

Company Update

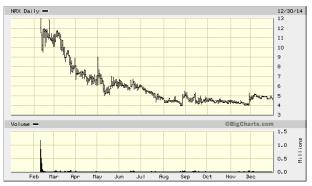
December 31, 2014

Key Metrics

\$4.65
Dec 30 2014
\$15.00
\$13.00 - \$3.96
8.9
\$41.4
12,733
26%
NM
NM
\$2.73
1.7x
NM
NM

EPS (\$) FY: December

		Prior	Curr.	Prior	Curr.
	2013A	2014E	2014E	2015E	2015E
1Q-Mar			(0.37)A		(0.60)E
2Q-Jun			(0.61)A		(0.61)E
3Q-Sep			(0.50)A		(0.62)E
4Q-Dec			(0.58)E		(0.62)E
FY	(19.71)		(2.14)E		(2.45)E
P/E	NM		NM		NM



Company Description:

NephroGenex, Inc. (http://www.nephrogenex.com/) is an emerging pharmaceutical company developing therapeutics for kidney diseases.

NephroGenex, Inc. Rating: Buy

Pyridorin Safe in QT Study

Investment Highlights:

- No Effect on the QT/QTc Interval. NephroGenex announced yesterday that a thorough QT/QTc (TQT) cardiac safety study on Pyridorin has been completed. The TQT study assesses a drug's risk of QT prolongation and its proarrhythmic potential, and is a standard component of all clinical development programs for new molecular entities. Pyridorin showed no effect on the QT/QTc interval at the expected therapeutic dose of 300mg and at a higher dose of 1200mg. In previous Phase 1 and Phase 2 studies, Pyridorin has shown no effect on the QT/QTc interval in patients with diabetic nephropathy. We believe these positive results support the use of Pyridorin in patients with diabetic nephropathy, many of which suffer from cardiovascular disease. In the wake of this update, we reiterate our Buy rating and 12-month price target of \$15.00 per share.
- PIONEER Phase 3 Trial Enrollment Continues. NephroGenex's PIONEER Phase 3 study of its lead candidate Pyridorin for diabetic nephropathy continues clinical site initiation and patient enrollment. We remind investors that it is a double-blind, placebo-controlled registration trial to evaluate the safety and efficacy of oral Pyridorin in reducing the rate of renal disease progression in Type 2 diabetic patients. Management expects to complete the enrollment of approximately 600 patients in summer 2015. We note that NephroGenex has reached agreement with the FDA on an unblinded, event-based interim analysis on 600 patients who have received Pyridorin therapy for at least 6 months, which is estimated to occur in early 2016.
- **Development Timeline.** We note that the firm is required to run two Phase 3 trials of Pyridorin by the FDA. Each of these Phase 3 trials has an estimated cost of \$35mm. If the interim analysis of the first Phase 3 trial reports positive data in early 2016, the firm may seek partnership to start the second Phase 3 trial before the topline data of the first trial are reported in 2017. Investors should be aware that although data from both Phase 3 trials are unlikely to be available before 2019, NephroGenex may be able to submit a NDA with data from the first Phase 3 study only, due to the lack of effective treatment for diabetic nephropathy. The FDA may choose to approve the drug on the condition that the firm will continue to finish the second Phase 3 study, thus providing earlier commercialization and cash flows for the firm. Additionally, the firm has completed a preclinical study of intravenous Pyridorin for ischemic reperfusion induced acute kidney injury (AKI). We believe the firm could bring intravenous Pyridorin into a clinical trial in 2015.
- Cash Runway. The firm had \$26.6mm in cash as of September 30, 2014. On November 20, 2014, NephroGenex announced that it had closed on a \$12mm term loan facility with East West Bank, which included an immediate \$7mm draw, with the additional \$5mm available upon the achievement of certain milestones before the end of May 2015. Following the closing of the loan, the company's cash position was approximately \$31mm. We believe it should provide a runway into 2016.

NephroGenex, Inc.

December 31, 2014

Table 1: NephroGenex, Inc. (NRX) - Historical Income Statements, Financial Projections

FY end December 31

\$ in thousands, except per share data

				2014					2015			
	2012A	2013A	1QA	2QA	3QA	4QE	2014E	1QE	2QE	3QE	4QE	2015E
Revenue												
Product revenue	-	-	-	-	-	-	-	-	-	-	-	-
Service revenue	-	-	-	-	-	-	-	-	-	-	-	-
Total revenue	-	-	-	-	-	-	-	-	-	-	-	-
Expenses												
Cost of revenues	-	-	-	-	-	-	-	-	-	-	-	-
Research and development	2,352	1,479	457	3,875	3,077	3,500	10,909	3,700	3,800	3,900	4,000	15,400
Selling and marketing	-	-	-	-	-	-	-	-	-	-	-	-
General and administrative	350	1,026	1,034	1,560	1,350	1,600	5,544	1,600	1,600	1,600	1,600	6,400
Total expenses	2,702	2,506	1,492	5,435	4,427	5,100	16,454	5,300	5,400	5,500	5,600	21,800
Gain (loss) from operations	(2,702)	(2,506)	(1,492)	(5,435)	(4,427)	(5,100)	(16,454)	(5,300)	(5,400)	(5,500)	(5,600)	(21,800)
Other income/expense												
Interest income (expense)	(200)	(382)	(68)	12	12	(38)	(82)	(96)	(96)	(165)	(165)	(522)
Change in value of preferred stock warrants	(2)	(3,417)	(140)	-	-	- 1	(140)	- '	- '	-	-	-
Other income (expense)	- ` `	-	-	-	-	-	-	-	-	-	-	-
Total investment income and other	(202)	(3,799)	(209)	12	12	(38)	(223)	(96)	(96)	(165)	(165)	(522)
Loss before provision for income taxes	(2,904)	(6,305)	(1,700)	(5,423)	(4,415)	(5,138)	(16,676)	(5,396)	(5,496)	(5,665)	(5,765)	(22,322)
Provision for income taxes	-	-	-	-	-	-	-	-	-	-	-	-
Net loss	(2,904)	(6,305)	(1,700)	(5,423)	(4,415)	(5,138)	(16,676)	(5,396)	(5,496)	(5,665)	(5,765)	(22,322)
Net loss per share (basic)	(9.08)	(19.71)	(0.37)	(0.61)	(0.50)	(0.58)	(2.14)	(0.60)	(0.61)	(0.62)	(0.62)	(2.45)
Net loss per share (diluted)	(9.08)	(19.71)	(0.37)	(0.61)	(0.50)	(0.58)	(2.14)	(0.60)	(0.61)	(0.62)	(0.62)	(2.45)
Weighted average number of shares outstanding (basic)	320	320	4,587	8,855	8,855	8,880	7,794	8,955	9,055	9,155	9,255	9,105
Weighted average number of shares outstanding (diluted)	320	320	4,587	8,855	8,855	8,880	7,794	8,955	9,055	9,155	9,255	9,105

Source: Company Reports and Aegis Capital Corp. estimates

NephroGenex, Inc.

December 31, 2014

Required Disclosures

Price Target

Our 12-month price target is \$15.00 per share.

Valuation Methodology

Given the fact that NephroGenex is currently unprofitable, we use a discounted cash flow-based approach to value the shares. Based on a comparables analysis, we believe that the stock is worth \$15.00 per share, given our estimate of a \$140 million risk-adjusted net present value (rNPV) for the firm's pipeline. This assumes that the firm has roughly 10 million shares outstanding (fully diluted) and \$10 million in cash at the end of 2015.

Risk Factors

Issues that could prevent the achievement of our price objective include, but are not limited to, clinical, regulatory, competitive, reimbursement and financial risks. Drugs in clinical development may not advance due to inadequate safety, efficacy, or tolerability. Regulatory agencies may decline to approve regulatory submissions in a timely manner, or may not approve a drug candidate at all. The firm may require substantial funding to complete the clinical development of its candidates and establish commercial infrastructure, which could be dilutive to current shareholders. We expect competition for the company's drugs from several public and private companies developing pharmaceuticals. Future sales of the firm's drugs could depend upon reimbursement from private, as well as public, reimbursement agencies.

For important disclosures go to www.aegiscap.com.

Research analyst compensation is dependent, in part, upon investment banking revenues received by Aegis Capital Corp.

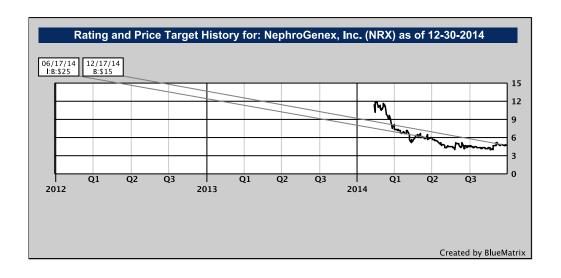
Aegis Capital Corp. intends to seek or expects to receive compensation for investment banking services from the subject company within the next three months.

Aegis Capital Corp. has performed investment banking services for and received fees from NephroGenex, Inc. within the past 12 months.

Aegis Capital Corp. makes a market in NephroGenex, Inc..

NephroGenex, Inc.

December 31, 2014



Investment Banking Services/Past 12 Mos.

Rating	Percent	Percent
BUY [BUY]	83.33	76.67
HOLD [HOLD]	16.67	50.00
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.

Other Disclosures

The information contained herein is based upon sources believed to be reliable but is not guaranteed by us and is not considered to be all inclusive. It is not to be construed as an offer or the solicitation of an offer to sell or buy the securities mentioned herein. Aegis Capital Corp., its affiliates, shareholders, officers, staff, and/or members of their families, may have a position in the securities mentioned herein, and, before or after your receipt of this report, may make or recommend purchases and/or sales for their own accounts or for the accounts of other customers of the Firm from time to time in the open market or otherwise. Opinions expressed are our present opinions only and are subject to change without notice. Aegis Capital is under no obligation to provide updates to the opinions or information provided herein. Additional information is available upon request.

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