

July 21, 2014

HEALTHCARE/BIO TECHNOLOGY

Stock Rating:

PERFORM

12-18 mo. Price Target NA
KPTI - NASDAQ \$34.10

3-5 Yr. EPS Gr. Rate NM
52-Wk Range \$47.98-\$15.50
Shares Outstanding 29.8M
Float 8.4M
Market Capitalization \$1,098.4M
Avg. Daily Trading Volume 438,213
Dividend/Div Yield NA/NM
Book Value \$4.87
Fiscal Year Ends Dec
2014E ROE NM
LT Debt NA
Preferred NA
Common Equity \$144M
Convertible Available No

EPS Diluted	Q1	Q2	Q3	Q4	Year	Mult.
2013A	(2.52)	(2.97)	(3.66)	(2.00)	(5.59)	NM
2014E	(0.46)A	(0.50)	(0.49)	(0.57)	(2.03)	NM
2015E	--	--	--	--	(3.04)	NM

Reflects 1:3.3 reverse stock split effective October 2013.

Revenue (\$/mil)	Q1	Q2	Q3	Q4	Year	Mult.
2013A	0.2	0.1	0.0	0.0	0.4	NM
2014E	0.2A	0.2	0.2	0.2	0.8	NM
2015E	--	--	--	--	2.0	NM

Karyopharm Therapeutics

2H14 Data Roadmap

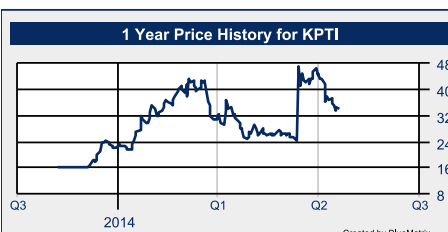
SUMMARY

The 2H14 data disclosure plan for Selinexor's Phase 1 program has been a key discussion point for investors following our July 7 [assumption of coverage note](#). Updates on the R/R myeloma study (Selinexor + dexamethasone) are of particular interest given the stock's recent ~95% move on EHA data showing a 50% ORR in eight myeloma patients dosed at 45 mg/m². We expect the next myeloma update at ASH 2014 (there had been speculation of ESMO) for two more patients at 45 mg/m² and 10 new patients at 60 mg/m², plus duration updates on the initial eight. For ESMO, we expect incremental Phase 1 updates on solid tumors (i.e. sarcoma, prostate, gynecologic).

KEY POINTS

- **Big Myeloma Update: ASH 2014.** Data in 12 additional patients will be key to assessing reliability of the early 50% ORR, particularly since response rates for dexamethasone alone can range from ~30-60%. Moreover, the ~33% higher 60 mg/m² Selinexor dose should provide important clues on any incremental contribution to the response rate over dexamethasone.
- **Dexamethasone Dosing Clarification.** There may be some confusion among investors regarding dexamethasone dosing in the Phase 1. We understand patients could receive 4-8 mg dexamethasone PRN for supportive care (anorexia) in the single-agent cohort, but not in the low-dose dex combo arm. Therefore, the 50% ORR was unlikely driven by atypically high dex doses.
- **ESMO, then ASH for Solid Tumors.** We expect some solid tumor updates at ESMO and we are specifically interested in PFS in R/R sarcoma (~4 months by [our prior analysis](#)) where we assume ~30% peak share. We expect a bigger solid tumor update at Karyopharm's ASH investor event (outside the context of ASH abstracts).
- **Investigator-Sponsored Trials to Provide More Myeloma Data Points.** Three combination ISPs in myeloma (+ Kypolis 2H14 start, + Pomalyst/dex 2H14 start, + Doxil underway) could provide important insights into Selinexor's potential with approved agents, especially given recent interest in the dex combo data. See Exhibit 1 inside for recent ISPs posted to clinicaltrials.gov and planned.

Stock Price Performance



Company Description

Karyopharm Therapeutics is a clinical-stage biotechnology company focused on discovery and development of novel first-in-class drugs directed against nuclear transport targets for the treatment of blood cancers and solid tumors.

Oppenheimer & Co. Inc. does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. See "Important Disclosures and Certifications" section at the end of this report for important disclosures, including potential conflicts of interest. See "Price Target Calculation" and "Key Risks to Price Target" sections at the end of this report, where applicable.

Exhibit 1**Announced and Planned Investigator-Sponsored Trials of Selinexor**

Academic Sponsor	Indication	Selinexor Combined with "X"	Phase	Expected Completion Date	Clinicaltrials.gov Identifier
Barbara Ann Karmanos Cancer Institute	Metastatic Pancreatic Cancer	Gemcitabine + Abraxane	1/2	3Q15	NCT02178436
H.Lee Moffitt Cancer Center	R/R Multiple Myeloma	Pegylated Liposomal Doxorubicin	1/2	1Q16	NCT02186834
National University Hospital, Singapore	Solid tumors (Asian patients)	NA	1	1Q17	NCT02078349
Sheba Medical Center	Neoadjuvant Locally Advanced Rectal Cancer	Standard Chemoradiation	1	3Q17	NCT02137356
Ohio State University Comprehensive Cancer Center	R/R Acute Myeloid Leukemia	Decitabine	1	3Q17	NCT02093403
Ohio State University Comprehensive Cancer Center	Unresectable melanoma	NA	1	3Q17	NCT02120222
Dana Farber Cancer Institute	R/R Childhood ALL and AML	NA	1	2Q18	NCT02091245
TBD	R/R Multiple Myeloma	Kyprolis	TBD	TBD	Not Yet Listed
TBD	R/R Multiple Myeloma	Pomalyst + dex	TBD	TBD	Not Yet Listed
TBD	Colon & Lung	Irinotecan	TBD	TBD	Not Yet Listed
TBD	Gynecologic cancers	Paclitaxel + carboplatin	TBD	TBD	Not Yet Listed
TBD	R/R Acute Myeloid Leukemia	Nexavar	TBD	TBD	Not Yet Listed
TBD	R/R Acute Myeloid Leukemia	Low dose Ara-C	TBD	TBD	Not Yet Listed
TBD	R/R CLL	Imbruvica	TBD	TBD	Not Yet Listed
TBD	R/R DLBCL	R-CHOP	TBD	TBD	Not Yet Listed

Sources: Karyopharm presentations, Oppenheimer Research.

Investment Thesis

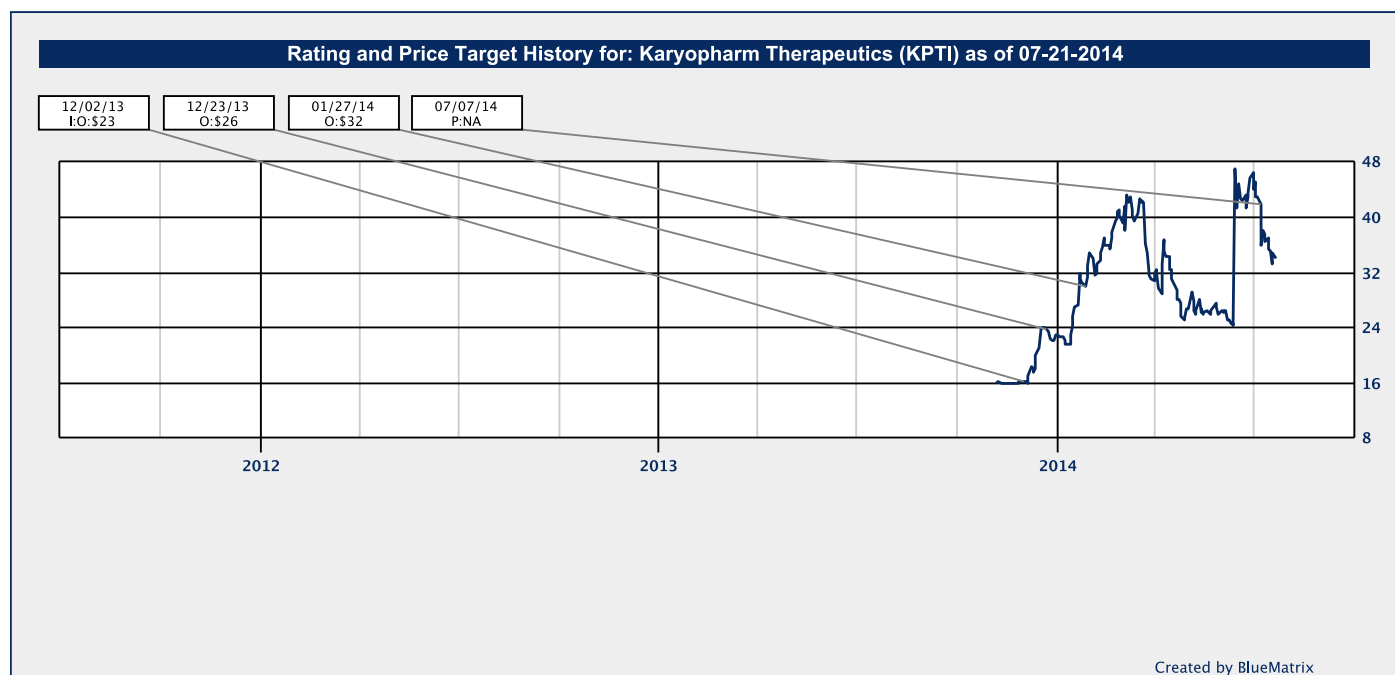
We believe Karyopharm shares are currently fairly valued. The emerging Phase 1 data for Karyopharm's lead drug Selinexor suggest to us fair-to-good chances of approval as a salvage therapy in several advanced cancers. We focus our work on myeloma, DLBCL, elderly AML and sarcoma, where we currently see the strongest efficacy data and where modest share and duration assumptions in the relapsed/refractory setting support the current valuation. We see room for upside if maturing Phase 1 data (and readouts from newly-initiated Phase 2 trials) can support: **1)** increased duration of treatment in myeloma, DLBCL, elderly AML and sarcoma; and **2)** better defined signals of activity in additional blood cancers and/or solid tumors.

Important Disclosures and Certifications

Analyst Certification - The author certifies that this research report accurately states his/her personal views about the subject securities, which are reflected in the ratings as well as in the substance of this report. The author certifies that no part of his/her compensation was, is, or will be directly or indirectly related to the specific recommendations or views contained in this research report.

Potential Conflicts of Interest:

Equity research analysts employed by Oppenheimer & Co. Inc. are compensated from revenues generated by the firm including the Oppenheimer & Co. Inc. Investment Banking Department. Research analysts do not receive compensation based upon revenues from specific investment banking transactions. Oppenheimer & Co. Inc. generally prohibits any research analyst and any member of his or her household from executing trades in the securities of a company that such research analyst covers. Additionally, Oppenheimer & Co. Inc. generally prohibits any research analyst from serving as an officer, director or advisory board member of a company that such analyst covers. In addition to 1% ownership positions in covered companies that are required to be specifically disclosed in this report, Oppenheimer & Co. Inc. may have a long position of less than 1% or a short position or deal as principal in the securities discussed herein, related securities or in options, futures or other derivative instruments based thereon. Recipients of this report are advised that any or all of the foregoing arrangements, as well as more specific disclosures set forth below, may at times give rise to potential conflicts of interest.



All price targets displayed in the chart above are for a 12- to 18-month period. Prior to March 30, 2004, Oppenheimer & Co. Inc. used 6-, 12-, 12- to 18-, and 12- to 24-month price targets and ranges. For more information about target price histories, please write to Oppenheimer & Co. Inc., 85 Broad Street, New York, NY 10004, Attention: Equity Research Department, Business Manager.

Oppenheimer & Co. Inc. Rating System as of January 14th, 2008:

Outperform(O) - Stock expected to outperform the S&P 500 within the next 12-18 months.

Perform (P) - Stock expected to perform in line with the S&P 500 within the next 12-18 months.

Underperform (U) - Stock expected to underperform the S&P 500 within the next 12-18 months.

Not Rated (NR) - Oppenheimer & Co. Inc. does not maintain coverage of the stock or is restricted from doing so due to a potential conflict of interest.

Oppenheimer & Co. Inc. Rating System prior to January 14th, 2008:

Buy - anticipates appreciation of 10% or more within the next 12 months, and/or a total return of 10% including dividend payments, and/or the ability of the shares to perform better than the leading stock market averages or stocks within its particular industry sector.

Neutral - anticipates that the shares will trade at or near their current price and generally in line with the leading market averages due to a perceived absence of strong dynamics that would cause volatility either to the upside or downside, and/or will perform less well than higher rated companies within its peer group. Our readers should be aware that when a rating change occurs to Neutral from Buy, aggressive trading accounts might decide to liquidate their positions to employ the funds elsewhere.

Sell - anticipates that the shares will depreciate 10% or more in price within the next 12 months, due to fundamental weakness perceived in the company or for valuation reasons, or are expected to perform significantly worse than equities within the peer group.

Distribution of Ratings/IB Services Firmwide				
Rating	Count	IB Serv/Past 12 Mos.		Count
		Percent	Percent	
OUTPERFORM [O]	312	52.17		142
PERFORM [P]	276	46.15		95
UNDERPERFORM [U]	10	1.67		3

Although the investment recommendations within the three-tiered, relative stock rating system utilized by Oppenheimer & Co. Inc. do not correlate to buy, hold and sell recommendations, for the purposes of complying with FINRA rules, Oppenheimer & Co. Inc. has assigned buy ratings to securities rated Outperform, hold ratings to securities rated Perform, and sell ratings to securities rated Underperform.

Company Specific Disclosures

Oppenheimer & Co. Inc. makes a market in the securities of KPTI.

Oppenheimer & Co. Inc. expects to receive or intends to seek compensation for investment banking services in the next 3 months from KPTI.

In the past 12 months Oppenheimer & Co. Inc. has received compensation for investment banking services from KPTI.

In the past 12 months Oppenheimer & Co. Inc. has managed or co-managed a public offering of securities for KPTI.

In the past 12 months Oppenheimer & Co. Inc. has provided investment banking services for KPTI.

Additional Information Available

Please log on to <http://www.opco.com> or write to Oppenheimer & Co. Inc., 85 Broad Street, New York, NY 10004, Attention: Equity Research Department, Business Manager.

Other Disclosures

This report is issued and approved for distribution by Oppenheimer & Co. Inc., a member of the New York Stock Exchange ("NYSE"), NASD and SIPC. This report is provided, for informational purposes only and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such offer or solicitation would be prohibited.

The securities mentioned in this report may not be suitable for all types of investors. This report does not take into account the investment objectives, financial situation or specific needs of any particular client of Oppenheimer & Co. Inc. Recipients should consider this report as only a single factor in making an investment decision and should not rely solely on investment recommendations contained herein, if any, as a substitution for the exercise of independent judgment of the merits and risks of investments. Before making an investment decision with respect to any security recommended in this report, the recipient should consider whether such recommendation is appropriate given the recipient's particular investment needs, objectives and financial circumstances. Non-client recipients of this report who are not institutional investor clients of Oppenheimer & Co. Inc. should consult with an independent financial advisor prior to making any investment decision based on this report or for any necessary explanation of its contents. Oppenheimer & Co. Inc. will not treat non-client recipients as its clients solely by virtue of their receiving this report.

Past performance is not a guarantee of future results, and no representation or warranty, express or implied, is made regarding future performance of any security mentioned in this report. The price of the securities mentioned in this report and the income they produce may fluctuate and/or be adversely affected by exchange rates, and investors may realize losses on investments in such securities, including the loss of investment principal. Oppenheimer & Co. Inc. accepts no liability for any loss arising from the use of information contained in this report, except to the extent that liability may arise under specific statutes or regulations applicable to Oppenheimer & Co. Inc.

Information, opinions and statistical data contained in this report were obtained or derived from sources believed to be reliable, but Oppenheimer & Co. Inc. does not represent that any such information, opinion or statistical data is accurate or complete (with the exception of information contained in the Important Disclosures section of this report provided by Oppenheimer & Co. Inc. or individual research analysts), and they should not be relied upon as such. All estimates, opinions and recommendations expressed herein constitute judgments as of the date of this report and are subject to change without notice.

Nothing in this report constitutes legal, accounting or tax advice. Since the levels and bases of taxation can change, any reference in this report to the impact of taxation should not be construed as offering tax advice on the tax consequences of investments. As with any investment having potential tax implications, clients should consult with their own independent tax adviser.

This report may provide addresses of, or contain hyperlinks to, Internet web sites. Oppenheimer & Co. Inc. has not reviewed the linked Internet web site of any third party and takes no responsibility for the contents thereof. Each such address or hyperlink is provided solely for the recipient's convenience and information, and the content of linked third-party web sites is not in any way incorporated into this document. Recipients who choose to access such third-party web sites or follow such hyperlinks do so at their own risk.

© 2014 Oppenheimer & Co. Inc. and All rights reserved. Unauthorized use, distribution, duplication or disclosure without the prior written permission of Oppenheimer & Co. Inc. is prohibited by law and may result in prosecution.

This report or any portion hereof may not be reprinted, sold, or redistributed without the written consent of Oppenheimer & Co. Inc. Copyright © Oppenheimer & Co. Inc. 2014.