

Emerging Company Research

Horizon Pharma — Initiating With Outperform (1)

Horizon Shine: A New Day Is About To Dawn With Duexis and LODOTRA

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Summary: Horizon Pharma is focused on the development and commercialization of therapeutics focused on pain and inflammation. The company has two approved products, Duexis, the combination of an NSAID and GI protectant that is expected to launch in the U.S. in 4Q11, and LODOTRA, a programmed-release low-dose prednisone currently marketed in select countries in Europe. The company intends to market both products themselves in the U.S. and out-license ex-U.S. rights. Both drugs have patents filed, allowed, or issued that do not expire until the 2025 time frame. Horizon intends to ramp up its sales force from 75 reps to 150 by the end of 2012 to accommodate the LODOTRA U.S. launch. Horizon management has worked diligently to set up the reimbursement structure for Duexis as well as the sales and marketing strategy. We believe these efforts are especially key to the overall success of the uptake of both drugs in a crowded market. Both drugs have strong differentiating characteristics, but will require strong marketing prowess to compete with already entrenched products.

- **Two approved products ready for launch mitigates risk.** Both Duexis and LODOTRA have completed Phase III pivotal studies in the U.S. with statistically significant results. Duexis is approved and LODOTRA could receive approval in 1H12. Both drugs will address markets that generate multi-billions of dollars annually in sales.
- **The power of the management team should not be underestimated.** We believe the success of Horizon will come from the marketing and sales strategy implemented by the company for its two therapeutic drugs. Given the competitive nature of this launch, we believe management's extensive prior experience is key. An unsuccessful launch with low formulary uptake and low prescriber volume is a real possible risk.

HZNP (09/07)	\$8.15	Revenue \$MM							
Mkt cap	\$155.7MM	FY	2010	2011E	2012E	2013E	2014E		
Dil shares out	19.1MM	Dec	Actual	Prior	Current	Prior	Current	Current	Current
Avg daily vol	3.6K	Q1	0.0	—	0.0A	—	7.5	—	—
52-wk range	\$7.5-9.3	Q2	0.0	—	1.3A	—	9.6	—	—
Dividend	Nil	Q3	0.0	—	1.4	—	13.4	—	—
Dividend yield	Nil	Q4	0.0	—	3.4	—	20.2	—	—
BV/sh	NA	Year	0.0	—	7.3	—	51.1	142.9	243.1
Net cash/sh	\$2.79	CY	—	—	—	—	—	—	—
Debt/cap	NA	EV/S	—	—	3.5x	—	0.5x	0.2x	0.1x
ROA (LTM)	NA								
5-yr fwd EPS growth (Norm)	NA	EPS \$							
		FY	2010	2011E	2012E	2013E	2014E		
		Dec	Actual	Prior	Current	Prior	Current	Current	Current
		Q1	0.00	—	(2.33)A	—	(0.98)	—	—
		Q2	0.00	—	(7.78)A	—	(0.69)	—	—
		Q3	0.00	—	(1.06)	—	(0.57)	—	—
		Q4	0.00	—	(1.13)	—	(0.32)	—	—
		Year	0.00	—	(5.82)	—	(2.47)	0.02	2.71
		CY	—	—	—	—	—	—	—
		P/E	—	—	—	—	—	407.5x	3.0x
S&P 500	1198.6								

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Investment Thesis

Horizon Pharma is focused on the development of therapeutics for the relief of signs and symptoms of rheumatoid arthritis and osteoarthritis. The company's lead drug in the U.S. is Duexis, which is a combination of ibuprofen, an NSAID, and famotidine, an H₂ antagonist. Duexis has been approved in the U.S. and is expected to launch in 4Q11. Horizon's second product, LODOTRA, is a low-dose steroid that through its programmed delivery is able to have greater effect on the factors that are associated with morning joint stiffness and pain. LODOTRA is currently approved in Europe and is expected to be approved in the U.S. in 2Q12.

We believe both of these drugs have distinct advantages over the current players in the NSAID and steroid markets and therefore could garner significant market penetration with an experienced and adept sales force. Important to the launch and uptake of both of these drugs is a well thought out and executed reimbursement, sales, and marketing strategy. For these components to come together and work effectively, a strong management team must be in place to coordinate these essential moving parts. We believe Horizon has a strong management team with decades of experience in the NSAID space from a development, regulatory, launch, and marketing standpoint.

Duexis looks to compete with drugs such as Vimovo (AstraZeneca and Pozen), Celebrex (Pfizer), and Arthrotec (Pfizer). Given Duexis's distinct advantage of lower GI side effects and therefore the ability to dose chronically in addition to a safe cardiac profile, we believe an adept sales force can make great strides taking market share away from existing flawed products.

Competitive pricing and a lower pill burden are the factors that come together to prevent physicians from prescribing ibuprofen and an H₂ antagonist separately. The sales pitch is strong and using the two drugs independently cannot be financially justified.

Finally, a potential LODOTRA approval on the heels of a Duexis launch will go a long way in reducing the average cost of the sales force and allow for greater accessibility to physicians. These are important factors that help motivate a sales force and promote accessibility to the high prescribing community.

HORIZON PHARMA, INC. SNAPSHOT

Horizon is a biopharmaceutical company that is developing and commercializing innovative medicines to target unmet therapeutic needs in arthritis, pain and inflammatory diseases. The company received FDA approval for DUEXIS in April 2011, a novel tablet formulation containing a fixed-dose combination of ibuprofen and high-dose famotidine in a single pill.

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Senior Management

Timothy P. Walbert	Chairman, President and CEO
Robert J. DeVaere	EVP, CFO
Jeffrey W. Sherman, M.D.	EVP, Development, Regulatory Affairs and CMO

Capitalization

Long-Term Debt (MM):	\$19
Market Value of Equity (MM):	\$159
Cash (MM):	\$47
Technology Value (MM):	\$131

Horizon Therapeutic Pipeline

Drug Candidate	Phase	Indication
Duexis	Approved	OA and RA pain
Lodotra	Approved in E.U.	RA
Trunoc	Preclinical	Pain and RA

Source: Cowen and Company

Duexis Offers Pain Relief and GI Protection

Over sixty million Americans use non-steroidal anti-inflammatory drugs (NSAIDs) to manage pain and inflammation. Two of the largest segments of this patient population are the roughly 20 million people who experience chronic pain due to osteoarthritis (OA) and the approximately three million who experience the symptoms of rheumatoid arthritis (RA). These patients often rely on chronic administration of either prescription or over-the-counter NSAIDs to relieve the pain and inflammation that result from their disease. Such chronic use, however, significantly increases the risk of developing gastrointestinal (GI) side effects such as gastric ulcers and bleeding. In response to the side-effect issues associated with the administration of NSAIDs for pain relief, physicians often prescribe treatments that offer gastric protection, like H₂-receptor antagonists such as famotidine or proton-pump inhibitors (PPI) such as omeprazole. These drugs offer the gastric protection required to combat the side effects of chronic NSAID use. Compliance with such an additional treatment regimen is poor, however, because of the inconvenient large pill burden and differing dosing schedules associated with a dual treatment regimen.

Horizon has developed and received FDA approval for Duexis to treat the pain and inflammation associated with rheumatoid and osteoarthritis while offering gastric protection to reduce the risks of developing upper GI ulcers and irritation as a result of chronic NSAID use. Duexis is a combination of one of the most widely used NSAIDs, ibuprofen, and one of the most potent available H₂-receptor antagonists, famotidine. Duexis received FDA approval in April 2011, and Horizon anticipates receiving approval in Europe in 1H12. Horizon is currently preparing for the commercial launch of Duexis in the U.S. in 4Q11.

Millions of Patients Endure Pain Associated with OA and RA

Chronic pain is characterized by pain that persists for a protracted period of time after an injury, long-term pain from unidentifiable causes, and pain resulting from a persistent or degenerative disease. Chronic pain affects millions of people every year causing many of those who experience it to miss work, experience difficulty in performing daily tasks, and seek treatment for relief. The prevalence of chronic pain is high with approximately 30% of the U.S. population experiencing some form of chronic pain. The percentage is only expected to increase as the demographics of the U.S. change with an aging population. Two of the most common conditions that result in chronic pain and inflammation are osteoarthritis and rheumatoid arthritis. In the U.S., the prevalence of osteoarthritis is approximately 20 million and that of rheumatoid arthritis is approximately three million. According to the American Pain Foundation, chronic pain results in an estimated annual cost in the U.S. of \$100 billion due to healthcare expenses, lost income, and lost productivity. Arthritis, the nation's leading cause of disability, accounts for medical care and indirect expenses such as lost wages and productivity totaling approximately \$128 billion. In addition, pain is the second leading cause of missed work resulting in a loss of approximately 50 million workdays annually.

OA is a degenerative joint disease occurring primarily in the hip, knee, and spine. Within the affected joint, all components are involved, including the cartilage, bone, and synovium. Symptomatically, the joint is painful, and in some cases inflamed. One to two percent of these patients will have erosive OA, an inflammatory form of disease that afflicts the small joints, particularly the distal interphalangeal joints of

the hands. Risk factors for OA include obesity, diabetes, and joint injury. OA is normally diagnosed by history, physical examination, and radiologic studies.

Currently, no treatments for OA are disease-modifying, which means there are no medications that slow down the progression of the joint space narrowing indicative of the disease. With no disease modifying medications available, patients try a multitude of prescription and over-the-counter medications, sometimes in combination, in order to relieve their pain. Therapeutics most often involve the prescription of NSAIDs, but may also include topical agents, oral drugs such as acetaminophen, narcotic and non-narcotic pain medications, and intra-articular injections of corticosteroids plus lidocaine or hyaluronic acid.

RA affects approximately 1% of the U.S. population, with a female to male ratio of 2 to 1. The exact etiology is unknown. The pathophysiology of RA is complicated and involves the interplay of T and B lymphocytes, cytokines, growth factors and ligands, the complement system, and other proteins and reactive agents. Patients present to their physician with complaints of morning stiffness greater than one hour relieved by activity and red, hot, swollen, painful hands, wrists, feet, and ankles. Aggressive treatments including the administration of methotrexate and other disease-modifying anti-rheumatic drugs (DMARDs), prednisone, and tumor necrosis factor (TNF) inhibitors are often prescribed for the treatment of RA. However, NSAIDs administered at high doses are also often prescribed to alleviate the pain and inflammation experienced by patients with RA.

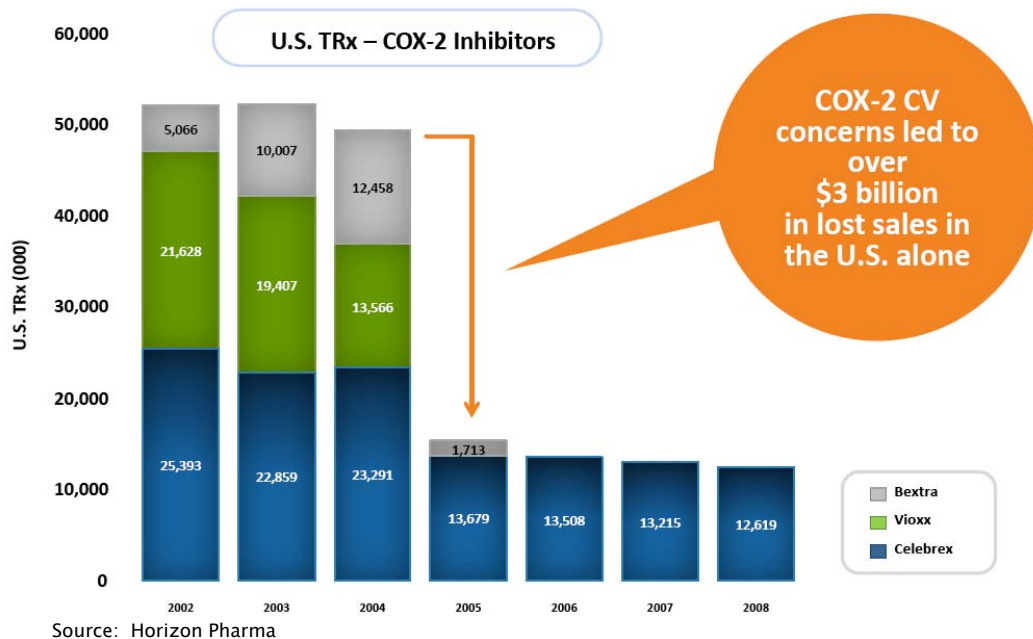
NSAIDs Provide Relief From Chronic Pain and Inflammation

Non-steroidal anti-inflammatory drugs or NSAIDs possess analgesic characteristics that reduce pain resulting from a variety of conditions. At high doses, these drugs also have anti-inflammatory effects adding to their utility in treating conditions such as osteoarthritis and rheumatoid arthritis, which are characterized by both pain and inflammation. In general, NSAIDs function by inhibiting the cyclooxygenase-1 and cyclooxygenase-2 (COX-1 and COX-2, respectively) enzymes. COX enzymes catalyze the production of prostaglandins, which function as signaling molecules involved in pain and inflammation and their inhibition relieves such symptoms. Commonly used NSAIDs include aspirin, ibuprofen, naproxen, and selective COX-2 inhibitors. NSAIDs are used regularly by approximately 60 million people in the United States as both over-the-counter and prescribed treatments for acute and chronic pain. NSAIDs enjoy such popularity because they are highly effective at relieving pain, including pain caused by OA and RA. However, the pain relieving and anti-inflammatory properties of NSAIDs come with considerable drawbacks in the form of side effects associated with the chronic use of NSAIDs. NSAIDs that fall into the category of non-selective COX enzyme inhibitors, such as ibuprofen and naproxen, are associated with a significant increase in the risks for developing GI-associated adverse events including upper GI ulcers and bleeding. COX-2 inhibitors have been demonstrated to have a less significant impact on these GI side effects, but they have been linked to an increased risk of severe cardiovascular complications. Given the utility and popularity of NSAIDs for the treatment of pain and the high incidence and severity of side effects, there is a large unmet medical need for safe, tolerable, and effective NSAID products.

COX-2 Inhibitors Altered the Treatment Paradigm . . . As Did Their Withdrawal

COX-2 inhibitors such as Celebrex, Vioxx, and Bextra were developed to provide pain relief without the upper GI side effects caused by traditional NSAIDs that were non-selective COX enzyme inhibitors. While the prostaglandins produced by COX enzymes do contribute to pain and inflammation, they also possess beneficial effects by aiding in GI protection. COX-1 is an enzyme that helps in the maintenance and protection of the stomach lining by producing protective prostaglandins, which prevent the erosion of the mucosa that protects the stomach from its own acid. When non-selective COX inhibitors such as traditional NSAIDs are used, this protective effect is lost. The loss of protective prostaglandins often results in GI adverse events including dyspepsia, upper GI ulcers, and in severe cases, bleeding. By selectively inhibiting COX-2 and not COX-1, COX-2 inhibitors provided relief from pain and inflammation without disturbing the protective effect of COX-1 on the upper GI tract. Because these drugs were so effective, and their use was not accompanied by increased GI side effects, they were immediately taken up by a patient population seeking safe and effective forms of pain relief. Within five years of the first COX-2 inhibitor launch, sales of the class reached \$6.3 billion in 2004. As the prevalence of COX-2 inhibitor use grew, however, a large amount of safety data suggested that these treatments increased the risks of severe cardiovascular adverse events, including myocardial infarction.

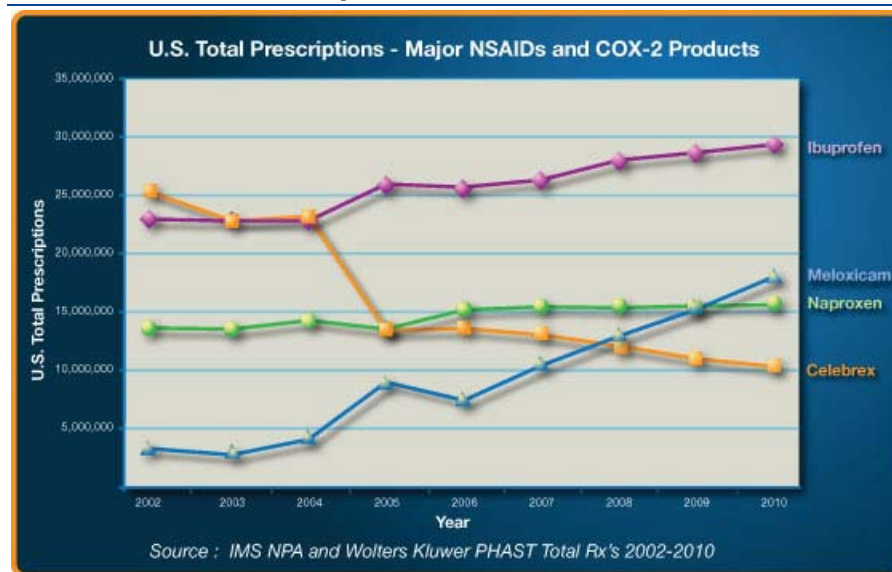
Fallout of COX-2 Cardiovascular Risks



In 2004 the COX-2 inhibitors Vioxx and Bextra were withdrawn from the market due to cardiovascular complications, and prescriptions and sales of Celebrex declined dramatically to nearly 50% of their peak levels. These withdrawals and the precipitous decline in sales of Celebrex eliminated \$3 billion in sales of COX-2 inhibitor drugs in the U.S. alone. Sales of non-selective NSAIDs increased concurrently with the decline in COX-2 sales as physicians and patients were left to balance the benefits of the effective relief of chronic pain provided by NSAIDs against the increased risks of GI complications due to their use. As NSAID

prescriptions have increased to fill the void left by the withdrawal of COX-2 inhibitors, the need for effective protection of the upper GI tract, along with relief of chronic pain, has grown. With more than 60 million people in the U.S. using both over-the-counter and prescription NSAIDs for pain relief, including many who use the drugs chronically for conditions such as OA and RA, there is an increasing exposure of the patient population to the detrimental GI side effects of NSAIDs resulting in an unmet medical need for effective pain relief with GI protection.

Increase in NSAID Prescriptions After COX-2 Withdrawals



Source: Horizon Pharma

Increased NSAID Use Drives a Need for Increased GI Protection

The relatively recent increase in the prescription and over-the-counter use of NSAID medications to treat pain and inflammation has resulted in a concomitant increase in the exposure of patients to the GI side effects of these drugs. This increased risk is especially significant for patients who use NSAIDs chronically to treat pain resulting from conditions such as OA and RA due to the long-term nature of these indications. Epidemiologic studies have demonstrated that endoscopies of chronic NSAID users reveal gastroduodenal damage in 20 to 40 percent of patients. The risks of peptic ulcer and death rise three- to sixfold in individuals taking NSAIDs relative to those who do not. One study that followed nearly two thousand patients over the course of 2.5 years found that nuisance adverse events including GI intolerance occur with up to a 50% incidence with NSAID users. Serious GI adverse events also occur frequently. Approximately 15% to 25% of patients experience ulcers that are revealed by endoscopy and symptomatic ulcers and ulcer complications occur in 2% to 4% of patients using NSAIDs annually. Most tellingly, more than 16,000 deaths and over 100,000 hospitalizations occur every year as a result of GI complications due to NSAID use.

To address the GI complications that result from NSAID use, particularly chronic use, physicians have prescribed gastroprotective medications to prevent and treat gastric adverse events. These medications primarily fall into the two categories; H₂-receptor antagonists and PPIs.

H₂-receptor antagonists are drugs that block the effects of histamine on parietal cells in the stomach. These compounds compete with histamine for binding to the H₂ histamine receptor. By binding the histamine receptor, they suppress the secretion of acid by the parietal cells in the stomach, thereby reducing the erosive effects of stomach acid and preventing GI complications. H₂-receptor antagonists are effective at reducing stomach acid production allowing for the treatment and prevention of upper GI distress. The four major classes of H₂-receptor antagonists are cimetidine, ranitidine, nizatidine, and famotidine, all of which provide relief of symptoms and are generally well tolerated by patients.

PPIs are the most commonly prescribed treatments for reducing acid production in the stomach and treating upper GI disorders such as dyspepsia and ulcers due to the fact that they provide long-lasting suppression of stomach acid production, which in turn allows healing of upper GI ulcers. In general, these treatments are believed to be well tolerated. However, recent research into the long term use of PPIs has revealed that complications may arise from chronic PPI use. Specifically, long-term use is associated with hypomagnesemia, and patients who take high doses of PPIs for long periods of time experience an increased risk of bone fractures.

Physicians and Patients Underutilize GI Protection Concomitant with NSAIDs

While both H₂-receptor antagonists and PPIs are widely prescribed to treat upper GI conditions such as peptic ulcers, co-prescription with chronic NSAID administration for the treatment of OA and RA lags. Physicians prescribe concomitant GI therapy, including H₂-receptor antagonists and PPIs, for only approximately 24% of patients receiving NSAID treatment for pain. Because all chronic NSAID users are at an increased risk of developing GI complications, the majority of patients at risk are not receiving prescriptions for appropriate GI protection from their physician. Even when gastroprotective medication is prescribed, patient compliance is poor. A recent study of 784 patients prescribed GI protection along with an NSAID for pain relief demonstrated that 37% of patients were non-compliant. This percentage increased to 61% non-compliance for patients receiving three or more prescriptions. Given that OA is a degenerative disease that occurs most frequently in older individuals, a patient group that often requires multiple prescriptions, this higher rate of non-compliance most likely reflects the true rate of OA patients not receiving adequate GI protection.

Duexis Offers Effective Pain Relief and GI Protection in One Pill

Horizon Pharma has developed Duexis as a simple solution that offers GI protection along with pain relief in an effective and convenient treatment. Duexis is a tablet formulation containing 800mg of the commonly prescribed NSAID, ibuprofen, and 26.6mg of the H₂-receptor antagonist, famotidine. Duexis is intended to be taken TID to provide all day relief of chronic pain due to RA and OA while reducing the risk of developing upper gastrointestinal ulcers, which can result from long-term ibuprofen use. Ibuprofen is the most widely prescribed NSAID on the market with approximately 28 million prescriptions in 2010, according to Wolters Kluwer information. Ibuprofen is a rapidly acting NSAID that effectively provides relief of pain symptoms that result from OA and RA. The onset of pain relief occurs within 30 minutes after use. While ibuprofen is an NSAID and must therefore carry a warning of the potentially increased risk of cardiovascular complications as all NSAIDs do, the increase in risk is much less than that reported for COX-2 inhibitors. For this

reason, ibuprofen is generally considered safe and tolerable with the exception of upper GI side effects.

Famotidine is the most potent H₂-receptor antagonist on the market and effectively reduces production of acid in the stomach, thereby reducing the risk of upper GI symptoms including dyspepsia and ulcers. Both ibuprofen and famotidine are supported by decades of long-term safety data. In developing Duexis, Horizon has characterized the safety and efficacy of the combination of ibuprofen and famotidine in patients experiencing chronic pain due to OA and RA, including the effective reduction in the risk of GI complications due to chronic ibuprofen use.

Clinical Data Demonstrate That Duexis Provides Pain Relief and Effective GI Protection

To demonstrate that Duexis offered effective GI protection along with relief of chronic pain due to OS and RA, Horizon conducted two pivotal Phase III clinical trials titled REDUCE-1 and REDUCE-2. These trials were conducted under a Special Protocol Assessment with the FDA in the U.S. and enrolled over 1,500 patients.

The REDUCE studies were conducted using the following protocol. Patients were required to have been using NSAIDs for 24 weeks prior to the initiation of the study. The first 30 days of the clinical trial were comprised of an NSAID washout period. After this period, endoscopies were performed to establish the baseline incidence of gastric or upper GI ulcers. Upper GI ulcers differ from gastric ulcers in that they also include duodenal ulcers. Over the course of twenty-four weeks, Duexis was administered TID while 800mg ibuprofen administered TID served as a control. Endoscopies were performed every eight weeks throughout the study. The primary endpoint of the trials was to evaluate the efficacy of Duexis in reducing the proportion of subjects who develop endoscopically-diagnosed gastric or upper GI ulcers after six months of treatment.

Duexis Pivotal Clinical Data

DUEXIS PIVOTAL CLINICAL DATA				
Trial		Duexis % (n/N)	Ibuprofen % (n/N)	p-value
REDUCE-1	Primary Endpoint Gastric ulcer	8.7% (39/447)	17.6% (38/216)	0.0004
	Secondary Endpoint Upper GI ulcer	10.1% (45/447)	21.3% (46/216)	< 0.0001
REDUCE-2	Primary Endpoint Gastric ulcer	10.5% (40/380)	20.0% (38/190)	0.002
	Secondary Endpoint Upper GI ulcer	9.7% (37/380)	17.9% (34/190)	0.005

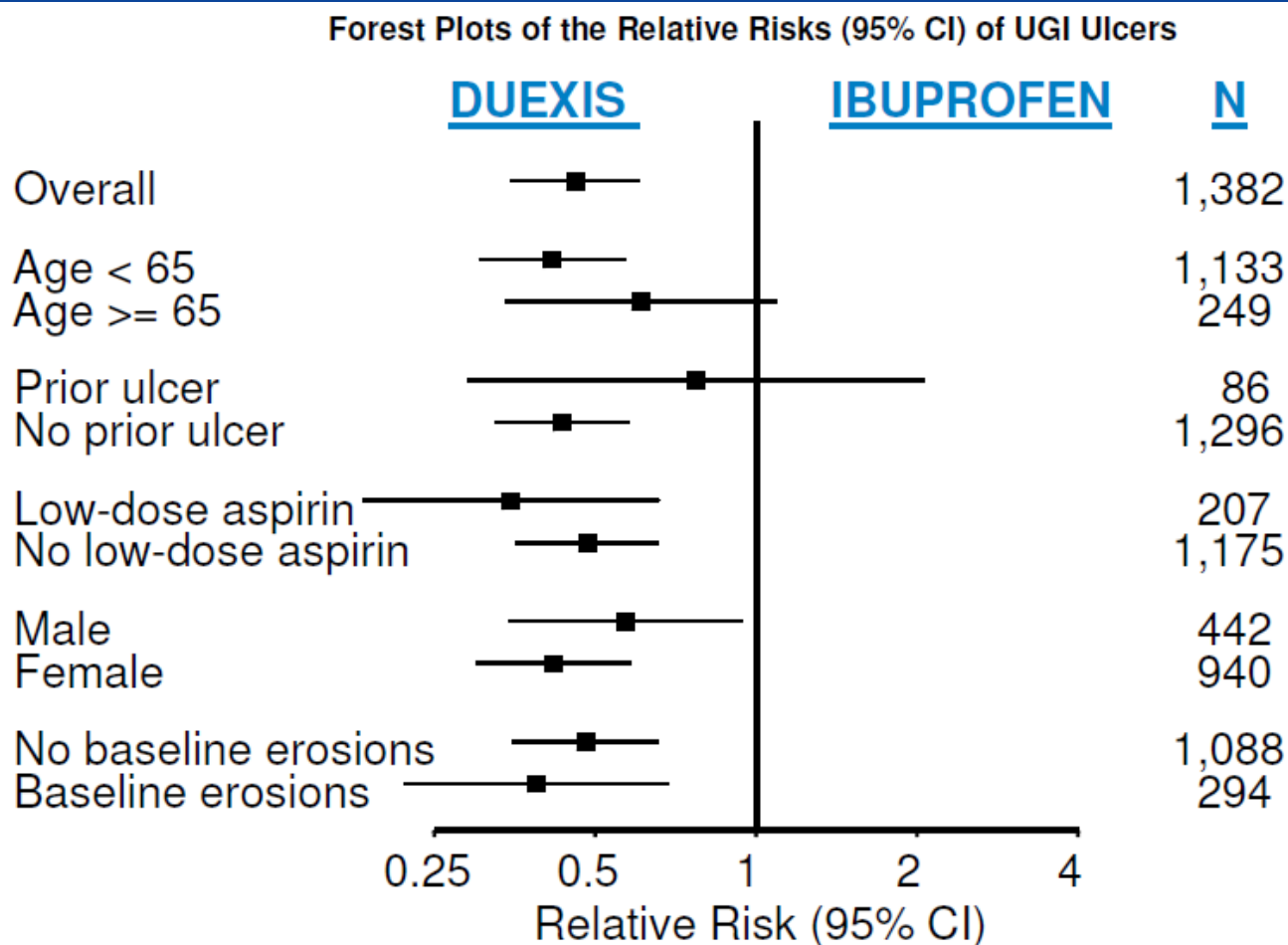
Source: Cowen and Company

The data from these clinical trials demonstrated that Duexis offered equivalent pain relief to ibuprofen while reducing the risk of developing upper GI and gastric ulcers by approximately 50%, relative to the use of ibuprofen alone. These results were statistically significant.

The data from these studies were robust and demonstrated a benefit to all patient groups regardless of age, sex, concurrent use of low dose aspirin, prior incidence of

acid erosions at baseline, and prior incidence of ulcers. These results were determined when analyzing statistically significant risk factors that contribute to upper GI ulcers in patients not receiving famotidine. While this analysis was not powered for statistical significance, the overall trends in all relative risk categories indicated that Duexis demonstrated an advantage in reducing the relative risk of upper GI ulcers in patients compared to those patients who received only ibuprofen for pain relief.

Relative Risks of Upper GI Ulcers



Source: Corporate documents

Duexis Reduces the Risks of GI Side Effects Associated With NSAIDs

When all patients in the REDUCE trials were analyzed, regardless of whether or not they received endoscopies to assess gastric and upper GI ulcers, reductions were reported in multiple GI adverse events. Statistically significant reductions in dyspepsia and withdrawals due to dyspepsia were observed in patients taking Duexis relative to those taking ibuprofen alone. Additionally, fewer patients taking Duexis experienced symptoms of gastroesophageal reflux disease (GERD) compared to those administered ibuprofen and overall, fewer patients withdrew from treatment with Duexis due to any GI adverse event than did patients receiving ibuprofen without GI protection.

Duexis Treatment Emergent GI Adverse Events

Adverse Event	Duexis (N=1022)	Ibuprofen (N=511)	
Any GI event	26.0% (266)	28.4% (145)	
Dyspepsia	4.7% (48)	8.0% (41)	p = 0.009
Nausea	5.8% (59)	4.7% (24)	
Diarrhea	4.6% (47)	4.3% (22)	
Constipation	4.1% (42)	4.1% (21)	
Upper Abdominal Pain	3.3% (34)	2.5% (13)	
GERD	1.9% (19)	3.1% (16)	
Withdrawals due to GI	4.0% (41)	5.1% (26)	
Withdrawals due to dyspepsia	0.5% (5)	1.8% (9)	p = 0.014

Source: Cowen and Company

Duexis Possesses Significant Advantages Over the Competition

While Duexis provides a convenient combination of pain relief with ibuprofen and GI protection with famotidine, the question arises as to why patients and physicians would prefer Duexis over the alternative of administering and taking separate prescriptions. The most significant advantage of Duexis is that the combination of two medications ensures compliance with the dosing of the gastroprotective H₂-receptor antagonist, famotidine. Patients are more likely to comply with a prescription for pain relief because of the need to treat readily apparent symptoms. However, many GI side effects that arise from the chronic use of NSAIDs may be asymptomatic, including upper GI ulcers and gastric bleeding. As mentioned previously, compliance with prescriptions declines dramatically with an increasing number of prescriptions for a given patient. The combination of ibuprofen and famotidine offered by Duexis results in more than just a more convenient treatment: it offers a more effective one by ensuring patient compliance. While both medications are offered as over-the-counter treatments, patients would be required to ingest 16 pills in a day to obtain the equivalent pain relief and GI protection of Duexis dosed TID.

In addition to providing a more convenient and effective treatment for pain relief and GI protection than over-the-counter medications, Duexis also possesses significant advantages over competing combinations of pain relievers and GI protectants. As mentioned previously, Celebrex is a COX-2 inhibitor that is still on the market after the recall of other drugs in the same class. While Celebrex does offer effective pain relief and reduced risk of GI side effects, physicians and patients see these benefits as outweighed by the significant increase in the risk of cardiovascular events related to COX-2 inhibition. These opinions are borne out in the sharply reduced number of prescriptions of Celebrex that resulted after the cardiovascular risks became apparent.

Vimovo and Arthrotec Fall Short

Vimovo, developed by Pozen (POZN), offers the NSAID naproxen in a prescription-strength delayed-release formulation combined with the PPI esomeprazole. While

Vimovo provides pain relief with GI protection, it possesses significant drawbacks. The formulation of naproxen used in Vimovo is intended to offer a limited form of gastric protection itself by slowly releasing the drug over time. However, this supposed advantage delays the relief of pain sought by patients. Additionally, concerns have grown over the chronic use of PPIs to prevent and treat GI side effects of NSAIDs due to possible long-term side effects. These adverse events include an increased risk of bone fractures, difficulty with nutrient absorption, and hypergastrinemia. For these reasons, we believe Duexis offers a more effective treatment of chronic pain with fewer long-term side effects relative to Vimovo. We also believe these advantages will translate to a larger share of the market for patients seeking relief of the pain associated with OA and RA and the prevention of GI complications that arise from NSAID use.

Arthrotec is a treatment offered by Pfizer (PFE) for chronic pain associated with OA and RA that combines an NSAID with a GI protectant. In the case of Arthrotec, the NSAID used is diclofenac and the GI protectant is the prostaglandin analogue, misoprostol. Significant side effects have been reported due to the use of Arthrotec, including diarrhea and abdominal pain. Diclofenac also demonstrates considerable drug-drug interactions with commonly prescribed blood thinning medications such as warfarin and has been reported to increase the side effects associated with the commonly prescribed RA treatment, methotrexate. Additionally, Arthrotec is sold with a black box warning that it is an abortifacient. These characteristics have led to a low uptake of Arthrotec in the OA and RA markets. Despite being launched in 1998, 2010 sales of Arthrotec totaled just \$170 million. We believe that Duexis offers pain relief and GI protection without the detrimental effects of Arthrotec and therefore do not foresee Arthrotec as a major source of competition for Duexis.

Horizon's Strategy for Effective Commercial Execution

On April 25, 2011, Horizon announced that the company had received approval of Duexis from the FDA based on the results of the REDUCE clinical trials and subsequent NDA filing. Based upon this approval, Horizon has undertaken plans to commercialize Duexis and capitalize on the large market opportunity resulting from the millions of patients seeking GI protection along with pain relief for OA and RA. Currently, the market for NSAIDs totals more than 91 million prescriptions annually with ibuprofen representing the largest share of this market at approximately 28 million prescriptions. While this total market is not comprised solely of patients using NSAIDs chronically for RA and OA, it does represent the magnitude of the number of patients at increased risk of developing GI complications from NSAID use. Priced similarly to currently available prescription NSAIDs such as Celebrex, treatments in this category represent revenues of \$200 million for every 1% share of the NSAID market captured. While these statistics demonstrate that even a small penetration of this market could lead to sizable revenue, we believe that Duexis has the potential to capture a fair portion of the prescription NSAID market for chronic users.

Horizon plans to launch Duexis in the U.S. in 4Q11 with a subsequent launch in Europe pending EMA approval in 1H2012. The company's strategy is to target a core of 33,000 high prescribing physicians in the U.S. The company has outlined plans to hire a sales force of 150 sales reps, half of which are already identified for launch, to reach these high prescribers, which represent 40% of the total U.S. NSAID market. This core group consists of approximately 23,000 primary care providers as well as 4,000 rheumatologists and 6,000 other specialists.

- Sales Force: Organized with two regional directors and nine district managers. Incentive modeling strategy (the more you sell, the more you make). With a total of 150 reps to be in place at the end of 2012, this will cover >90% of top prescribers.
- Marketing Team: Sales materials have been created and the positioning strategy is complete.
- Managed Care: Pricing strategy complete and ready for implementation. Managed care leadership and account team hired, physician targets identified that are aligned with high managed care access territories.

We See Reimbursement on the Horizon for Duexis

Horizon has conducted extensive market research into various aspects of reimbursement for Duexis, given that it is a reformulation of two medications that are currently available over the counter. Horizon anticipates pricing Duexis similar to that of other prescription NSAIDs that offer gastroprotective benefits such as Celebrex and Arthrotec. Based on this information, we anticipate a daily average cost of \$4.50. This class of treatments incurs a low level of management by payors, and such NSAIDs are commonly reimbursed in Tier 3. Most of the management of the costs of NSAIDs occurs through differentials in patient co-pays. Horizon has stated that co-pay buy downs and a coupon strategy will be implemented to assist in reducing co-pays for patients and ensuring that they will not need to discontinue or abandon prescriptions. We believe that Horizon has thoroughly researched all relevant aspects of their marketing and reimbursement strategies and that they have positioned Duexis for a successful launch that may potentially lead to a rapid uptake and allow the company to capture a significant share of the NSAID market.

IP Notice of Allowance Issued

In September 2011, the U.S. Patent and Trademark Office issued to Horizon Pharma a Notice of Allowance entitled, "Methods and Medicaments for Administration of Ibuprofen." This patent has claims that cover Duexis. This patent will be issued once the administrative process is complete. This patent will expire in 2026.

In addition, Duexis has applied for a broad portfolio of patents. The company has 25+ patent applications pending, which if issued would have expiry dates in 2026. Many patent applications are in U.S. prosecution.

There is currently a pending claim to composition-of-matter on unit dose forms of Duexis and pending claims to methods of use for the treatment of patients with ibuprofen-responsive conditions and the TID administration of famotidine and ibuprofen.

Horizon has done a tremendous amount of work, and not without many failures, in combining famotidine and ibuprofen, which under most circumstances is not stable. We believe that Duexis's formulation is not obvious and therefore would result in the patent and trademark office issuing additional patents surrounding its formulation.

LODOTRA

A Little Dab'll Do Ya

LODOTRA is a proprietary programmed release formulation of low dose prednisone for the treatment of morning stiffness associated with rheumatoid arthritis (RA). LODOTRA has received regulatory approval in the European Economic Area (EEA) and is currently marketed in Italy and Germany. LODOTRA distinguishes itself from the competition mainly by its programmed release and scheduled time of dosing. These two factors are key to the positive clinical outcome observed in the Phase III pivotal trials.

The administration of prednisone is not unique in the treatment of patients with RA, but dosing of this steroid has always been on an acute basis because long term use of steroids can be physically detrimental to patients. The concept of dosing chronically with low-dose steroids has gained popularity amongst the rheumatology community in the last several years. Studies have demonstrated that low-dose prednisone administered chronically helps to treat the pain associated with RA. To take this concept to the next level, we believe that Horizon has the answer in LODOTRA's timing of delivery and programmed-release technology.

The A to Z on RA

Rheumatoid arthritis (RA) affects about one percent of the U.S. population, with a female to male ratio of two to one. The exact etiology is unknown but there appears to be a genetic predisposition. Smoking, the presence of auto-antibodies (RF and anti-CCP), hormonal imbalances, and environmental and infectious exposure may all play a synergistic role in triggering RA disease activity. The pathophysiology of RA is complicated and involves the interplay of T and B lymphocytes, cytokines (TNF alpha), growth factors and ligands, the complement system, and other proteins and reactive agents.

Patients present to their physician with complaints of morning stiffness greater than one hour and have red, hot, swollen, painful hands/wrists/feet/ankles. Symptoms typically develop slowly over time and if they continue over a period of six weeks or more, become "typical" for RA. While smaller joints are usually involved on presentation, almost any joint can be affected over time. Rheumatologists diagnose RA by the patient's history, physical examination, laboratory testing, and diagnostic imaging and procedures. Patients, especially those with positive auto-antibodies (RF and anti-CCP), can have manifestations other than joint inflammation. These include hematologic, cutaneous, pulmonary, cardiac, ocular, vascular, and renal disease. Patients with RA also have a decreased life expectancy from infection, cancer (especially lymphoma), and accelerated vascular disease.

Treating Aggressively Is the Mantra in Treating RA

Over the last decade, several new disease-modifying anti-rheumatic drugs (DMARDs) have been approved for the treatment of RA. The main attribute of DMARDs is their ability to slow or stop disease progression and radiographic bony destruction. Rheumatologists aggressively scale up therapy, as many rheumatoid arthritis patients are able to achieve a clinical remission on a combination of two or more DMARDs. Most of the medical literature concludes that the earlier combination therapy is started, including utilizing anti-TNF agents, the quicker patients are able to achieve clinical disease and radiographic remission.

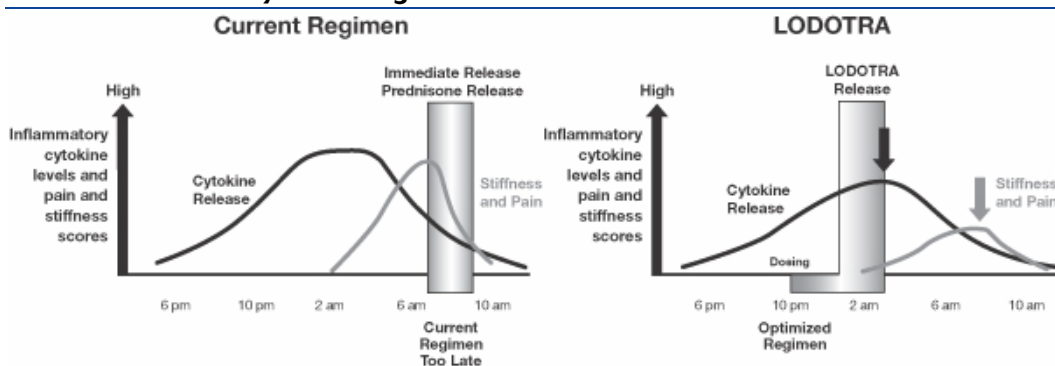
Initial therapy includes NSAIDs, methotrexate, and possibly Plaquenil, depending on disease severity and number of joints involved. Prednisone is prescribed as an initial therapy for those patients with severe symptoms since it can provide immediate relief (within 24 hours) vs. methotrexate and Plaquenil, which can take up to 3-6 months to exert a maximum effect. If after 2-3 months the disease is still active, rheumatologists will often maximize the dose of methotrexate and consider additional therapies such as anti-TNF injectables, leflunomide, Plaquenil (if not already prescribed), and low-dose prednisone. Enbrel (Amgen/Pfizer) and Humira (Abbott) are often the first-line biologic agents after methotrexate. Remicade (JNJ, MRK), Simponi (JNJ, MRK) and Cimzia (UCB) represent additional anti-TNF options. Once started on an anti-TNF agent, most rheumatologists wait 3-6 months to evaluate its efficacy (including the option to dose escalate Humira/Remicade). If after 3-6 months, a patient continues to have break-through disease activity, specialists then will either change to a second anti-TNF or switch classes to Orencia (Bristol-Myers), Actemra (Roche), or Rituxan (Biogen Idec/Roche). Other medications like sulfasalazine, azathioprine, Cytoxan, Kineret, and cyclosporine are rarely used.

So, Why A Low Dose Steroid Like LODOTRA?

Corticosteroids, including prednisone, are prescribed by rheumatologists and primary care physicians to suppress various autoimmune, inflammatory, and allergic disorders by inhibiting the production of various pro-inflammatory cytokines, such as interleukin 6, or IL-6, and TNF-alpha. These pro-inflammatory cytokines are the culprits behind the joint swelling and subsequent pain experienced by RA patients. Joint inflammation in RA is specifically driven by excessive production of inflammatory mediators and cytokines such as IL-6 and TNF-alpha.

Corticosteroids are potent and effective agents to administer to RA patients, but they are usually administered at high doses to treat RA flares or significant inflammation. So, they are essentially used on an acute basis. High-dose oral steroid treatment is not a viable long-term treatment option due to concerning side effects such as osteoporosis, cardiovascular disease, and weight gain. Within the last several years, clinical studies have shown that the long-term use of low-dose prednisone does not dramatically increase total adverse events. Clinical studies have demonstrated that low doses (less than 10mg daily), of steroids such as prednisone have been shown to treat the symptoms of RA while slowing the overall progression of the disease.

Current use of steroids to treat RA patients can not only be effective when administered at low doses, but they can also be administered at the time at which patients' pro-inflammatory cytokines are at peak levels: before bedtime. Increased levels of pro-inflammatory cytokines during the early morning hours are a known cause of morning stiffness and decreased mobility. IL-6 levels are substantially increased in patients with RA in general and show a significant circadian variation in these levels. Given the onset of action four hours after delivery, LODOTRA administered before bed reaches its peak effect during the time when cytokine levels are at their highest. This allows for an aggressive treatment during prime hours resulting in less morning joint stiffness and pain.

LODOTRA's Delivery Advantage

Source: Cowen and Company and SEC documents

CAPRA Results Demonstrate That With LODOTRA It's a Wonderful Life

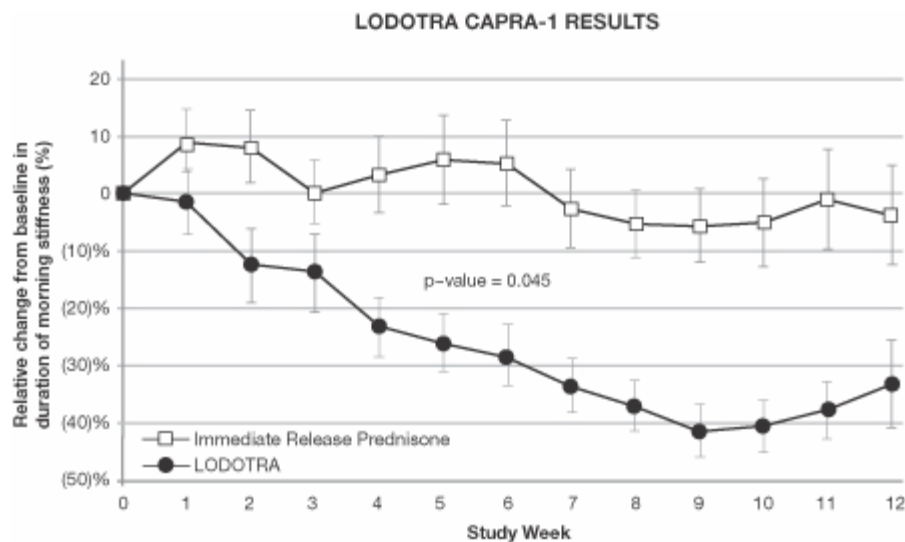
The Phase III CAPRA Trials for LODOTRA

Horizon Pharma has successfully completed two pivotal Phase III clinical trials for LODOTRA in the treatment of patients with RA. The **C**ircadian **A**dministration of **P**rednisone in **R**heumatoid **A**rthritis-1, or CAPRA-1 trial, was designed to support an MAA approval in Europe, which has now been obtained. The second pivotal Phase III clinical trial, Circadian Administration of Prednisone in Rheumatoid Arthritis-2, or CAPRA-2 trial, was designed to support an NDA submission for U.S. marketing approval. An NDA approval is anticipated in 2Q12.

CAPRA-1

The primary endpoint of CAPRA-1 was reduction of the duration of morning stiffness associated with RA. CAPRA-1 was designed as a 12-week, randomized, double-blind, placebo-controlled trial that enrolled 288 RA patients comparing bedtime administration of LODOTRA with morning administration of immediate release prednisone at the same individual dose (an average dose of 6.7 mg). All patients continued on existing DMARD and NSAID treatment at stable doses as background therapy. At the conclusion of the 12-week period, patients taking LODOTRA were permitted to continue LODOTRA treatment and patients taking immediate release prednisone were permitted to switch to LODOTRA for a nine-month open label extension study. There were a total of 219 patients who completed the open label extension study.

The CAPRA-1 results demonstrated that bedtime administration of LODOTRA was superior to immediate release prednisone in reducing the duration of morning stiffness associated with RA. The duration of morning stiffness was significantly reduced in the LODOTRA treatment group compared to the group treated with immediate release prednisone, where no change in morning stiffness was shown. The mean relative change in duration of morning stiffness of joints from baseline was approximately 23% in patients taking LODOTRA compared to approximately 0.4% for patients taking immediate release prednisone (p-value = 0.045) after 12 weeks.



In addition to its positive effect on the reduction of cytokine levels, LODOTRA was as effective as treatment with immediate release prednisone for other markers of disease activity, including disease activity scores in 28 joints typically impacted by RA, and American College of Rheumatology 20, or ACR20, response rate.

In the open label phase, the most commonly reported treatment-emergent adverse events were a flare in RA-related symptoms (14.5%), flushing (5.2%), upper respiratory tract infections (2.8%), back pain (2.8%) and weight increase (2.8%). Adverse events indicative of aggravated hypothalamic-pituitary-adrenal, or HPA, axis suppression, typical of high dose prednisone administration, were not observed.

LODOTRA vs. IR Prednisone

	LODOTRA	IR Prednisone	
CAPRA-1			
IL-6	Reduced 29%	No change	p-value < 0.0001
Flare in RA symptoms	7.6%	9.0%	
Abdominal pain	3.5%	5.6%	
Nasopharyngitis	2.8%	5.6%	
Headache	4.2%	2.8%	
Flushing	2.8%	4.2%	

Nine Month Open Label Extension Study

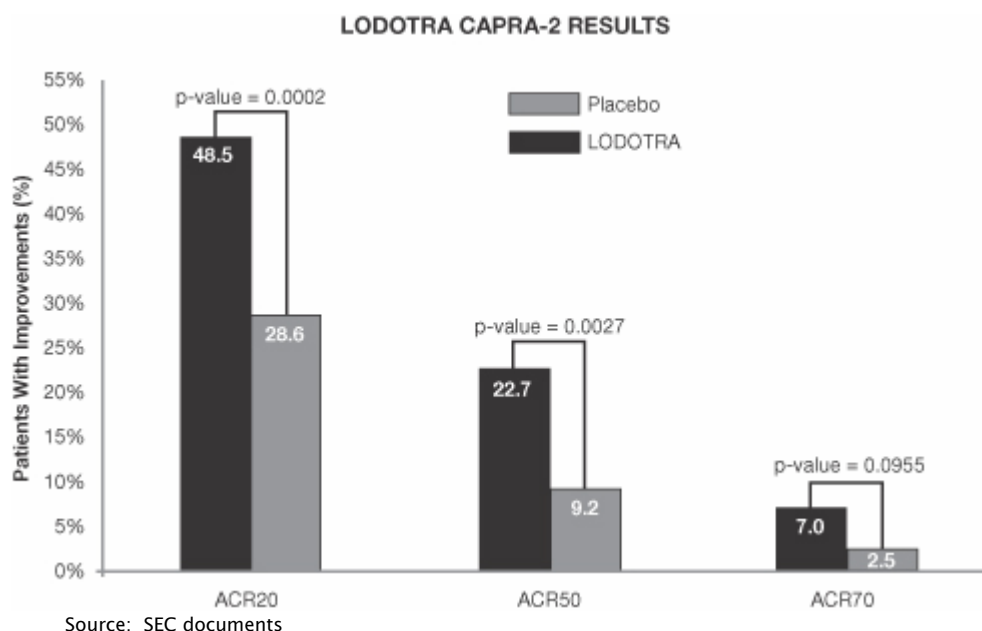
Morning stiffness	55% reduction	45% reduction after switching to LODOTRA
IL-6 reduction		50% after switching to LODOTRA

Source: Cowen and Company and corporate documents

CAPRA-2

The primary endpoint of the CAPRA-2 Phase III U.S. pivotal study was to show that LODOTRA significantly improved the ACR20 response rate in patients with RA as compared to placebo. This primary endpoint is the standard used in approval of RA

products in the U.S. by the FDA. The design of the CAPRA-2 trial was as a 12-week, randomized, double-blind, placebo-controlled clinical trial conducted in centers in both the U.S. and Europe involving 350 RA patients. All patients were inadequate responders to DMARD therapy and were randomized into one of two arms to receive either LODOTRA (5mg) or placebo once daily at bedtime in addition to their existing therapy. Results showed that patients treated with LODOTRA experienced a statistically significant improvement in ACR20 response criteria compared to patients in the placebo group (48.5% vs. 28.6%; p-value = 0.0002), which met the primary endpoint.



LODOTRA was shown to be highly statistically significant in the primary endpoint of ACR20 score. In addition ACR50 was a secondary endpoint, which also was able to demonstrate statistical significance. Patients in the LODOTRA arm also performed better in the ACR70 arm, which is quite stringent even though statistical significance was not achieved.

Patients in the LODOTRA arm of the study also experienced a statistically significant reduction in morning stiffness compared to patients in the placebo group (56.5% vs. 33.3%; p-value = 0.0008).

In the CAPRA-2 study, the most commonly reported treatment-emergent adverse events were joint pain (10.4% for LODOTRA compared to 20.2% for placebo), RA flare (6.5% for LODOTRA compared to 9.2% for placebo), nasopharyngitis (4.8% for LODOTRA compared to 3.4% for placebo) and headache (3.9% for LODOTRA compared to 4.2% for placebo).

LODOTRA: Full Speed Ahead in Europe; The U.S. Is Next

The Horizon-Merck Serono-Mundipharma Connection

In December 2006 and March 2009, Horizon entered into separate transfer, license and supply agreements with Merck Serono and Merck GmbH, an affiliate of Merck Serono, for the commercialization of LODOTRA in Germany and Austria, respectively. The agreement covering Germany was amended in December 2008 to

allow co-promotion of LODOTRA in Germany. Under the agreements, Horizon granted Merck Serono and Merck GmbH exclusive distribution and marketing rights pertaining to LODOTRA for each of Germany and Austria, respectively. In April 2011, Merck Serono, with Horizon's consent, transferred and assigned the transfer, license and supply agreement with respect to Germany and the rights to commercialize LODOTRA in Germany to Mundipharma Laboratories GmbH. Mundipharma is the European subsidiary of Purdue Pharma in the U.S.

Horizon supplies LODOTRA to Merck Serono and Mundipharma. Mundipharma holds marketing rights to LODOTRA in all other European countries from Horizon Pharma.

In November 2010, Horizon entered into a second distribution agreement with Mundipharma for the commercialization of LODOTRA in several Asian countries, Australia, New Zealand and South Africa, and a second manufacturing and supply agreement with Mundipharma Medical. Under the distribution agreement, Horizon received an upfront payment of \$3.5 million and may be entitled to additional aggregate milestone payments of up to \$4.4 million.

In the U.S., Horizon holds all sales and marketing rights to LODOTRA. The company intends to increase its sales force by an additional 75 reps by 4Q12 to focus on the launch of LODOTRA in the U.S., which is expected to be approved by the FDA in 3Q12.

A Well Executed IP Estate for LODOTRA

Horizon has filed patent applications covering:

- Site- and time-controlled GI release of corticosteroids
- Delayed release corticosteroid treatment of RA and diseases with a suppression of the HPA axis
- Delayed release treatment of asthma
- Filed patent applications with the World Intellectual Property Organization covering site- and time-controlled GI release of corticosteroids and delayed release treatments for asthma
- Filed patent applications in the U.S. covering site- and time-controlled GI release of corticosteroids and delayed release corticosteroid treatment of RA and diseases with a suppression of the HPA axis

Specifically, LODOTRA has issued patents in the U.S. covering unit dose of controlled release formulation, which has an expiry date of 2020. Additionally, there is a method of treatment patent for 1mg and 2mg that also expires in 2020. In total LODOTRA has 25+ U.S. and foreign patent applications surrounding SkyPharma's GeoClock programmed release formulation. There are also 25+ patents applied for in the U.S. and abroad for RA with delayed-release glucocorticoid, which expire in 2027, and for treatment of RA joint damage/asthma, which expire in 2030.

A Strong Management Team That Can Execute

All companies need strong management teams, but Horizon's success depends heavily on the successful launch and market penetration of two products into competitive fields. We believe Horizon's management team has just the skill set required to make the Duexis and LODOTRA launches successful in the U.S. The team has worked on the development and successful launch of multiple NSAIDS. Additionally, they fully understand the most successful and least successful strategies to pursue. With a pricing strategy already in place as along with a well-defined marketing and sales plan, management has set the Horizon story up for success, in our view.

The Horizon Business Model Makes Pill Counting Exciting

A Focused Launch Strategy Is the Linchpin to Horizon's Success

Horizon specializes in the development of treatments for pain and inflammation in patient populations that have a need for differentiated products with better efficacy. More than one-quarter of the U.S. population over the age of 20 (76.5 million) report of having had pain that lasts more than 24 hours. Many of these patients are placed on NSAIDS as a first-line treatment and many continue to take the medication chronically, and as a result many end up experiencing GI intolerance and require the use of a GI protectant. For chronic use, Duexis has the ability to take market share from Vimovo, Celebrex, Arthrotec and other NSAIDS given its fast onset of action and safe side-effect profile.

The NSAID market is sizable, with multiple physician specialties prescribing this class. By focusing on the top prescribing doctors within certain specialties, Horizon will in essence derive more bang from their buck. That buck is spent on a knowledgeable sales force consisting initially of 75 reps and growing to 150 by the end of 2012.

Competitive Pricing Assumptions Are Consistent with Current NSAID Treatment Options

The competitive space for the development, sales, and marketing of therapeutics for pain is growing larger annually. While the growth of new therapeutics is significant, the market is growing at a steady pace as well. The key for new entrants is to introduce products that are strongly differentiated from the competition. This differentiation may come in the form of greater potency, a more benign side effect profile, or better dose scheduling. The marketing and reimbursement strategies are important to the overall success of the franchise. We believe that Horizon has addressed these issues head on by having a strategy in place even before the approval of Duexis and LODOTRA in the U.S.

Horizon is currently seeking to price Duexis in the \$4.50 to \$5.00 per day range. This weighted average cost is right in the middle of where the most popular NSAIDS and GI protectants are priced. Celebrex 200mg BID is currently priced at \$8.04 per day on the high end of the spectrum and Vimovo 20mg is at the lower end at \$3.10 per day. Annual price increases of 8% are typical in this therapeutic category. In our model, we assume a \$4.50 price per patient per day.

Duexis is dosed three times per day (TID), which is a significant reduction in pill burden and scheduling compared to taking an NSAID and GI protectant separately.

We also believe that Duexis will most likely be placed in the Tier 3 category for most insurance plans. We believe this tier would allow for easy self-regulation as the co-pay amount is high enough to deter inappropriate use of the drug.

Rapid Penetration and Competitive Pricing Drive Toward Profitability

Our revenue model assumes a Duexis launch in the U.S. in 4Q11 with a launch in the E.U. the following year. We have modeled an annual wholesale price (AWP) per patient per day of \$4.50 for Duexis dosed TID in the U.S. We project that Horizon will become profitable in 2013 with fully diluted earnings of \$0.02 based on a rapid penetration of the NSAID market in the U.S. and a successful launch in the E.U. Our revenue assumptions are based on Horizon marketing Duexis in the U.S. and partnering in the EEA with Horizon receiving a 10% back-end royalty on EEA sales. We project that product and royalty revenue in the first year of profitability will total \$142.9 million. We have accounted for the rebate buy-downs that will be needed in the early stages of the launch to increase brand awareness and managed care formulary uptake.

HORIZON PHARMA, INC. CLINICAL TIMELINE																
Program	2010				2011				2012				2013			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Duexis				MAA Submitted			U.S. Launch		E.U. Approval							
LODOTRA											NDA Approval	U.S. Launch				

Source: Cowen and Company

The Balance Sheet Analysis: The S of SG&A Continues to Ramp Through 2012

Horizon ended 2Q11 with \$5.8 million in cash, cash equivalents, and marketable securities. The company added net proceeds of \$42.5 million to its balance sheet in July after a successful IPO. Horizon has publicly stated that its current cash position should be adequate to last through 2Q12, at which time the company will need to raise funds for the additional 75 sales people to buttress initial sales efforts. We believe an equity raise would be done at a reasonable valuation, as preliminary sales numbers from the launch of Duexis should be strong, which we believe will be reflected in the company's share price. These additional funds should allow Horizon to follow through on its launch of LODOTRA and should generate enough cash flow to drive the franchise and company to profitability. We believe a buttressed balance sheet is essential to Horizon as they prepare to launch LODOTRA in 2H12.

An Appealing Valuation Given the Near-Term Launch of Two Products

We determine the valuation of shares of Horizon by employing two different methodologies. We first use a discounted earnings model and discount our estimated earnings per share from the first year of meaningful revenue back to 12 months from our current time period after applying a reasonable multiple and discount rate. We then compare this number with where shares are currently trading. Our valuation assumptions are based on 2013 when Duexis and LODOTRA are both launched in both the U.S. and E.U. We apply a 10x multiple on our 2013 EPS estimate of \$2.71 based on an aggressive growth rate in the early years of the launches while applying a rate at a discount to the mean multiple of the profitable

biotechs. We discount back by 25% and arrive at what we believe to be a fair valuation. We apply a 25% discount rate based on the sales and marketing associated with the crowded NSAID market, but also do not use a higher rate, as we believe Duexis and LODOTRA, will have a rapid uptake given the significant advantages of each for their own individual therapeutic areas.

Second, we have performed a comparable company analysis composed of companies that are either working in the same therapeutic area as Horizon or are at the same stage in their corporate life cycle. We then compare the mean technology value of the comparable company universe to the technology value of Horizon, which again signals that shares are currently trading at a discount to their peer group. The mean technology value of the group is \$181.1 million and Horizon's is currently \$131.1 million. This represents a 28% discount to the mean of the group.

HORIZON PHARMA, INC. COMPARABLES							
Company	Ticker	Enterprise Value (\$MM)	Price 7-Sep-11	Shares Out (MM)	Market Cap (\$MM)	Cash (\$MM)	Debt (\$MM)
BioDelivery Sciences	BDSI	71.3	\$3.19	29.0	92.5	21.2	0.0
Cornerstone Therapeutics	CRTX	97.5	\$7.25	26.2	190.3	92.8	0.0
Optimer Pharmaceuticals	OPTR	452.7	\$11.06	46.5	514.1	61.4	0.0
Corcept Therapeutics	CORT	201.5	\$3.02	84.0	253.7	52.2	0.0
Pain Therapeutics	PTIE	151.0	\$4.84	44.2	213.9	62.8	0.0
Vanda Pharmaceuticals	VNDA	112.9	\$5.81	28.1	163.3	50.4	0.0
Savient Pharmaceuticals	SVNT	255.0	\$4.00	70.1	280.3	198.6	173.3
Median		151.0			213.9		
Mean		181.1			238.0		
Horizon Pharma	HZNP	131.1	\$8.33	19.1	159.1	47.0	19.0

Source: Cowen and Company

A Rapid Progression Toward Two Well-Timed Launches

Our model assumes a 2011 launch of Duexis where Horizon penetrates 0.01% of the U.S. NSAID market. By 2016, we project that Duexis will control 1.1% of the U.S. NSAID market that is comprised predominantly of rheumatology and osteoarthritis patients. We project total worldwide revenue and royalties related to Duexis will be \$476.8 million with \$281.3 million being booked by Horizon. In 2016, we estimate worldwide revenue for both Duexis and LODOTRA will total \$599.8 of which, \$389.1 is booked by Horizon.

Horizon Pharma, Inc. Revenue Build-Up Model

Edward H. Nash - Cowen and Company, LLC | Director - Biotechnology Equity Research - 646-562-1385

HORIZON PHARMA, INC. REVENUE BUILD-UP MODEL						
	2011E	2012E	2013E	2014E	2015E	2016E
Duexis (ibuprofen/famotidine)						
U.S. Population that regularly uses NSAIDS (MM)	60.0	60.0	60.0	60.0	60.0	60.0
U.S. Population >65 years of age (MM)	39.6	39.6	39.6	41.0	41.0	41.0
U.S. Population >65 years of age with gastric erosion related to NSAIDS (50%) (MM)	19.8	19.8	19.8	20.5	20.5	20.5
Percentage of NSAID users who concomitantly take a PPI (29%)* (MM)	17.4	17.4	17.4	17.4	17.4	17.4
Available patient population for Duexis (MM)	17.4	17.4	17.4	17.4	17.4	17.4
Average number of days used per year (avg. 5/wk)	260.0	260.0	260.0	260.0	260.0	260.0
Market penetration by Horizon for Duexis	0.01%	0.20%	0.56%	0.80%	0.95%	1.10%
AWP per patient per day	4.5	4.6	4.8	4.9	5.1	5.2
Total Revenue for Duexis pre-rebate	2.0	41.9	119.9	178.0	217.7	259.6
Co-pay coupons and rebates absorbed by Horizon for Duexis	0.38	7.54	20.92	30.16	35.82	41.47
Revenue booked by Horizon for U.S. market of Duexis (MM)	2.0	41.9	119.9	178.0	217.7	259.6
Prevalence of NSAID use in ROW in ROW (MM)	-	17.4	17.4	17.4	17.4	17.4
Market penetration	-	0.0%	0.2%	0.4%	0.5%	0.6%
AWP per patient per dose	-	8.0	8.0	8.0	8.0	8.0
Average number of days used per year (avg. 5/wk)	-	260.0	260.0	260.0	260.0	260.0
Total annual revenue for Duexis in ROW (MM)	-	3.6	72.4	144.8	181.0	217.2
Royalty paid back to Horizon (10%) (MM)	-	0.4	7.2	14.5	18.1	21.7
Total WW revenue and royalties to Horizon for Duexis (MM)	2.0	42.3	127.1	192.4	235.8	281.3
Lodotra (modified release version of prednisone) for RA						
Prevalence of Rheumatoid Arthritis (RA), U.S. (MM)	-	3.2	3.2	3.2	3.2	3.2
Patients diagnosed with RA (58%)	-	1.9	1.9	1.9	1.9	1.9
Diagnosed RA Patients that undergo treatment (93%)	-	1.7	1.7	1.7	1.7	1.7
Patients with RA who take prednisone chronically (25%) (MM)	-	0.43	0.43	0.43	0.43	0.43
AWP per patient (\$6/tab)	-	1,446.0	1,446.0	1,446.0	1,446.0	1,446.0
Penetration of Market By Lodotra	-	0.3%	2.5%	8.0%	12.0%	17.0%
Total annual revenue for RA in U.S. (MM)	-	1.9	15.6	49.9	74.9	106.1
Prevalence of RA in ROW (MM)	-	-	2.0	2.0	2.0	2.0
Patients with RA who take prednisone chronically (25%) (MM)	-	-	0.2	0.2	0.2	0.2
AWP per patient (\$5/tab)	-	-	1,205	1,205	1,205	1,205
Penetration of Market By Lodotra	-	-	1%	3%	5%	7%
Total annual revenue for RA in U.S. (MM)	-	-	2.4	7.2	12.1	16.9
Royalty paid back to Horizon (10%) (MM)	-	-	0.2	0.7	1.2	1.7
Total WW revenue and royalties to Horizon for RA (MM)	-	1.87	15.8	50.6	76.1	107.8
Total WW product revenue and royalties to Horizon (MM)	2.0	44.2	142.9	243.1	311.9	389.1

Source: Cowen and Company

Horizon Pharma, Inc. Quarterly P&L (\$MM)

Edward H. Nash - Cowen and Company, LLC Director - Biotechnology Equity Research - 646-562-1385										
HORIZON PHARMA, INC. QUARTERLY P&L										
	Q1:11A	Q2:11A	Q3:11E	Q4:11E	2011E	Q1:12E	Q2:12E	Q3:12E	Q4:12E	2012E
Duexis	0.0	0.0	0.0	2.0	2.0	6.0	8.0	11.0	16.9	41.9
% Growth (y/y)	-	-	-	-	-	-	-	-	-	-
Lodotra	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.3	1.9
Duexis Royalty	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Lodotra Royalty	0.0	1.3	1.4	1.4	4.1	1.5	1.6	1.8	2.0	6.9
Total Product Revenues	0.0	0.0	0.0	2.0	2.0	6.0	8.0	11.6	18.2	43.8
Total Royalty Revenues	0.0	1.3	1.4	1.4	4.1	1.5	1.6	1.8	2.0	7.3
Duexis License Fees	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lodotra License Fees	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Milestone Payments	1.2	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0
Total Revenues	1.2	1.3	1.4	3.4	7.3	7.5	9.6	13.4	20.2	51.1
COGS	0.9	2.1	1.5	2.7	7.2	1.9	2.4	3.4	5.1	12.8
COGS as a percent of revenue	-	-	-	-	-	25%	25%	25%	25%	25%
R&D	2.3	3.5	3.7	3.9	13.4	3.8	4.0	4.0	4.2	16.0
Sales (including sales rebates)	0.6	1.2	11.3	13.7	28.6	14.2	14.5	14.9	14.5	58.1
General & Administrative	2.9	3.3	3.5	3.3	13.9	3.4	3.5	3.8	3.9	14.6
Total Operating Expenses:	6.7	10.1	20.0	23.6	63.1	23.3	24.4	26.1	27.7	101.5
Income from Operations	(5.5)	(8.8)	(18.6)	(20.2)	(55.8)	(15.8)	(14.8)	(12.7)	(7.5)	(50.4)
Interest Income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
Other Income (expense)	(0.9)	0.0	(0.9)	(0.9)	(3.6)	(2.8)	(2.2)	(1.8)	(1.0)	(7.8)
Interest Expense	(0.6)	(3.2)	(0.8)	(0.8)	(5.2)	(0.5)	(0.3)	0.0	0.0	(0.8)
Pretax Income	(7.0)	(12.0)	(20.3)	(21.9)	(64.6)	(19.1)	(17.3)	(14.5)	(8.3)	(58.8)
Foreign Exchange Loss	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bargain Purchase Gain	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income Tax Provision	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tax rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Income (loss)	(7.0)	11.7	(20.3)	(21.9)	(64.6)	(19.1)	(17.3)	(14.5)	(8.3)	(58.8)
GAAP EPS, Basic	(2.33)	(7.78)	(1.06)	(1.13)	(5.82)	(0.98)	(0.69)	(0.57)	(0.32)	(2.47)
Weighted Average Shares Outstanding	3.0	1.5	19.1	19.3	11.1	19.5	25.0	25.3	25.4	23.8

Source: Cowen and Company

Horizon Pharma, Inc. Annual P&L (\$MM)

Edward H. Nash - Cowen and Company, LLC Director - Biotechnology Equity Research - 646-562-1385							
HORIZON PHARMA, INC. ANNUAL P&L							
	2010A	2011E	2012E	2013E	2014E	2015E	2016E
Duexis	0.0	2.0	41.9	119.9	178.0	217.7	259.6
% Growth (y/y)	-	0.0	0.0	1.9	0.5	0.2	0.2
Lodotra	0.0	0.0	1.9	15.6	49.9	74.9	106.1
Duexis Royalty	0.0	0.0	0.4	7.2	14.5	18.1	21.7
Lodotra Royalty	0.0	4.1	6.9	0.2	0.7	1.2	1.7
Total Product Revenues	0.0	2.0	43.8	135.5	227.9	292.6	365.7
Total Royalty Revenues	0.0	4.1	7.3	7.5	15.2	19.3	23.4
Duexis License Fees	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lodotra License Fees	2.4	0.0	0.0	0.0	0.0	0.0	0.0
Milestone Payments	0.0	1.2	0.0	0.0	0.0	0.0	0.0
Total Revenues	2.4	7.3	51.1	142.9	243.1	311.9	389.1
COGS	4.3	7.2	12.8	28.6	36.5	46.8	58.4
COGS as a percent of revenue	-	-	25%	20%	15%	15%	15%
R&D	17.7	13.4	16.0	20.0	21.0	23.0	25.0
Sales (including sales rebates)	5.6	28.6	58.1	77.3	82.7	84.4	87.5
General & Administrative	18.6	13.9	14.6	16.0	18.5	19.8	20.0
Total Operating Expenses:	46.2	63.1	101.5	141.9	158.7	174.0	190.9
Income from Operations	(43.8)	(55.8)	(50.4)	1.1	84.4	137.9	198.2
Interest Income	0.0	0.0	0.2	0.4	0.6	1.0	1.4
Other Income (expense)	0.0	(3.6)	(7.8)	(1.0)	(1.0)	(1.0)	(1.0)
Interest Expense	(3.1)	(5.2)	(0.8)	0.0	0.0	0.0	0.0
Pretax Income	(46.9)	(64.6)	(58.8)	0.5	84.0	137.9	198.6
Foreign Exchange Loss	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0
Bargain Purchase Gain	19.3	0.0	0.0	0.0	0.0	0.0	0.0
Income Tax Provision	0.0	0.0	0.0	0.0	6.7	20.7	59.6
<i>Tax rate</i>	0.0	0.0	0.0	0.0	0.1	0.2	0.3
Net Income (loss)	(27.6)	(64.6)	(58.8)	0.5	77.3	117.2	139.0
GAAP EPS, Basic	(9.20)	(5.82)	(2.47)	0.02	2.71	4.04	4.48
Weighted Average Shares Outstanding	3.0	11.1	23.8	27.0	28.5	29.0	31.0

Source: Cowen and Company

Positives

1. Horizon has two products approved, one in the U.S. and one in the E.U. Both products should be fully launched in the U.S. by the end of 2012, with Duexis being launched initially in 4Q11. Both of these programs provide near-term revenue generation for Horizon.
2. Duexis just received its first U.S. patent allowance and more are expected. This patent has an expiry in 2026. We expect additional patents surrounding use and formulation to be issued, thereby creating a strong patent estate.
3. Duexis and LODOTRA both have strong differentiating characteristics that distinguish them from the competitive landscape. These are the key to grabbing the attention of doctors and thereby increasing market share and formulary penetration.
4. Horizon has a strong management team that distinguishes itself by having worked on developing and launching NSAIDS for most of their careers. We believe this is key to the overall successful launch of the products and therefore the success of Horizon.

Negatives

1. Cash is a strong focal point currently for the company, as more funding will be required in 2Q12 to hire the additional 75 sales reps needed to reach the company's financial projections as well as ours.
2. The NSAID market is very crowded with many players with varied pros and cons. It will take a very strong and dedicated sales force to make the needed penetration into the top prescribers to make Duexis and LODOTRA profitable.
3. While we believe Horizon has a strong pricing strategy with regard to Duexis, there are many large pharmaceutical companies that market other NSAIDS and they can weather a price-cutting war if one were to ensue. Also, the rebate programs may need to last longer than expected, thereby cutting into the revenue projections for Duexis.

Addendum

STOCKS MENTIONED IN IMPORTANT DISCLOSURES

Ticker	Company Name
HZNP	Horizon Pharma

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