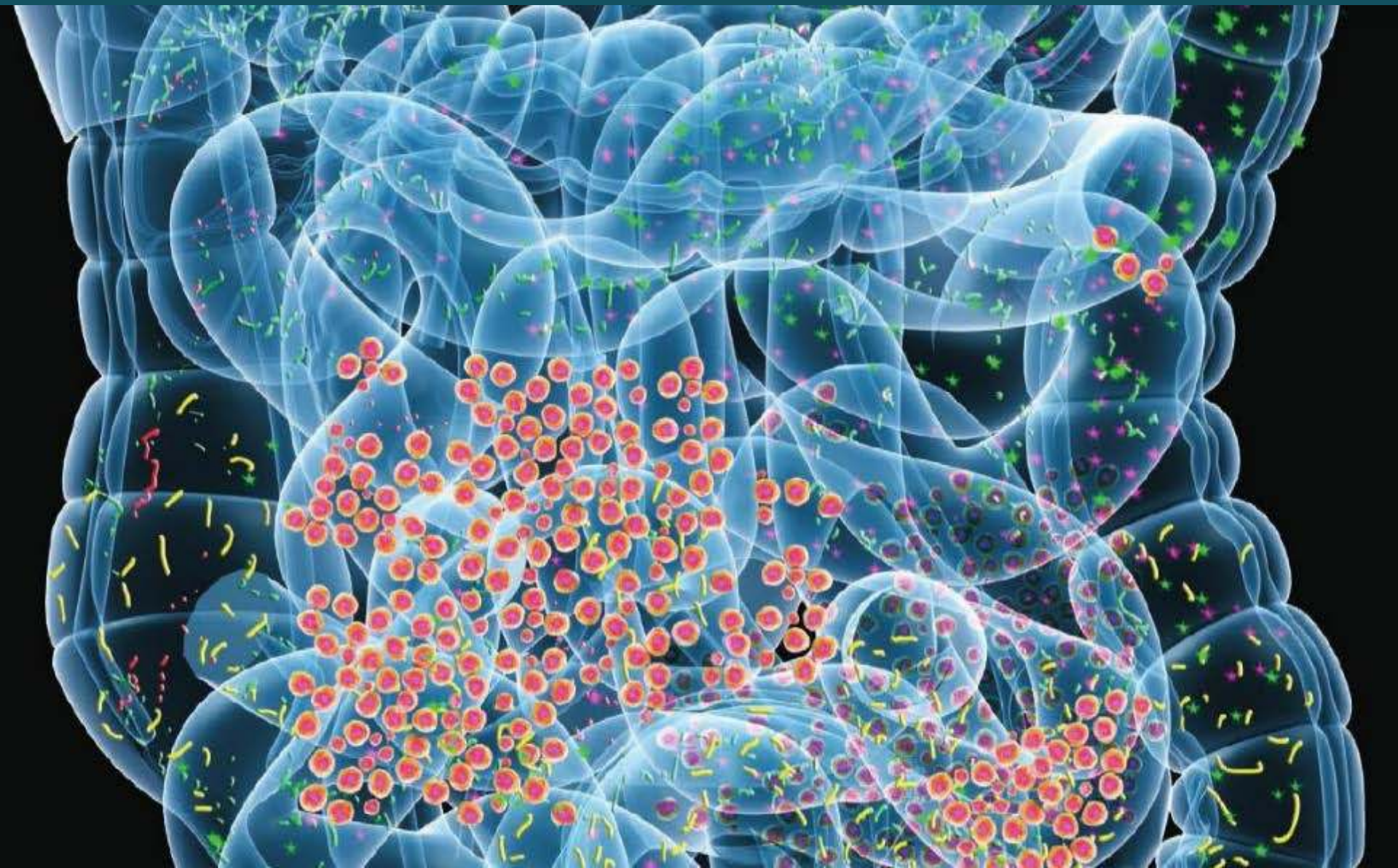
Additional Clinical Programs

Gastrobiome: Ecology within our GI tract



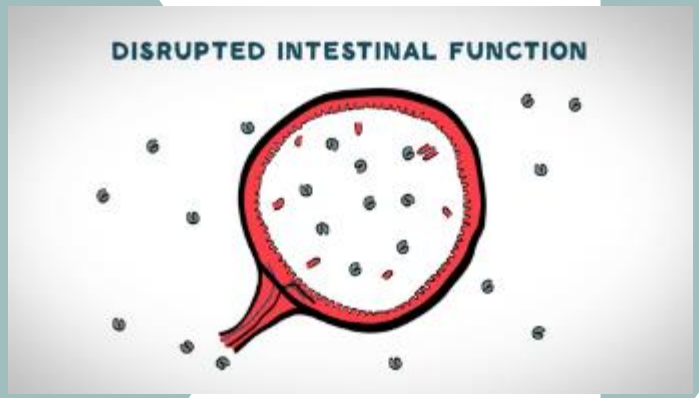
Multiple Chronic Health Conditions Resulting from Chronic Digestive Enzyme Leak

- Diabetes

- Hyper-tension

- Obesity

- Insomnia



- Lack of glucose control
- Coronary artery disease
- Pulmonary disease
- Overeating
- Mental health disorders

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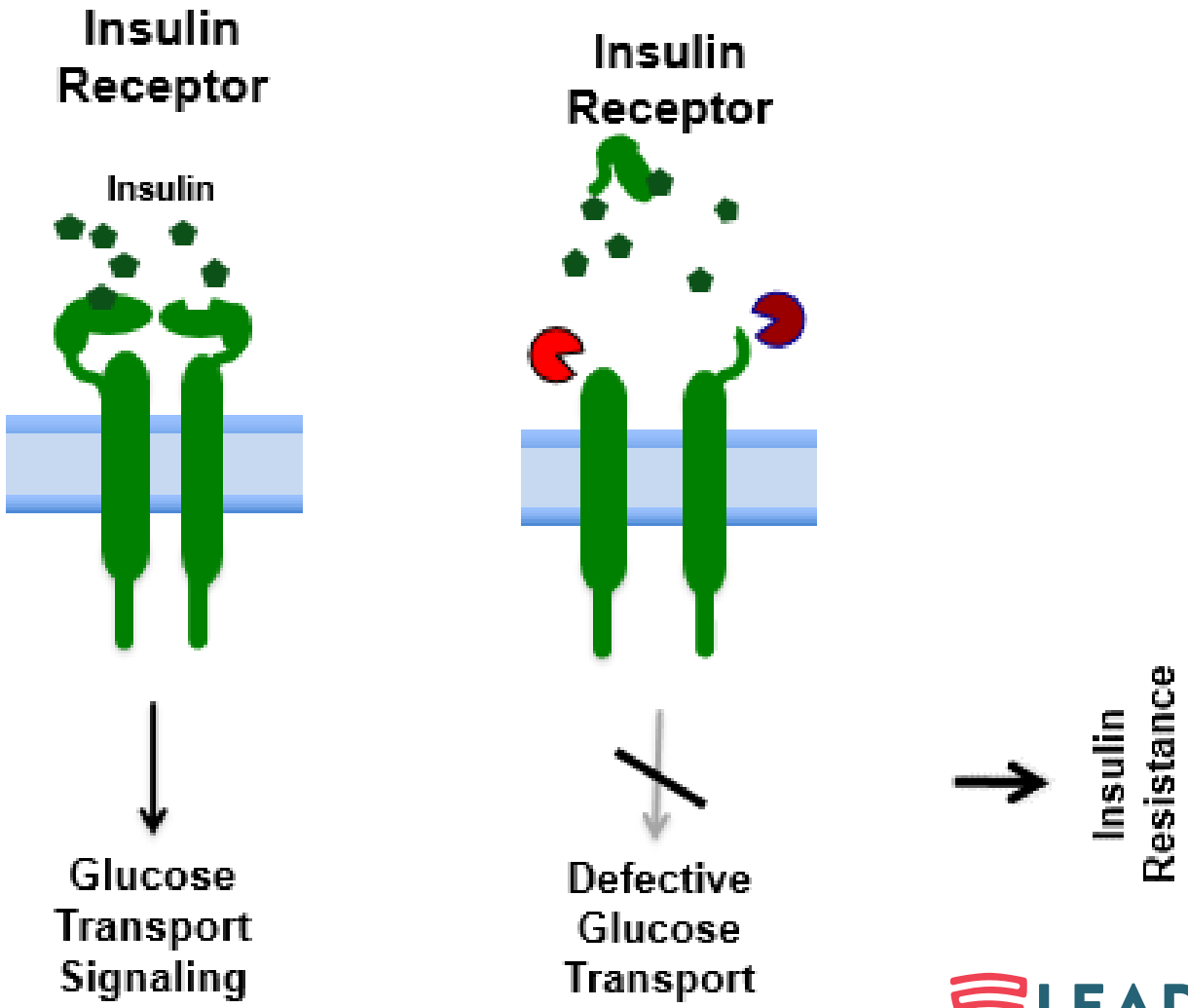
Digestive Enzymes in Blood Destroy the Insulin Receptor Making It Insensitive to Insulin



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Gastrobiome Companion Dx - Detection of Aberrant Blood Proteases from Leaky Gut Syndrome

- Capable of detecting protease activity in a few microliters of whole blood in 20 minutes.

- Rapid, simple sensitive monitoring tool that provides timely actionable information to physicians and patients to direct treatment decisions.

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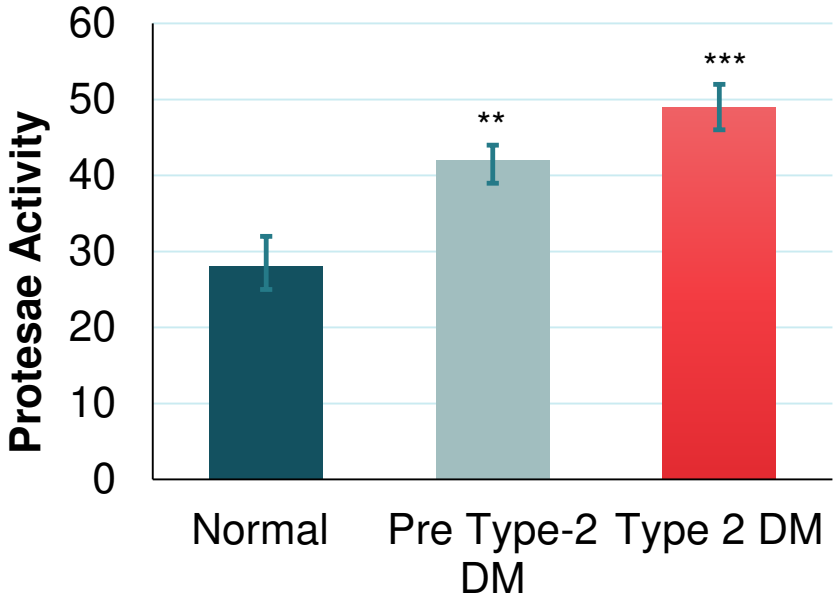

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Diabetic Rat Has Elevated Digestive Enzyme Activity in Plasma Similar to Diabetic Patients

Frederic P. Miller, Agnes F. Vandome, John McBrewster (Ed.)

Spontaneously Hypertensive Rat

Hypertension, Cardiovascular Disease, Strain (Biology), Animal Husbandry, Blood Pressure, Systole (Medicine), Circulatory System

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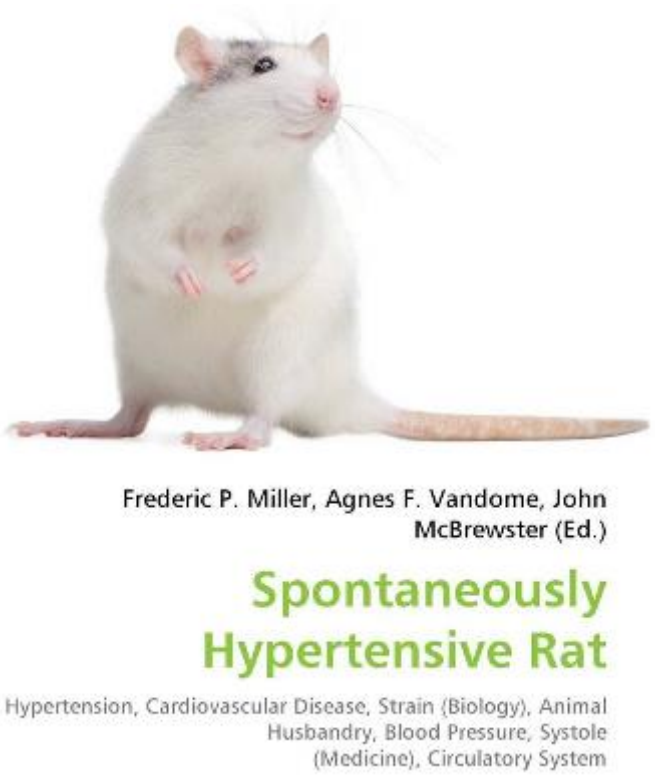

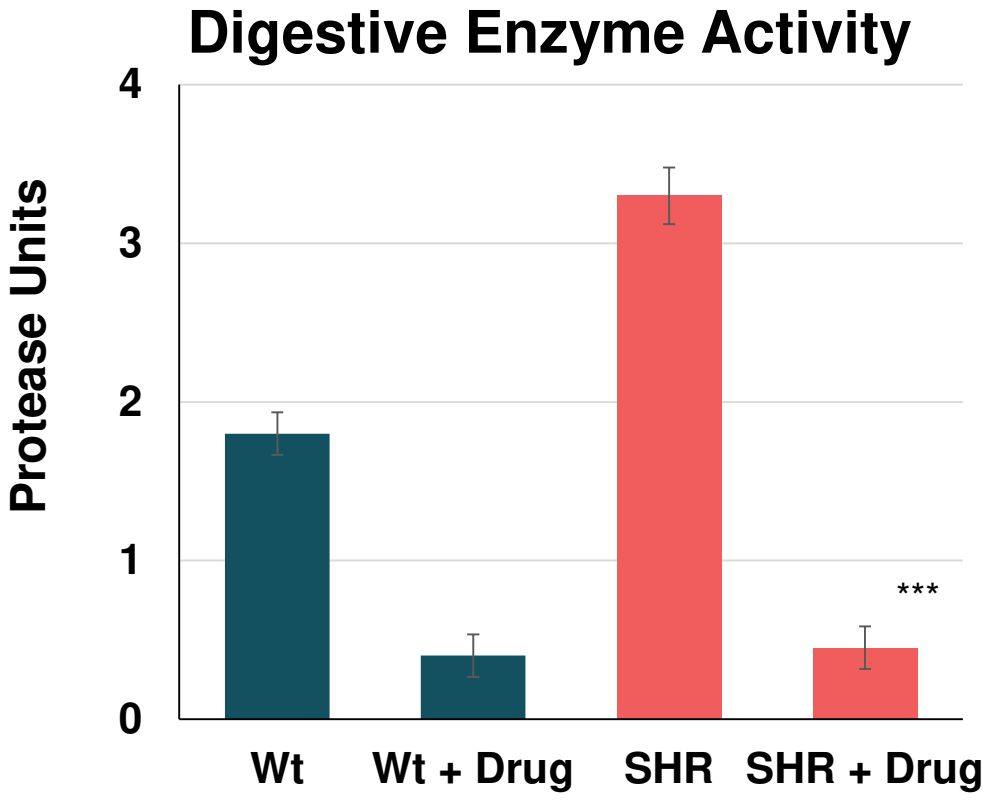

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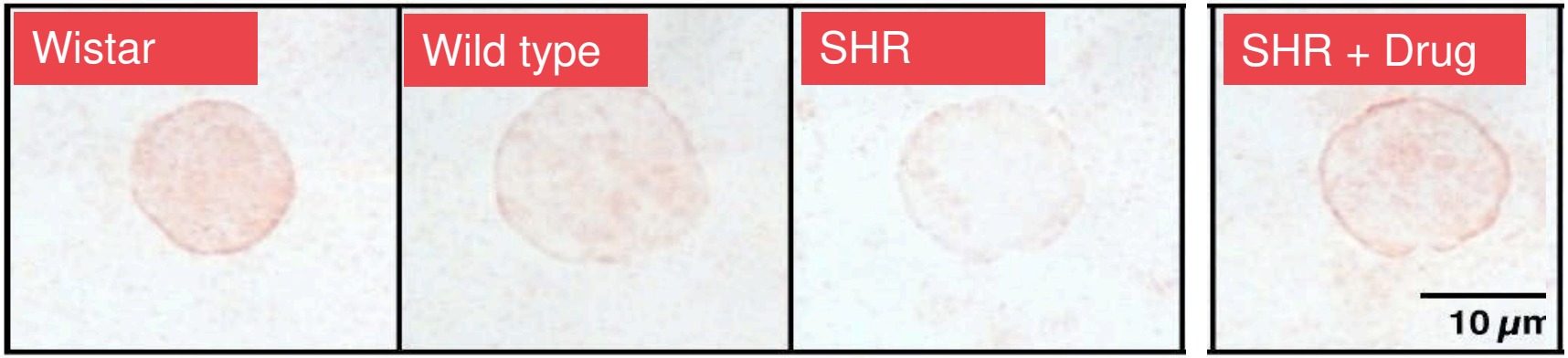
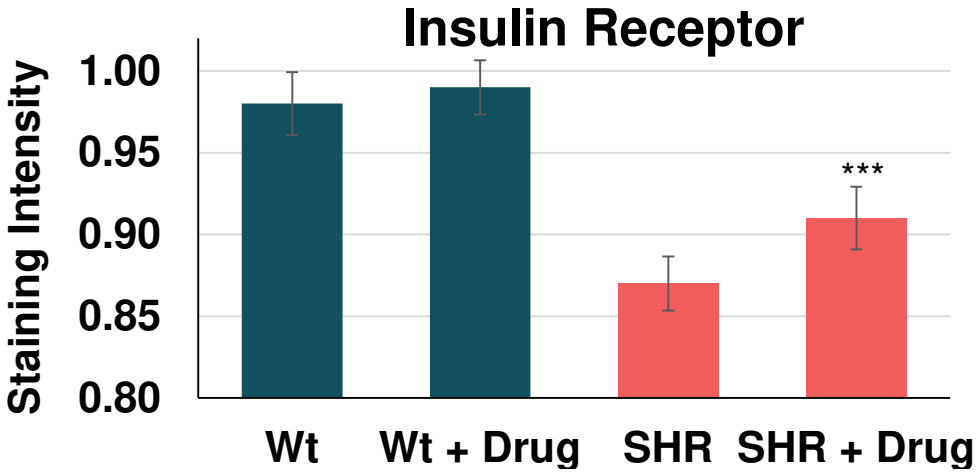
Digestive Enzymes Cleave the Insulin Receptor and Oral Drug Reverses Insulin Resistance



* The pink label is the extracellular domain of the insulin receptor.



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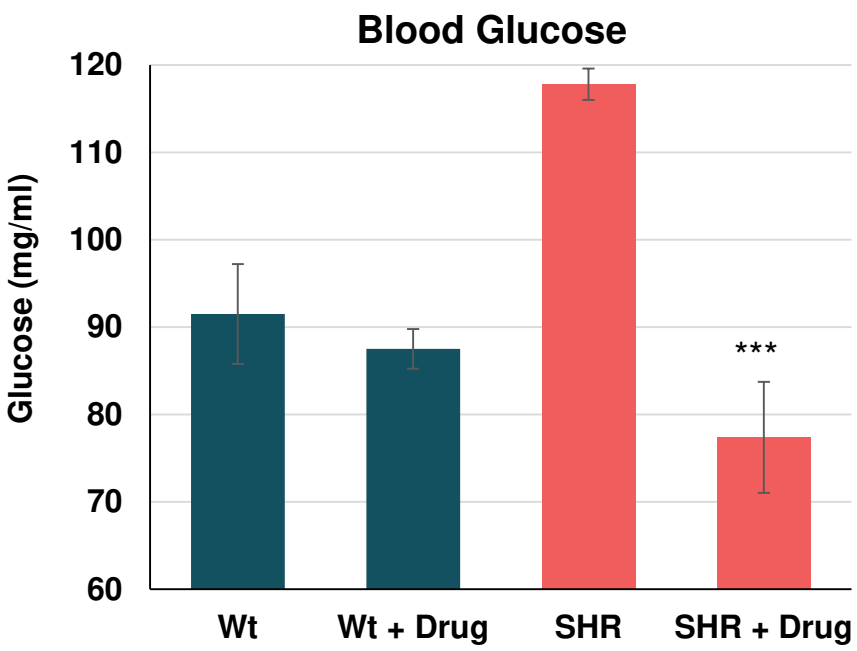
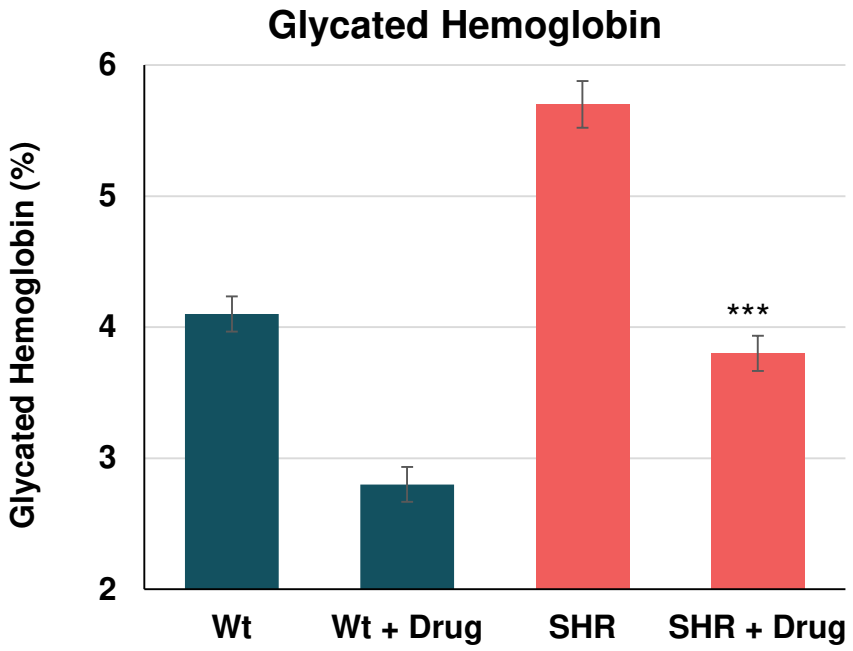
Blockade of Proteases Normalizes Blood Glucose Levels in the Spontaneously Hypertensive Rat





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Corporate Overview

Management Team

THOMAS HALLAM, PhD – Chief Executive Officer

Previously served as the Director of Therapeutic Programs for Mesoblast Inc. Served as a consultant and advisor to some of the world's leading healthcare companies, including Merck, Roche/Genentech, Pfizer, Sanofi, Astra-Zeneca, Bausch & Lomb, J&J, Saatchi & Saatchi, and Ogilvy CommonHealth. Dr Hallam is a former Howard Hughes Medical Institute Research fellow. He received his PhD in Neuroscience from UC Davis and holds an MBA from USC.

JD FINLEY – Chief Financial Officer

Mr. Finley has raised nearly $1 billion in capital for companies during his career. Mr. Finley's experience includes roles of Tax Specialist, EVP, CFO, and President at companies including Deloitte & Haskins and Sells, MetroGolf Inc. Phillips Capital, Proteus Capital Partners Inc., and PointAcross. Mr. Finley holds a Bachelor of Business Administration degree from Boise State University and a Master of Taxation degree from the University of Denver.

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MICHAEL DAWSON, MD – Chief Medical Director

Dr. Dawson brings both clinical experience and a background in research and development to Leading BioSciences. He has served in leadership positions and on numerous Hospital committees including the Governing Board at Centinela Hospital. He has participated in numerous clinical trials, performing some of the earliest Adenovirus gene transfers studies. Dr Dawson is a board certified Diagnostic Radiologist and Interventional Radiology. He received an MD from USC and Masters degrees in Biochemistry and Cell Biology from UCSD.

CHIP PARKER – Co-Founder, Executive VP Business Development

Mr. Parker has over 20 years of diverse experience in operations, sales and marketing, and management within the angel and venture capital space. He was the Founder of the entrepreneur-in-lab prototype fund and the President of the Southern California Chapter of Keiretsu Forum. He was a major principal at Delta Net which was the largest privately held ISP in Southern California.

JOHN RODENRYS – Co-Founder, Executive VP R&D

Served in several Senior Executive positions at a number of companies including Angel, VC funded and Fortune 40 organizations. Positions included CEO, President and COO at Forhealth, Safetymate, Vistant Corp (Cardinal Health), and Pyxis Corp (Cardinal Health) among others. Served on several review boards to include CCAT and von Liebig Center at UCSD. Academic background includes an Engineering degree and an MBA.

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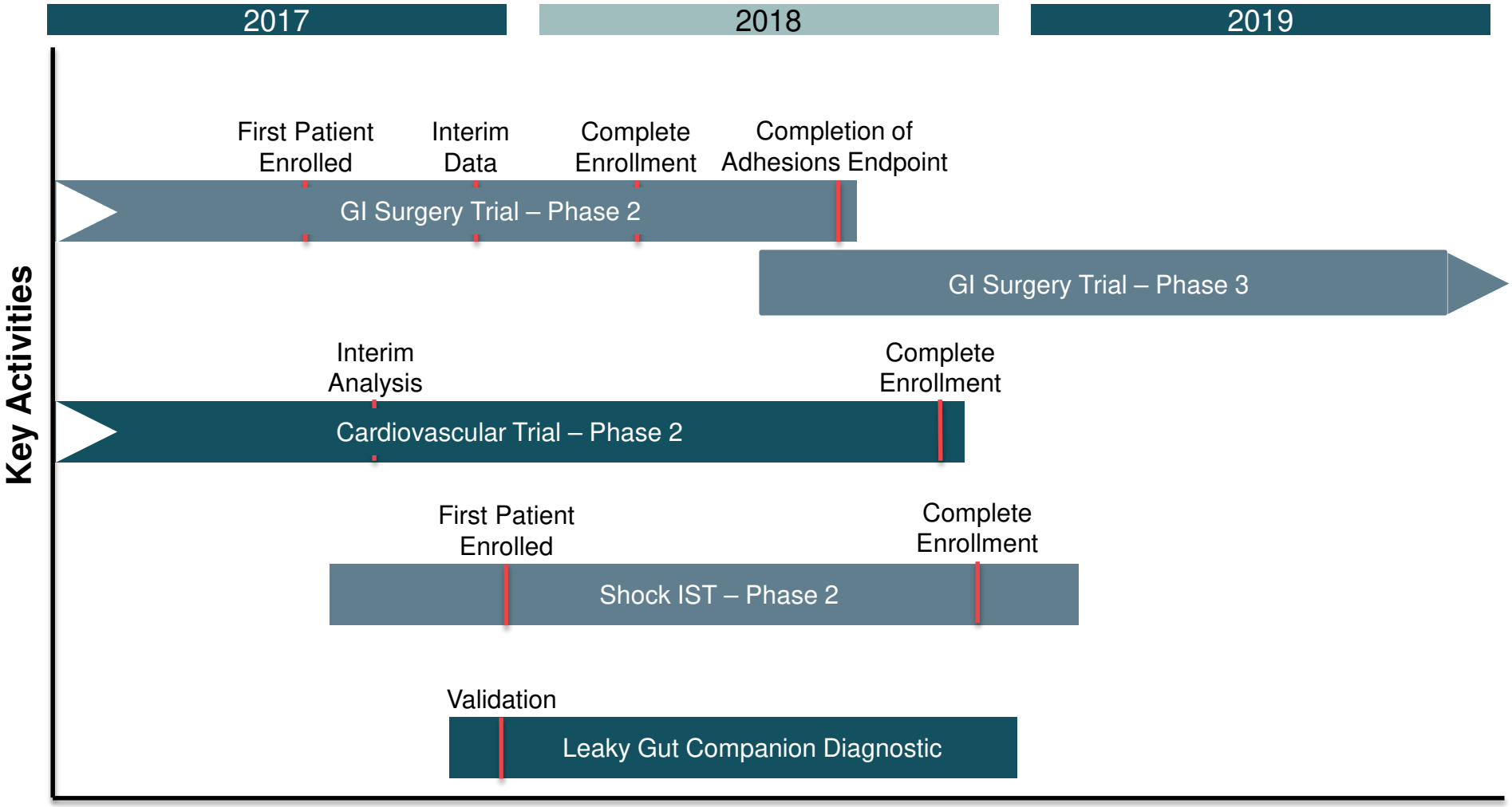
Company Activities and Timelines



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Investment Highlights

- Focused development of innovative medicines to protect and restore GI mucosal barrier and function.
- Platform focused on de-risked product opportunities
  - Repurposing known small molecules with composition of matter patents
  - Companion diagnostics to identify patients for treatment and clinical trial enrollment
- Broad pipeline addressing hospital-based/acute conditions as well as chronic conditions with multiple near- and long-term catalysts
- Lead candidate, LB1148, has first-in-class and pipeline-in-a-product potential
  - Potential to become the first FDA-approved oral drug to improve return of GI function and reduce abdominal adhesions in large hospital-focused market
  - Multiple Phase 2 trials underway with data expected 2018
    - Post Operative Return of Bowel Function
    - Cardiovascular Surgery Complications
    - Adhesions
  - Potential for additional indications in septic and hemorrhagic shock
- Robust IP estate
- Accomplished leadership team

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In Summary: We are Protectors of the GI Tract

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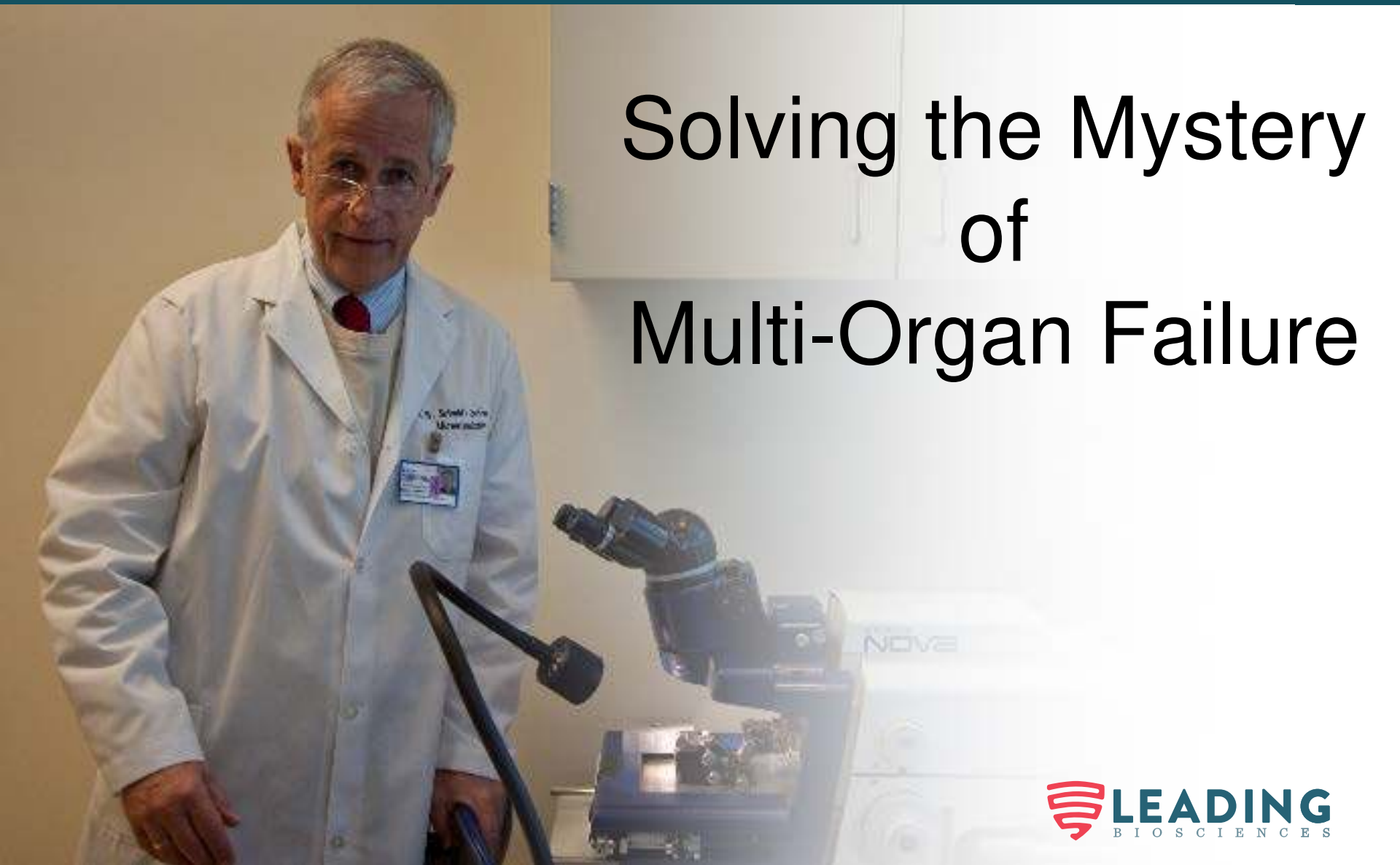
Founding Scientist: Dr. Geert Schmid-Schönbein



Solving the Mystery of Multi-Organ Failure

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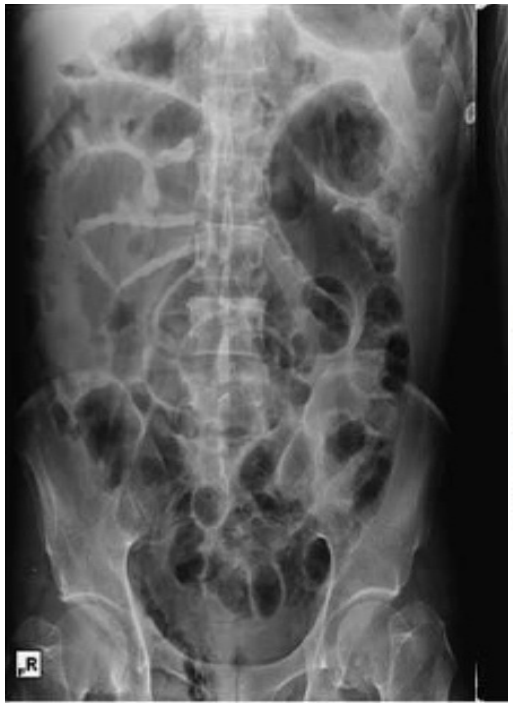
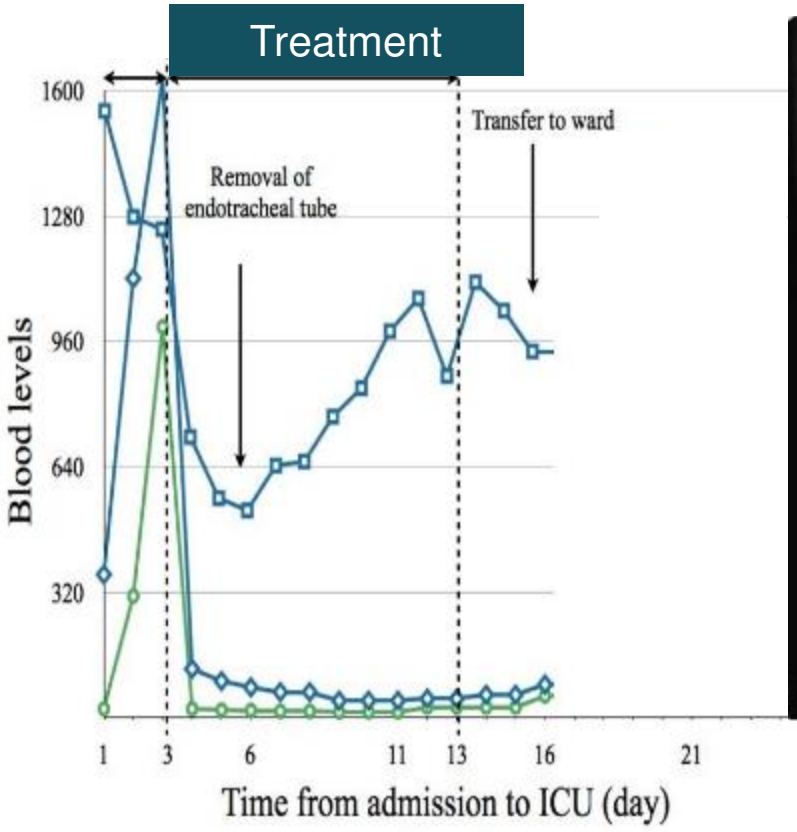
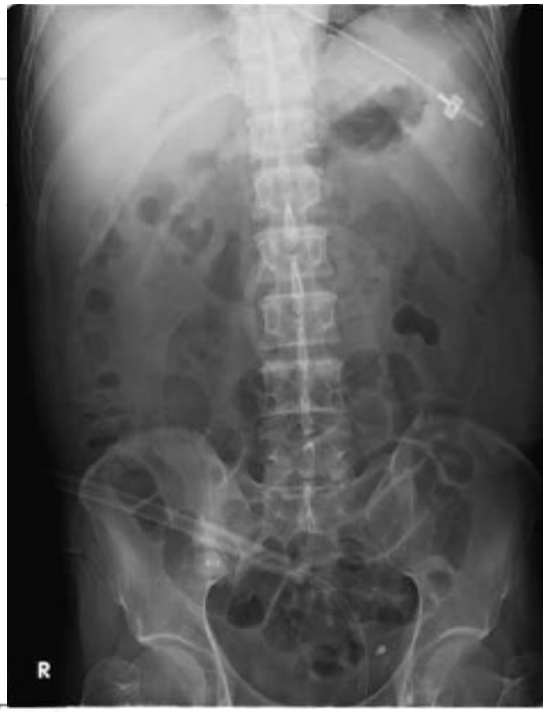
First Patient Treated — Fournier's Gangrene

Digestive Enzymes in Blood

X-Ray Day 1	Patient Data Day 1-16	X-Ray Day 16







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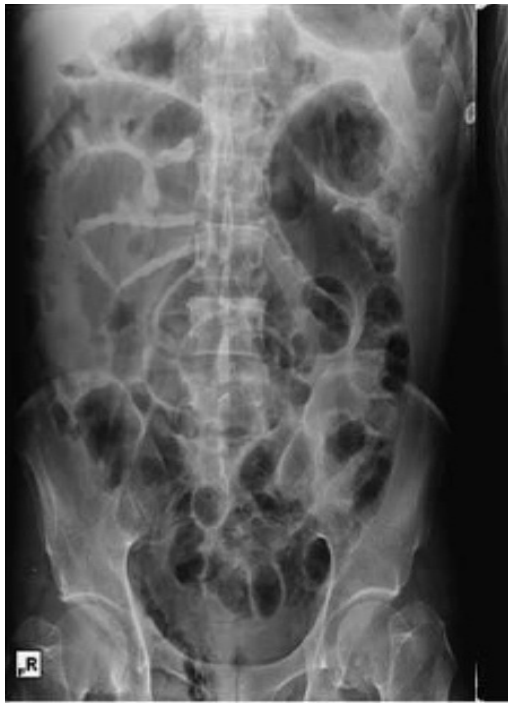
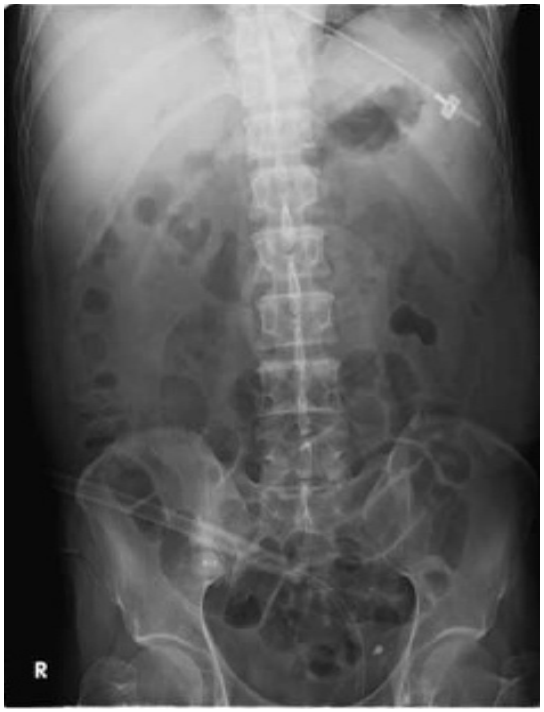
First Patient Treated — Fournier's Gangrene

X-Ray Day 1	Recovered INDEX Patient w/ Doctors	X-Ray Day 16





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