EVOKE PHARMA

NASDAQ: EVOK

September 2016

Forward-Looking Statements

This presentation contains forward-looking statements about Evoke Pharma, Inc. 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 the potential New Drug Application (NDA) submission and regulatory pathway submission strategies for Gimoti, including Evoke’s belief that the sections of the NDA regarding the regulatory, chemistry, manufacturing, and control (CMC) and non-clinical information will be acceptable to the Food and Drug Administration (FDA); the timing, if any , of an additional pre-NDA meeting with the FDA to discuss the clinical sections of the NDA; the potential approval and commercialization of Gimoti as a new and effective treatment for gastroparesis, the potential market size for Gimoti, the potential for Gimoti to be the only new treatment approved on the market for several years, Evoke’s protection of its intellectual property and Evoke’s completed trials and studies serving as a basis for submission of an NDA. 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 presentation due to the risk and uncertainties inherent in Evoke’s business, including, without limitation: additional analyses of data from the Phase 3 trial may produce negative or inconclusive results and may not serve as the basis for an NDA submission or regulatory approval; the final FDA minutes may be inconsistent with Evoke’s understanding of the FDA’s position on the matters addressed at the meeting, or may be inconsistent with previously announced topline results; the inherent risks of clinical development of Gimoti; Evoke is entirely dependent on the success of Gimoti, and it cannot be certain that it will be able to conduct additional trials of Gimoti or obtain regulatory approval for or successfully commercialize Gimoti; Evoke will require substantial additional funding to continue to develop and commercialize Gimoti, and may be unable to raise capital when needed, including to fund ongoing operations; Evoke may not be able to successfully commercialize Gimoti, if approved, as a result of risks associated with market acceptance, coverage and reimbursement and competing products; Evoke’s reliance on outsourcing arrangements for many of its activities, including clinical development and supply of Gimoti; the ability of Evoke to obtain, maintain and successfully enforce adequate patent and other intellectual property protection of its product candidate and the ability to operate it business without infringing the intellectual property rights of other and other risks detailed in prior press releases and in the periodic reports Evoke 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 Section 21E of the Private Securities Litigation Reform Act of 1995 and Section 27A of the Securities Act of 1933, as amended. Information included herein is based on clinical data Evoke has received to date and its evaluation of such data. All conclusions contained herein are subject to and contingent upon additional clinical data being generated by Evoke as well as the evaluation of such data by the FDA and other regulatory agencies.

Investment Highlights

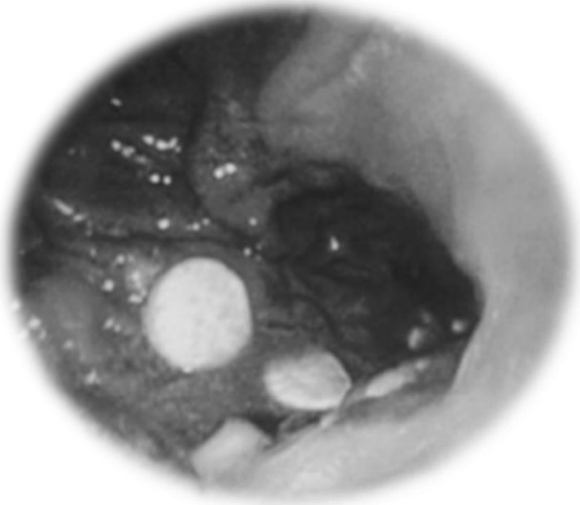
Product	• Gimoti™ (previously EVK-001): novel nasal delivery of metoclopramide • Symptomatic relief of acute and recurrent diabetic gastroparesis in women
Differentiation versus oral medications	• Predictable absorption despite delayed and erratic stomach emptying • Absorption not affected by vomiting
Large, Growing and Unsatisfied Market	• 12-16 million gastroparesis patients in US of which 80% are women • Only 1 FDA-approved product; metoclopramide (oral & IV) with ~4 million prescriptions written each year for oral metoclopramide
Clinical and Regulatory Pathway	• EOP2 Meeting direction and July 2015 FDA Guidance • Phase 3 results did not meet primary endpoint for intent-to-treat (ITT) • Ongoing clinical data analysis to identify optimal 505(b)(2) NDA path • Positive Pre-NDA meeting held in August to discuss Regulatory, CMC, and Non-Clinical sections of NDA • Preparing for Pre-NDA meeting to discuss Clinical sections of the NDA

Gastroparesis Overview

Unpredictable and Difficult to Treat

Severity of disease state can lead to malnourishment and hospitalization

Undissolved drug tablets in a stomach



Simpson, S.E., *Clinical Toxicology*, 2011

- Disorder in which the stomach is delayed in emptying contents to small intestine (in the absence of an obstruction)
- Interferes with GI absorption of medications and food due to unpredictable gastric emptying and vomiting
- Characteristic symptom flares of: nausea, abdominal pain, early satiety, bloating, prolonged fullness, and vomiting

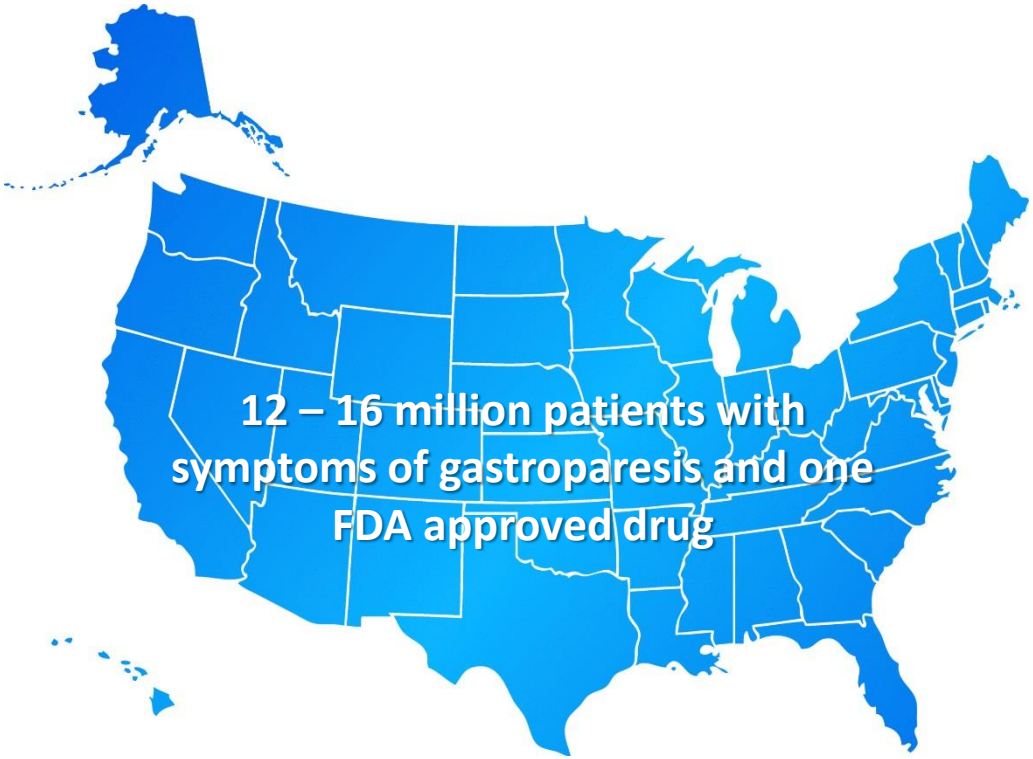
Impact on patients

- Diminished Quality of Life; Malnourishment; Poor diabetes control
- Hospitalization (on average 6+ days)*

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

Large and Growing Market

Estimated total $3-4B prescription market for Gastroparesis with $3.5B in additional hospitalization costs in 2004



- ~2-3 million patients currently receive treatment
- Under-diagnosed in part due to lack of awareness
- Diabetes is the number one known cause
- Increasing prevalence due to growing diabetes rate
- **80% of all patients affected are women**

- 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: 261-2692007;9: 270-279
- 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.

Unmet Clinical Need

Current treatment options for gastroparesis lack predictable delivery

Motility & Symptoms

- Metoclopramide (1st line)
- Domperidone (not approved by US FDA)

Motility

- Erythromycin (not indicated)

Symptoms

- Odansetron, promethazine
- PPI's
- Narcotics

All oral medications

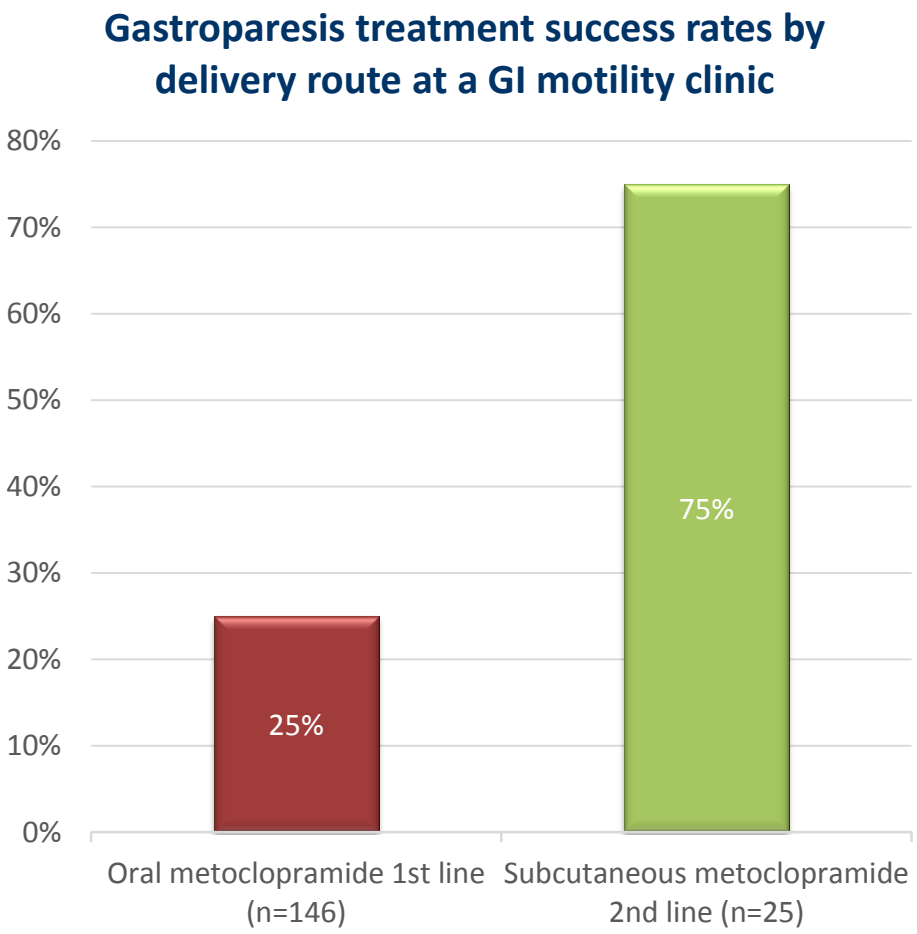
Ineffective Treatments and Inadequate Response

- 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

Improved Efficacy with Non-Oral Metoclopramide

Success rate for subcutaneous administration shown to be 3x higher than oral



"This [non-oral] route generates a constant plasma level of the metoclopramide when:

- Patients are vomiting
- Unpredictable absorption limits the value of any orally administered agent"

Soykan. et al Digestive Diseases and Sciences, Vol. 43, No. 11 (November 1998)

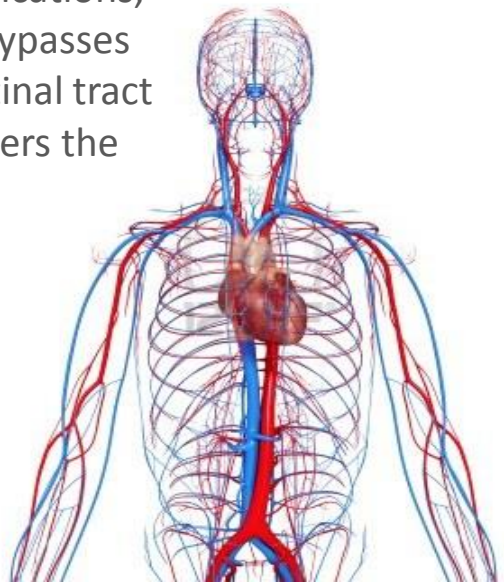
Gimoti: Our Treatment Solution

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

Sites of drug spray and absorption

Gimoti
(Nasal Metoclopramide)

Unlike oral medications, nasal delivery bypasses the gastrointestinal tract and directly enters the bloodstream



Provides predictable absorption regardless of gastric emptying delays; Provides symptom relief even during flares

Clinical Development

Phase 3 Design & Top-Line Results

Trial Design

- US study with design similar to Phase 2b study (concordant to FDA Guidance July 2015)
- Double-blind, placebo-controlled, parallel-group, 28-day study to evaluate the efficacy, safety and population pharmacokinetics in adult female subjects with diabetic gastroparesis and delayed gastric emptying
- Two treatment arms: Gimoti 10 mg or placebo, one spray before each meal and at bedtime
- Primary endpoint: Change in the average GSA total score for baseline versus Week 4 of the treatment period
- 205 subjects completed

Reported Results

- Efficacy: Primary endpoint for the ITT population not statistically significant
  - Confirmed no systemic trial errors occurred; verified data from all sources
- Safety: Gimoti was well-tolerated
  - Similar or fewer adverse events of special interest (CNS, nasal) for Gimoti compared to placebo
  - No Serious Adverse Events (SAE) related to study drug

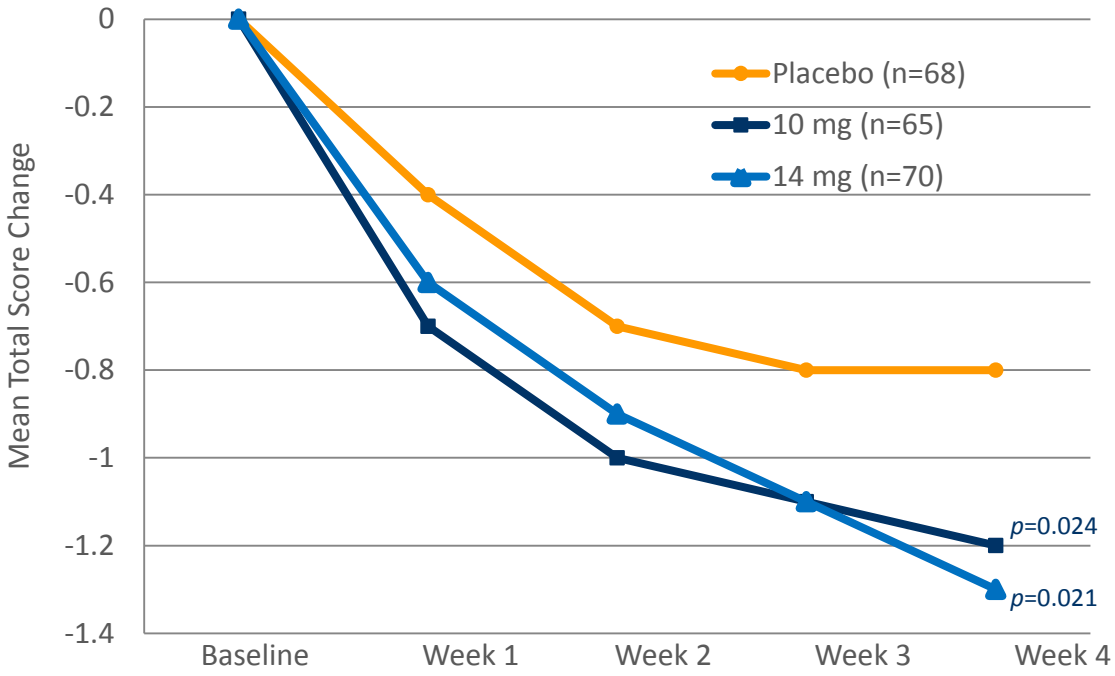
Phase 2b Efficacy Results

Statistically Significant & Clinically Meaningful Improvement in Women

Summary of Phase 2b Study

- Statistically significant difference between Gimoti and placebo ($p<0.02$) for the **pre-specified** analysis group of females (n=203)
- Results not significant for ITT population due to lack of statistical differentiation from placebo in males (n=84)
- A treatment difference of .40 -.50 points is considered a clinically important (absolute) difference for GCSI total scores*

Mean mGCSI-DD Total Score Change from Baseline to Week 4 for Females



Other Considerations

- METO-IN-002 revealed a gender difference not previously detected in smaller gastroparesis studies
- Gender effects have been reported in drug studies for other GI motility disorders, such as IBS, and products approved for women only indications

*Revicki et al. (2004) Gastroparesis Cardinal Symptom Index (GCSI): development and validation of a patient reported assessment of severity of gastroparesis symptoms. *Qual Life Res*. 2004;13(4):833-44.

Gimoti Shown to be Well Tolerated in Clinical Trials

	Phase 2			Phase 3	
Adverse Events (AEs) and Serious Adverse Events (SAEs)	Placebo (N=95)	10 mg (N=95)	14 mg (N=95)	Placebo (N=103)	10 mg (N=102)
Nervous System AEs	12%	25%	30%	12%	10%
Respiratory System AEs	8%	13%	18%	12%	7%
- Epistaxis AEs	2%	2%	3%	2%	1%
- Nasal discomfort AEs	0	3%	2%	4%	1%
Serious Adverse Events (n)	4	0	2	2	3

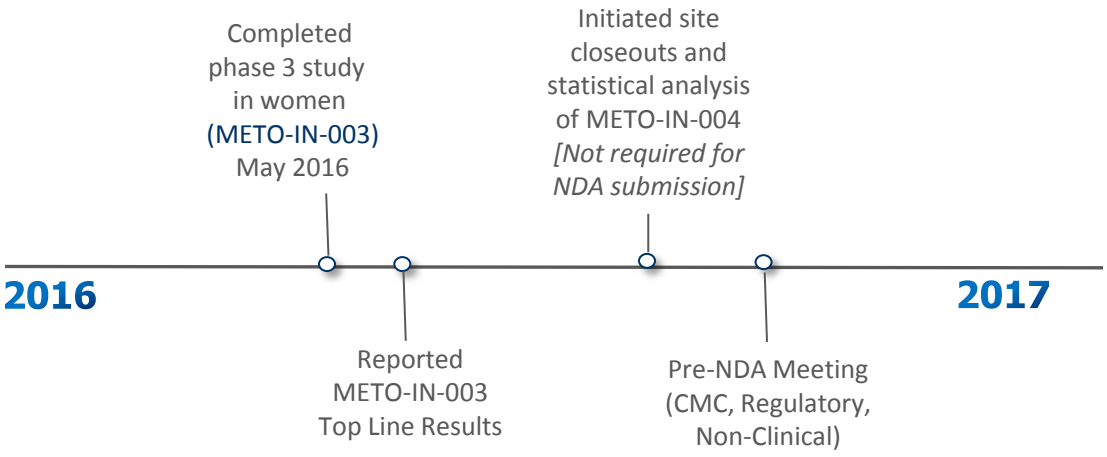
Favorable Safety Profile in Phase 1, 2, 3 and TQT studies

- No deaths, few SAEs and no SAEs related to study drug
- Fewer patients reported AEs in Phase 3 compared to Phase 2
- Dropouts:
  - Phase 2 = 10% (includes 5% due to AE)
  - Phase 3 = 7% (includes 2% due to AE)
- TQT study: No QT prolongation at supratherapeutic dose (80 mg)

Gimoti Regulatory Timeline

- Phase 3 results not meeting primary endpoint for ITT were reported in July 2016
- The FDA granted a Pre-NDA meeting in August to discuss CMC, Regulatory and Non-Clinical sections of NDA
  - Positive feedback on all aspects with acceptable steps for submission
  - No additional Non-Clinical studies requested
  - Limited other data requested
- Evoke to request additional Pre-NDA meeting for clinical (PK, Efficacy, Safety) results

Gimoti Development Timeline



Commercial Opportunity

Compelling Commercial Opportunity

Significant Unmet Need	• Physicians and patients report broad interest in non-oral treatment alternatives to address unpredictable absorption • No new therapies for gastroparesis since 1980
Ready-made Market	• 4 Million prescriptions of oral metoclopramide per year • 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

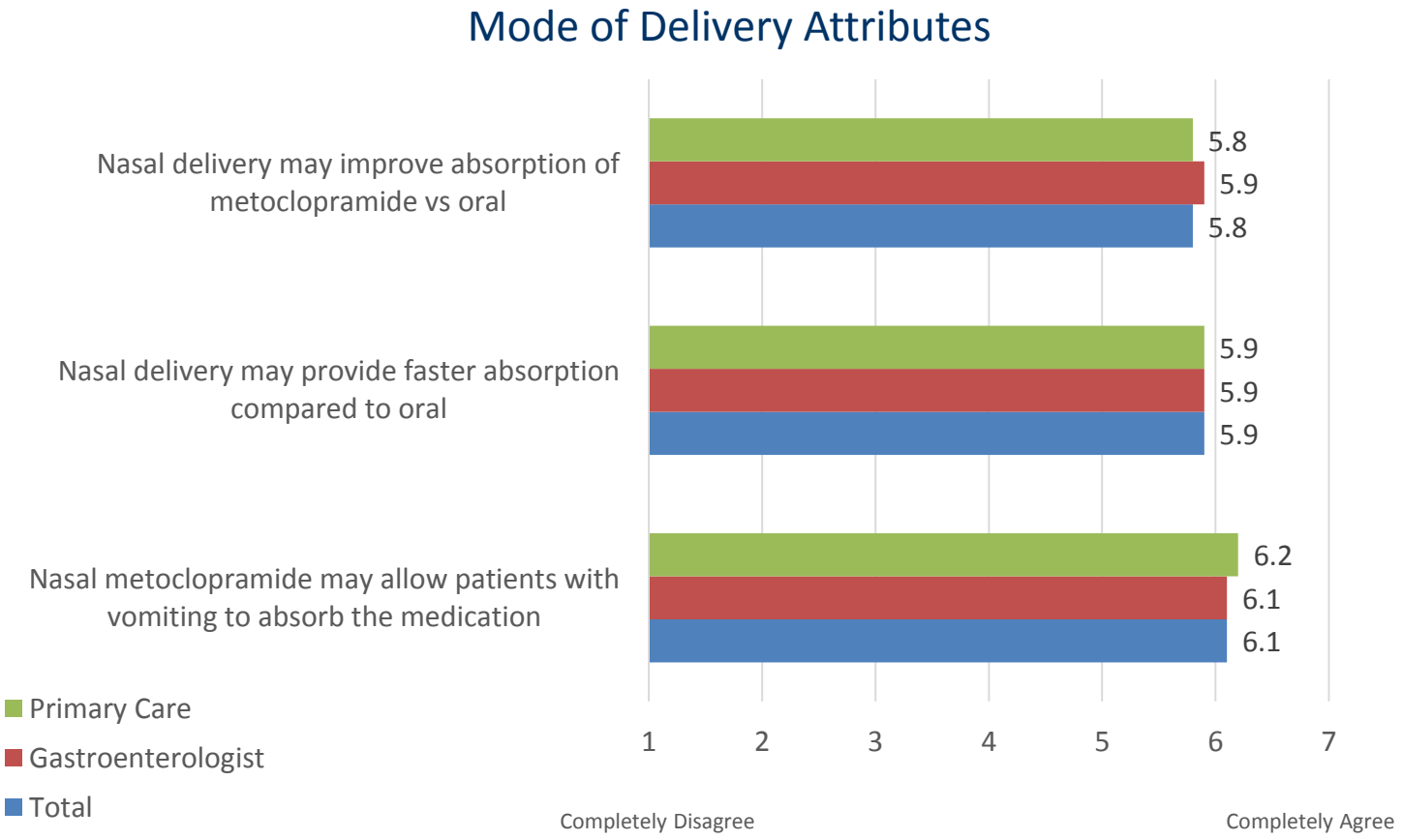
Current Competitive Landscape

Product	Class	Route	Company	Development Status
Gimoti	**Dopamine antagonist & mixed 5-HT_3 antagonist/5-HT_4 agonist**	**Nasal**	**Evoke Pharma**	**Phase 3 did not meet primary endpoint** **Phase 2b (n=287) results:** **Met prespecified symptomatic efficacy endpoint in both doses**
RM-131	Ghrelin agonist	Sub Cutaneous	Allergan/ Rhythm Therapeutics	**Phase 2b (Last Patient In April 2016)** Phase 2a (n=204) results: Failed to meet secondary composite symptom endpoint with either dose
GSK962040	Motilin agonist	Oral	Glaxo	**Phase 2b (completed August 2015)** Phase 2a (n=79) results: No composite symptom endpoint results reported; effect seen for fullness only
TD-5108	5-HT_4 agonist	Oral	Theravance	**Phase 2 (enrolling)** Phase 2a (n=34) results: No results reported for symptom relief

Strong competitive advantages

- FDA requires symptom relief as the primary endpoint for gastroparesis clinical trials
- Only Gimoti has shown symptomatic efficacy in an endpoint

Addressing Physician Concerns



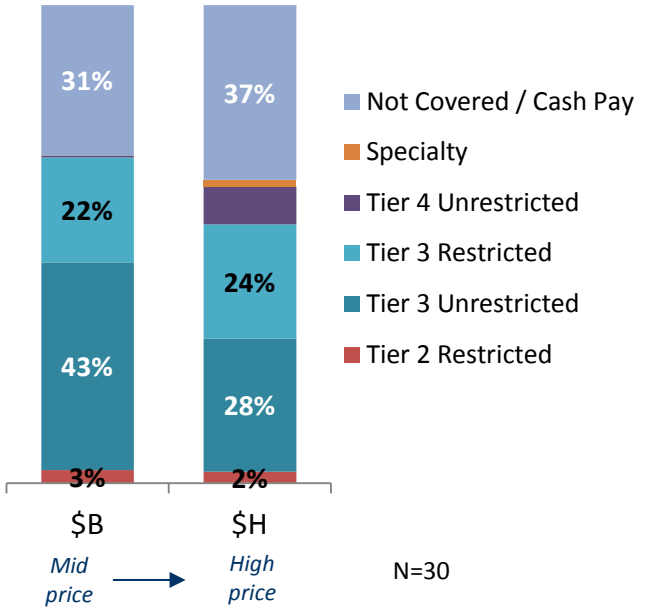
Source: ZS Associates Gastroparesis quantitative survey (n=121), Question 4Q5: How much do you agree with each of the following statements?
Totals weighted based on average metoclopramide TRx's per high/medium segment

Strong Pricing Potential

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



- Ample commercial insurance reimbursement expected
  - Prices similar to ($B) or higher than ($H) than current branded GI products
  - Similar regardless of label (profile) differentiation
- Mostly Tier 3 “Unrestricted” or “Restricted” coverage projected (typical for branded products)
- Expecting relatively less reimbursement issues 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.

Long-term IP Protection

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)

Summary

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

Selected Financial Data

Income Statement Data (in US $)

	3 months ended June 30, 2016
Operating Expense	
Research & Development	$2.1M
General Administrative	$0.8M
Total Operating Expense	$2.9M
Other (Income) Expense	$0.1M
Net Loss	$3.0M

Balance Sheet Data (in US $)

	June 30, 2016
Cash Balance*	$4.1M
Debt	$4.5M

*$14.5M equity raise in July/August 2016

Equity Outstanding as of June 30, 2016
12.4M Common Shares
3.3M Warrants
1.3M Stock Options

Summary Highlights

- **Gimoti™ (previously EVK-001):** novel nasal delivery of metoclopramide for the symptomatic relief of acute and recurrent diabetic gastroparesis in women
- **Only one FDA-approved therapy for gastroparesis:** Metoclopramide (oral & IV) which has ~4 million prescriptions of the oral medication written annually
- **Serves unmet clinical need:** Provides predictable absorption despite gastroparesis symptoms
- **Large market opportunity:** 12-16 million patients in US (80% women)
- **Pursuing optimal 505(b)(2) NDA pathway:** Ongoing analysis of Phase 3 data
- **Positive Pre-NDA meeting with FDA:** Recent FDA meeting to discuss Regulatory, CMC, and Non-Clinical sections of NDA
- **Pre-NDA meeting with FDA focused on Clinical**: Preparing a meeting to discuss Clinical sections of the NDA

EVOKE PHARMA

NASDAQ: EVOK