

A Superior Way To Address Postoperative Pain: Initiating Coverage With Buy

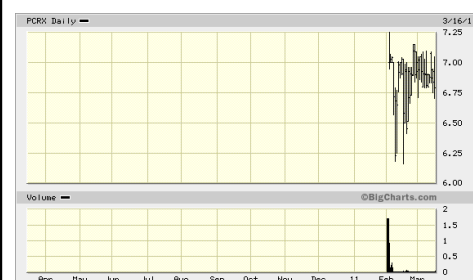
Initiating Coverage at Buy
Target Price: \$20

Investment Summary

- We are initiating coverage of Pacira Pharmaceuticals with a Buy rating and a \$20 target price, which is underpinned by a DCF analysis, based primarily on the revenue generated by Exparel for the infiltration application, and the net cash position. Within the DCF analysis, we assume a 40% discount rate and a 7x multiple of the terminal value for the projected 2016 EBITDA. FDA approval or materialization of the remainder of the pipeline would encourage us to use a lower discount rate in the future. Currently, Pacira has adequate funds to see the company through the launch of Exparel.
- The market for Exparel potentially consists of 40 million surgical opportunities annually in the U.S., but this is an absolute maximum for the U.S. market. In the nearer term, we consider the U.S. market for infiltration to peak at about 21 million opportunities annually, with at least a market size of about 5 million opportunities annually for the infiltration application. Thus, we consider it a likely event that total revenue will eventually exceed \$1 billion. Furthermore, we have broken the market into segments that consist of the in-patient and out-patient population. This was necessary because we believe the greatest demand for Exparel to be with the in-patient population, due to the possible reduction in hospital stay for patients.
- Exparel offers a great deal of benefit to patients and payers, while providing a solid margin to Pacira. Specifically, Exparel offers patients 72 hours of post-operative pain relief, with up to a 91% reduction in adverse events related to opioids, due to a potential 57% reduction in opioid use. These adverse events include opioid-induced constipation (OIC), sleeping problems, nausea/vomiting, loss of appetite, and sexual dysfunction as the most common side effects, but other side effects occur as well, such as acute morphine poisoning, respiratory depression, and dependence.
- The population that is most prone to opioid adverse events makes up at least 50% of the surgical population. This population includes the elderly, sleep apnics, obese, opioid intolerant, and the opioid tolerant. It is the intent of Pacira to target this patient population first, demonstrating the solid economic value-add by Exparel. Additionally, Exparel is anticipated to be used as both a nerve block, and in an infiltration application at the same time, thereby enabling the doctor to apply Exparel when there is easy access to the nerve, and still be able to use Exparel as infiltration when closing the wound. This double application is not worked into our model, but instead left as upside to our valuation.

Price	\$6.85
52-Week High/Low	\$7.25 - 6.16
Shares Outstanding (000)	14,911.00
Market Cap. (000)	\$102,140.35
Average Daily Volume	85,808.33

EPS	FY10A	FY11E	FY12E
Mar	-	\$(0.46)	-
Jun	-	\$(0.46)	-
Sep	-	\$(0.81)	-
Dec	-	\$(1.33)	-
FY	\$(49.97)E	\$(3.05)	\$(1.10)
Prior	-	-	-
Consensus	NA	NA	NA
P/E	NM	NM	NM
FY Rev.	\$16,495.00E	\$17,391.00	\$69,810.00



Source: BigCharts.com

Investment Thesis

We are initiating coverage of Pacira Pharmaceuticals with a Buy rating and a \$20 target price, which is underpinned by a DCF analysis, based primarily on the revenue generated by Exparel for the infiltration application, and the net cash position. Within the DCF analysis, we assume a 40% discount rate and a 7x multiple of the terminal value for the projected 2016 EBITDA. FDA approval or materialization of the remainder of the pipeline would encourage us to use a lower discount rate in the future. Currently, Pacira has adequate funds to see the company through the launch of Exparel.

Exparel offers a great deal of benefit to patients and payers, while providing a solid margin to Pacira. Specifically, Exparel offers patients 72 hours of post-operative pain relief, with up to a 91% reduction in adverse events related to opioids, due to a potential 57% reduction in opioid use. These adverse events include opioid-induced constipation (OIC), sleeping problems, nausea/vomiting, loss of appetite, and sexual dysfunction as the most common side effects, but other side effects occur as well, such as acute morphine poisoning, respiratory depression, and dependence. These adverse events are not minor, particularly when recovering from even a minor surgery. For example, OIC occurs in approximately 45% of patients, sleeping problems in 25%, nausea/vomiting in 25%, loss of appetite in 23%, and sexual dysfunction in 18% of patients. Pain management is one of the primary reasons for a patient to remain in the hospital after surgery, and in general increases the total surgery-related health care costs. Moreover, an opioid adverse event can increase that hospital stay for more than a day. Therefore, Exparel's ability to reduce the amount of opioids taken and therefore the adverse events gives a direct cost benefit to using Exparel, on top of the perceived benefits to patients that is more difficult on which to put a dollar figure.

The cost of the last day in the hospital is the least expensive and at a minimum it averages over \$400 in direct costs, but the real loss comes in the opportunity costs. Occupying a hospital bed can cause a lower flow of surgeries to run through the hospital, and this is particularly important when dealing with a problematic patient population that was scheduled for an outpatient procedure that turns into an inpatient procedure. For example, an elderly arthritis patient who is an opioid-tolerant individual due to the regular use of opioids has a much harder time dealing with pain, because of the need for excess opioids, and this overuse of opioids and excess pain not only increases the chances for an adverse event, but usually results in a hospital stay even if one was never intended. Additionally, Exparel is able to reduce the need for PCA pumps, and the need for much of the monitoring associated with administration of opioids. Patients directly out of the operating room are usually administered a loading dose of an opioid and hooked up to a PCA pump, which has a high dose of opioids available to the patient if needed. These high doses of opioids contribute greatly to the occurrence of opioid adverse events and a prolonged recovery. Whereas, the use of Exparel increases the length of time to the first opioid rescue, and if an opioid is given, it can decrease the need for such high doses that contribute to adverse events. The direct costs associated with the use of opioids analgesics can easily range above \$300, when considering the nursing time, the doctor's time, and the hospitals costs associated with the handling of a controlled substance. Therefore, with an expected cost for Exparel of about \$200 per patient for the in-patient population, we would expect strong demand, given the value proposition and the win-win created for all parties involved.

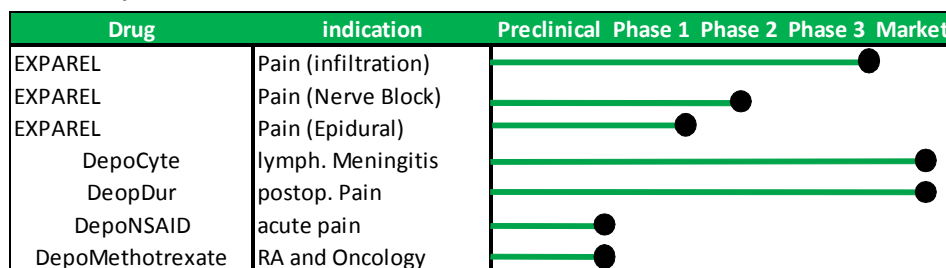
The population that is most prone to opioid adverse events makes up at least 50% of the surgical population. This population includes the elderly, sleep apnics, obese, opioid intolerant, and the opioid tolerant (those who regularly take opioids for illness like arthritis, and have built up a tolerance to opioid pain medication). It is the intent of Pacira to target this patient population first, demonstrating the solid economic value-add by Exparel. Additionally, Exparel is anticipated to be used as both a nerve block, and in an infiltration application at the same time, thereby enabling the doctor to apply Exparel when there is easy access to the nerve, and still be able to use Exparel as infiltration when closing the wound. This double application is not worked into our model, but instead left as upside to our valuation.

The market for Exparel potentially consists of 40 million surgical opportunities annually in the U.S., but this is an absolute maximum for the U.S. market. In the nearer term, we consider the U.S. market for infiltration to peak at about 21 million opportunities annually, with at least a market size of about 5 million opportunities annually for the infiltration application. Thus, we consider it a likely event that total revenue will eventually exceed \$1 billion. Furthermore, we have broken the market into segments that consist of the in-patient and out-patient population. This was necessary because we believe the greatest

demand for Exparel to be with the in-patient population, due to the possible reduction in hospital stay for patients. The in-patient market consists of about 35% of the total surgical market and therefore equals about 14 million patients, of which about 7.5 million are candidates for Exparel use as infiltration in 2010. To be conservative, we are only forecasting a penetration rate of about 12% into this market in 2016, which equates to over 1 million patients treated. As for the out-patient market, we are left with about 14 million patients in the infiltration market, out of the 21 million of total applicable surgeries in 2010. Moreover, we are forecasting a much smaller market demand and thus lower penetration rate of about 7%, which equates to treated population of about 1.1 million patients. Thus, we have forecasted a total of about 2.1 million patients treated with Exparel for infiltration in 2016.

Given clinical success and approval, the market for nerve block and epidural will expand the treated patient population. The market for nerve block is projected to be about 8.6 million patients in 2013 when the nerve block application is expected to be approved, but due to the early stage of drug development, we have used a very low penetration rate of 4% in 2016 in both the in-patient and the out-patient population. Therefore, we are projecting a patient population of about 370,000 in 2016, but total revenue is projected at only about \$30 million, due to the lower dose needed. Similarly, the epidural application is expected to be a smaller market than infiltration, with only about 6.8 million patients in 2015 when approved, and total revenue is projected to be about \$17 million with a 3% penetration rate in 2016.

Exhibit 1: Pipeline Chart



Source: Company documents

Valuation

We project revenue and royalties from the sale of Exparel used in infiltration, nerve block, and epidural applications, as well as the revenue and royalties from the existing pipeline of DepoCyt(e) and DepoDur. We derive our target price of \$20 through a DCF analysis, using a 40% discount rate. We have a high degree of confidence that Exparel will be approved, but we still maintain a 40% discount rate as there are risks associated with FDA approval, competition, market adoption, as well as liquidity concerns in 2012. We believe there is a strong possibility that the number of patients treated with Exparel in 2016 could be anywhere from 1.5 to 2 times that of our projections, due to the large potential market opportunity for Exparel. We believe that we have remained conservative with the sales ramp and ultimate market penetration for Exparel, projecting a blended penetration rate of 8.75% into the total infiltration market in 2016 of about 24 million procedures. The blending is essentially the weighted average of the in-patient and out-patient population.

Exparel will be produced and sold in several different sized syringes, which we project to range in price from \$75 (50mL) at the low end to \$200 (300mL) at the high end, starting in 2011 and growing at 2% a year in the U.S. Our blended price for infiltration is \$156 in 2016, and with about 2.1 million patients, we expect to see revenues from the infiltration application of about \$360 million in 2016.

Exparel for the nerve block and epidural applications is expected to be used at the lowest dosage, which we have projected to be priced at \$75 in 2010 and to grow at 2% per year, reaching \$83 in 2016. Therefore, with 580,000 total patients treated for both indications in 2016, we anticipate \$57 million in revenue from the nerve block and the epidural application in total.

We are anticipating a partner for the E.U. Exparel market and approval by 2014, given that Pacira is aggressively looking for a partner and has a value-added product. Therefore, with a 2016 penetration

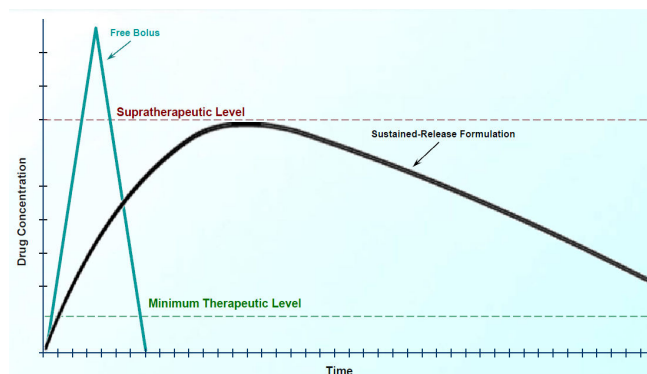
rate of 6% in the infiltration market, a 1% penetration rate in nerve block, and a 0.5% penetration rate in epidural, we are projecting about 1.7 million patients treated and total revenues of about \$250 million. However, we anticipate Pacira to have a 15% royalty rate, and therefore total revenues of \$38 million in 2016 from the E.U. market.

Exparel (Sky0402) for the Treatment of Post-Operative Pain Management

Exparel is a biological delivery system for the already approved analgesic bupivacaine, offering an extended time release of bupivacaine, which is released over the course of 72 hours. Exparel is usually injected to the wound area before applying sutures (infiltration), and provides uninterrupted pain relief to the post-operative patient. It is generally only applied once and doses can vary. This has the further benefit of reducing the need for opioids and other analgesics, thus reducing the patient's likelihood of experiencing adverse events. Pacira, has filed the NDA for exparel and has a PDUFA date of July 28, 2011, and given the fact that Exparel utilizes the already approved bupivacaine with a similar safety profile, we believe there is a high probability of FDA and EMA approval. Furthermore, the depof foam technology is already in use with Pacira's other approved drugs Depodur, and DepoCyt(e), which utilize morphine and cytarabine, respectively. Currently, Pacira owns the rights to Exparel in the U.S., but is looking for partnerships ex-U.S.

Additionally, Exparel has the advantage of having a lower peak Cmax, whereas bupivacaine reaches an unnecessarily high level before dropping off. The graph below in Exhibit 2 shows the relative difference in concentration of bupivacaine in the blood when using Exparel versus bupivacaine.

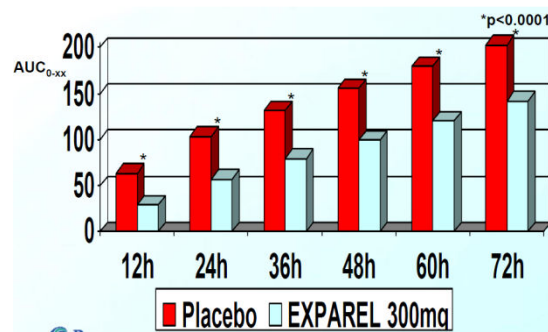
Exhibit 2: Sustained Release Profile



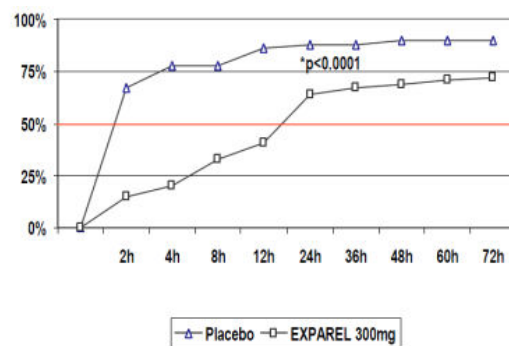
Source: Company documents

Phase 3 Trials for Exparel Administered Through Wound Infiltration

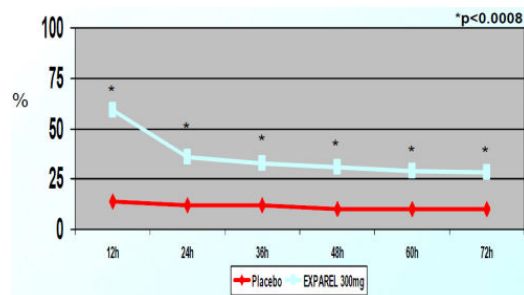
There were four Phase 3 trials completed for Exparel, and the indications were patients undergoing bunionectomy, hemorrhoidectomy, and total knee arthroplasty (TKA), although the TKA data has not been released yet. In May 2009, Pacira began a 189-patient Phase 3 trial to evaluate post-operative analgesia patients undergoing a hemorrhoidectomy. The trial was a 1:1 randomized, double-blind, placebo-control trial. The patients in the drug arm were administered 300mg of bupivacaine via injection of 30mL of Exparel to the relevant area. The primary endpoint was the area under the curve (AUC) of the numeric rating scale at rest (NRS-R) of pain intensity scores through the first 72 hours after surgery. The primary endpoint of the AUC was statistically significant at every time point through 72 hours ($p < 0.0001$) compared to placebo. Moreover, the percentage of patients that were opioid free through 72 hours was statistically significant ($p < 0.0007$), and the reduction in total opioid consumption was also statistically significant through 72 hours ($p = 0.0006$). Additionally, the median time to first opioid use was 1 hour and 10 minutes for placebo patients, but was 14 hours and 20 minutes for Exparel patients ($p < 0.0001$). Furthermore, patients experienced a decrease in opioid-related side effects, which included nausea, vomiting, constipation, urinary retention, pruritis, somnolence, and respiratory depression. The hospitals experienced a reduction in resource consumption, such as the time from PACU to floor, and the nursing time related to the monitoring of the PCA and opioid-related side effects. The patients and the hospitals were satisfied with the faster discharge time, and reduced need for patients to be tethered to an IV pole.

Exhibit 3: AUC Through Different Timepoints

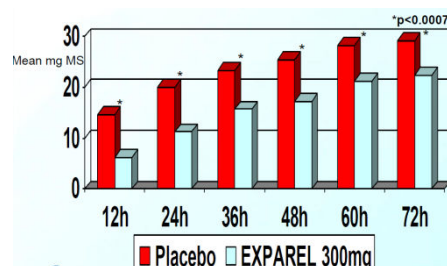
Source: Company documents

Exhibit 4: Time to Opioid Rescue (Red Line Median)

Source: Company documents

Exhibit 5: Percent Avoiding Opioids

Source: Company documents

Exhibit 6: Total Opioid Consumption

Source: Company documents

Safety Profile for Exparel in Hemorrhoidectomy Trials

The use of Exparel was well tolerated in the hemorrhoidectomy Phase 3 trial, and the drug was able to reduce the gastrointestinal adverse effects that are normally associated with opioid use versus both a placebo-control and the bupivacaine active-control group. Furthermore, no serious adverse events were experienced by Exparel patients. Exhibit 8 below shows the safety results of the Phase 2 trial where bupivacaine was used as the active-comparator.

Exhibit 7: Phase 3 Safety: Exparel Versus Placebo

Patients who experienced:	Placebo	EXPAREL
At Least One TEAE	18%	17%
At Least One Related TEAE	0%	1%
Gastrointestinal AE (e.g., PONV)	14%	8%
SAE	1%	0%
Discontinuation Due to AE	0%	0%
Death	0%	0%

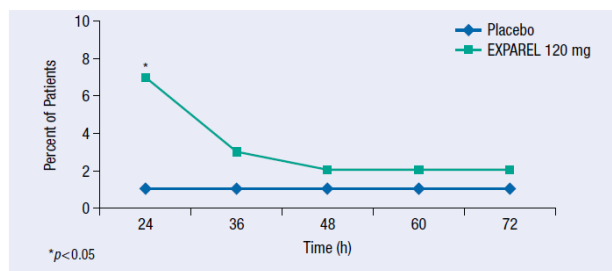
Source: Company documents

Exhibit 8: Phase 2 Safety: Exparel Versus Bupivacaine

Patients who experienced:	Bupivacaine 75mg	EXPAREL 75mg	EXPAREL 225mg	EXPAREL 300mg
At Least One TEAE	42%	29%	28%	4%
Gastrointestinal AE (e.g., PONV)	35%	29%	28%	0%
SAE	0%	4%	0%	0%
Discontinuation Due to AE	0%	0%	0%	0%
Death	0%	0%	0%	0%

Source: Company documents

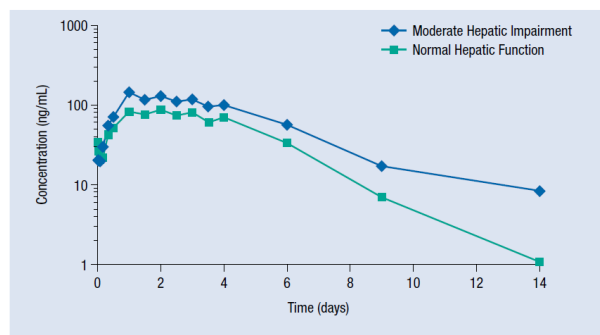
In April 2009, Pacira began a 193-patient Phase 3 trial to evaluate post-operative analgesia patients undergoing a bunionectomy. The trial was a 1:1 randomized, double-blind, placebo-control trial. The patients in the drug arm were administered 120mg (8mL) of Exparel via injection or wound infiltration. The primary endpoint was the area under the curve (AUC) of the numeric rating scale at rest (NRS-R) of pain intensity scores recorded at predetermined time points after surgery. The primary endpoint was statistically significant at time points of 24 hours ($p=0.0005$) and 36 hours ($p<0.03$) after surgery compared to placebo. The secondary endpoints included the number of patients who experienced no pain, the number of patients who did not need an opioid rescue, and the time to first rescue for those requiring an opioid rescue. The secondary endpoint of the number of patients who avoided opioid rescue was met for the first 24-hour period ($p<0.05$), and this is shown graphically in Exhibit 9 below. The median time to first opioid use was also statistically significant for Exparel versus the placebo ($p<0.0001$). However, the safety profile was not as robust for the bunionectomy trial as it was for the hemorrhoidectomy, but since the safety was still improved over placebo, we see no potential issues. Specifically, treatment-emergent adverse events were seen in 68% of placebo patients and 60% of Exparel patients with one discontinuation in the placebo arm.

Exhibit 9: Patients Requiring No Opioid Rescue

* $p < 0.05$
 ■ Statistical significance favoring the EXPAREL group was demonstrated through 24 hours

Source: Company documents

Ongoing development. Pacira recently completed a Phase 1 trial, where Exparel was tested on patients with hepatic impairment. This was necessary because bupivacaine is processed through the liver, and many potential patients may be hepatically impaired. Exhibit 10 below shows a relatively minor difference between normal patients' plasma concentration and that for the hepatically impaired. The trial concluded that the difference in pharmacokinetics was small enough to remain within FDA guidelines, and that no dose modification was necessary for patients with moderate hepatic impairment. Also, Pacira continues to run an observational, long-term trial to follow up with breast augmentation subjects.

Exhibit 10: Plasma Concentration of Hepatic Impaired and Normal Patients

■ Mean bupivacaine concentrations peaked for both groups at the 24-hour sample time and formed a plateau from 24 hours to 96 hours (4 days)

Source: Company documents

Market potential. The market for Exparel potentially consists of 40 million surgical opportunities annually in the U.S., but this is an absolute maximum for the U.S. market. In the nearer term, we consider the U.S. market for infiltration to peak at about 21 million opportunities annually, with at least a market size of about 5 million opportunities annually for the infiltration application. Thus, we consider it a likely event that total revenue will eventually exceed \$1 billion. Furthermore, we have broken the market into segments that consist of the inpatient and outpatient population. This was necessary because we believe the greatest demand for Exparel to be with the inpatient population, due to the possible greater reduction in hospital stay for inpatients. The inpatient market consists of about 35% of the total surgical market and therefore equals about 16 million patients in 2016, of which about 8.5 million are candidates for Exparel use as infiltration in 2016. To be conservative, we are only forecasting a penetration rate of about 12% into this market in 2016, which equates to over 1 million patients treated. Additionally, we have assumed that on average a larger wound is more likely to be involved in an inpatient setting, and thus we applied the larger dose and the correspondingly larger price to this group. Therefore, with a price of \$221 for a 300mg dose, we project total revenue for the 2016 inpatient infiltration market to be about \$225 million.

As for the outpatient market, we are left with about 29 million patients in total requiring post-operative pain medication in 2016 and about 16 million in the infiltration market. We are forecasting a much smaller market demand and thus lower penetration rate of about 7%, which equates to a treated population of about 1.1 million patients. The smaller market demand takes into consideration surgeries with smaller wounds and less post-operative pain. Additionally, we have assumed that the lower dosage of Exparel would be needed in the outpatient population, which consists of about 65% of the surgical population. Moreover, management has stated that pricing will not be strictly tied to the amount of drug in a vial, and that it plans to price the 150mg dose higher than half the cost of the 300mg dose, in order to encourage the use of the 300mg dose. Therefore, we have forecasted a price of \$121 for the 150mg in 2016, and thus anticipate total outpatient infiltration revenue of about \$135 million in 2016.

We have also included the E.U. market into our analysis, but to a very conservative extent, mainly due to the fact that a partner is necessary for Pacira to access this market. Our forecast anticipates finding a partner capable of securing drug approval in the E.U. by 4Q14. That said, we made the conservative assumption that the surgical market is the same as the U.S. market, which is underestimating this larger population. Additionally, we have split the E.U. surgery market in the same manner as the U.S. surgery market, by considering the inpatient population to be 35% of the total market and the outpatient population to be 65%. Moreover, our drug price includes zero growth and remains at \$200 for the 300mg dose, and \$110 for the 150mg dose in 2016. Therefore, with a 9% penetration rate in 2016, we view the inpatient market to have total revenue of about \$150 million, and with a 5% penetration rate for the outpatient market and a drug cost of \$110, we estimate total revenue of about \$87 million. Keeping with the conservative mindset, we have estimated only a 15% royalty rate for the E.U. market, which gives about \$37 million in revenue to Pacira in 2016.

Economics. Exparel demand should be high, given its solid economic value-add, which we further outlined below in Exhibit 11. Additionally, Pacira plans to meet demand by hiring between 60 and 100 salespeople upon approval of Exparel. The initial target market is the top 800 hospitals, surgeons, anesthesiologists, pharmacies, and nursing pain teams within these hospitals. The advantage of this sales model is that Pacira can make a large impact on the market quickly by targeting large, high-volume hospitals in major metropolitan areas. The downside is that there is a time lag when dealing with the drug adoption policies of hospitals. Specifically, it takes on average anywhere from six to nine months to have the drug approved by the hospital for it to be added to the formulary. This is the major factor determining the product launch characteristics of Exparel, and is the primary reason for our low anticipated sales in 2011.

Currently, Pacira has specific manufacturing capabilities for the production of its Depofoam technology that are not easily reproduced. Specifically, if a company was to attempt to set up a similar facility to compete, it would take approximately seven years and much R&D spend to reproduce Pacira's technology; additionally, Pacira has pending patents to protect its manufacturing technology. Therefore, supply in the mid-to-long term should be constrained by Pacira's production capabilities. In addition to hospital uptake constraints, Pacira has supply constraints related to the Depofoam technology. Currently, the production is limited to between \$50-60 million worth of product in a year. Pacira plans to overproduce in 4Q11, just to fill the extra anticipated demand in 2012. By year-end 2012, Pacira will likely have a new manufacturing facility (suite C) up and running, which should increase production to \$250 million worth of product. That said, Pacira has developed a new process that will enable it to not only produce much greater volumes of product, but also reduce the marginal costs greatly, and this process is anticipated to be up and running by 4Q13.

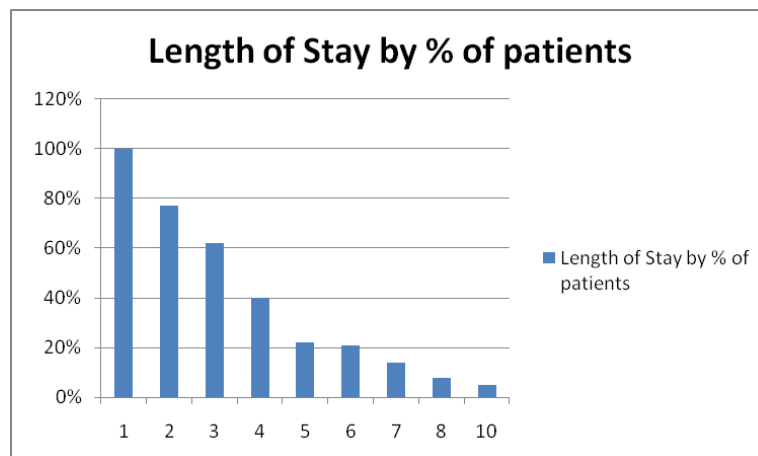
Exhibit 11: Value Added by Reducing Opioid Consumption

Costs related to opioid and opioid AE's		Ave. \$ value
1	Additional hospital LOS	\$ 400.00
2	Doctor costs	\$ 200.00
3	Nurseing costs	\$ 75.00
4	Value to patients of avoiding opioid AE's and pain	\$ 200.00
5	Avoidance of PCA or elastomeric bags	\$ 175.00
6	Added administration costs	\$ 50.00
Total		\$ 1,100.00

Source: Brean Murray Carret & Co. estimates

Description of Value-Added Items

1. **Additional hospital LOS.** The additional length of stay in the hospital (LOS) is primarily determined by pain management, and is the largest and most direct cost incurred due to opioid usage. The more pain management required, the more monitoring by hospital staff that is needed, and this is particularly true when large loading doses of opioids are given to patients after surgery. Hospitals are keenly aware of the adverse drug events caused by opioids and carefully monitor patients for these adverse events. We expect that the LOS after surgeries will be shortened by administering Exparel for post-operative pain management, primarily due to better pain management immediately after surgery and the avoidance of large amounts of opioids. When post-operative pain is well controlled, it will help patients to move around more easily, thus hasten healing and reduce post-operative problems (i.e., blood clots and pneumonia), and therefore reduce the LOS. Most important is the avoidance of opioid adverse events, which can increase the hospital stay by two days, and in some of the more severe cases, the LOS can be increased beyond five days, simply due to these adverse events. Hospital charges exceeding \$6,000 can occur due to adverse events associated with analgesics, and the last day in the hospital for such patients is the least expensive, costing about \$450 on average, and thus it is desirable to avoid when that space could otherwise be used for a more profitable new patient. We have remained conservative and estimated the additional hospital stay avoided by using Exparel to be only one day and to cost about \$400 on average, which we think by itself is enough reason to use Exparel at a cost of \$200 per dose.

Exhibit 12: Length of Stay in Days as a Percent of Patient Population

Source: Brean Murray Carret & Co. estimates

2. **Doctor costs.** The post-operative pain management process requires the doctor to set the dosage of the opioid, and the doctor is the only one who can change the patient dosage, which is lowered frequently during the first 24 hours post surgery. These costs can be low when a patient is taken off a PCA pump, or an intravenous drip within four hours post surgery, but can range to well into the thousands of dollars if a doctor has to be available to monitor

the dosage for days, as is the case with an opioid-tolerant patient experiencing opioid adverse events. Moreover, the process of hooking a patient up to a catheter can only be done by a doctor, thus incurring more doctor-related expenses, which could be avoided by using Exparel. Specifically, it costs about \$350 for the insertion and maintenance of the catheters, and at least \$100 for the extra 30 minutes of operating room time (*Clin Orthop.* 1990;260:30-37). Thus, we have remained conservative and view the value added by Exparel to be near the lower end, as the average case is more typical than the extreme case. Additionally, our research has reinforced the fact that a patient who is able to avoid a PCA pump or elastomeric bags—which are loaded with higher doses of opioids, and is able to be adequately treated with lower doses of opioids taken orally—incurs lower doctor expenses.

3. **Nursing costs.** Although a nurse is usually on staff to monitor patients, it takes a nurse who is trained to use PCA pumps to monitor the opioid patients, and they are required to check the patient every four hours. Perhaps, more importantly are the patients who require extra respiratory monitoring, which is the case when a patient receives an increased dose. In this case, it is normal for a nurse to monitor the patient every 15 minutes for the first hour, and every 30 minutes for the second hour. Moreover, the hospitals require two nurses to open the PCA pump and to adjust the dosage per doctor's orders. This process is in place to avoid mistakes, because that much caution is needed when dealing with high doses of opioids in the post-operative patient. The most common mistakes include syringe mix-ups, incorrect drug, incorrect concentration, and programming errors. With an average wage of \$22 per hour for a nurse, it is easy to see how costs can add up over 3.5 days in the hospital (average inpatient hospital stay).
4. **Value to patient of avoiding opioid adverse events and interim pain.** This category is definitely subjective and patient specific, but nonetheless very real. As we mentioned previously, OIC occurs in approximately 45% of patients, sleeping problems in 25%, nausea/vomiting in 25%, loss of appetite in 23%, and sexual dysfunction in 18% of patients. What is most important for the post-operative patient to heal and exit the hospital is rest and proper diet. The sleeping problems that accompany opioids do not contribute to the patient's recovery, and neither do nausea, vomiting and loss of appetite. We do not have patient survey data giving us hard numbers, but intuitively anyone would want to feel better and recover faster without vomiting and OIC. Additionally, avoiding pain immediately after surgery will help the patient to sleep instead of being evaluated for a specific amount of opioid dose.
5. **Avoidance of patient-controlled analgesia (PCA) pumps and elastomeric bags.** From the patient's perspective, being tethered to a PCA pump or elastomeric bag on a pole is not convenient, but it is the associated cost with which we are concerned. Currently, many hospitals lease the PCA pumps, and there is the direct cost for the high dose of opioids used in the pumps, which can be quite a bit more than the typical morphine. Elastomeric bags, which are another form of delivery system for opioids, typically range in cost from \$175 to \$300, and are one-time use items. The number of elastomeric bags sold each year is about 1 million. We would expect Exparel to eliminate the need for either PCA pumps or elastomeric bags, in most circumstances. Moreover, there are other drawbacks to the operation of PCA pumps. Not all patients are able to handle PCA. For example, elder patients might be confused after surgery and unable to utilize the pump, while a child may not understand how to operate it. Patients need to be educated to understand the system and know how to use it, which takes up even more nursing time. Patients must be cognitively and psychologically able to manage their pain as well.

Further detail on problems associated with a PCA pump. The nurses administering and monitoring a PCA pump have additional recordkeeping responsibilities, as well as the actual medical implementation. The implementation of the device is somewhat complicated and time consuming for the nurses; meanwhile, the patient sits there in pain during the hook up, and has to wait for the medication to work. Not to mention the fact that it is easy to make errors with the pump, which may not only adversely affect patients and their length of stay, but also open the hospital up to potential litigation. It has been reported that there is a 3.5 times greater chance for patient harm due to medication errors from the use of PCA pumps. Errors that contribute to patient harm include improper dose, wrong or unauthorized drug, dose omission, wrong administration technique, extra dose, and wrong drug preparation.

Once again, Exparel is administered locally while the patient is under general anesthesia, and administered by a doctor. Additionally, while a patient is using a high dose of opioid with the PCA pump, there is a higher risk for the patient to experience respiratory distress. There are further difficulties for the patient when they have to be weaned off intravenous narcotics as well. Furthermore, intravenous problems can arise with the PCA pumps and elastomeric bags that are potentially avoidable with Exparel, provided Exparel can reduce the pain to the point where patients are able to take only oral doses of opioids or none at all. The intravenous apparatus complications alone can include infection, phlebitis, infiltration, possible DVT, hematoma, or pain, and it must be changed every three days. This is not even taking into consideration the frequency and problems associated with catheterization, which we touched on briefly in bullet #2 above. Other complications include the limited supply of PCA pumps in the hospital, which is a problem if the attending doctor is planning on using a PCA pump for the patient, but none are available when needed. Logistical problems like these are avoided with the use of Exparel. Moreover, there are service and general maintenance costs, as well as storage costs associated with the pumps.

6. **Added administration costs.** Opioids are a controlled substance, and therefore require observation and paperwork from the hospital in general. These costs are due to the extra pharmacy and inventory controls, as well as the pharmacist's time in preparing solutions and such. From ordering to disposal, everything is done in triplicate when it comes to controlled substances.

Exparel for Use as a Nerve Block and Epidural Analgesia

Pacira has completed the Phase 2 trial for the nerve block application, but has not released the results yet. The company plans to start the Phase 3 Nerve block trial in 4Q11, and expects to submit the sNDA in either 4Q12 or 1Q13, which puts it in line for approval around 4Q13. Additionally, with Exparel on the formulary of many hospitals at the time of launch for the nerve block application, a correspondingly faster launch would be expected than with the infiltration application. Therefore, we would expect a more typical non-formulary type of launch curve for the nerve block indication. Due to the need to conserve cash, Pacira has put a temporary hold on the epidural application of Exparel, and has not made specific plans for the necessary Phase 2 trials. Furthermore, Pacira estimates that the epidural application will be approved by the FDA in mid-2015.

Bupivacaine has already been used in nerve block and epidural applications, and we see no barrier to entry for Exparel. Moreover, eliminating intravenous and catheterization of continuous epidural applications may solve several problems associated with continuous epidural analgesia. The use of bupivacaine and duramorph with continuous epidural infusion also tends to cause a high incidence of adverse effects, primarily associated with the amount of drug given to the patient, whereas Exparel may be able to reduce the amount of drug given.

Overall, we see similar advantages for the nerve block and epidural applications as we do for the infiltration application. Additionally, since nerve block and epidural applications require a much smaller dose of Exparel, we anticipate that nerve block or epidural and infiltration applications will be able to be used simultaneously. Surgeons generally don't use bupivacaine in this manner, because of the short time period for pain relief, and due to the avoidance of the higher dosage of bupivacaine.

Market potential for the nerve block application. The market potential for the nerve block application for Exparel is projected to consist of about 20% of the total surgery market, which equates to about 9 million opportunities in 2016. Since the dosage for the nerve block is expected to be the smallest dosage available, and assuming that the amount of Exparel needed for the inpatient and outpatient surgeries is similar, we have not separated the markets. Therefore, with a 4% penetration rate in 2016, we estimate about 370,000 patients to be treated. With a cost of \$83 per dose, we are projecting U.S. revenues of \$30 million in 2016. As for the E.U. market, we have taken a very conservative approach, and forecast the market to be the same size as the U.S. market, but with only a 1% penetration rate in 2016. Thus, with a price of \$75 per dose, we anticipate \$7 million in total E.U. revenue from the nerve block application in 2016. Furthermore, we have conservatively estimated only a 15% royalty from the E.U. market, which gives Pacira about \$1 million in revenue from the E.U. market in 2016.

Market potential for the epidural application. The market potential for the epidural application for Exparel is projected to consist of about 15% of the total surgery market, which equates to about 7

million opportunities in 2016. Similar to the nerve block application, the epidural application is expected to use the smallest dosage available, and there is no reason to segment the market for the epidural application either. Therefore, with a 3% penetration rate in 2016, we estimate about 210,000 patients to be treated in the U.S. With a cost of \$83 per dose, we are projecting U.S. revenue of \$17 million in 2016. As for the E.U. market, we remain conservative, and forecast the market to be the same size as the U.S. market, but with only a 0.5% penetration rate in 2016. Thus, with a price of \$75 per dose, we anticipate \$2.6 million in total E.U. revenue from the nerve block application in 2016. Furthermore, we maintain our conservative royalty estimate of only 15% from the E.U. market, which gives Pacira about \$400,000 in revenue from the E.U. market.

Currently Approved Drugs

DepoCyt(e) for the treatment of lymphomatous meningitis.

DepoCyt(e) is a biological technology and part of the depof foam technology for the extended release of cytarabine, which is a chemotherapeutic agent for the treatment of lymphomatous meningitis. DepoCyt(e) was granted accelerated FDA approval in 1999, but didn't receive full approval until 2007. Pacira currently manufactures DepoCyt(e) for the companies partners Sigma-Tau Pharmaceuticals and Mundipharma International and receives supply revenue associated with this manufacturing; additionally, Pacira receives royalties from the sale of DepoCyt(e). Pacira is optimistic about the growth of DepoCyt(e), but we have remained extremely conservative with respect to sales growth and have forecasted only about a 3% annual growth from YE09 sales. We maintain this view due to the slow market adoption of DepoCyt(e). Thus, we have projected the total top-line contribution to Pacira from DepoCyt(e) to be about \$11 million in 2016.

DepoDur for the treatment of pain management.

DepoDur is also part of the depof foam technology, but designed for the extended release of morphine to reduce/manage pain. DepoDur was granted accelerated FDA approval in 2004, and Pacira receives royalties from the sale of DepoDur. Pacira is less optimistic about the growth of DepoDur, and we have remained extremely conservative accordingly. We have projected the total top-line contribution to Pacira from DepoDur to be about \$1.2 million in 2016, which accounts for only 0.3% of our projected 2016 revenue.

Intellectual Property

There are five patent families related to Exparel, and these include patents in the U.S. and the E.U. Concerning Exparel, the formulation patent will expire in November 2013 and includes patent numbers 6,132,766 and 5,766,627, which are continuations of patent application Ser. No. 08/153,657 filed in 1993. However, the latest issued patent expires in 2017 (5,891,467) in the U.S., and current patent pending applications would provide coverage until 2031 if granted. There are multiple, pending patent applications for Exparel, because there are grounds for a new patent covering the current formulations. The manufacturing processes of Exparel in the E.U. and the U.S. are covered until 2018, and other manufacturing patents like patent 7,468,151 cover the preparation and purification of microparticles until 2022. The patents for DepoCyt(e) and depodur in the E.U. have expired, but Pacira believes that its trade secrets and customized equipment will help protect its products. Additionally, Pacira has issued patents in Japan, Canada, Australia, NZ, and Israel.

Financials

Revenue. We expect the majority of the revenues that Pacira achieves to come from company-generated sales from Exparel for the infiltration application in the U.S, with total sales of \$360 million. A much smaller portion of revenue is expected to be generated from royalties of E.U. sales for the infiltration application. Our sales and royalty projections through 2016 can be seen in Exhibit 13 below. The next largest revenue contribution comes from the nerve block & epidural applications and equates to \$48 million in revenue in 2016.

Exhibit 13: Revenue Breakdown Showing Sales and Royalties

PACIRA PHARMACEUTICALS INC								
Income Statement								
Fiscal Year ends December								
(All amounts in 000s except per share items)								
		2010E	2011E	2012E	2013E	2014E	2015E	2016E
PRODUCT Sales:								
Exparel for Pain (infiltration) in the US			3,466	55,473	132,465	225,326	308,360	360,438
Exparel royalties EX-US sales					-	4,903	20,494	37,509
Exparel milestones								
Exparel for Pain (Nerve Block & Epidural) in the US			-	-	3,361	14,057	35,638	48,015
DepoCyte Supply revenue		8,663	6,000	6,180	6,365	6,556	6,753	6,956
DepoCyte Royalties		3,293	3,400	3,502	3,607	3,715	3,827	3,942
DepoDur Supply revenue		840	700	721	743	765	788	811
DepoDur Royalties		297	325	335	345	355	366	377
Other								
Total product revenues		9,503	10,166	62,374	142,934	246,703	351,539	416,220
Royalty and license revenues		3,591	3,725	3,837	3,952	8,973	24,686	41,827
Contract/Collaborative agreement revenues		3,401	3,500	3,605	3,713	3,825	3,939	4,057
Total revenues		16,495	17,391	69,816	150,599	259,501	380,165	462,104

Source: Brean Murray Carret & Co. estimates

Expenses. Due to the cash needs of the company, we expect Pacira to be cash-sparing until late 2012, unless the company raises a significant amount of cash that takes it comfortably into 2013. Therefore, the company has put early drug development on hold, and this includes the epidural application for Exparel. Thus 2012 R&D is only about \$11 million, and should dramatically increase in 2013 and beyond, as the remainder of the pipeline accelerates into development, keeping in mind that Pacira is not a company focused on in-house drug development.

Due to royalties owed and manufacturing of DepoCyt(e) and DepoDur, the COGS remain high through 2013; however, in 2016, COGS approach the long-term average rate of about 20%. Additionally, we anticipate higher COGS for 2011, due to an inventory buildup in anticipation of 2012 sales. The projected jump in SG&A of 126% in 2011 and another 55% in 2012 reflects the addition of an Exparel sales force. We anticipate the addition of 60-100 sales reps; however, Pacira has indicated that this will not occur until after the approval. Moreover, we may see a slower build of the sales team, until Pacira has a more solid cash position, and thus we expect to be surprised with lower SG&A expenses for 2011 verses higher. With projected 2012 SG&A expenses that are \$30 million greater than projected 2010 SG&A expenses, we are comfortable that this figure includes the costs of up to 100 sales reps.

Bottom Line: We project full-year profitability in 2013, and for Pacira to stay profitable thereafter. Exhibit 14 below shows a summary of the forecasted profits.

Exhibit 14: Net Income and EPS Through 2016

	2010E	2011E	2012E	2013E	2014E	2015E	2016E
Net income, GAAP	(28,685)	(52,639)	(25,878)	36,524	129,441	145,437	184,659
EPS basic	\$ (49.97)	\$ (3.05)	\$ (1.10)	\$ 1.52	\$ 5.28	\$ 5.81	\$ 7.24
EPS diluted, GAAP	\$ (49.97)	\$ (3.05)	\$ (1.10)	\$ 1.32	\$ 4.57	\$ 5.04	\$ 6.27
Basic shares outstanding	574	17,233	23,578	24,049	24,530	25,021	25,521
Diluted shares outstanding		20,791	27,207	27,751	28,306	28,872	29,450

Source: Brean Murray Carret & Co. estimates

Balance Sheet. Pacira is projected to have ended 4Q10 with \$25 million in cash and cash equivalents, and due to the recent initial public offering, we are projecting current cash and cash equivalents to be about \$59 million, as this takes into consideration 1Q11 cash burn. Additionally, Pacira retired debt with the recent offering, leaving about \$29 million in total debt. Moreover, 4Q11 shows the build in inventory anticipated in advance of the 2012 ramp in sales, and the increase in accounts payable and accounts receivable reflect the inventory build and sales of Exparel.

Risks

Market adoption. Pacira's drugs may not achieve approval or market adoption, based on our expectations, which could negatively impact share price.

Business development. Pacira may not attract a partner for any of its unpartnered programs, particularly ex-U.S., thereby reducing our revenue expectations and increasing our expense expectations.

Competition. Pacira's competitors could win approval for products that outcompete drugs developed by Pacira, or may win partnerships also sought by Pacira.

High stock price volatility. This factor is common among developmental-stage biotechnology companies.

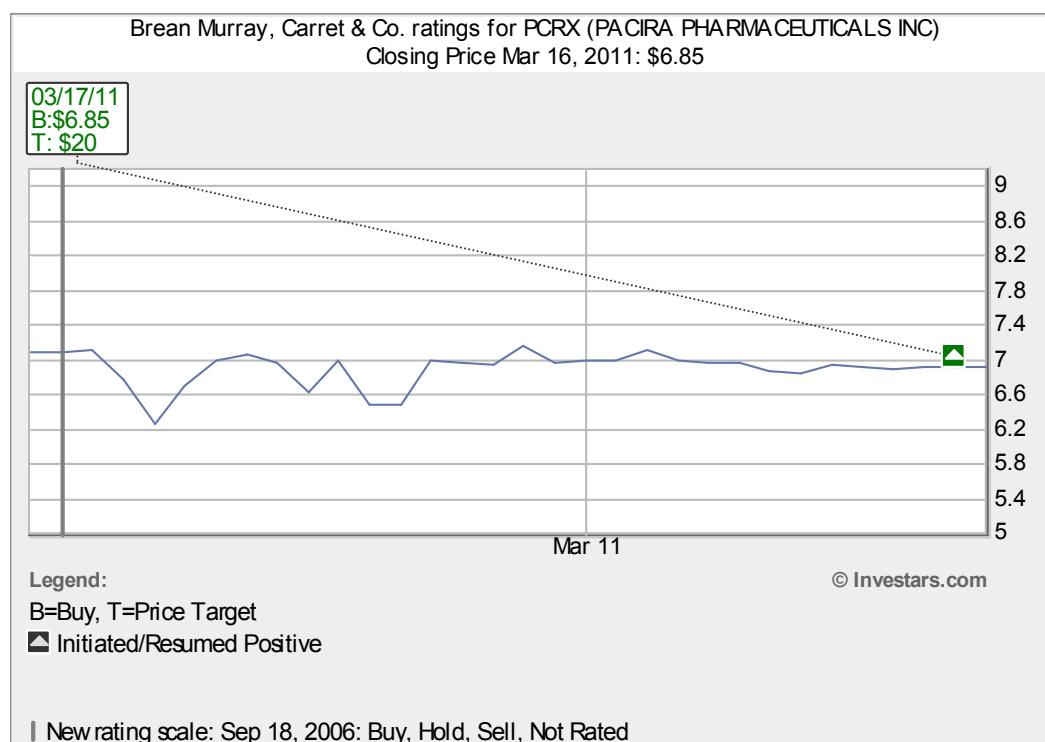
PACIRA PHARMACEUTICALS INC Income Statement Fiscal Year ends December (All amounts in 000s except per share items)													
	2008A	2009A	2010E	1Q11E	2Q11E	3Q11E	4Q11E	2011E	2012E	2013E	2014E	2015E	2016E
PRODUCT Sales:													
Exparel for Pain (infiltration) in the US						1,023	2,443	3,466	55,473	132,465	225,326	308,360	360,438
Exparel for Pain (Nerve Block & Epidural) in the US								-	-	3,361	14,057	35,638	48,015
DepoCyt(e) Supply revenue	5,912	5,882	8,663	1,500	1,500	1,500	1,500	6,000	6,180	6,365	6,556	6,753	6,956
DepoDur Supply revenue	940	442	840	175	175	175	175	700	721	743	765	788	811
Other													
Total product revenues	6,852	6,324	9,503	1,675	1,675	2,698	4,118	10,166	62,374	142,934	246,703	351,539	416,220
Royalty and license revenues	3,648	4,044	3,591	931	931	931	931	3,725	3,837	3,952	8,973	24,686	41,827
Contract/Collaborative agreement revenues	3,425	4,638	3,401	875	875	875	875	3,500	3,605	3,713	3,825	3,939	4,057
Total revenues	13,925	15,006	16,495	3,481	3,481	4,504	5,924	17,391	69,816	150,599	259,501	380,165	462,104
COGS	17,463	12,301	13,557	2,855	2,855	3,064	13,355	22,129	41,635	51,960	61,551	83,371	96,970
R&D	33,214	26,233	19,939	5,483	5,483	5,483	5,483	21,933	10,900	15,000	16,500	18,150	19,965
SG&A	8,611	5,020	7,887	1,972	1,972	8,782	8,783	21,509	38,514	43,156	49,420	55,495	61,779
Acquired in-process R&D													
Total operating expenses	59,288	43,554	41,383	10,310	10,310	17,329	27,621	65,570	91,049	110,116	127,471	157,016	178,714
Operating income (EBIT)	(45,363)	(28,548)	(24,888)	(6,829)	(6,829)	(12,825)	(21,698)	(48,180)	(21,233)	40,483	132,030	223,148	283,390
Other income	(224)	367											
Interest income	235	77	191	172	88	86	44	390	190	100	500	600	700
Interest expense		(1,723)	(2,589)	(1,211)	(1,211)	(1,211)	(1,211)	(4,845)	(4,835)	(4,062)	(3,092)		
Royalty interest obligation	3,490	(1,880)	(1,397)										
Income before taxes	(41,862)	(31,707)	(28,685)	(7,868)	(7,952)	(13,950)	(22,865)	(52,635)	(25,878)	36,524	129,441	223,750	284,091
Provision for income taxes												78,312	99,432
Net income, GAAP	(41,862)	(31,707)	(28,685)	(7,868)	(7,952)	(13,950)	(22,865)	(52,635)	(25,878)	36,524	129,441	145,437	184,659
EPS basic	(79)	(55)	\$ (49.97)	\$ (0.46)	\$ (0.46)	\$ (0.81)	\$ (1.33)	\$ (3.05)	\$ (1.10)	\$ 1.52	\$ 5.28	\$ 5.81	\$ 7.24
EPS diluted, GAAP		(4)	\$ (49.97)	\$ (0.46)	\$ (0.46)	\$ (0.81)	\$ (1.33)	\$ (3.05)	\$ (1.10)	\$ 1.32	\$ 4.57	\$ 5.04	\$ 6.27
Basic shares outstanding	528	573	574	17,233	17,233	17,233	17,233	17,233	23,578	24,049	24,530	25,021	25,521
Diluted shares outstanding		8,545	8,545	20,791	20,791	20,791	20,791	20,791	27,207	27,751	28,306	28,872	29,450
Source: Company documents and Brean Murray Carret & Co. estimates													

PACIRA PHARMACEUTICALS INC								
Balance Sheet								
Fiscal Year ends December								
(All amounts in 000s except per share items)								
	2008A	2009A	2010E	1Q11E	2Q11E	3Q11E	4Q11E	2011E
Current assets:								
Cash and cash equivalents	12,386	\$7,077	22,921	56,164	47,370	32,777	5,586	5,586
Restricted cash	1,182	1,216	2,079	2,079	2,079	2,079	2,159	2,159
Trade accounts receivable / Rev	2,585	1,455	2,665	2,665	2,953	3,500	4,000	4,000
Inventories, net / COGS	2,028	1,729	1,250	1,250	1,250	2,500	5,000	5,000
Prepaid expenses and other current assets / Rev	1,176	1,072	1,132	1,112	1,246	1,359	1,478	1,478
Total current assets	19,357	12,549	30,047	63,270	54,898	42,215	18,223	18,223
Fixed assets, net / Rev	18,037	19,560	21,773	21,773	21,864	22,305	22,608	22,608
Intangibles, net / Income from royal fee	13,084	11,178	10,589	10,589	10,748	11,200	11,648	11,648
Other assets, net / Rev	63	667	1,113	1,023	967	916	870	870
Total assets	\$50,541	\$43,954	63,522	96,655	88,477	76,636	53,349	53,348
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)								
Current liabilities:								
Accounts payable / COGS	\$11,794	\$6,994	7,015	7,045	9,132	11,546	13,277	13,277
Accrued expenses / Rev	1,733	3,478	3,137	3,200	3,387	3,416	3,478	3,478
Current portion of royalty interest obligation / COGS	1,443	1,599	1,762	1,798	1,952	2,369	2,655	2,655
Current portion of deferred revenue / Rev	2,046	2,346	2,523	2,591	2,636	2,701	2,782	2,782
Total current liabilities	17,016	14,417	14,437	14,634	17,107	20,032	22,193	22,193
Related party debt, including accrued interest / Rev	-	22,173	42,652	26,250	26,250	26,250	26,250	26,250
Royalty interest obligation, excluding current portion / Rev	3,618	3,647	3,520	3,410	3,410	3,410	3,410	3,410
Deferred revenue, excluding current portion / Rev	16,894	20,387	19,626	21,350	22,650	23,156	24,347	24,347
Contingent purchase liability / Rev	2,042	2,042	2,042	2,042	2,042	2,042	2,042	2,042
Deferred rent / Rev	874	1,177	1,319	1,325	1,358	1,373	1,391	1,391
Other long-term liabilities / Rev	2,607	3,060	2,857	2,915	3,172	3,249	3,478	3,478
Total liabilities	43,051	66,903	86,453	71,926	75,989	79,512	83,111	83,112
Commitments and Contingencies								
Stockholders' equity (deficit):								
Preferred stock, par value \$0.001, 88,000,000 shares authorized, 6,322,640 issued and outstanding at December 31, 2009, and 2008 (liquidation preference \$10.00 per share)	6	6	6	6	6	6	6	6
Common stock, par value \$0.001, 120,000,000 shares authorized, 573,920 and 572,164 shares issued and outstanding at, December 31, 2009	1	1	1	17	17	17	17	17
Additional paid-in capital	85,538	86,806	115,509	171,021	166,731	165,318	161,297	161,296
Accumulated deficit	(78,055)	(109,762)	(138,447)	(146,315)	(154,267)	(168,217)	(191,082)	(191,082)
Total stockholders' equity (deficit)	7,490	(22,949)	(22,931)	24,729	12,488	(2,876)	(29,762)	(29,763)
Total liabilities and stockholders' equity (deficit)	\$50,541	\$43,954	63,522	96,655	88,477	76,636	53,349	53,348

Source: Company documents and Brean Murray, Carret & Co. estimates

Important Disclosures

Ratings and Target Price History



Priced as of market close on 3/16/11.

At the time this report was published, Brean Murray, Carret & Co., LLC made a market in the securities of Pacira

Brean Murray, Carret & Co., LLC has managed or co-managed a public offering or placement of securities of Pacira within the past 12 months.

Pacira is, or within the last 12 months has been, a client of Brean Murray, Carret & Co., LLC, and investment banking and/or advisory services are being, or have been provided.

Brean Murray, Carret & Co., LLC expects to receive compensation or intends to seek compensation for investment banking and/or advisory services from Pacira within the next 3 months.

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Brean Murray, Carret & Co. Stock Rating System

Buy - Expected to appreciate by at least 10% within the next 12 months.

Hold - Fully valued, not expected to appreciate or decline materially within the next 12 months.

Sell - Expected to decline by at least 10% within the next 12 months.

	# of Securities	% of Total Securities	# of IB-Related Securities in Past 12 mos.	% of Total Securities
BUY	145	61.7%	16	11.03%
HOLD	64	27.23%	2	3.13%
SELL	7	2.98%	0	0%
NOT RATED	19	8.09%	1	5.26%
TOTAL	235			

Note : Stock price volatility may cause temporary non-alignment of some ratings with some target prices.

Valuation Methodology and Risks

Pacira Pharmaceuticals (PCRX): Our target price is derived through a DCF analysis by applying a 40% discount rate to our 2016 EBITDA projections. Risks to investing in Pacira include but are not limited to market adoption risk, business development risk, competition risk, and high stock price volatility.

Analyst Certification

I, Jonathan Aschoff, Ph.D., hereby certify that the views expressed in this research report accurately reflect my personal views about any and all of the subject securities or issuers referred to in this document. The analyst and associate analyst further certify that they have not received and will not be receiving direct or indirect compensation in exchange for expressing the recommendation contained in this publication.

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