



Hope Delivered: Changing Lives For the Better

Discovering, developing, and commercializing innovative therapies to improve the quality of life for underserved patients and their communities



Safe Harbor Statement

This presentation contains forward-looking statements regarding the research, development and commercialization of pharmaceutical products. Such forward-looking statements are based on current expectations and involve inherent risks and uncertainties, including factors that could delay, divert or change any of them, and could cause actual outcomes and results to differ materially from current expectations. Some of these important risks and uncertainties are described in reports filed by Emmaus Life Sciences, Inc. ("Emmaus" or the "Company") with the U.S. Securities and Exchange Commission ("SEC"), including the Company's Annual Report on Form 10-K/A filed on August 10, 2021 and the Company's Quarterly Reports on Form 10-Q. Emmaus is providing this information as of the date of this publication or the dates stated within this publication and does not undertake any obligation to update any forward-looking statements as a result of new information, future events or otherwise.





Our Mission:

To improve the lives of people in need through the discovery, development and commercialization of innovative treatments and therapies. Our focus historically has been on sickle cell disease and other rare diseases but have since expanded our pipeline to include diseases affecting larger populations, such as diverticulosis.



Why invest in Emmaus?



A highly experienced management team with proven success in pharmaceutical research, development and commercialization led by CEO and principal inventor of Endari®, Yutaka Niihara, M.D., M.P.H.



Significant domestic and global opportunities targeting underserved sickle cell disease patient population and undeveloped therapeutic markets



Revenue generated yearly has increased since FDA approval in 2017 and despite the impact of COVID-19



With an FDA-recognized, favorable safety profile, Endari® is safe for pediatric and adult use and can be safely used to improve the efficacy of other therapeutics



Emmaus has contributed Endari® to clinical trials in multiple conditions, including burn healing, diabetes, and pancreatic cancer and a trial underway for diverticulosis

Accomplished Leadership Team



Lead by
Distinguished Clinician and
Principal Inventor of Endari®

Yutaka Niihara,
M.D., M.P.H. – Chairman & CEO

- Physician specialist for Los Angeles County from 1992 to 2009, licensed to practice medicine in both the U.S. and Japan
- Published author in the area of sickle cell disease
- Principal inventor of Endari®
- Professor of Medicine at the David Geffen School of Medicine at UCLA

Willis Lee, MS
Vice Chairman & Chief Operating Officer

George Sekulich
Senior Vice President of Global Commercialization & Chief Information Officer

Charles Stark, Pharm.D.
Senior Vice President of Medical Affairs, Research, & Regulatory

Yasushi Nagasaki, CPA
Chief Financial Officer

Dale E. Short, JD
General Counsel & Corporate Secretary



Collective Experience



Product Pipeline

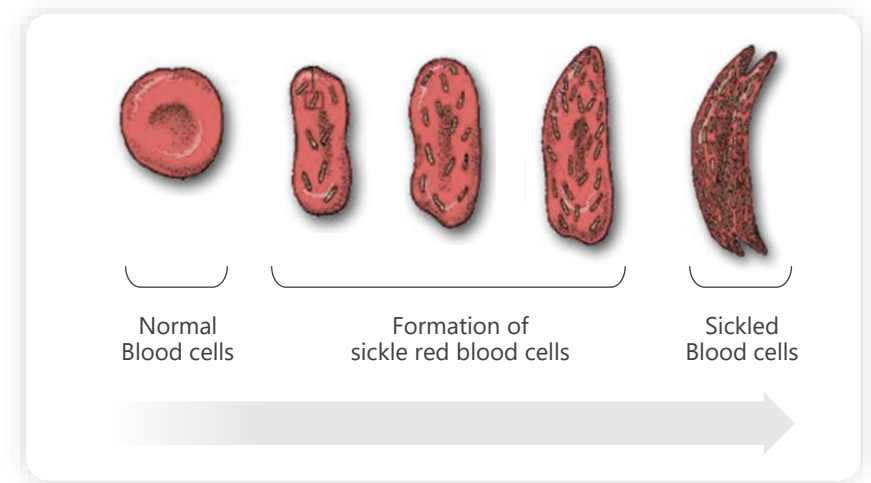
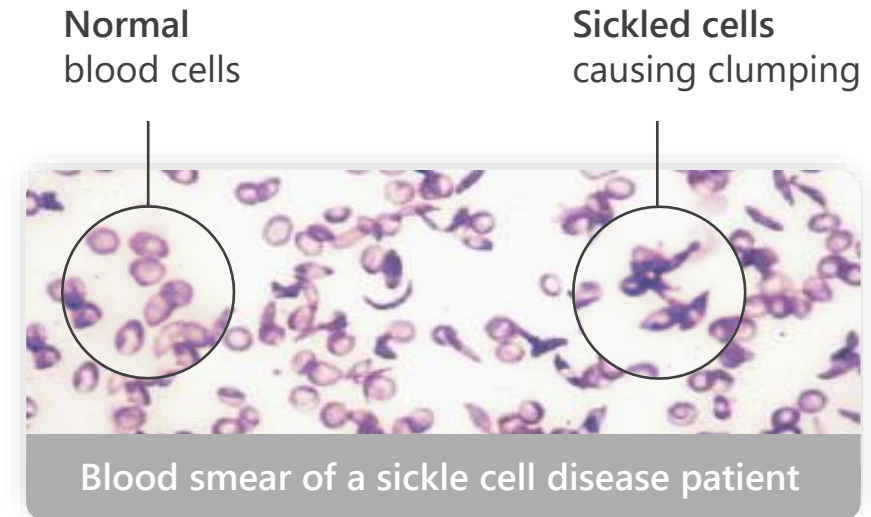
Product ID	Preclinical	Phase 1	Phase 2	Phase 3	Commercial	Description
ELS001						Pharmaceutical grade L-glutamine to treat SCD (Endari®)
ELS004						Pharmaceutical grade L-glutamine to treat diverticulosis
ELS003						Lab device/research tool to measure transmittance cell sheet
ELS005						Cancer treatment targeting IRAK4 (Kainos Medicine partnership)
ELS002						Cultured autologous oral mucosal epithelial cell sheet transplantation for treatment of corneal limbal epithelial stem cell deficiency (Lundquist Institute partnership)



Sickle Cell Disease:

Cause and Effect

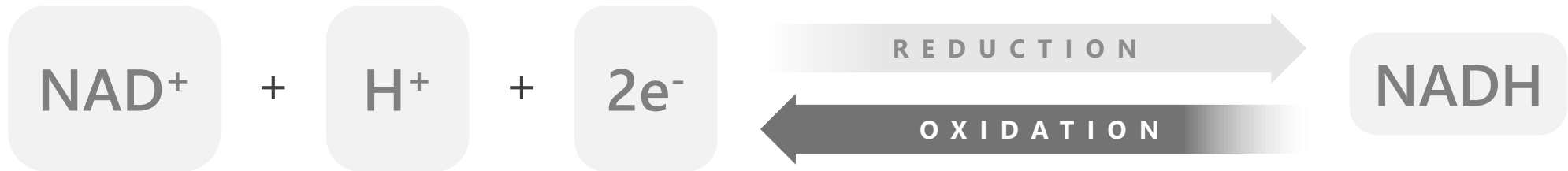
- **Sickle cell disease (SCD)** is an autosomal recessive disorder, meaning each parent carries one copy of mutated gene.
- The most prevalent symptom of SCD is **pain**.
- SCD affects an estimated **20M - 25M people worldwide**, and there is no cure.



Sickle Cell Disease:

Cause and Effect

- **NAD is nicotinamide adenine dinucleotide**, a critical coenzyme found in every cell in your body, and it's involved in hundreds of metabolic processes.
- **NAD exists in two forms:** an oxidized and reduced form, abbreviated as **NAD⁺** and **NADH⁺**
- The higher levels of oxidants experienced by SCD patients tilts the **NAD⁺/NADH** equilibrium towards NAD⁺ production.



This adversely effects red blood cell performance



The SCD Prognosis:

A domino effect



Patients experience pain and acute symptoms with increasing severity as chronic damage accumulates.

Sickle-shaped, adhesive and inflexible red blood cells occlude blood vessels, causing recurring crises and visceral pain



Increased risk of heart attacks, strokes, frequent infections – any of which can be deadly

Patients' quality of life suffers, as they endure excruciating pain and subsequent negative effects on family, relationships and ability to work

Episodes of acute chest syndrome (ACS), a crisis which often causes painful complications, frequent hospitalizations, and can be fatal

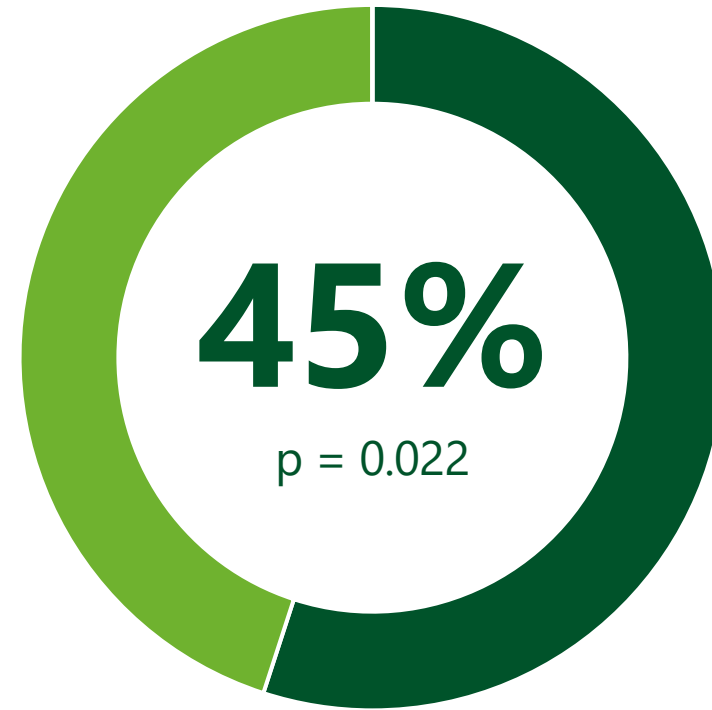
Devastating mortality expectancy, reduced life expectancy

The severe pain experienced by SCD patients often results in opioid dependency and organ damage



A reduction in sickle cell crises extends lives

As the number of crises decreases, the life expectancy for a patient dramatically increases



Annualized
reduction in crisis rates



**Endari® reduces instances
of sickle cell crises**

Trial patients on Endari[®] spend less time in the hospital

Potential savings on treatment costs of over \$2B annually (U.S.)¹



Driving down SCD
hospitalization costs



Breaking the SCD hospital
readmittance cycle

33%

p = 0.005

Lower frequency
of hospitalization

41%

p = 0.02

Fewer days
in hospital

56%

p = 0.02

Delay in the onset of
first sickle cell crises

59%

p = 0.03

Delay in the onset of
second sickle cell crises

63%

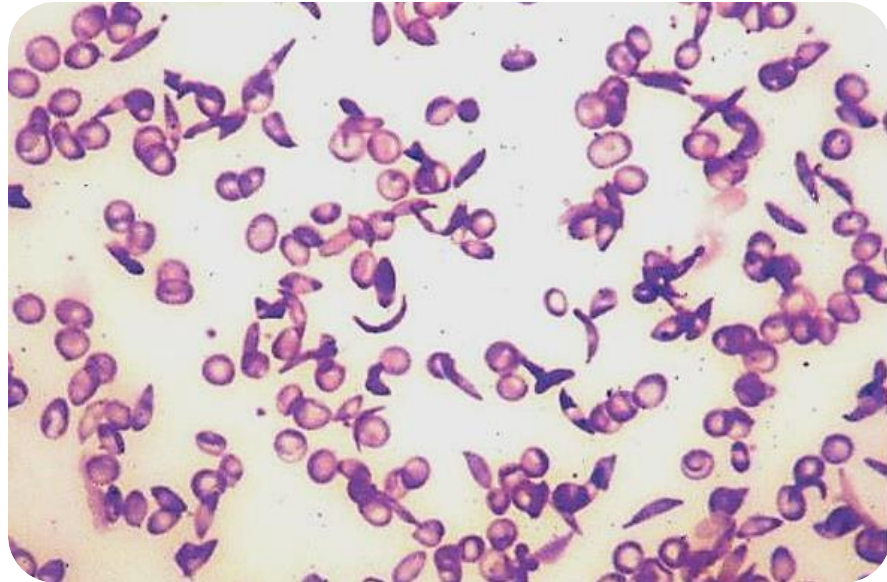
p = 0.003

Fewer cases of acute
chest syndrome

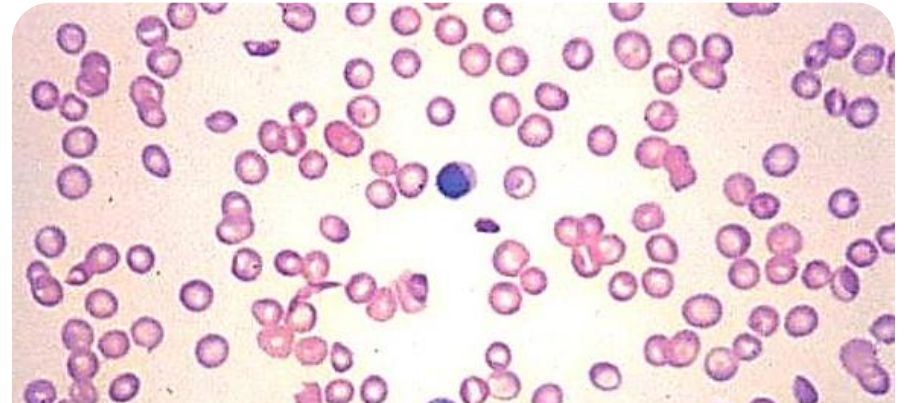


Endari[®] (L-Glutamine) Impact

The results for an Emmaus early clinical trial patient after 12 weeks of treatment



Endari[®]



ENDARI[®] CAUSES PRODUCTION OF NAD,
WHICH "MOPS UP" OXIDANTS



Endari® is an effective therapeutic option for many SCD patients, and the only safe option for some

	Endari® (L-glutamine)	Hydroxyurea	Siklos (Hydroxyurea) (Amedica)	Oxbryta (Global Blood Therapeutics)	Adakveo
Broad indication	YES	NO	NO	NO	NO
Black box warning	NONE	YES	YES	NONE	NONE
Lab tests required	NONE	YES	YES	YES	YES
Patient age range	5+ years old	18+ years old, used off label for pediatrics	2+ years old	12+ years old	16+ years old



Financial Highlights

Income Statement Summary	Year Ended – December 31, 2020	Year Ended – December 31, 2021
Revenues, net	\$ 23,167	\$ 20,610
Gross Profit	20,919	17,298
Operating Expenses	20,951	23,426
Loss from Operations	(32)	(6,128)
Net Income (Loss)	1,354	(15,946)
Earnings (Loss) Per Common Share	\$ 0.03	\$ (0.32)
Weighted Average Common Shares Outstanding	48,897,004	49,253,156
Statement of Cash Flow		
Cash Flows from (used in) Operating Activities	\$ (2,451)	\$ (1,254)
Cash Flows from (used in) Investing Activities	5,470	(6,377)
Cash Flows from (used in) Financing Activities	(2,310)	7,411
Balance Sheet Summary		
Cash and Cash Equivalents	\$ 2,487	\$ 2,279
Total Assets	59,536	56,734
Total Current Liabilities	23,382	37,100
Total Long-Term Liabilities	41,312	41,084



Stock Information



Ticker Symbol

EMMA
(OTCQX)*



Shares Outstanding

49,311,864



Fully Diluted Shares

73,323,063
(As of 3/31/2022)



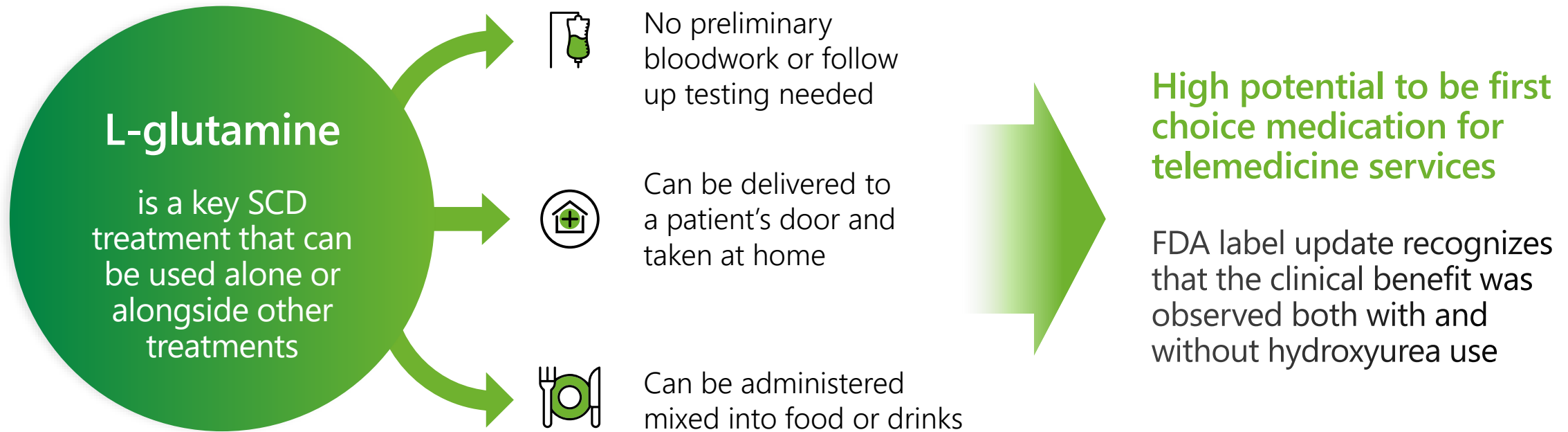
Insider Ownership

30%

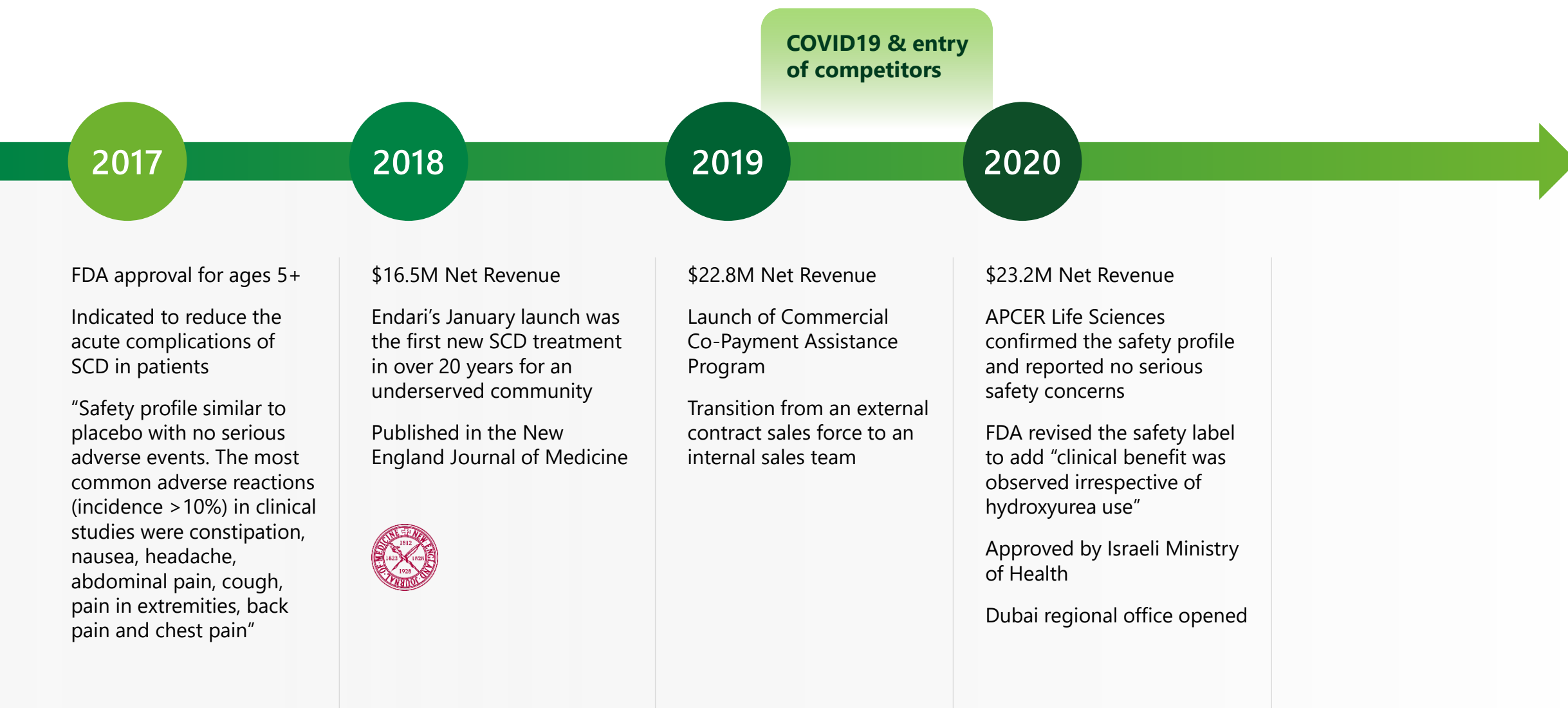
*With plans to uplist to a national exchange



Favorable safety profile makes accessible treatment options possible and compliance more likely



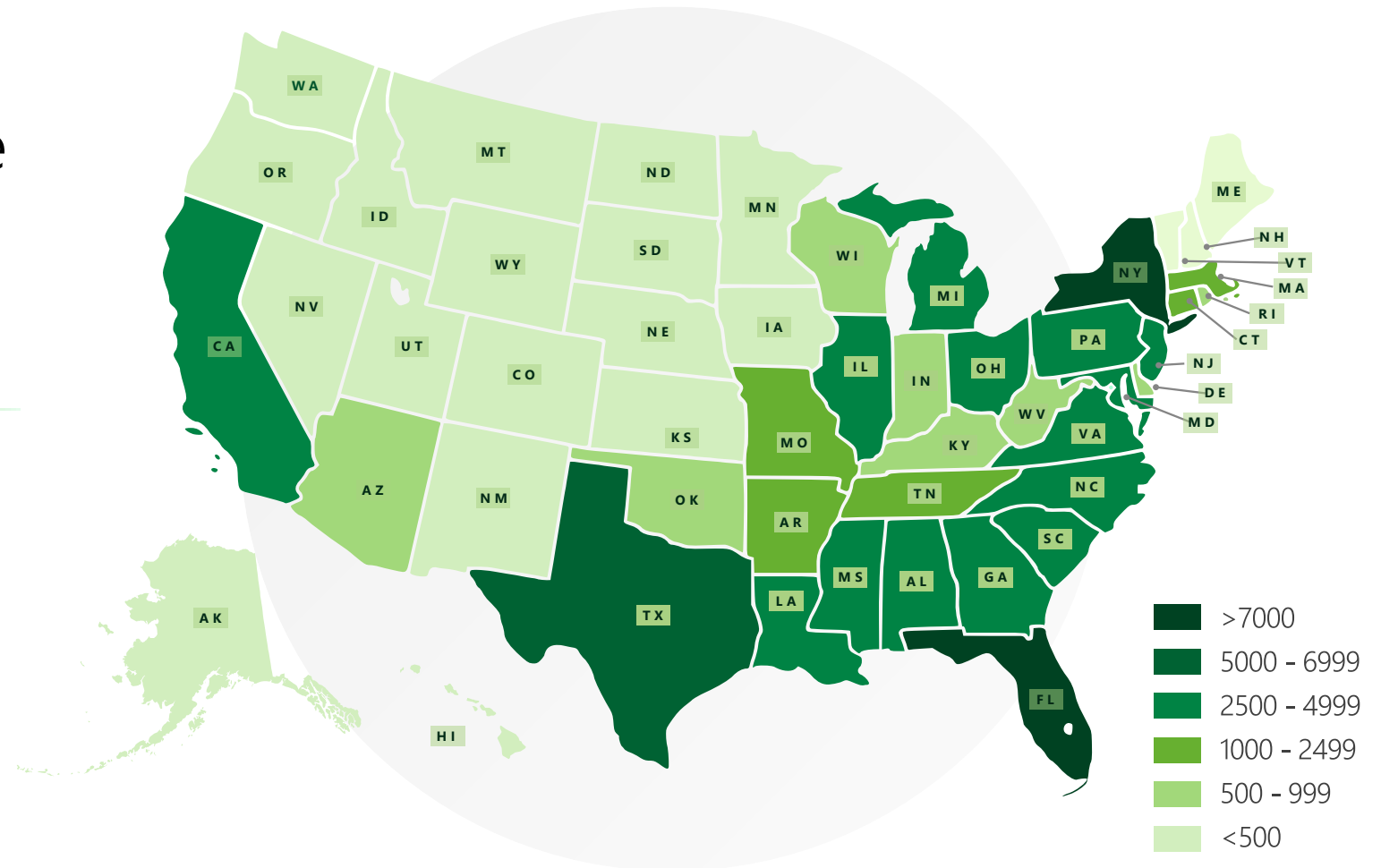
Endari's success to date

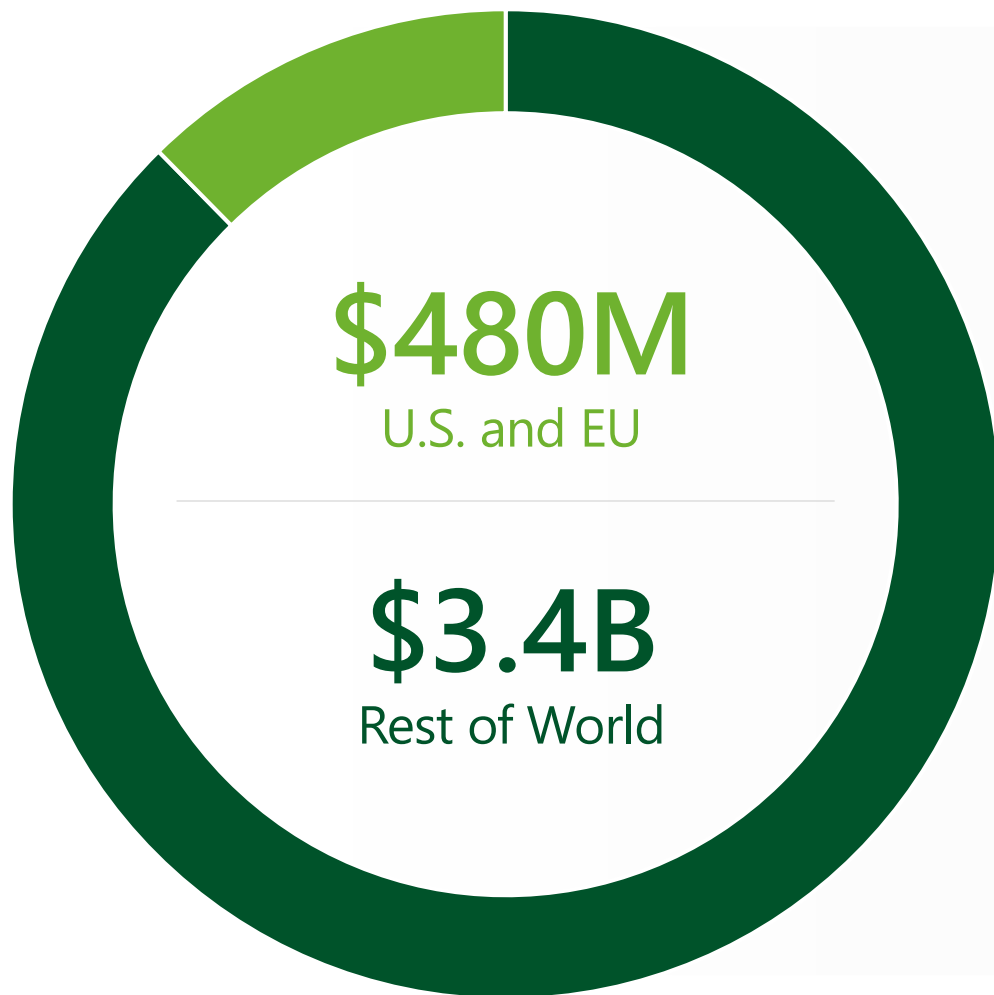


U.S. Strategy: a highly concentrated market allows for a smaller, more effective sales force

86% of patients reside in major metropolitan areas in **18** states

Our **19-person** field team is well deployed to serve this market





Europe

- Focus on early access programs
- EMA and UK approval process

Middle East & North Africa (MENA)

- Distribution partners in place
- Opened Dubai office in 2020

Latin America

- With a focus on Brazil and Colombia



Endari® Commercialization

\$30K annual wholesale acquisition cost
per adult patient

Target

SCD Specialized:

- Hematologists
- Physicians
- Treatment centers

Support

Involvement with local and
national SCD foundations

Excellent payer coverage

- Managed Medicaid
(primary payer)
- Children's Health Insurance
Plan (low-income support)
- Commercial Insurance
- Medicare

Patient assistance programs

Expand

Network of over 600
pharmacies and growing

Big 3 distributors:
AmerisourceBergen, Cardinal
and McKesson

RXs filled in 44 states, Puerto
Rico and Washington, D.C.

Contracted with pharmacy
benefit managers

Additional sales
opportunities: group
purchasing organizations,
specialty pharmacies



Global Strategy

Current Approvals

United States FDA
Israeli Ministry of Health
United Arab Emirates

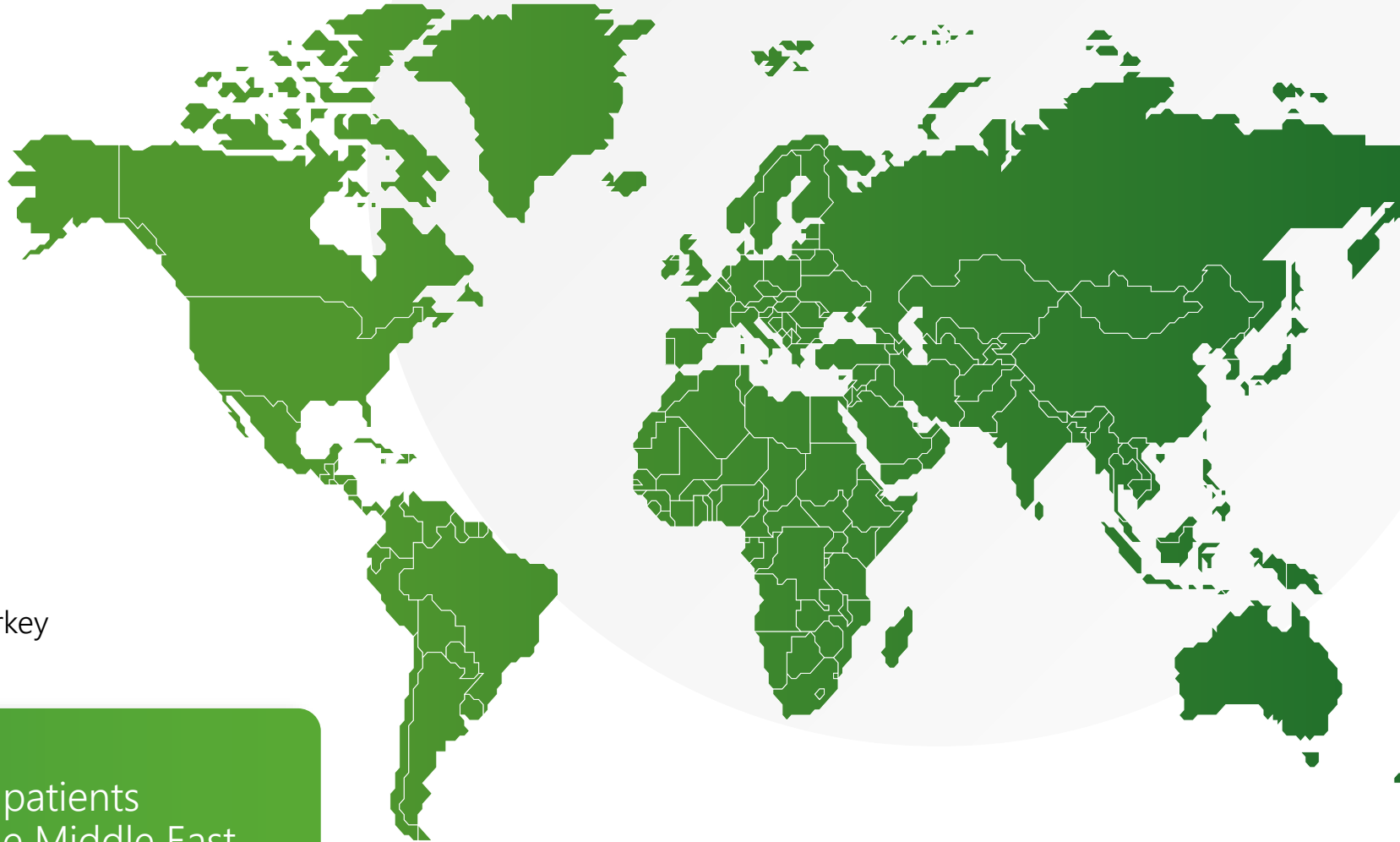
Submitted

Kingdom of Saudi Arabia
Kuwait
Bahrain

In process

Gulf Cooperation Council (GCC) Countries
Early Access program in the U.K., France, and Turkey

SCD affects an estimated **20M - 25M** patients worldwide, predominately in Africa, the Middle East, India, South America, and Mediterranean regions



Growth Opportunities

L-GLUTAMINE

Ongoing research in new applications

Diverticulosis

Type 2 Diabetes:

Phase 1 — trial using Endari®

Sickle Cell Disease

Burn Injuries:

Phase 3 — study product provided by Emmaus

Pancreatic Cancer:

Phase 1 — study product provided by Emmaus

IRAK4 Inhibitor Anti-Cancer Drug

- For solid cancers, blood-cancers, and lymphoma
- Partnership with **Kainos Medicine, Inc.**
- **Emmaus responsibilities:** investigation and proof of target disease selection, efficacy, and safety
- Exclusive license in the U.S., U.K. and E.U. in cancer indications



Growth Opportunities

Telehealth

100,000 sickle cell patients in the US

25,000 patients are currently accessible through regular channels

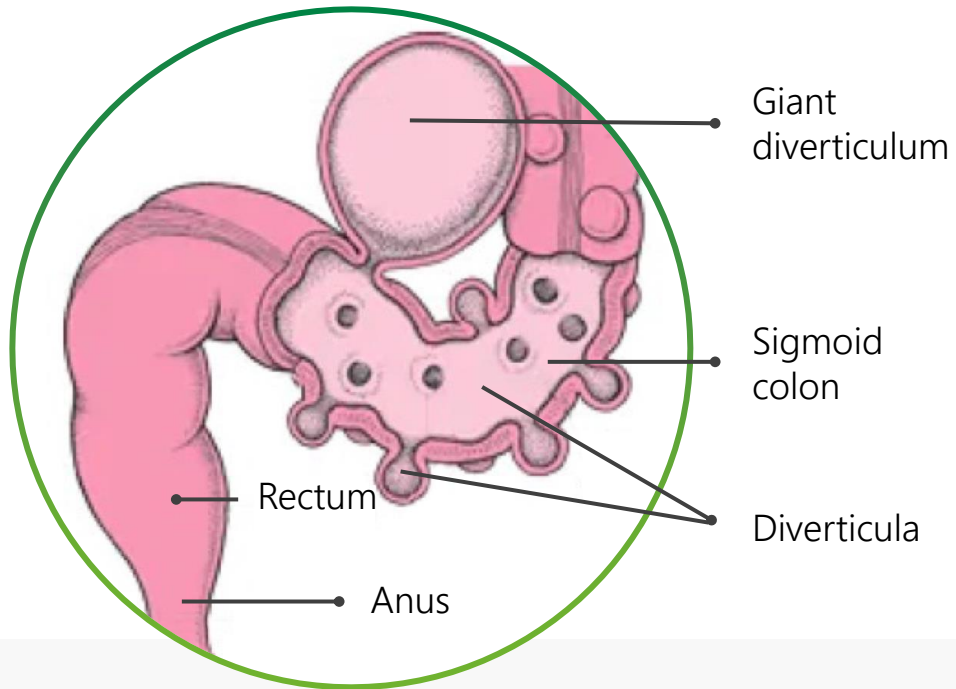
75,000 can be potentially accessed through telehealth

Advantages

- Endari does not require bloodwork in order to be prescribed.
- Endari can be delivered directly to patients' homes
- Same-day physician authorization and prescription
- Endari gets shipped within 3 business days.



Diverticulosis is the formation of balloon-like sacs (diverticula) in the large intestine



In the U.S., this affects an estimated

40%
of 60-year-olds¹

70%
of 80-year-olds

of whom 10% - 20% will develop into diverticulitis, resulting in abdominal pain, nausea, vomiting, constipation, diarrhea, fever, and leukocytosis

L-glutamine

May rejuvenate the mucosa membrane of intestine
Supports muscle cells, including those surrounding the intestine



**Preventing and
reducing diverticula
formation**



Development of a diverticulosis treatment is an exciting opportunity



Large potential markets

\$8B-\$20B U.S. market

\$14B-\$35B EU market



Internationally approved patents

U.S., EU, Australia, China, Russia, Japan, South Korea, Mexico, Indonesia, and India



Promising early results

Two initial patients showed 100% and 50% reductions in number of diverticula over 6 months



Emmaus continues to expand and explore opportunities to transform lives

Initial focus and success on rare and orphan diseases with unmet needs.

We are now extending our efforts to include conditions and diseases affecting larger populations, also with unmet needs.



EJ Holdings, Inc.



Location

Ube, Yamaguchi Prefecture, Japan

Product: Prescription Grade L-Glutamine (PGLG)

Area: 95.1 acers

Purpose: Additional API cGMP facility to meet the captive source of API for Endari® and product candidates

Capability:

Fermentation process ➤ Crude purification process

L-Glutamine manufacturing passages:

Warehouse (raw materials) ➤ Production (final purification) ➤ Warehouse (products)

Production capability:
2,000 tons/yr

Projected launch year:
2023



EJ Holdings, Inc.

Date of acquisition of
the manufacturing plant:

Dec. 25, 2019

Purchase price:

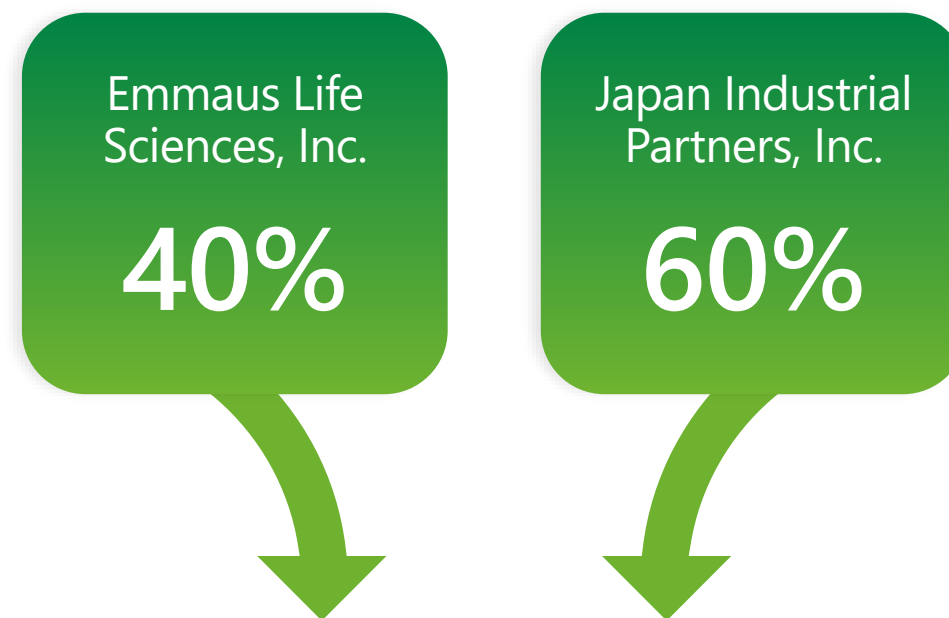
JPY 1,100M
(~USD 10.4M)

**40% interest accounted for as
a Variable Interest Entity (VIE)**

Fair Market Value (Dec. 2019):

USD 53.5M (Appraisal by Marshall and Stevens)

Ownership:



EJ Holdings, Inc.



Investment highlights



Commercial stage company marketing Endari®
– a safe and efficacious therapy for sickle cell disease



Targeting large addressable markets in underserved patient populations



Experiencing year-over-year revenue growth



Clinical pipeline with multiple shots on goal



Experienced leadership team to execute corporate strategy



Securing captive source of API for Endari® and product candidates

Significant returns on funds invested

\$100M Raised



Developed
Endari® through
Phase 3 and FDA
approval



Launched and
commercialized
Endari®



Built and deployed
an internal sales
team



Created a pipeline
with multiple
product candidates





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