

Company Update

November 23, 2016

Key Metrics

ZGNX - NASDAQ	\$13.30
Pricing Date	Nov 23 2016
Price Target	\$28.00
52-Week Range	\$16.56 - \$7.33
Shares Outstanding (mm)	24.8
Market Capitalization (mm)	\$329.8
3-Mo Average Daily Volume	206,082
Institutional Ownership	63%
Book Value/Share	\$6.33
Price/Book	2.1x

EPS FY: December

		Prior	Curr.	Prior	Curr.
	2015A	2016E	2016E	2017E	2017E
1Q-Mar	(0.15)		(0.42)A		(0.84)E
2Q-Jun	3.78		(0.76)A		(0.83)E
3Q-Sep	(0.65)		(0.69)A		(0.64)E
4Q-Dec	(0.36)		(0.87)E		(0.49)E
FY	1.22		(2.74)E		(2.79)E
P/E	10.90x		NM		NM

REVENUE

		Prior	Curr.	Prior	Curr.
	2015A	2016E	2016E	2017E	2017E
1Q-Mar	4.6		9.2A		6.4E
2Q-Jun	7.4		2.1A		6.4E
3Q-Sep	9.1		6.6A		6.4E
4Q-Dec	6.1		6.0E		6.5E
FY	27.2		23.9E		25.6E

Company Description:

Zogenix, Inc. is a pharmaceutical company committed to developing and commercializing central nervous system (CNS) therapies that address specific clinical needs for people living with orphan and other CNS disorders who need innovative treatment alternatives to help them improve their daily functioning.

Zogenix, Inc.

Rating: Buy

ZX008 showing efficacy in patients with LGS, BUY and \$28 PT

Investment Highlights:

- 8 week interim data from open label dose finding study seems suggesting efficacy in LGS. An interesting abstract set to be presented on the afternoon of December 3rd at the 70th annual American Epilepsy Society was published yesterday after market close. Titled "Effectiveness and Tolerability of Low Dose Fenfluramine (ZX008) In Lennox Gastaut Syndrome: A Pilot, Open-Label Dose Finding Study", poster session # 1.369 will present interim data from the study. The driving rationale behind the potential of a low dose add-on of ZX008 to effectively reduce seizure frequency in patients with Lennox Gastaut Syndrome (LGS) stems from observed beneficial effects of the compound on a range of seizure types in patients with Dravet Syndrome (DS). All patients enrolled in the study are between the ages of 3 and 18, and have failed multiple previous therapies. The abstract poster presents interim results from the first 10 patients all of whom are 8 weeks into ZX008 treatment. Dosage is initiated at 0.2 mg/kg/ day and is allowed to step up in 0.2 mg/kg/day increments to a maximum of 0.8 mg/kg/day. If subjects do not show a greater than or equal to 50% reduction in seizure frequency their dose is upped over 4 week segments. The results of the 8-week interim data points to a clinical meaningful improvement in the subject's convulsive seizure frequency as a result of ZX008 treatment. The median monthly convulsive seizure frequency reduction compared to baseline for all 10 patients (ITT population) was 50.5% with 3 patients experiencing a >75% reduction in convulsive seizure frequency.
- **ZX008** appears more efficacious than Epidiolex. Over the past 6 months, GW Pharmaceutical's rival product candidate Epidiolex (cannabidiol) has shown efficacy for the treatment of LGS in two separate phase III trials. The first trial achieved its primary endpoint with a statistical significance of p=0.0135 – pointing to Epidiolex as a potential effective treatment to reduce drop seizures when compared to a placebo. The endpoint achieved over the 14 week treatment period was a 44% median reduction in drop seizures per month vs. a 22% reduction in the placebo population. The 86 patients in the active arm were given 20mg/kg/day Epidiolex, while 85 patients received a placebo. All 171 patients were on other anti-epileptic drugs for the duration of the trial, for which they had been previously unresponsive. The second trial randomized 225 patients into three treatment arms across placebo (n=76), 10 mg/kg/day Epidiolex (n=73), and 20 mg/kg/day Epidiolex (n=76). All patients were on other anti-epileptic drugs for the duration of the trial, for which they had been previously unresponsive. In the 10 mg/kg/day arm patients achieved a 37% median reduction in drop seizures per month compared to a 17% reduction in the placebo arm (p=0.0016). While in the 20 mg/kg/day arm patients achieved a 42% median reduction in drop seizures per month compared to a 17% reduction in the placebo arm (p=0.0047). Serious adverse events were experienced by patients in both trials. Given the current data available, we believe that ZX008 appears to be more efficacious.
- ZX008 may be efficaciou across indications. While we do like signals in ZX008 for treatment in LGS over Epidiolex, it is still too early in the development process to include in our valuation. We see the progress of ZX008 in the LGS indication as incrementally positive for Zogenix and are eager to see full data from the openlabel dose finding study. For ZX008 in treatment of DS we currently give an 80% chance of success to the clinical development process.

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Required Disclosures

Price Target

\$28

Valuation Methodology

We used DCF to determine our target price. A DCF method yielded a value of \$28, with consideration of ZX008 only. In deriving a DCF valuation, we assumed a 10% discount rate and terminal value as 1x last year's EBITDA as well as probability of success of 80% for ZX008.

Risk Factors

Investing in clinical stage companies in the pharmaceuticals industry is speculative in nature and is only appropriate for those that have high tolerance for price volatility. In addition to the common risks involved with investing in companies in the pharmaceuticals sectors such as clinical, developmental, and commercialization risks, Zogenix has several firm specific risks: 1) intense competition from multiple product candidates in development for treatment of Dravet Syndrome; 2) potential for slow enrollment rates as caregivers of patients with Dravet Syndrome might not be aware of trial existence.

For important disclosures go to www.aegiscap.com.

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Investment Banking Services/Past 12 Mos.

Rating	Percent	Percent
BUY [BUY]	85.58	38.20
HOLD [HOLD]	14.42	20.00
SELL [SELL]	0.00	0.00

Meaning of Ratings

- A) A Buy rating is assigned when we do not believe the stock price adequately reflects a company's prospects over 12-18 months.
- B) A Hold rating is assigned when we believe the stock price adequately reflects a company's prospects over 12-18 months.
- C) A Sell rating is assigned when we believe the stock price more than adequately reflects a company's prospects over 12-18 months.

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Aegis Capital Corp. (212) 813-1010 810 Seventh Avenue, 18th Floor New York, New York 10019