COMPANY NOTE

Estimate Change

USA | Healthcare | Biotechnology

May 14, 2014

Jefferies

Price target \$48.00 Price \$16.60

Dicerna Pharmaceuticals (DRNA) **1Q14 DRNA Earnings: Data Readouts Expected in 2015**

Key Takeaway

The next major catalyst for DRNA will be an update from meeting with the FDA on initiation of a DCR-PH1 Phase 1 trial. We believe that, even if the FDA requires a healthy volunteer study first, DRNA is looking at ways in which this study may still be able to validate the drug's mechanism of action. We continue to expect data from this trial and the DCR-MYC Phase 1 trial in 2H15. We maintain our Buy and \$48 price target.

DCR-MYC Phase 1 Trial Began This Quarter. The dose escalation portion for the first DCR-MYC (formerly DCR-M1711) trial in solid tumors, multiple myeloma and lymphoma began this quarter to determine the maximum tolerated dose (MTD) in non-hepatocellular carcinoma (HCC) patients, followed by an expansion cohort at the MTD. A second Phase 1 trial in advanced HCC (likely Nexavar intolerant or failures) is expected to begin in 2H14 and will follow the same MTD and then expansion format. We expect proof-of-concept data in 2H15. DRNA does not believe there will be significant adverse events associated with maximal MYC knockdown, as knockout mice only experienced minor myelosuppression issues. However, with a lesser degree of knockdown than the 70% seen in preclinical models, DRNA believes that DCR-MYC will still be efficacious, as 25% preclinical knockdown was sufficient for an anti-tumor effect.

DCR-PH1 On Track For Phase 1 Initiation In Early 2015. DRNA will select a clinical candidate this year and initiate the Phase 1 trial in Type 1 primary hyperoxaluria (PH1) in early 2015. The company has an upcoming meeting with the FDA to discuss the program and it is still unclear whether the first trial would be in healthy volunteers or PH1 patients. Either a healthy volunteer or patient trial could have efficacy endpoints that look at urinary oxalate excretion, as well as surrogate markers that could be early predictors of efficacy. Even with a healthy volunteer study, we would expect validation of the platform, as volunteers could potentially be fed diets that cause oxalate excretion.

Next Target Expected This Year. DRNA expects to reveal its third drug target this calendar year. The major criteria in selecting targets are: a high likelihood of clinical success and the potential to retain as much of the economics as possible. Thus, we would assume DRNA's priority will continue to be on orphan opportunities like PH1.

Valuation/Risks

We derive our \$48 price target on a DCF based sum-of-parts valuation. Risks include: clinical, regulatory, and commercial.

USD	Prev.	2014E	Prev.	2015E	Prev.	Prev.	
	riev.		riev.		riev.	riev.	
Rev. (MM)		0.0		0.0		 	
EPS							
Mar	(0.39)	(0.56)A				 	
Jun		(0.40)				 	
Sep	(0.43)	(0.42)				 	
Dec	(0.45)	(0.44)				 	
FY Dec	(1.67)	(1.77)	(2.37)	(2.38)		 	
FY P/E		NM		NM			

Limited historical data due to recent company IPO

Financial Summary	
Net Debt (MM):	(\$140.0)
Cash (MM):	\$140.0
Market Data	
52 Week Range:	\$46.00 - \$15.00
Total Entprs. Value (MM):	\$150.5
Market Cap. (MM):	\$290.5
Insider Ownership:	43.3%
Institutional Ownership:	38.3%
Shares Out. (MM):	17.5
Float (MM):	4.8
Avg. Daily Vol.:	183,325

Thomas Wei *

Equity Analyst (212) 284-2326 twei@jefferies.com

Rebecca Forest *

Equity Associate (212) 284-2170 rforest@jefferies.com

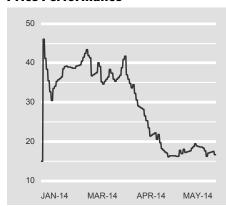
Shaunak Deepak *

Equity Associate (212) 284-2020 sdeepak@jefferies.com

Timothy Chou *

Equity Associate (212) 284-2571 tchou@jefferies.com * Jefferies LLC

Price Performance



DRNA Estimate Change May 14, 2014

Financials And Guidance. DRNA reported a net cash loss in 1Q14 of \$6m and ended the quarter with \$134m in cash. The company continues to expect the current cash balance to be sufficient to fund operations through 2016.

DRNA

Estimate Change

May 14, 2014

DRNA: Historical and Projected Revenue and Earnings

December 31 Fiscal Year (\$000s, except per share)	2012	2013	1Q14A	2Q14E	3Q14E	4Q14E	2014	2015	2016	2017	2018	2019	2020	2021	2022
5.111.51															
End User Sales U.S. PH1 Sales		0	Ö	0	0	0	0	0	0	15,581	63,225	106,783	154,514	201,448	245,079
Ex-U.S. PH1 Sales		0	0	0	0	0	0	0	0	22.073	89,895	155,040	224,326	201,448	355,972
WW PH1 Sales		0	0	-	-	0	0	0	0	,					
		0	0	0	0	0	0	0	0	37,654	153,120	261,823 0	378,840	494,565	601,051
WW DCR-M1711 Sales		U	U	U	U	٥	U	٥	U	0	0	U	66,150	667,229	1,829,961
Dicerna Reported Revenue															
U.S. PH1 Sales		0	0	0	0	0	0	0	0	15,581	63,225	106,783	154,514	201,448	245,079
Ex-U.S. PH1 Royalties		0	0	0	0	0	0	0	0	4,415	19,974	36,512	57,298	77,935	96,792
DCR-M1711 Royalties		0	0	0	0	0	0	0	0	0	0	9,922	100,084	274,494	451,193
Milestones		0	0	0	0	0	0	0	50,000	125,000	25,000	25,000	125,000	75,000	75,000
Other Revenue		0	0	0	0	0	0	0	0	0	0	0	0	0	0
December	7.045		0	•		0	0		50.000	444.000	400 400	470 247	426 007	620.077	000.000
Revenue	7,015	0	0	0	0	0	0	0	50,000	144,996	108,199	178,217	436,897	628,877	868,063
Operating expenses:															
COGS	0	0	0	0	0	0	0	0	0	1,558	5,058	7,475	10,816	14,101	17,156
% of Product Sales	NM	NM	NM	NM	NM	NM	NM	NM	NM	10%	8%	7%	7%	7%	7%
Research and Development	11,551	11,434	3,525	4,750	5,250	5,500	19,025	36,000	50,000	62,000	68,200	75,020	90,024	108,029	129,635
% of Revenue	NM	NM	NM	NM	NM	NM	NM	NM	NM	43%	63%	42%	21%	17%	15%
SG&A	4,589	5,449	2,355	2,400	2,400	2,400	9,555	11,000	18,000	31,000	38,000	41,000	44,300	47,115	49,021
% of Revenue	NM	NM	NM	NM	NM	NM	NM	NM	NM	21%	35%	23%	10%	7%	6%
Total Operating Expenses	16,265	16,883	5,880	7,150	7,650	7,900	28,580	47,000	68,000	94,558	111,258	123,495	145,140	169,245	195,811
Income (Loss) from operations	(9,250)	(16,883)	(5,880)	(7,150)	(7,650)	(7,900)	(28,580)	(47,000)	(18.000)	50,438	(3,059)	54,722	291,757	459,632	672,253
income (Loss) from operations	(9,250)	(10,003)	(3,000)	(7,150)	(7,050)	(7,900)	(20,300)	(47,000)	(18,000)	30,436	(3,039)	34,722	231,737	459,032	0/2,255
Other income (expense):															
Preferred stock warrant remeasurement	469	0	0	0	0	0	0	0	0	0	0	0	0	1	2
Interest income	2	0	0	163	154	144	461	538	599	771	863	964	1,528	2,678	4,427
Loss on extinguishment of debt		0	0	0	0	0	0	0	0	0		0	0	0	0
Interest expense	(1,342)	(1,140)	(153)	(69)	(69)	(69)	(361)	0	0	0		0	0	0	0
·	, , ,	, , ,	. ,			`	, ,								
Total other income (expense)	(871)	(1,140)	(153)	93	84	75	100	538	599	771	863	964	1,528	2,679	4,429
Pre-tax income	(10,121)	(18,023)	(6,033)	(7,057)	(7,566)	(7,825)	(28,480)	(46,462)	(17,401)	51,209	(2,196)	55,686	293,285	462,311	676,682
	, , , = ,	, .,,	,,	, , ,	,,,	, ,	, .,,	, .,,	, , , , -,	- ,	,,,,,	,	,		,
Tax	0	0	0	Ö	0	0	0	0	0	18,947	0	20,604	108,515	171,055	250,372
Tax rate		_	_	_	_	_	_	_	_	37%	0%	37%	37%	37%	37%
Less: Accretion and dividends on redeemable convertible preferred stock	(4,097)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net loss	(14,218)	(18,023)	(6,033)	(7,057)	(7,566)	(7,825)	(28,480)	(46,462)	(17,401)	32,261	(2,196)	35,082	184,769	291,256	426,310
	\$ (516.00)		\$ (0.56) \$		(0.42) \$	(0.44)	. ,	. ,	\$ (0.78)		. ,			\$ 10.70	
Pro forma weighted average shares outstanding	28	29	10,822	17,763	17,813	17,863	16,065	19,553	22,378	24,003	24,678	25,428	26,278	27,228	28,280

Source: Company data, Jefferies Group LLC estimate

5/13/2014

DRNA

Estimate Change

May 14, 2014

DRNA: Historical and Projected Changes in Financial Position

December 31 Fiscal Year (\$000s, except per share)	2012A	2013A	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
CASH FLOWS FROM OPERATING ACTIVITIES:											
Net loss	(10.121)	(18,023)	(28,480)	(46,462)	(17,401)	32,261	(2,196)	35,082	184,769	291,256	426,310
Adjustments to reconcile net loss to net cash used in operating acti	(10,121)	(10,023)	(20,100)	(10,102)	(17,101)	32,201	(2,170)	33,002	101,702	271,230	120,510
Deferred revenue	(1,014)										
Depreciation	551	523	575	632	696	765	842	926	1,019	1,120	1,232
Stock-based compensation		495							.,	.,.=-	-,
Loss on extinguishment of debt	-	318									
Non-cash interest expense	-										
Amortization of debt discount	201	193									
Amortization of debt issuance costs	24	24									
Utilization of NOL Carryforwards			_	_	-	18,947	-	20,604	-	_	_
Decrease in fair value of preferred stock warrant	(469)	(126)				•		•			
Changes in operating assets and liabilities:											
Research and license receivable	(4,857)	5,018	-	-	-	-	-	-	-	-	=
Prepaid expenses and other current assets	28	57									
Accounts payable	(216)	116									
Accrued expenses and other current liabilities	49	1,016									
Deferred rent	(38)	(60)									
Net cash used in operating activities	(15,737)	(10,449)	(27,905)	(45,830)	(16,705)	51,974	(1,354)	56,612	185,788	292,376	427,542
CASH FLOWS FROM INVESTING ACTIVITIES —											
Purchases of property and equipment	(120)	(413)	(496)	(595)	(5,947)	(6,542)	(7,196)	(7,916)	(8,707)	(9,578)	(10,536)
Net cash used in investing activities	(120)	(413)	(496)	(595)	(5,947)	(6,542)	(7,196)	(7,916)	(8,707)	(9,578)	(10,536)
CASH FLOWS FROM FINANCING ACTIVITIES:											
Proceeds from issuance of common stock	7	46	92,955	47,940	46,022	-	-	-	-	-	=
Repurchase of restricted common stock	-	(5)									
Payments of deferred issuance costs	-	(1,399)									
Proceeds from issuance of redeemable convertible preferred stock	-	57,000									
Redeemable convertible preferred stock issuance costs	-	(220)									
Proceeds from long-term debt	-	-									
Proceeds from bridge loan financing	-	3,000									
Payments of long-term debt issuance costs	-	-									
Payments of long-term debt fees	(136)	-									
Repayments of long-term debt principal	(2,834)	(4,140)	(4,587)	(439)							
Net cash provided by (used in) financing activities	(2,963)	54,282	88,368	47,501	46,022	-	-	-	-	-	=
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(18,820)	43,420	59,967	1,077	23,370	45,432	(8,550)	48,696	177,081	282,798	417,006
CASH AND CASH EQUIVALENTS – Beginning of period	22,490	3,670	47,090	107,057	108,133	131 <i>,5</i> 03	176,935	168,385	217,081	394,162	676,960
CASH AND CASH EQUIVALENTS—End of period	3,670	47,090	107,057	108,133	131,503	176,935	168,385	217,081	394,162	676,960	1,093,966

Source: Company data, Jefferies Group LLC estimate

May 13, 2014

DRNA

Estimate Change

May 14, 2014

DRNA: Historical Condensed Balance Sheets

(\$000s)	12/31/2011 1	12/31/2012	9/30/2013	12/31/2013	3/31/201
ASSETS					
CURRENT ASSETS:					
Cash and cash equivalents	22,490	3,670	54,712	46,595	133,792
Research and license agreement receivable	161	5,018	-	-	-
Prepaid expenses and other current assets	372	344	413	2,058	906
Total current assets	23,023	9,032	55,125	48,653	134,698
NONCURRENT ASSETS:					
Property and equipment-net	1,314	883	683	877	911
Restricted cash	264	264	264	264	264
Other assets	36	12	-	-	-
Total noncurrent assets	1,614	1,159	947	1,141	1,175
TOTAL ASSETS	24,637	10,191	56,072	49,794	135,87
LIABILITIES AND STOCKHOLDERS' EQUITY					
CURRENT LIABILITIES:					
Accounts payable	1,414	1,198	1,557	1,700	715
Current portion of long-term debt	2,834	4,140	4,471	4,587	3,785
Deferred revenue	830	-	-	-	-
Deferred rent	-	63	14	105	96
Accrued expenses and other current liabilities	221	270	518	1,286	1,947
Total current liabilities	5,299	5,671	6,560	7,678	6,543
NONCURRENT LIABILITIES:					
Long-term debt-net of current portion	8,735	4,660	1,407	260	-
Preferred stock warrant liability	800	331	436	529	-
Deferred revenue-net of current portion	184	-	-	-	-
	101	-	-	-	-
Deferred rent-net of current portion	9,820	4,991	1,843	789	-
Total noncurrent liabilities	3,020				
Total noncurrent liabilities	15,119	10,662	8,403	8,467	6,54
•	·	10,662 (471)	8,403 47,669	8,467 41,327	6,543 129,330

Source: Company data, Jefferies Group LLC, Inc. estimates May 13,2014

DRNA
Estimate Change
May 14, 2014

Company Description

Dicerna Pharmaceuticals is a Watertown, MA-based therapeutics company focused on developing RNA interference (RNAi) technologies targeting liver and cancer. Dicerna has partnered two oncology development programs with the global pharmaceutical company Kyowa Hakko Kirin Co., Ltd. (KHK) targeting KRAS and CKAP5. DRNA's unpartnered programs are DCR-PH1 for Type 1 primary hyperoxaluria, a rare orphan disease resulting in renal failure, and DCR-M1711 targeting MYC for solid tumors.

Analyst Certification

- I, Thomas Wei, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
- I, Rebecca Forest, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
- I, Shaunak Deepak, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.
- I, Timothy Chou, certify that all of the views expressed in this research report accurately reflect my personal views about the subject security(ies) and subject company(ies). I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this research report.

As is the case with all Jefferies employees, the analyst(s) responsible for the coverage of the financial instruments discussed in this report receives compensation based in part on the overall performance of the firm, including investment banking income. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Aside from certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgement.

Company Specific Disclosures

Jefferies Group LLC makes a market in the securities or ADRs of Dicerna Pharmaceuticals, Inc..

Within the past 12 months, Jefferies Group LLC, its affiliates or subsidiaries has received compensation from investment banking services from Dicerna Pharmaceuticals, Inc..

Within the past twelve months, Dicerna Pharmaceuticals, Inc. has been a client of Jefferies LLC and investment banking services are being or have been provided.

Jefferies Group LLC, its affiliates or subsidiaries has acted as a manager or co-manager in the underwriting or placement of securities for Dicerna Pharmaceuticals, Inc. or one of its affiliates within the past twelve months.

Meanings of Jefferies Ratings

Buy - Describes stocks that we expect to provide a total return (price appreciation plus yield) of 15% or more within a 12-month period.

Hold - Describes stocks that we expect to provide a total return (price appreciation plus yield) of plus 15% or minus 10% within a 12-month period. Underperform - Describes stocks that we expect to provide a total negative return (price appreciation plus yield) of 10% or more within a 12-month period.

The expected total return (price appreciation plus yield) for Buy rated stocks with an average stock price consistently below \$10 is 20% or more within a 12-month period as these companies are typically more volatile than the overall stock market. For Hold rated stocks with an average stock price consistently below \$10, the expected total return (price appreciation plus yield) is plus or minus 20% within a 12-month period. For Underperform rated stocks with an average stock price consistently below \$10, the expected total return (price appreciation plus yield) is minus 20% within a 12-month period.

NR - The investment rating and price target have been temporarily suspended. Such suspensions are in compliance with applicable regulations and/or Jefferies policies.

CS - Coverage Suspended. Jefferies has suspended coverage of this company.

NC - Not covered. Jefferies does not cover this company.

Restricted - Describes issuers where, in conjunction with Jefferies engagement in certain transactions, company policy or applicable securities regulations prohibit certain types of communications, including investment recommendations.

Monitor - Describes stocks whose company fundamentals and financials are being monitored, and for which no financial projections or opinions on the investment merits of the company are provided.

Valuation Methodology

Jefferies' methodology for assigning ratings may include the following: market capitalization, maturity, growth/value, volatility and expected total return over the next 12 months. The price targets are based on several methodologies, which may include, but are not restricted to, analyses of market risk, growth rate, revenue stream, discounted cash flow (DCF), EBITDA, EPS, cash flow (CF), free cash flow (FCF), EV/EBITDA, P/E, PE/growth, P/CF, P/FCF, premium (discount)/average group EV/EBITDA, premium (discount)/average group P/E, sum of the parts, net asset value, dividend returns, and return on equity (ROE) over the next 12 months.

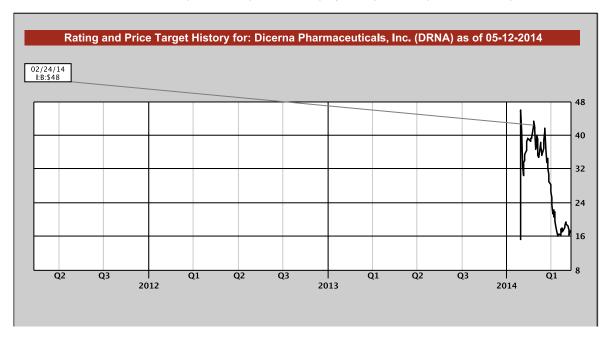
<u>**Jefferies Franchise Picks**</u>

DRNA
Estimate Change
May 14, 2014

Jefferies Franchise Picks include stock selections from among the best stock ideas from our equity analysts over a 12 month period. Stock selection is based on fundamental analysis and may take into account other factors such as analyst conviction, differentiated analysis, a favorable risk/reward ratio and investment themes that Jefferies analysts are recommending. Jefferies Franchise Picks will include only Buy rated stocks and the number can vary depending on analyst recommendations for inclusion. Stocks will be added as new opportunities arise and removed when the reason for inclusion changes, the stock has met its desired return, if it is no longer rated Buy and/or if it underperforms the S&P by 15% or more since inclusion. Franchise Picks are not intended to represent a recommended portfolio of stocks and is not sector based, but we may note where we believe a Pick falls within an investment style such as growth or value.

Risk which may impede the achievement of our Price Target

This report was prepared for general circulation and does not provide investment recommendations specific to individual investors. As such, the financial instruments discussed in this report may not be suitable for all investors and investors must make their own investment decisions based upon their specific investment objectives and financial situation utilizing their own financial advisors as they deem necessary. Past performance of the financial instruments recommended in this report should not be taken as an indication or guarantee of future results. The price, value of, and income from, any of the financial instruments mentioned in this report can rise as well as fall and may be affected by changes in economic, financial and political factors. If a financial instrument is denominated in a currency other than the investor's home currency, a change in exchange rates may adversely affect the price of, value of, or income derived from the financial instrument described in this report. In addition, investors in securities such as ADRs, whose values are affected by the currency of the underlying security, effectively assume currency risk.



Distribution of Ratings

			IB Serv./Past 12 Mos.			
Rating	Count	Percent	Count	Percent		
BUY	909	49.73%	246	27.06%		
HOLD	773	42.29%	133	17.21%		
UNDERPERFORM	146	7.99%	5	3.42%		

DRNA Estimate Change May 14, 2014

Other Important Disclosures

Jefferies Equity Research refers to research reports produced by analysts employed by one of the following Jefferies Group LLC ("Jefferies") group companies:

United States: Jefferies LLC which is an SEC registered firm and a member of FINRA.

United Kingdom: Jefferies International Limited, which is authorized and regulated by the Financial Conduct Authority; registered in England and Wales No. 1978621; registered office: Vintners Place, 68 Upper Thames Street, London EC4V 3BJ; telephone +44 (0)20 7029 8000; facsimile +44 (0)20 7029 8010.

Hong Kong: Jefferies Hong Kong Limited, which is licensed by the Securities and Futures Commission of Hong Kong with CE number ATS546; located at Suite 2201, 22nd Floor, Cheung Kong Center, 2 Queen's Road Central, Hong Kong.

Singapore: Jefferies Singapore Limited, which is licensed by the Monetary Authority of Singapore; located at 80 Raffles Place #15-20, UOB Plaza 2, Singapore 048624, telephone: +65 6551 3950.

Japan: Jefferies (Japan) Limited, Tokyo Branch, which is a securities company registered by the Financial Services Agency of Japan and is a member of the Japan Securities Dealers Association; located at Hibiya Marine Bldg, 3F, 1-5-1 Yuraku-cho, Chiyoda-ku, Tokyo 100-0006; telephone +813 5251 6100; facsimile +813 5251 6101.

India: Jefferies India Private Limited (CIN - U74140MH2007PTC200509), which is licensed by the Securities and Exchange Board of India as a Merchant Banker (INM000011443) and a Stock Broker with Bombay Stock Exchange Limited (INB011491033) and National Stock Exchange of India Limited (INB231491037) in the Capital Market Segment; located at 42/43, 2 North Avenue, Maker Maxity, Bandra-Kurla Complex, Bandra (East) Mumbai 400 051, India; Tel +91 22 4356 6000.

This material has been prepared by Jefferies employing appropriate expertise, and in the belief that it is fair and not misleading. The information set forth herein was obtained from sources believed to be reliable, but has not been independently verified by Jefferies. Therefore, except for any obligation under applicable rules we do not quarantee its accuracy. Additional and supporting information is available upon request. Unless prohibited by the provisions of Regulation S of the U.S. Securities Act of 1933, this material is distributed in the United States ("US"), by Jefferies LLC, a US-registered broker-dealer, which accepts responsibility for its contents in accordance with the provisions of Rule 15a-6, under the US Securities Exchange Act of 1934. Transactions by or on behalf of any US person may only be effected through lefferies LLC. In the United Kingdom and European Economic Area this report is issued and/or approved for distribution by Jefferies International Limited and is intended for use only by persons who have, or have been assessed as having, suitable professional experience and expertise, or by persons to whom it can be otherwise lawfully distributed. Jefferies International Limited has adopted a conflicts management policy in connection with the preparation and publication of research, the details of which are available upon request in writing to the Compliance Officer. Jefferies International Limited may allow its analysts to undertake private consultancy work. Jefferies International Limited's conflicts management policy sets out the arrangements Jefferies International Limited employs to manage any potential conflicts of interest that may arise as a result of such consultancy work. For Canadian investors, this material is intended for use only by professional or institutional investors. None of the investments or investment services mentioned or described herein is available to other persons or to anyone in Canada who is not a "Designated Institution" as defined by the Securities Act (Ontario). In Singapore, Jefferies Singapore Limited is regulated by the Monetary Authority of Singapore. For investors in the Republic of Singapore, this material is provided by Jefferies Singapore Limited pursuant to Regulation 32C of the Financial Advisers Regulations. The material contained in this document is intended solely for accredited, expert or institutional investors, as defined under the Securities and Futures Act (Cap. 289 of Singapore). If there are any matters arising from, or in connection with this material, please contact Jefferies Singapore Limited, located at 80 Raffles Place #15-20, UOB Plaza 2, Singapore 048624, telephone: +65 6551 3950. In Japan this material is issued and distributed by Jefferies (Japan) Limited to institutional investors only. In Hong Kong, this report is issued and approved by Jefferies Hong Kong Limited and is intended for use only by professional investors as defined in the Hong Kong Securities and Futures Ordinance and its subsidiary legislation. In the Republic of China (Taiwan), this report should not be distributed. The research in relation to this report is conducted outside the PRC. This report does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. In India this report is made available by Jefferies India Private Limited. In Australia this information is issued solely by Jefferies International Limited and is directed solely at wholesale clients within the meaning of the Corporations Act 2001 of Australia (the "Act") in connection with their consideration of any investment or investment service that is the subject of this document. Any offer or issue that is the subject of this document does not require, and this document is not, a disclosure document or product disclosure statement within the meaning of the Act. Jefferies International Limited is authorised and regulated by the Financial Conduct Authority under the laws of the United Kingdom, which differ from Australian laws. Jefferies International Limited has obtained relief under Australian Securities and Investments Commission Class Order 03/1099, which conditionally exempts it from holding an Australian financial services licence under the Act in respect of the provision of certain financial services to wholesale clients. Recipients of this document in any other jurisdictions should inform themselves about and observe any applicable legal requirements in relation to the receipt of this document.

This report is not an offer or solicitation of an offer to buy or sell any security or derivative instrument, or to make any investment. Any opinion or estimate constitutes the preparer's best judgment as of the date of preparation, and is subject to change without notice. Jefferies assumes no obligation to maintain or update this report based on subsequent information and events. Jefferies, its associates or affiliates, and its respective officers, directors, and employees may have long or short positions in, or may buy or sell any of the securities, derivative instruments or other investments mentioned or described herein, either as agent or as principal for their own account. Upon request Jefferies may provide specialized research products or services to certain customers focusing on the prospects for individual covered stocks as compared to other covered stocks over varying time horizons or under differing market conditions. While the views expressed in these situations may not always be directionally consistent with the long-term views expressed in the analyst's published research, the analyst has a reasonable basis and any inconsistencies can be reasonably explained. This material does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this report is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of the investments referred to herein and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange

Thomas Wei, Equity Analyst, (212) 284-2326, twei@jefferies.com

DRNAEstimate Change

May 14, 2014

rates could have adverse effects on the value or price of, or income derived from, certain investments. This report has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of securities. None of Jefferies, any of its affiliates or its research analysts has any authority whatsoever to make any representations or warranty on behalf of the issuer(s). Jefferies policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis. Any comments or statements made herein are those of the author(s) and may differ from the views of Jefferies.

This report may contain information obtained from third parties, including ratings from credit ratings agencies such as Standard & Poor's. Reproduction and distribution of third party content in any form is prohibited except with the prior written permission of the related third party. Third party content providers do not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Third party content providers shall not be liable for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs) in connection with any use of their content, including ratings. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase, hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.

Jefferies research reports are disseminated and available primarily electronically, and, in some cases, in printed form. Electronic research is simultaneously available to all clients. This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of Jefferies. Neither Jefferies nor any officer nor employee of Jefferies accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this report or its contents.

For Important Disclosure information, please visit our website at https://javatar.bluematrix.com/sellside/Disclosures.action or call 1.888.JEFFERIES

© 2014 Jefferies Group LLC