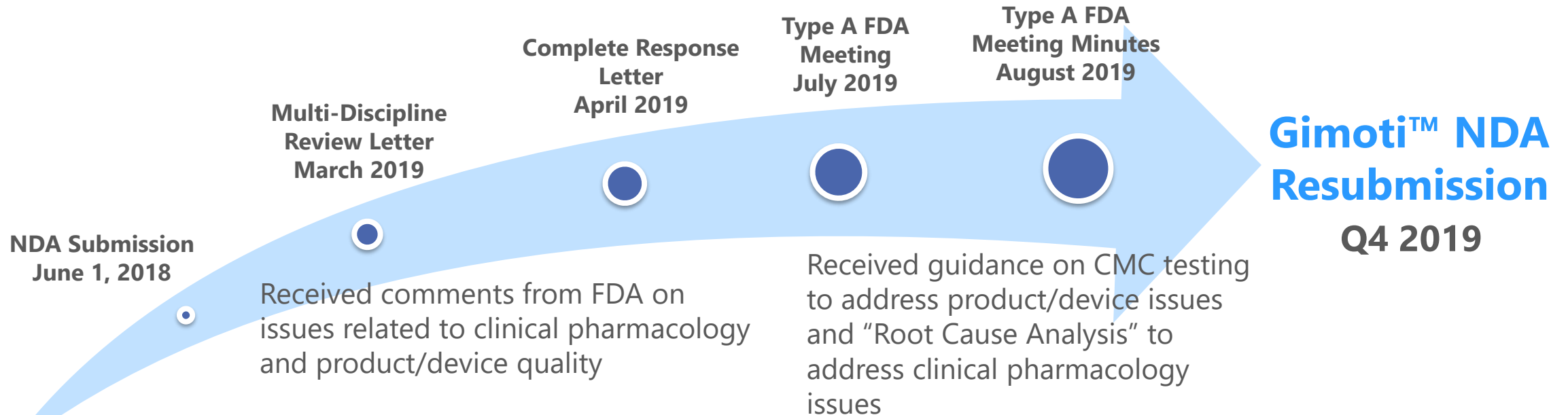


The logo for Evoke Pharmaceuticals features the word "EVOKE" in a large, bold, blue sans-serif font. Below it, the word "PHARMA" is written in a smaller, grey sans-serif font. The letters are spaced out. Behind the text are several overlapping, curved, light blue shapes that resemble stylized waves or a partial circle. The background of the slide is white on the left and transitions into a dark blue geometric pattern of overlapping triangles on the right.

EVOKE
PHARMA

NASDAQ: EVOK
September 2019

Evoke cautions you that statements included in this presentation that are not a description of historical facts are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negatives of these terms or other similar expressions. These statements are based on the company’s current beliefs and expectations. These forward-looking statements include statements regarding: Evoke’s plan to resubmit the Gimoti new drug application (NDA) in the fourth quarter of 2019; Evoke’s belief that it can address the approvability issues raised by the FDA in the complete response letter (CRL) and during the Type A meeting; and Evoke’s projected cash runway. The inclusion of forward-looking statements should not be regarded as a representation by Evoke that any of its plans will be achieved. Actual results may differ from those set forth in this press release due to the risks and uncertainties inherent in Evoke’s business, including, without limitation: Evoke may be unable to timely and successfully address the deficiencies raised in the CRL, including as a result of adverse findings from a root cause analysis or data from newly manufactured product batches; FDA may not agree with Evoke’s conclusion of the root cause analysis or may require Evoke to conduct additional studies; the inherent risks of clinical development of Gimoti; Evoke’s dependence on third parties for the manufacture of Gimoti and analysis of the PK data; Evoke is entirely dependent on the success of Gimoti, and Evoke cannot be certain that FDA will accept or approve an NDA resubmission for Gimoti; Evoke will be dependent on third parties to commercialize Gimoti, if approved; Evoke will require substantial additional funding to address the deficiencies raised in the CRL, and may be unable to raise capital or obtain funds when needed, including to fund ongoing operations; Evoke could face significant additional costs due to litigation or other events; Evoke’s ability to maintain the continued listing of its common stock on the Nasdaq Capital Market; and other risks detailed in Evoke’s prior press releases and in the periodic reports it files with the Securities and Exchange Commission. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof, and Evoke undertakes no obligation to revise or update this presentation to reflect events or circumstances after the date hereof. All forward-looking statements are qualified in their entirety by this cautionary statement. This caution is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.



- **FDA provided recommendations to address two remaining approvability issues**
 - **Clinical pharmacology**
 - Specific to low C_{max} in 4.6% (14/308) of total administered Gimoti doses in the pivotal pharmacokinetic (PK) study
 - FDA stated overall lower mean C_{max} was driven by the data from these few subjects
 - Without these aberrant doses, Company's analysis shows data met the bioequivalence criteria for both men and women
 - FDA recommended a root cause analysis to determine the origin of the PK variability and mitigation strategies to address the issue(s)
 - **Product quality/device quality**
 - FDA requested data from previously planned registration batches of commercial product to be manufactured
 - Data may provide additional support for the proposed acceptance criteria for droplet size distribution and actuation force
- **The Agency did not request any new clinical data and did not raise any safety concerns**

- **Focused on topics noted in the CRL**
 - Root cause analysis of low drug exposure in the comparative bioavailability study
 - Additional product quality/device quality control testing
- **Based on FDA feedback and meeting minutes Evoke will submit:**
 - Root cause analysis and previously collected patient use and experience information
 - Analysis of pump performance characteristics of the nasal spray devices used in the comparative bioavailability study
 - 3-month stability data from commercial scale batches of Gimoti (initiated manufacturing in June 2019)
 - **FDA did not request additional human clinical trials be completed for resubmission**
- **Targeting resubmission of Gimoti NDA in Q4 2019**

Product

- Gimoti™: a novel nasal spray delivery of metoclopramide
- Relief of symptoms in adult women with acute and recurrent diabetic gastroparesis

Large, Growing & Unsatisfied Market

- 12-16M patients in US, 80% female, poorly served with limited efficacy from current standard of care
- Only 1 FDA-approved product: metoclopramide (oral & injection)
- ~4M prescriptions annually for oral metoclopramide

Differentiation versus Oral Medications

- Bypasses the GI tract and enters the bloodstream directly
- Predictable absorption despite delayed and erratic stomach emptying
- Absorption not affected by vomiting
- Sex-based PK differences for Gimoti

Compelling Commercial Opportunity

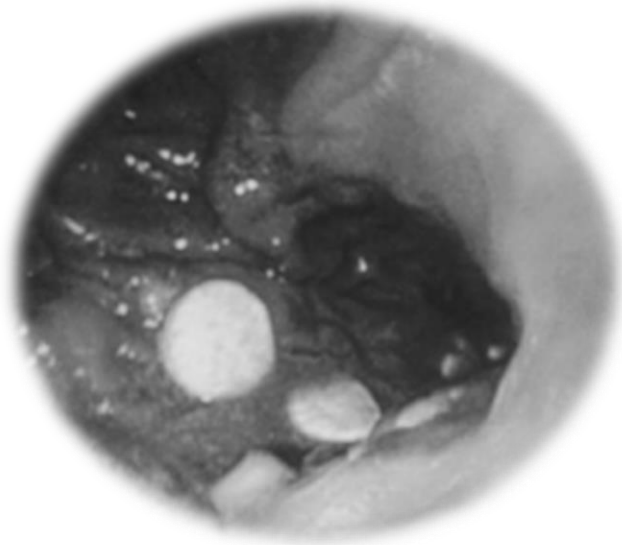
- Product launch through agreement with Novos Growth Partners, provides non-dilutive financing and integrated commercial team
- Only 1 other out-patient treatment approved by FDA
- Limited competitive products in development showing limited efficacy to date

Regulatory Pathway

- Gimoti NDA PDUFA decision date of April 1, 2019: Complete Response Letter
 - Type A FDA meeting held in July 2019 to receive FDA feedback on planned resubmission
 - Resubmission of Gimoti NDA targeted for Q4 2019
-

Unpredictable symptom flares can lead to costly hospitalizations

Undissolved drug tablets in stomach



Simpson, S.E., Clinical Toxicology, 2011

- Delayed emptying of stomach contents to small intestine (in the absence of an obstruction) interferes with oral absorption
- Vomiting further complicates effectiveness of oral medications
- Signs and symptoms characteristic of flare:

Nausea

Abdominal Pain

Early Satiety

Bloating

Prolonged Fullness

Vomiting

Impact on patients:

Diminished Quality of Life • Malnourishment • Poor Diabetes Control • Hospitalizations (Avg. 6+ days*)

* Wang, YM. Am J of Gastroenterol 2008; 103:313-322



12–16M patients with symptoms of gastroparesis and one FDA approved drug

- **80% of diabetic gastroparesis patients are women**
 - Diabetes is #1 known cause of gastroparesis
 - ~2-3M patients currently receive treatment
 - Under-diagnosed in part due to lack of awareness
 - Prevalence increasing due to growing diabetes population
- **Estimated \$3-4B prescription market**
- **\$3.5B in additional hospitalization costs in 2004**

- Wang, Parkman. "Gastroparesis Related Hospitalizations in the United States: Trends, Characteristics and Outcomes 1995-2004" *AM J Gastroenterol* 2008; 103:313-322
- Samsom M, Roelofs J. "Prevalence of Delayed Gastric Emptying in Diabetic Patients and Relationship to Dyspeptic Symptoms." *Diabetes Care*, Vol. 26, No. 11, Nov. 2003, 3116-3122
- Hasler WL. *Current Gastro Reports* 2007; 9: 261-269
- Intagliato NI, Koch KL. *Current Gastro Reports*
- Soykan I, Sivri B, Sarosiek I, Kiernan B, McCallum RW. Demography, clinical characteristics, psychological and abuse profiles, treatment, and long-term follow-up of patients with gastroparesis. *Dig Dis Sci* 1998;43:2398-404

Current oral treatment options lack predictable delivery and absorption, leading to inadequate treatment

- **Motility & Symptoms**
 - Oral Metoclopramide (1st line)
 - Domperidone (not FDA-approved)
- **Motility**
 - Erythromycin (used off-label)
- **Symptoms**
 - Odansetron, promethazine (nausea & vomiting)
 - PPI's (abdominal pain)
 - Narcotics (abdominal pain)



Ineffective Treatments and Inadequate Response

- Erratic absorption of oral drugs* (significant delay, multi-dose dumping) or no absorption due to vomiting
- Unpredictable efficacy and potential safety concerns
- Lack of compliance due to nausea and other GI symptoms

* Gastroparesis: Clinical Evaluation of Drugs for Treatment FDA Guidance for Industry. July 2015

Novel approach for symptomatic relief of acute & recurrent diabetic gastroparesis in women

Spray delivered and absorbed in the nasal cavity



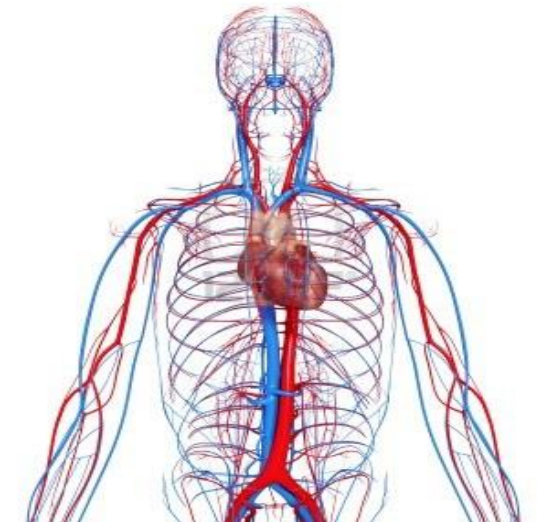
Gimoti™

(metoclopramide nasal spray)



Provides:

- Predictable absorption regardless of gastric emptying delays
- Symptom relief even during flares



Unlike oral medications, nasal delivery:

- Bypasses the GI tract to directly enter the bloodstream
- Ensures predictable absorption despite vomiting and gastric emptying delays

Significant Unmet Need

- Physicians and patients report broad interest in non-oral treatment alternatives to address unpredictable absorption
- No new FDA approved therapies for gastroparesis since 1980

Ready-made Market

- ~4M prescriptions of oral metoclopramide annually
- 20-50% of patients use off-label treatments or go untreated

Potential for Premium Pricing

- 30 national and regional plans indicate limited reimbursement impediments based upon various pricing scenarios

Appropriate for Specialty Salesforce

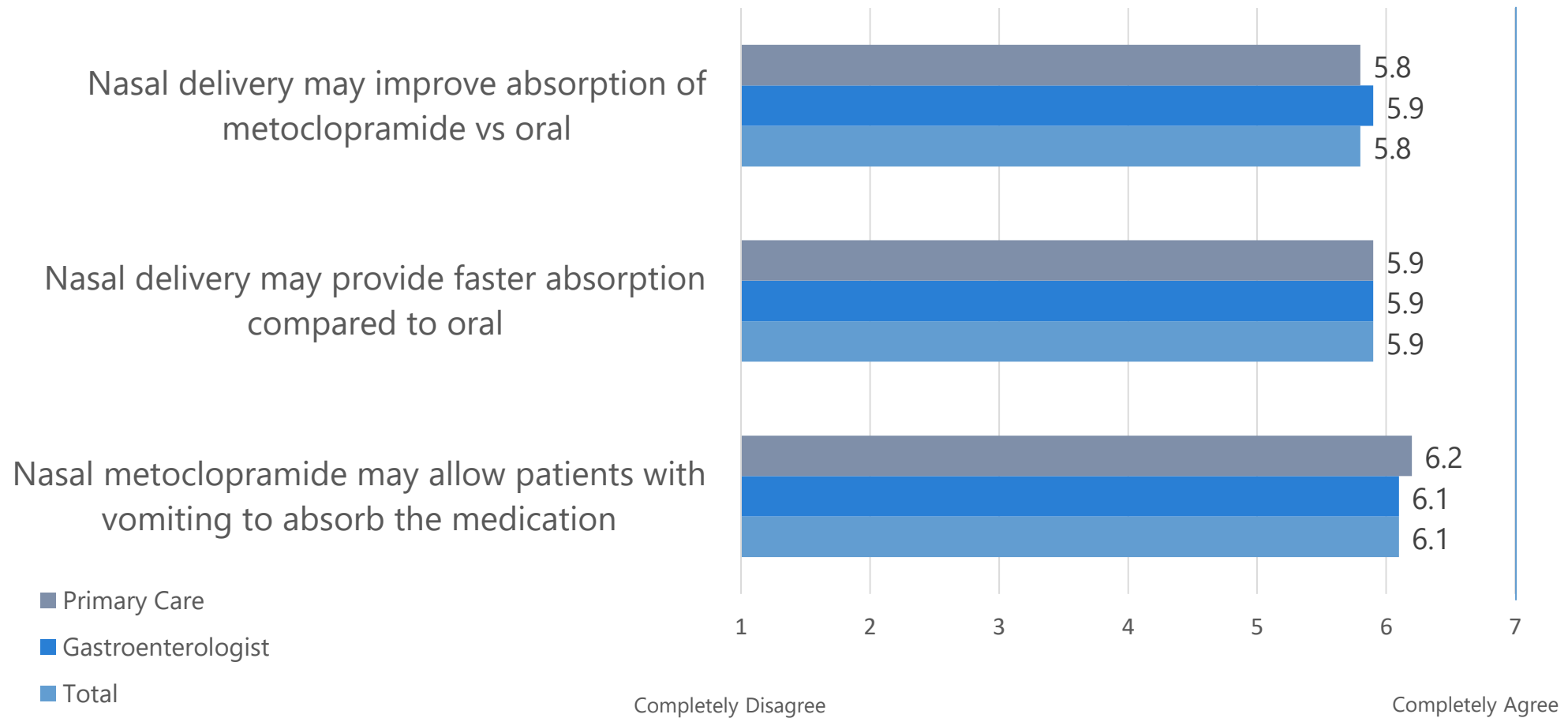
- ~7,200 metoclopramide prescribing gastroenterologists allows for small, targeted salesforce
- Significant referrals for diagnosis/treatment from specialists

Rapid Uptake Possible

- No expected competitive sales force for several years after launch
- Market research shows rapid incorporation into treatment regime



Mode of Delivery Attributes

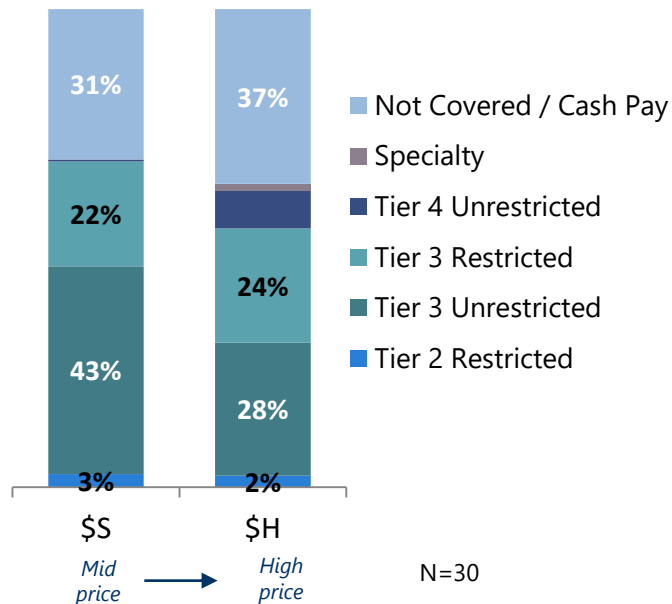


Source: ZS Associates Gastroparesis quantitative survey (n=121), Question 4Q5: How much do you agree with each of the following statements?
Totals weighted based on average metoclopramide TRx's per high/medium segment

Anticipate Gimoti to be widely available to commercial plan members

Management of Gimoti at Evaluated Prices
(Coverage by Percentage of Lives)

Gimoti benefit vs. standard of care



- Mostly Tier 3 “Unrestricted” or “Restricted” coverage projected (typical for branded products)
 - Typical co-pay for most branded products
 - Little difference in coverage at similar (\$S) or high (\$H) price to current branded GI products
- Similar reimbursement regardless of label differentiation
- Ample commercial insurance reimbursement expected due to:
 - Lack of competitive products
 - Large unmet need
 - Significant current medical costs for hospitalization

Source: Campbell Alliance Web-based surveys with 18 pharmacy directors and 12 medical directors. April 29 through May 26, 2015.

- Current patents provide protection against:
 - Delivering metoclopramide into the nose to treat symptoms associated with gastroparesis; and
 - Using a spectrum of stable liquid formulations containing metoclopramide
- Granted gender specific patents in the European Union and Mexico with coverage until 2032
- 3-years Hatch Waxman data exclusivity upon approval

U.S. Granted Patents

Patent #	U.S. 6,770,262	U.S. 8,334,281
Title	Nasal Administration of Agents for the Treatment of Gastroparesis	Nasal Formulations of Metoclopramide
Expires	2021	2030

PCT Application

Application #	PCT/US2012/052096
Title	Treatment of Symptoms Associated with Female Gastroparesis
Expires	2032 (if granted)

Current Competitive Landscape

Product	Class	Route	Company	Development Status
Gimoti	Dopamine antagonist & mixed 5-HT₃ antagonist/ 5-HT₄ agonist	Nasal	Evoke Pharma	505(b)(2) NDA PDUFA decision date April 1, 2019: CRL received Positive comparative exposure PK study results Phase 3 (n=205): Statistical significance achieved in women with moderate to severe gastroparesis symptoms at baseline. Did not meet primary endpoint for ITT.
Relamorelin	Ghrelin agonist	Sub Cutaneous	Allergan	Phase 3 (enrolling) results expected in 2020 Phase 2b results: Failed to meet primary endpoint in symptomatic relief of vomiting reduction. Phase 2a results: Failed to meet secondary symptom endpoint with either dose
Velusetrag	5-HT ₄ agonist	Oral	Takeda/ Theravance	Phase 2b (n = 232) Mixed results with three doses (5, 15, and 30 mg). No dose response. More side effects with higher doses. Phase 2a (n=34) results: No results reported for symptom relief
Tradipitant	NK-1 antagonist	Oral	Vanda	Phase 2 (n=141): Met primary endpoint for nausea. January 2019 partial clinical hold.
Renzapride	5-HT ₄ agonist and 5HT-3 antagonist	Oral	EndoLogic	Phase 2a (completed 2008): No results reported for symptom relief (gastric emptying only)
NG-101	D2/D3 receptor antagonist	Oral	Neurogastrx	Phase 1: No gastroparesis results

Experienced Senior Management & Board

Cam Garner
Chairman, Founder

Dave Gonyer, R.Ph.
President, CEO, Founder, Director

Matt D'Onofrio, MBA
Chief Business Officer, Founder

Marilyn Carlson, D.M.D, M.D., RAC
Chief Medical Officer



\$7.4M Cash as of June 30, 2019

Project cash expected to support company into Q2, 2020

Income Statement Data (in USD)

Q2 2019	(Ended June 30, 2019)
Operating Expenses	
Research & Development	\$1.2M
General Administrative	\$0.9M
Total Operating Expense	\$2.1M
Other (Income) Expense	(\$0.0M)
Net Loss	\$2.1M

Cash (in USD) and Equity Data

	June 30, 2019
Cash Balance	\$7.4M
Common Shares Outstanding	24.1M
Warrants	2.7M
Stock Options	4.7M

- **Gimoti™**: Novel nasal delivery of metoclopramide for the symptomatic relief of acute and recurrent diabetic gastroparesis in women
- **Serves unmet clinical need**: Provides predictable absorption despite gastroparesis symptoms or stomach emptying status; bypasses the GI tract
- **Large market opportunity**: ~12-16M patients with symptoms (80% women); ~2-3M currently treated in US given limited efficacy from few available treatment options
- **Only one FDA-approved therapy for gastroparesis**: Metoclopramide (oral & IV) still has ~4M prescriptions of the oral medication prescribed annually
- **Positive data from pivotal comparative exposure PK study**: Gimoti demonstrated AUC equivalence
- **Resubmission of 505(b)(2) NDA expected Q4 2019**