

**Linzzess Approval Further Validates Plecanatide****Investment Summary****Buy**  
**Target Price: \$13**

Ironwood Pharmaceuticals' drug Linzzess (linaclotide) indicated for chronic idiopathic constipation (CIC) and irritable bowel syndrome with constipation (IBS-C) was approved today by the FDA. In response to this approval, Synergy's plecanatide mechanism of action is further validated. We anticipate that the Linzzess approval will drive more interest in Synergy and its product plecanatide. After our anticipated positive Phase 2/3 plecanatide data, we believe that Synergy could garner the attention of an acquirer.

Linzzess is the first to market, but as there was a clear lack of an effective therapy in CIC or IBS-C before Linzzess, and an undeveloped market for this new class of drugs, we believe that plecanatide will benefit from the marketing efforts for Linzzess. Additionally, we firmly believe that the low hanging fruit for Synergy will be patients motivated enough to seek treatment for CIC and IBS-C, but unable to tolerate Linzzess, given its high incidence of diarrhea. We are anticipating positive top-line results as early as late 2012 in at least the 1mg and 3mg dose groups versus placebo, and believe that the full dataset will be presented as a late breaker at DDW in May 2013.

Ironwood estimates a 4Q12 launch, but no price was given yet. Also, Ironwood estimates the market to be worth about \$6 billion annually. The market launch will consist of greater than 1,200 sales representatives marketing Linzzess to general practitioners, and more than 140 sales representatives marketing to GI specialists. Notably, there is a box warning for Linzzess that contraindicates the use in patients under 6 years old, and suggests that patients between 6 and 17 should avoid the product. The box warning was due to the death of young mice in preclinical studies. The young mice did not have fully developed GI tracks and that appeared to be the primary concern, because adult mice were safely dosed with 5,000 mcg/kg/day. As a post market requirement, Ironwood will conduct preclinical animal studies to characterize the deaths in young mice. Importantly, Ironwood does not believe that there will be much avoidance of use in the adult population due to the box warning. The majority of the patient population (95%), are adult patients, and there is sufficient data for there to be no real concern.

**Valuation.** We derive our target price of \$13 through a DCF analysis, assuming a 40% discount rate that is applied to all cash flows and the terminal value, which is based on a 5x multiple of the projected 2019 EBITDA.

**Risks.** Risks to the achievement of our target price include clinical, regulatory, financing, competitive risks, as well as stock price volatility.

Price	\$4.96
52-Week High/Low	\$6.50 - 2.10
Shares Outstanding (000)	65,806.00
Market Cap. (000)	\$326,397.76
Average Daily Volume (000)	106.23

EPS	FY11A	FY12E	FY13E
Mar	\$(0.08)	\$(0.13)A	-
Jun	\$(0.10)	\$(0.17)A	-
Sep	\$(0.01)	\$(0.16)	-
Dec	\$(0.11)	\$(0.16)	-
<b>FY</b>	<b>\$(0.30)</b>	<b>\$(0.63)</b>	<b>\$(0.65)</b>
Prior	-	-	-
Consensus	-	\$(0.59)	\$(0.55)
P/E	NM	NM	NM
FY Rev. (000)	\$0.00	\$0.00	\$0.00



Source: BigCharts.com

**Synergy Pharmaceuticals, Inc.****Income Statement**

Fiscal Year ends December

(in 000, except per share items)

	2009A	2010A	1Q 11	2Q 11	3Q 11	4Q 11	2011A	1Q 12A	2Q 12A	3Q 12E	4Q 12E	2012E	2013E	2014E	2015E	2016E	2017E
Plecanatide CIC revenue															84,591	192,296	361,243
Plecanatide IBS-C revenue															57,676	125,678	227,285
<b>Total Revenue</b>															<b>142,268</b>	<b>317,974</b>	<b>588,528</b>
COGS															7,904	22,126	48,967
R&D	3,733	9,559	1,478	2,354	3,883	5,704	13,419	5,338	7,626	8,008	8,408	29,380	36,725	44,070	50,680	55,748	58,536
SG&A	4,467	6,562	1,898	1,524	1,103	2,221	6,746	1,731	1,918	1,957	1,996	7,602	9,123	18,246	36,492	72,984	94,879
<b>Total Operating Expenses</b>	<b>8,200</b>	<b>16,121</b>	<b>3,376</b>	<b>3,879</b>	<b>4,986</b>	<b>7,925</b>	<b>20,165</b>	<b>7,069</b>	<b>9,545</b>	<b>9,964</b>	<b>10,404</b>	<b>36,982</b>	<b>45,848</b>	<b>62,316</b>	<b>95,076</b>	<b>150,858</b>	<b>202,381</b>
<b>Operating Income</b>	<b>(8,200)</b>	<b>(16,121)</b>	<b>(3,376)</b>	<b>(3,879)</b>	<b>(4,986)</b>	<b>(7,925)</b>	<b>(20,165)</b>	<b>(7,069)</b>	<b>(9,545)</b>	<b>(9,964)</b>	<b>(10,404)</b>	<b>(36,982)</b>	<b>(45,848)</b>	<b>(62,316)</b>	<b>47,191</b>	<b>167,116</b>	<b>386,147</b>
Interest income	75	108	24	20	20	26	90	39	48	51	53	190	196	202	208	214	221
Interest expense			(12)				(12)										
Other income (expense), net		494				363	363		256		200	456	433	411	391	371	352
Change in fair value of financial instrument		297	(339)	(698)	4,383	1911	5,257	8	(1,317)	(1,357)	(1,398)	(4,064)	(4,186)	(4,311)	(4,441)	(4,574)	(4,711)
<b>Pretax income</b>	<b>(8,125)</b>	<b>(15,222)</b>	<b>(3,702)</b>	<b>(4,557)</b>	<b>(583)</b>	<b>(5,625)</b>	<b>(14,467)</b>	<b>(7,023)</b>	<b>(10,558)</b>	<b>(11,271)</b>	<b>(11,548)</b>	<b>(40,400)</b>	<b>(49,405)</b>	<b>(66,014)</b>	<b>43,349</b>	<b>163,127</b>	<b>382,009</b>
Provision for income tax (benefit)																4,894	95,502
<b>Net Income</b>	<b>(8,125)</b>	<b>(15,222)</b>	<b>(3,702)</b>	<b>(4,557)</b>	<b>(583)</b>	<b>(5,625)</b>	<b>(14,467)</b>	<b>(7,023)</b>	<b>(10,558)</b>	<b>(11,271)</b>	<b>(11,548)</b>	<b>(40,400)</b>	<b>(49,405)</b>	<b>(66,014)</b>	<b>43,349</b>	<b>158,234</b>	<b>286,507</b>
<b>EPS</b>	<b>(0.22)</b>	<b>(0.34)</b>	<b>(0.08)</b>	<b>(0.10)</b>	<b>(0.01)</b>	<b>(0.11)</b>	<b>(0.30)</b>	<b>(0.13)</b>	<b>(0.17)</b>	<b>(0.16)</b>	<b>(0.16)</b>	<b>(0.63)</b>	<b>(0.65)</b>	<b>(0.82)</b>	<b>0.51</b>	<b>1.83</b>	<b>3.26</b>
<b>EPS diluted, GAAP</b>	<b>(0.22)</b>	<b>(0.34)</b>	<b>(0.08)</b>	<b>(0.10)</b>	<b>(0.01)</b>	<b>(0.11)</b>	<b>(0.30)</b>	<b>(0.13)</b>	<b>(0.17)</b>	<b>(0.16)</b>	<b>(0.16)</b>	<b>(0.63)</b>	<b>(0.65)</b>	<b>(0.82)</b>	<b>0.47</b>	<b>1.71</b>	<b>3.05</b>
Shares Outstanding Basic/Diluted	36,641	44,875	46,167	46,643	47,309	50,274	47,598	54,298	60,416	69,838	72,285	64,209	75,899	80,453	85,280	86,560	87,858
Diluted shares outstanding	36,641	44,875	46,167	46,643	47,309	50,274	47,598	54,298	60,416	69,838	72,285	64,209	75,899	80,453	91,280	92,650	94,039

Source: Company reports, Brean Murray, Carret &amp; Co. estimates

## Important Disclosures

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All prices are as of the market close on 8/30/12.

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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	134	56.07%	9	6.72%
HOLD	56	23.43%	2	3.57%
SELL	4	1.67%	0	0%
NOT RATED	45	18.83%	1	2.22%
<b>TOTAL</b>	<b>239</b>			

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

**Valuation Methodology and Risks**

**Synergy Pharmaceuticals (SGYP):** We derive our target price of \$13 through a DCF analysis, assuming a 40% discount rate that is applied to all cash flows and the terminal value, which is based on a 5x multiple of the projected 2019 EBITDA. Risks to the achievement of our target price include clinical, regulatory, financing, competitive risks, as well as stock price volatility.

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I, Jonathan Aschoff, 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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