

# Evoke Pharma, Inc.

## Initiating Coverage with BUY and \$18.00 Price Target

*Advancing Novel Therapeutic for Gastroparesis*

### COVERAGE INITIATION

**Rating: BUY**

Ticker: EVOK

Price: \$9.89

Target: \$18.00

**Developing Late Stage Novel Compound:** Evoke Pharma is a small-cap biotech company that is advancing the development of its proprietary compound EVK-001. EVK-001 is a novel formulation of the drug metoclopramide, designed to facilitate systemic delivery of the drug through a nasal spray route of administration. The Company is preparing to conduct a Phase 3 clinical study of EVK-001 for the treatment of diabetic gastroparesis in women, which it expects to commence in Q2 of this year.

**Attractive Opportunity in Gastrophoresis:** Diabetic gastroparesis is a GI disorder in which the stomach takes too long to empty its contents that can result in serious digestive system symptoms which can include: nausea, vomiting, heartburn, and persistent fullness that lasts long after meals. It is estimated that 2.3 million diabetic patients with moderate or severe gastroparesis symptoms currently seek treatment in the U.S. by a health care professional. Metoclopramide is a drug often prescribed for the relief of symptoms associated with gastroparesis. However, metoclopramide when administered in an oral pill formulation, can have delayed absorption due to gastrophoresis itself, especially in patients suffering from nausea and vomiting. EVK-001, as a nasal spray, is designed to facilitate systemic delivery of metoclopramide that effectively bypasses the digestive system. The potential advantages of this route of administration include a more rapid-onset of delivery, and circumvention of first-pass elimination, resulting in greater bioavailability of the drug compared with oral formulations.

**Initiating Coverage with a BUY Rating:** We believe that Evoke Pharma is an intriguing speculative small cap investment story. First, the U.S. population of gastroparesis is large and growing, driven by the increased rate of diabetes and greater awareness about the disease. Second, given that the company's EVK-001 drug candidate is about to enter Phase 3 evaluation, coupled with the fact that metoclopramide has already been well-characterized, we believe that this is a relatively low-risk development program. Finally, we believe that EVOK has the potential for significant upside, which would be driven by positive results from this Phase 3 clinical study and associated partnering opportunities. Our 12-month price target of \$18.00 is calculated using an NPV analysis.

### Company Description

Evoke Pharma was founded in 2007 and is headquartered in San Diego, CA. The Company is focused on the development and commercialization of its novel therapeutic, EVK-001 for the treatment of diabetic gastroparesis in women.

United States  
Healthcare

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### Stock Data

Exchange:	NasdaqCM
52-week Range:	\$6.75 – 14.25
Shares Outstanding (million):	6.8
Market cap (\$million):	\$67.3
EV (\$million):	\$43.3
Debt (\$million):	\$3
Cash (\$million):	\$27
Avg. Daily Trading Vol. (\$million):	\$0.1
Float (million shares):	2.4
Short Interest (million shares):	0.1
Incorporation:	Delaware
Public auditor:	Ernst & Young LLP

### Revenues (US\$ million)

	<u>2012A</u>	<u>2013E</u>	<u>2014E</u>	<u>2015E</u>
<b>Q1 Mar</b>	0.0A	0.0A	0.0E	0.0E
<b>Q2 Jun</b>	0.0A	0.0A	0.0E	0.0E
<b>Q3 Sep</b>	0.0A	0.0A	0.0E	0.0E
<b>Q4 Dec</b>	<u>0.0A</u>	<u>0.0E</u>	<u>0.0E</u>	<u>0.0E</u>
<b>Total</b>	<b>0.0A</b>	<b>0.0E</b>	<b>0.0E</b>	<b>0.0E</b>
EV/Revs	N/A	N/A	N/A	N/A

### Earnings per Share (GAAP)

	<u>2012A</u>	<u>2013E</u>	<u>2014E</u>	<u>2015E</u>
<b>Q1</b>	(0.45)A	(0.44)A	(0.35)E	(0.54)E
<b>Q2</b>	(0.32)A	(0.21)A	(0.68)E	(0.40)E
<b>Q3</b>	(0.43)A	(0.41)A	(0.73)E	(0.32)E
<b>Q4</b>	<u>(0.60)A</u>	<u>(0.13)E</u>	<u>(0.52)E</u>	<u>(0.38)E</u>
<b>Total</b>	<b>(1.79)A</b>	<b>(0.84)E</b>	<b>(2.25)E</b>	<b>(1.64)E</b>
P/E	N/A	N/A	N/A	N/A

### EBITDA (US\$ million)

	<u>2012A</u>	<u>2013E</u>	<u>2014E</u>	<u>2015E</u>
<b>Q1</b>	(0.5)A	(0.3)A	(2.1)E	(4.6)E
<b>Q2</b>	(0.4)A	(0.2)A	(4.1)E	(3.4)E
<b>Q3</b>	(0.5)A	(0.5)A	(4.4)E	(2.7)E
<b>Q4</b>	<u>(0.7)A</u>	<u>(0.8)E</u>	<u>(4.4)E</u>	<u>(3.2)E</u>
<b>Total</b>	<b>(2.0)A</b>	<b>(1.8)E</b>	<b>(15.0)E</b>	<b>(13.9)E</b>

EBITDA is defined as earnings before interest, taxes, depreciation, and amortization.

### Important Disclosures

Ascendant Capital Markets LLC seeks to do business with companies covered by its research team. Consequently, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making an investment decision.

**For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report, beginning on page 14.**

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## INVESTMENT THESIS

We are initiating coverage of EVOK with a BUY rating and 12-month price target of \$18.00. The company is advancing the development of its proprietary compound, EVK-001, for the treatment of diabetic gastroparesis in women. Diabetic gastroparesis is a GI disorder in which the stomach takes too long to empty its contents that can result in serious digestive system symptoms which can include: nausea, vomiting, heartburn, and persistent fullness that lasts long after meals. Metoclopramide is a drug often prescribed for the relief of symptoms associated with gastroparesis. Metoclopramide acts to increase the movements or contractions of the muscles in the stomach and intestines, thus decreasing the amount of time it takes for the stomach contents to move through the digestive tract. However, metoclopramide when administered in an oral pill formulation, can have delayed absorption due to gastroparesis itself, especially in patients suffering from nausea and vomiting. EVK-001 is a novel formulation of metoclopramide designed to facilitate systemic delivery of the drug through a nasal spray route of administration, thus effectively bypassing the digestive system. The potential advantages of this route of administration include a more rapid-onset of delivery, and circumvention of first-pass elimination, resulting in greater bioavailability of the drug compared with oral formulations.

Metoclopramide is currently the only medication in the U.S. that is FDA approved for the treatment of gastroparesis. The drug has been well characterized at this point, having been first approved for this indication in the U.S. in 1980, and now available as a generic. The EVK-001 nasal spray formulation of metoclopramide has also been extensively evaluated at this point. In a multicenter, randomized, double-blind, placebo-controlled, dose-ranging Phase 2b clinical trial in 287 patients with diabetic gastroparesis, EVK-001 was observed to be effective in improving the most prevalent and clinically relevant symptoms associated with gastroparesis in women while exhibiting a favorable safety profile. The next step for the company is to initiate a Phase 3 clinical trial of EVK-001 in female patients with symptoms associated with acute and recurrent diabetic gastroparesis, which is expected to commence in Q2 of 2014. This Phase 3 clinical trial will be a randomized, double-blind, placebo-controlled study that will enroll approximately 200 patients at approximately 60 sites across the U.S. We anticipate topline data from this trial to be reported in mid-2015. Should this trial be successful, as well as a thorough QT study that is also required to evaluate cardiac safety of this formulation, we would anticipate that the company would then be in a position to submit a new drug application (NDA) for EVK-001 to the FDA in late 2015.

We believe that Evoke Pharma is an intriguing speculative small cap investment story. First, the U.S. population of gastroparesis is large and growing, driven by the increased rate of diabetes and greater awareness about the disease. It is estimated that 2.3 million diabetic patients with moderate or severe gastroparesis symptoms currently seek treatment in the U.S. by a health care professional. Second, given that the company's EVK-001 drug candidate is about to enter Phase 3 evaluation, coupled with the fact that metoclopramide has already been well-characterized, we believe that this is a relatively low-risk development program. Finally, we believe that EVOK has the potential for significant upside, which would be driven by positive results from this Phase 3 clinical study and the associated opportunity to partner with a larger pharmaceutical company that has established sales and marketing capabilities to commercialize EVK-001.

## EVK-001 – A NOVEL FORMULATION OF METOCLOPRAMIDE

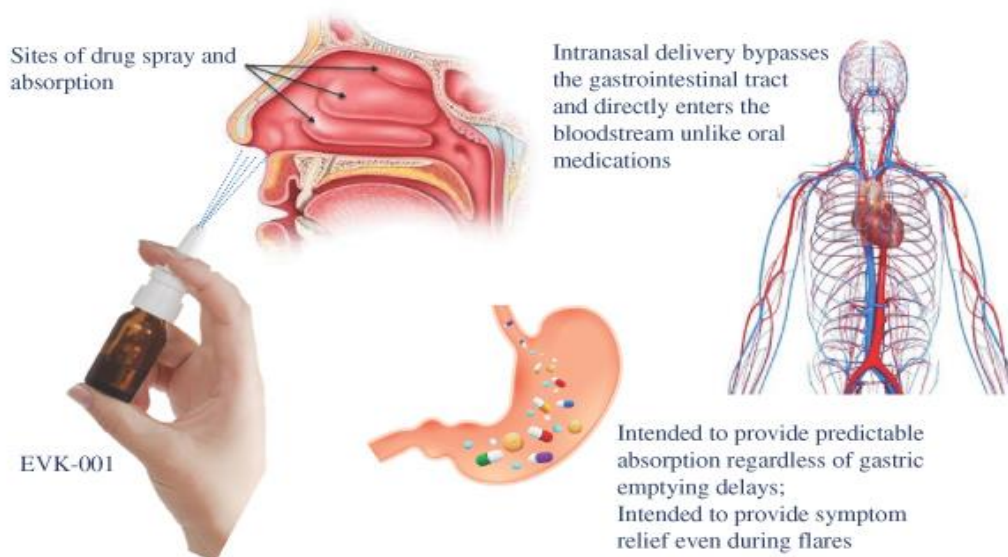
Since its approval in 1980 by the FDA, oral and intravenous metoclopramide have been the only products approved in the U.S. to treat gastroparesis. Metoclopramide acts to increase the movements or contractions of the muscles in the stomach and intestines, thus decreasing the amount of time it takes for the stomach contents to move through the digestive tract. Metoclopramide is principally a dopamine D<sub>2</sub> antagonist but also acts as an agonist on serotonin 5-HT<sub>4</sub> receptors and causes weak inhibition of 5-HT<sub>3</sub> receptors. As a result of its ability to inhibit dopamine D<sub>2</sub> receptors, while stimulating other 5-HT<sub>4</sub> receptors in the GI tract, metoclopramide acts to promote the release of acetylcholine, which in turn leads to accelerated gastric emptying. Further, metoclopramide produces an antiemetic (prevents vomiting) effect due to its inhibition of D<sub>2</sub> and 5-HT<sub>3</sub> receptors. However, because gastroparesis itself can block or slow the movement of the contents of the stomach to the small intestine, oral drug administration is often compromised. As a result, patients with severe symptoms of diabetic gastroparesis, typically receive the intravenous formulation of metoclopramide, which is usually administered in a hospital setting. EVK-001 is a novel formulation of metoclopramide as a nasal spray. As such, if approved, EVK-001 could offer an alternative route of administration of metoclopramide for female patients with symptoms of diabetic gastroparesis. The advantages of an intranasal formulation would be a more predictable and

consistent means of delivering metoclopramide in patients with delayed gastric emptying, and would represent an outpatient therapy that could be administered and absorbed even in more severe case when patients are experiencing nausea and vomiting, who are currently treated with intravenous metoclopramide.

Metoclopramide nasal spray was initially developed by Natestch Pharmaceutical Company in precursor formulations to EVK-001, which was subsequently acquired and further developed by Questcor. Evoke Pharma acquired all worldwide rights, data, patents and other related assets associated with EVK-001 from Questcor in June 2007. Intranasal delivery is feasible due to the single epithelial cell layer of the mucosa in the nasal cavity. This area is highly vascularized, which can allow metoclopramide molecules to be transferred directly into systemic circulation. Since it is able to bypass the digestive system, EVK-001 should be well tolerated even when patients are experiencing nausea and vomiting. Further, since there is no first pass liver metabolism required prior to onset of action, the intranasal formulation should also provide greater availability of the drug.

The primary drug delivery device for EVK-001 is relatively simple, comprised of a glass vial directly attached to a pre-assembled spray pump unit which utilizes standardized metered sprayer technology found in other common nasal spray products. Each multi dose sprayer system comes preassembled and is capable of delivering a 30 day supply (120 doses at 4 doses per day).

### Exhibit 1: EVK-001 Nasal Spray Formulation of Metoclopramide

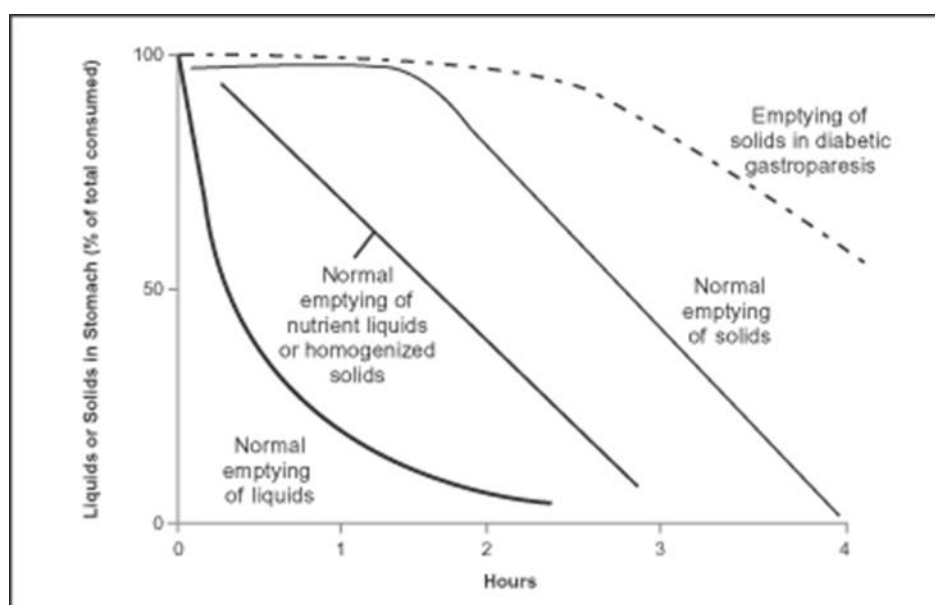


Source: Evoke Pharma S1

## OPPORTUNITY IN GASTROPARESIS

Gastroparesis is a disorder that slows or stops the movement of food from the stomach to the small intestine. The digestion of food begins in the stomach, where acids and enzymes, referred to as gastric juices, are mixed with food that is physically broken down by the churning action created by contraction and relaxation of the stomach muscles. The muscles of the stomach are controlled by the vagus nerve. The vagus nerve provides direct two-way communication between the brain and body which allows it to regulate many other activities in the human body, including: energy metabolism, blood pressure regulation, as well as activities of the stomach, intestine and pancreas. Specifically, the vagus nerve has been shown to play a role in: expansion of the stomach as food enters, stomach contractions that break food into smaller particles, release of gastric acid to continue food processing, and emptying of the stomach contents into the small intestine. Gastroparesis can occur when the vagus nerve is damaged by illness or injury and the stomach muscles stop working normally. Food then moves slowly from the stomach to the small intestine or stops moving altogether that can result in serious digestive system symptoms which can include: nausea, vomiting, heartburn, and persistent fullness that lasts long after meals

### Exhibit 2: Effect of Diabetic Gastroparesis on Stomach Emptying Times



Source: Camilleri M. *New England Journal of Medicine* 2007

Gastroparesis can result from a number of different causes including: systemic illnesses, as a complication of select surgical procedures, or can develop due to unknown causes. Diabetes mellitus is a known leading cause of gastroparesis, estimated to be associated with 29% of the total gastroparesis population. While the underlying mechanism of diabetic gastroparesis is unknown, it is thought to be related in part to neuropathic changes in the vagus nerve caused by prolonged elevated serum glucose levels. According to a study published in the *Journal of Gastrointestinal and Liver Diseases* in July 2010, between 25% and 55% of Type 1 and 15% and 30% of Type 2 diabetics suffer from symptoms associated with the gastroparesis.

The prevalence of diabetes in the U.S. is rapidly rising. In 2011, the American Diabetes Association estimated that diabetes affects approximately 26 million people of all ages in the U.S., equating to about 8.3% of the population. Hence, the potential gastroparesis patient pool in the U.S. is approximately 12 to 16 million adults, with women making up 82% of this population, according to a 2007 study published in Current Gastroenterology Reports. According to IMS Health there are approximately 5 million prescriptions written for metoclopramide for per year in the U.S. Given that a current script is typically written for a 30 day supply of pills, we would estimate that the addressable market for a superior product, at an assumed cost of \$10 per day, would be approximately \$1.5 billion in the U.S.

## CURRENT AND POTENTIAL COMPETITIVE ALTERNATIVE TREATMENTS FOR GASTROPARESIS

It is estimated that 2.3 million diabetic patients with moderate or severe gastroparesis symptoms currently seek treatment in the U.S. by a health care professional. Multiple medications are frequently used to address the individual symptoms of gastroparesis. Metoclopramide is currently the only medication in the U.S. that is FDA approved for the treatment of gastroparesis. Metoclopramide is available in oral, intravenous, and the oral disintegrating tablet formulations of metoclopramide. Physicians also prescribe other medications “off-label” in an attempt to address individual symptoms experienced by patients, such as anti-emetics for nausea and vomiting, and opioids for abdominal pain.

Market research indicates that existing treatment options for diabetic gastroparesis are viewed as inadequate. As a result, there is a high level of interest in new therapeutic options. In addition to EVK-001, there are a number of other product candidates under development to treat gastroparesis, which could represent future competition.

### Exhibit 3: Current Gastroparesis Treatments in Development

Gastroparesis Treatments in Development				
Product	Class	Route	Company	Status
EVK-001	dopamine antagonist /mixed	intranasal	Evoke Pharma	Phase 3
RM-131	5-HT3 antagonist 5-HT4 agonist ghrelin agonist	sub-cutaneous	Rhythm Pharmaceuticals	Ready Phase 2a
GSK962040	motilin agonist	oral	GlaxoSmithKline	Phase 2a
TD-5108	5-HT4 receptor agonist	oral	Theravance	Phase 2a

Source: Evoke Pharma S1

## CLINICAL DEVELOPMENT PLAN FOR EVK-001

Metoclopramide nasal spray was initially developed by Natestch Pharmaceutical Company in precursor formulations to EVK-001, which was subsequently acquired and further developed by Questcor. Evoke Pharma acquired rights to this product candidate from Questcor in 2007. Evoke subsequently optimized the formulation of metoclopramide nasal spray to improve stability and remove inactive ingredients in order to improve the palatability and tolerability of EVK-001 for patients.

From 1985 to present, Evoke or its predecessors have conducted 24 clinical studies to evaluate the safety and pharmacokinetic profile of nasal spray formulations of metoclopramide in healthy volunteers and the safety, efficacy, pharmacokinetic and pharmacodynamic profile of metoclopramide nasal spray in patients. A total of 1,045 patients have been dosed in these studies with intranasal formulations of metoclopramide at doses ranging from 10 mg to 80 mg.

The most significant clinical study conducted to date evaluated EVK-001 in a multicenter, randomized, double-blind, placebo-controlled parallel group, dose-ranging Phase 2b clinical trial in 287 subjects with diabetic gastroparesis. The protocol for the Phase 2b clinical trial consisted of a screening period, of up to a 23-days, and a seven-day washout period, followed by 28 days of treatment with study drug. The trial evaluated two dosage strengths of EVK-001: 10 mg and 14 mg; as well as placebo. The study drug was administered for the 28-day treatment period as a single intranasal spray four times daily, 30 minutes before meals and at bedtime. This study relied on patient reported outcomes (PRO) instruments to assess efficacy that were designed in close collaboration with FDA. These Gastroparesis Cardinal Symptom Index Daily Diary (GCSI-DD) instruments require patients in the study to record the severity of their gastroparesis symptoms in a telephonic diary using an interactive voice response system once each day. The primary efficacy endpoint in this study was the change from seven-day baseline to Week 4 of the treatment period in the mGCSI-DD total score. The rmGCSI-DD is comprised of four symptoms (nausea, early satiety, bloating, and upper abdominal pain) rated from zero (none) to five (very severe). The second efficacy endpoint analyzed was the change from seven-day baseline to Week 4 of the treatment period in the GCSI-DD total score. The GCSI-DD contains nine symptoms (nausea, retching, vomiting, stomach fullness, not able to finish a normal sized meal, feeling excessively full after meal, loss of appetite, bloating, and stomach or belly visibly larger) grouped in three subscales. The daily score is calculated as a mean of three subscale means.

In this trial, although an overall improvement in symptoms was observed in EVK-001-treated patients with diabetic gastroparesis compared to placebo, the difference was not statistically significant due to a high placebo response among male subjects. However, a pre-specified analysis of female subjects (who represented 79% of the patients enrolled) did demonstrate a statistically significant improvement in gastroparesis symptoms as measured by the mGCSI-DD and GCSI-DD total scores for both doses of EVK-001 compared to the placebo. Male subjects treated with EVK-001 showed some improvement in gastroparesis symptoms, but did not show a statistically significant difference compared to placebo. Due to these results in men, the primary objective of statistical significance in the overall population was not achieved. The observed differences in efficacy were based on gender and were not due to severity of baseline disease, or other demographic characteristics. No statistically significant differences were observed in efficacy between the 10 mg and 14 mg EVK-001 doses; thus the 10 mg dose was considered the lowest effective dose in this study.

#### Exhibit 4: Summary of Study Endpoint P-Values in Phase 2b Clinical Trial of EVK-001

	EVK- 001 10 m g <u>p -values</u>	EVK- 001 14 m g <u>p -values</u>
<b>mGCSI-DD Total Score (per FDA guidance) <sup>(1)</sup></b>		
All Subjects	0.1504	0.3005
Females	<b>0.0247</b>	<b>0.0215</b>
Males	0.4497	0.2174
<b>GCSI-DD Total Score (per trial protocol) <sup>(2)</sup></b>		
All Subjects	0.2277	0.5266
Females	<b>0.0485</b>	<b>0.0437</b>
Males	0.4054	0.0972

P -values for pairwise comparisons are obtained from an ANCOVA model with effects for treatment group and Baseline value as a covariate.

Source: Evoke Pharma S1

EVK-001 also exhibited a favorable safety profile. In the Phase 2b clinical trial, EVK-001 10 mg and 14 mg doses were well-tolerated and no differences in the safety profiles were observed between the two doses administered. Further, no serious adverse events occurred related to study treatment.



The efficacy results of the Phase 2b trial are consistent with what is known about gender effects in other GI motility disorders. GI motility and functional GI disorders, including gastroparesis, are more common in females than in males. As a result, there is general consensus among thought leaders in GI motility that women have a higher prevalence of symptoms due to the fact that their neural and sensory pathways differ, and it is also believed that hormones, such as estrogen and progesterone, play a role.

Based on discussions with the FDA, the company now plans to conduct a single Phase 3 trial in women, which it believes will be sufficient for NDA submission. This will be a, multicenter, randomized, double-blind, placebo-controlled, parallel Phase 3 clinical trial to evaluate the efficacy, safety and population pharmacokinetics of EVK-001 in adult female subjects with diabetic gastroparesis. They plan to enroll approximately 200 patients at approximately 60 sites across the United States. The duration of treatment will be four weeks. The trial population will consist of female diabetic patients with gastroparesis, who will be randomized in a 1:1 ratio to EVK-001 10 mg or placebo administered as a single intranasal spray four times daily; 30 minutes before meals and at bedtime.

Based on discussions with the FDA, the primary efficacy endpoint for this Phase 3 clinical trial will be based upon a change from baseline in total composite score of the specific symptoms included in a different PRO instrument known as the Gastroparesis Symptom Assessment (GSA). Also based on discussions with FDA, and to assess safety in men, the company plans to conduct a similar and concurrent companion study for safety and efficacy in diabetic men with gastroparesis. However, the FDA has agreed that completion of the male companion study is not required for submission of the NDA seeking approval of EVK-001 for use in women. Finally, the company will also need to conduct a thorough QT study to evaluate cardiac safety of this formulation of EVK-001 prior to NDA submission. We anticipate that the Phase 3 study will start in Q2 2014, with top line data available in mid-2015.

Since metoclopramide has been previously approved by the FDA, the company believes that it will be able to submit an NDA for EVK-001 under the 505(b)(2) regulatory pathway, and thus will only need to conduct one Phase 3 clinical study. Section 505(b)(2) of the Hatch-Waxman Amendments permits the filing of an NDA where at least some of the information required for approval comes from the FDA's findings of safety and effectiveness based on certain pre-clinical or clinical studies conducted for another approved product.

## INVESTMENT RISKS

Investors should be aware of several events or factors that could adversely impact the company's financial performance and valuation. These risks include:

### **The company has a history of losses and may never become and remain consistently profitable.**

Evoke Pharma has experienced significant operating losses since its inception. As of September 30, 2013, the company had an accumulated deficit of \$21 million. The company has not yet commercialized any product, nor generated any revenues from the sale of such products. Further, the company is not expecting to generate any revenues from such product in the foreseeable future. The company is expected to continue to incur annual net operating losses over the next several years and will require further substantial resources as it expands its efforts to develop and commercialize its products. Net cash used in Evoke's operations was \$2.9 million in 2011 and \$1.7 million in 2012, and we expect it was about \$2.0 million in 2013.

### **The company may need to raise debt or equity funds in the future.**

We believe that the company will need additional funds for its research and product development programs, regulatory processes, preclinical and clinical testing, and potential sales and marketing infrastructure, and potential licenses and acquisitions. Any additional equity financing may be dilutive to stockholders, and additional debt financing, if available, may involve restrictive covenants. However, external financing, depending on the prevailing financial environment, may be particularly difficult, and the source, timing and availability of any future fundraising will depend principally upon market conditions and, more specifically, on the company's progress in its research, preclinical and clinical development programs. Funding may not be available when needed at all or on acceptable terms.



**EVK-001 may never become a marketable product.**

The company's sole product candidate, EVK-001, will require additional clinical testing and regulatory review and/or approvals or clearances before marketing. EVK-001 may not prove to be a safe and effective treatment for the disease for which it is being evaluated. Finally, there is always risk associated with FDA and other regulatory agencies' review of any new drug product. The company currently believes that it will be able to file for FDA approval utilizing the 505(b)(2) regulatory pathway and therefore will be required to conduct only one Phase 3 clinical study.

**The company faces significant competition.**

Evoke faces competition from a number of companies. The biotechnology and pharmaceutical industries are intensely competitive. The competitors include major multinational pharmaceutical and chemical companies, specialized biotechnology firms and universities and other research institutions. Many of these competitors possess greater financial and other resources, larger research and development staffs and significantly greater experience in the discovery and development of product candidates, obtaining FDA and other regulatory approvals of products and the commercialization of those products. If approved, EVK-001 will compete directly with oral metoclopramide, erythromycin and domperidone as a treatment for gastroparesis. Oral metoclopramide is available from a number of generic pharmaceutical manufacturer, which will limit the price that could be charged for EVK-001. Finally, the development of new treatment methods for this diseases, if successful, could render EVK-001 non-competitive or obsolete.

**Key intellectual property could fail to protect products.**

Evoke Pharma currently holds nine U.S. patents, three international patents, and has patent applications pending from the U.S. Patent and Trademark Office. These patents include claims covering the nasal formulation (U.S. Patent 8,334,281), which expires in 2030, and method of use of metoclopramide via nasal delivery for gastroparesis (U.S. Patent 6,770,262), which expires in 2021. However, the biotechnology business is very litigious. Newly issued IP in this space has often been opposed, resulting in some issued patents being revoked. An unfavorable judgment or substantial legal fees can adversely affect financial performance.

**180-day lockup agreement associated with the IPO will expire shortly.**

The 180 day lock-up agreement associated with the IPO will expire at the end of March 2014. After the lock-up agreements expire, up to an additional 3.7 million shares of common stock will be eligible for sale in the public market. Sales of a substantial number of shares in the public market, or the perception that these sales might occur, could significantly reduce the market price of EVOK common stock. Of the shares subject to the lock-up agreement 3.4 million shares are held by directors, executive officers and other affiliates of the company and thus are subject to volume limitations under Rule 144 under the Securities Act of 1933.

The above factors represent only some of the risks associated with investing in Evoke Pharma. For a complete list, investors should refer to the company's most recent S-1/A and 10-Q filings.

## MANAGEMENT

**President and Chief Executive Officer – David Gonyer**

David A. Gonyer, R.Ph. is one of the co-founders of the company and has served as Chief Executive Officer and as a member of the board of directors since March 2007. Mr. Gonyer has extensive knowledge of the pharmaceutical industry with over 25 years of work experience. From January 2004 to June 2007, Mr. Gonyer served as Vice President, Strategic and Product Development of Medgenex, Inc., a subsidiary of Victory Pharma, Inc. a biopharmaceutical company focused on acquiring, developing and marketing products to treat pain and related conditions. From April 2000 to December 2004, Mr. Gonyer was a founder and Vice President of Sales and Marketing at Xcel Pharmaceuticals, Inc., a specialty pharmaceutical focused on neurological disorders. From December 1996 to April 2000, Mr. Gonyer served as Director of Marketing at Elan/Dura Pharmaceuticals, Inc. From 1987 to 1996, Mr. Gonyer held a broad range of management positions in commercial operations, alliance/partnership management, and regional sales at Eli Lilly & Company. Mr. Gonyer serves as a member of the board of directors of Neurelis, Inc., a privately held neurological specialty pharmaceutical company. Mr. Gonyer is a Registered Pharmacist and holds a B.Sc. in Pharmacy from Ferris State University School of Pharmacy.

**Chief Business Officer – Matt D’Onofrio**

Matthew J. D’Onofrio is one of the co-founders of the company and has served as Executive Vice President, Chief Business Officer since 2010 and as Executive Vice President, Corporate Development, Treasurer and Secretary since March 2007. Mr. D’Onofrio has over 20 years of experience in both large and small pharmaceutical firms. Prior to founding Evoke, Mr. D’Onofrio was Vice President, Business Development for Victory Pharma, a specialty pharma company from 2002 to 2005, where he led efforts to acquire marketed brands for the sales force. Mr. D’Onofrio was previously Director and Head of West Coast Business Development at Vertex Pharmaceuticals, a biotechnology company, directing partnership efforts associated with the La Jolla research facility as well as other corporate assets. Mr. D’Onofrio also held various commercial roles of increasing responsibility over a decade at Eli Lilly & Company, including significant experience in worldwide corporate business development. During his licensing career, Mr. D’Onofrio has developed and executed license and investment relationships across a wide collection of disease states and technologies. Mr. D’Onofrio earned a B.S. in Chemistry from San Diego State University and an M.B.A. (Finance) from the Marshall School of Business, University of Southern California.

**Chairman of the Board – Mr. Cam Garner**

Cam L. Garner is one of the co-founders of the company and has served as chairman of the board of directors since June 2007. Mr. Garner has extensive knowledge of the pharmaceutical industry, with experience as a board member of multiple publicly-traded and privately-held companies, and expertise in developing, financing and providing strong executive leadership to numerous biopharmaceutical companies. Mr. Garner co-founded specialty pharmaceutical companies Zogenix Pharmaceuticals, Cadence Pharmaceuticals, Inc., Somaxon Pharmaceuticals, Inc., Elevation Pharmaceuticals, Inc., DJ Pharma, Verus Pharmaceuticals, Inc., Xcel Pharmaceuticals, Inc. and Meritage Pharma, Inc. He has served as chairman of Zogenix, Cadence, Verus, Elevation and Meritage since August 2006, May 2004, November 2002, December 2007 and February 2008, respectively. Xcel was acquired in March 2005 by Valeant Pharmaceuticals International, DJ Pharma was sold to Biovail in 2000 and Elevation was acquired by Sunovion Pharmaceuticals Inc. in September 2012. He was Chief Executive Officer of Dura Pharmaceuticals, Inc. from 1989 to 1995 and its Chairman and Chief Executive Officer from 1995 to 2000 until it was sold to Elan in November 2000. Mr. Garner also serves on the board of directors of Aegis Therapeutics, Inc., Cadence Pharmaceuticals, Inc., Meritage Pharma, Inc., Neurelis, Inc., and Zogenix, Inc. Mr. Garner earned his B.A. in Biology from Virginia Wesleyan College and an M.B.A. from Baldwin-Wallace College.

*Source for Management Biographies – Evoke Pharma S-1 filing*

**FINANCIALS**

Evoke Pharma is a pre-revenue development stage company. We expect the company to be in a net loss position for several more years. We would not expect the company to commercialize its first product until 2017. We project that the company will have approximately \$25 million in cash at the end of 2013. Our projected quarterly operating expense is expected to increase to approximately \$4 MM per quarter once the company commences a Phase 3 study in gastroparesis, which the company estimates will cost approximately \$15 million to conduct. Hence, we believe that the company will require additional capital in order to achieve its product development goals.

Evoke Pharma acquired rights to EVK-001 from Questcor in 2007, making an upfront payment of \$650,000. Evoke will be required to make additional milestone payments to Questcor totaling up to \$52.0 million. These milestones include up to \$5.0 million in payments if EVK-001 achieves the following development targets: \$0.5 million upon the initiation of the first patient dosing in our planned Phase 3 clinical trial for EVK-001; \$1.5 million upon the FDA’s acceptance for review of an NDA for EVK-001; and \$3.0 million upon the FDA’s approval of EVK-001. The remaining \$47.0 million in milestone payments depend on EVK-001’s commercial success and will only apply if EVK-001 receives regulatory approval. In addition, Evoke will be required to pay to Questcor a low single digit royalty on net sales of EVK-001.

Evoke currently has a loan and security agreement with Silicon Valley Bank with a current outstanding principal balance of \$3.0 million. Under the terms of the agreement, Evoke is required to pay back the loan by the end of 2015 in the form of quarterly principle and interest payment over the next two years.

For 2013, we are projecting a net loss of approximately (\$2) MM or GAAP EPS of (\$0.84).

For 2014, we are projecting a net loss of approximately (\$15) MM or GAAP EPS of (\$2.25). We project that operating expenses will increase significantly due to increased clinical trial activity. Our model assumes that the company will raise additional cash via an equity offering.

For 2015, we are projecting a net loss of approximately (\$14) MM or GAAP EPS of (\$1.64). We project that operating expenses will remain elevated due to clinical trial activity and preparation and submission of the NDA filing.

## VALUATION

As a development stage company, accurate valuation is more complex and requires a number of forward assumptions, which at best are inexact. Since its IPO last September at \$12 per share, the stock price of EVOK has decreased approximately 16% to the current price. We have used an NPV analysis to establish our 12-month price target of \$18.00. Our analysis considers future estimated revenue out to 2025 (\$200 MM), consisting of royalties from commercial sales of its EVK-001 compound used to treat gastroparesis. Our model assumes that the company enters into a licensing agreement for the product in early 2016, after the NDA is filed, and thus assumes that the company funds all of the clinical development costs for the product by itself. We apply a further haircut adjustment of 50% to the future royalty streams for gastroparesis to capture the remaining clinical and regulatory risk associated with this Phase 3 product development program. We use a WACC of 15% as our discount rate. Finally, we assume a fully diluted share count of 9.3 million.

## OTHER COMPANIES MENTIONED IN THE REPORT

Questcor - (QCOR, \$60.75, Not Rated)  
GlaxoSmithKline - (LJPC, \$55.94, Not Rated)  
Theravance - (THRX, \$37.00, Not Rated)  
Silicon Valley Bank – (SIVB, \$125.91, Not Rated)

## FINANCIAL MODEL

Evoke Pharma Inc. Income Statement (in millions)	FY 2012					FY 2013E					FY 2014E					FY 2015E				
	Q1	Q2	Q3	Q4	YE	Q1	Q2	Q3	Q4E	YE	Q1E	Q2E	Q3E	Q4E	YE	Q1E	Q2E	Q3E	Q4E	YE
Revenues	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cost of revenue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gross profit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Research and development	0.3	0.2	0.3	0.3	1.2	0.1	0.1	0.1	0.4	0.7	1.2	3.4	3.7	3.7	12.0	3.7	2.7	2.0	2.5	10.9
General and administrative	0.2	0.1	0.1	0.3	0.8	0.2	0.1	0.4	0.4	1.1	0.9	0.7	0.7	0.7	3.0	0.9	0.7	0.7	0.7	3.0
Operating expenses	0.5	0.4	0.5	0.7	2.0	0.3	0.2	0.5	0.8	1.8	2.1	4.1	4.4	4.4	15.0	4.6	3.4	2.7	3.2	13.9
Operating income	(0.5)	(0.4)	(0.5)	(0.7)	(2.0)	(0.3)	(0.2)	(0.5)	(0.8)	(1.8)	(2.1)	(4.1)	(4.4)	(4.4)	(15.0)	(4.6)	(3.4)	(2.7)	(3.2)	(13.9)
Interest income	0.0	-	0.0	(0.0)	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest expense	-	0.0	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.2)
Change in fair value of warrant liability	-	0.0	0.0	0.0	0.0	(0.1)	-	0.0	-	(0.1)	-	-	-	-	-	-	-	-	-	-
Other income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Income (loss) before taxes & extraordinary items	(0.5)	(0.4)	(0.5)	(0.7)	(2.0)	(0.5)	(0.2)	(0.5)	(0.8)	(2.0)	(2.1)	(4.1)	(4.4)	(4.4)	(15.2)	(4.6)	(3.4)	(2.8)	(3.3)	(14.1)
Income tax expense	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Effective tax rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
Net Income (Loss) applicable to common stockholder	(0.5)	(0.4)	(0.5)	(0.7)	(2.0)	(0.5)	(0.2)	(0.5)	(0.8)	(2.0)	(2.1)	(4.1)	(4.4)	(4.4)	(15.2)	(4.6)	(3.4)	(2.8)	(3.3)	(14.1)
Basic earnings (losses) per share:																				
Net earnings (losses)	(0.45)	(0.32)	(0.43)	(0.60)	(1.79)	(0.44)	(0.21)	(0.41)	(0.13)	(0.84)	(0.35)	(0.68)	(0.73)	(0.52)	(2.25)	(0.54)	(0.40)	(0.32)	(0.38)	(1.6)
Diluted earnings (losses) per share:																				
Net earnings (losses)	(0.45)	(0.32)	(0.43)	(0.60)	(1.79)	(0.44)	(0.21)	(0.41)	(0.13)	(0.84)	(0.35)	(0.68)	(0.73)	(0.52)	(2.25)	(0.54)	(0.40)	(0.32)	(0.38)	(1.6)
Weighted average shares outstanding:																				
Basic	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	6.1	2.4	6.1	6.1	6.1	8.6	6.7	8.6	8.6	8.6	8.6	8.6
Diluted	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	6.8	2.8	6.8	6.8	6.8	9.3	7.5	9.3	9.3	9.3	9.3	9.3
EBITDA	(0.5)	(0.4)	(0.5)	(0.7)	(2.0)	(0.3)	(0.2)	(0.5)	(0.8)	(1.8)	(2.1)	(4.1)	(4.4)	(4.4)	(15.0)	(4.6)	(3.4)	(2.7)	(3.2)	(13.9)
Margin analysis (percentage of sales)																				
Cost of goods sold	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gross profit	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Research and development	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
General and administrative	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Operating expenses	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Operating income	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Net Income (Loss)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

<i>Evoke Pharma Inc.</i>	2012	2013E	2014E	2015E
<b>Balance Sheet (in millions)</b>	<b>YE</b>	<b>YE</b>	<b>YE</b>	<b>YE</b>
<b>ASSETS</b>				
Current Assets:				
Cash and cash equivalents	0	26	35	18
Short term investments	-	-	-	-
Accounts receivable	-	-	-	-
Prepaid expenses and other current assets	-	-	-	-
Other	-	-	-	-
<i>Total current assets</i>	0	26	35	18
Plant, Property, & Equipment	-	-	-	-
Restricted cash and security deposit	-	-	-	-
Intangible assets, net	-	-	-	-
<b>Total Assets</b>	<b>0</b>	<b>26</b>	<b>35</b>	<b>18</b>
<b>LIABILITIES &amp; STOCKHOLDERS' EQUITY</b>				
Current Liabilities:				
Accounts payable	0	1	1	1
Accrued compensation	0	0	0	0
Warrant liability	-	-	-	-
Deferred Revenue	-	-	-	-
Current portion of long-term debt, net of debt discount	-	1	1	-
<i>Total current liabilities</i>	1	3	3	2
Long Term Liabilities:				
Other	1	2	0	-
<b>Total Liabilities</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>2</b>
<b>STOCKHOLDERS' EQUITY</b>				
Series A convertible preferred stock	18	-	-	-
Common stock	0	0	0	0
Additional paid in capital	0	44	69	68
Retained earnings (deficit)	(20)	(22)	(37)	(51)
<b>Total Stockholders' Equity</b>	<b>(1)</b>	<b>22</b>	<b>32</b>	<b>17</b>
<b>Total Liabilities, Convertible Preferred Stock and Stockholders' Equity</b>	<b>0</b>	<b>26</b>	<b>35</b>	<b>18</b>

<b>Evoke Pharma Inc.</b>	<b>2012</b>	<b>2013E</b>	<b>2014E</b>
<b>Cash Flow Statement (in millions)</b>	<b>YE</b>	<b>YE</b>	<b>YE</b>
<b>OPERATING CASH FLOWS</b>			
Net loss	(2)	(2)	(15)
Adjustments to reconcile net loss to net cash used in operating activities			
Stock-based compensation	0	0	0
Non-cash interest	0	0	-
Change in fair value of purchase right liability	-	-	-
Change in fair value of warrant liability	(0)	0	-
Changes in:	-	-	-
Prepaid expenses and other assets	0	-	-
Accounts payable and accrued expenses	0	(0)	-
Other long-term liabilities	-	-	-
Deferred Revenue	-	-	-
<b>Net cash provided by (used in) operating activities</b>	<b>(2)</b>	<b>(2)</b>	<b>(15)</b>
<b>INVESTING CASH FLOWS</b>			
Purchases of property and equipment	-	-	-
Other	-	-	-
<b>Net cash provided by (used in) investing activities</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>FINANCING CASH FLOWS</b>			
Proceeds from convertible promissory note	-	-	-
Proceeds from bank line of credit and loan advances	1	2	-
Payment on bank line of credit	-	-	(2)
Proceeds from issuance of common stock	-	29	25
Cash paid in connection with initial public offering	-	(2)	-
Proceeds from issuance of preferred stock and purchase rights, net	-	-	-
Proceeds from exercise of stock options	-	-	-
<b>Net cash provided by (used in) financing activities</b>	<b>1</b>	<b>28</b>	<b>24</b>
<b>Net increase (decrease) in cash &amp; cash equivalents</b>	<b>(1)</b>	<b>26</b>	<b>8</b>
Cash & cash equivalents, beginning	1	0	26
<b>Cash &amp; cash equivalents, end</b>	<b>0</b>	<b>26</b>	<b>35</b>

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**BUY:** We expect the stock to provide a total return of 15% or more within a 12-month period.

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**SELL:** We expect the stock to have a negative total return of more than 15% within a 12-month period.

Total return is defined as price appreciation plus dividend yield.

### **Ascendant Capital Markets, LLC Rating System**

*Prior to January 31, 2014, ASCM used the following rating system:*

**Strong Buy:** We expect the stock to provide a total return of 30% or more within a 12-month period.

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**Neutral:** We expect the stock to provide a total return of between minus 10% and plus 10% within a 12-month period.

**Sell:** We expect the stock to provide a total return of minus 10% or worse within a 12-month period.

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Total return is defined as price appreciation plus dividend yield.

### **Ascendant Capital Markets, LLC Distribution of Investment Ratings (as of December 31, 2013)**

Rating	Count	Percent	Investment Banking Services Past 12 months	
			Count	Percent
Strong Buy	9	14%	3	33%
Buy	42	67%	5	12%
Neutral	10	16%	0	0%
Sell	2	3%	0	0%
Total	63	100%	8	13%

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