Equity Research

Concert Pharmaceuticals, Inc.

CNCE: Q1--'354 MAD Data Soon--Promising '499 Fibrosis Data

- **Summary:** On May 14, CNCE reported Q1 2014 earnings. Overall, we are encouraged by the continued progress with '354 and '499, as well as the partnered programs--for which the expedited paths remain on the table. We continue to believe Concert's valuation does not fully reflect the potential of its many proprietary and partnered programs. Adjusting 2014E/2015E EPS to -\$1.88/-\$0.74 from -\$1.71/-\$0.66.
- **Financials:** Concert reported a net loss of \$7.0MM, or EPS of -\$0.76, and ended Q1 with cash and equivalents of \$108.0MM. A slight uptick in quarterly R&D expense to \$5.6MM from \$5.0MM in Q1 2013 reflected increased spending on clinical development of '354. The company indicated that its current cash should be sufficient to fund operations into 2016.
- Phase II MAD study for '354 progressing rapidly, with tox study completing. The phase II MAD study for '354 appears to be progressing well, and initial receptor occupancy data--key for helping to determine whether the drug's therapeutic window could be broader than a standard benzo--is expected midyear, if anything, slightly sooner than expected. The company also noted it completed enrollment in the tox study, which could be important in enabling regulatory sign-off for higher doses potentially necessary in other indications such as anxiety. Though early, we continue to believe '354 has a promising profile that could address the significant limitations of benzos.
- '499 mechanism becoming clearer--could help in near-term regulatory discussions. The company remains encouraged by recently-reported effects of '499 in CKD, showing improvements in fibrotic biomarkers, which CNCE believes indicates an underlying mechanism of preventing the collagen deposition that causes disease progression; we agree that this could explain the apparent longer time course of action and increase the likelihood the drug is conferring true benefits, despite mixed data from the study. An end-of-phase II should come around mid-year, and we believe should set it up for a potential collaboration.

Valuation Range: \$21.00 to \$23.00

Our valuation range is based on applying a 30x multiple to our 2022 estimated EPS and discounting at 15%, blended with 6x multiple of 2022 estimated sales, and discounting 12%. Key risks, in our view, are failure of '354 and/or '499 to show efficacy in subsequent studies and regulatory hurdles in spasticity or CKD.

Investment Thesis:

We believe Concert's proprietary and partnered candidates, and drug deuteration platform, will generate long-term value.

Please see page 4 for rating definitions, important disclosures and required analyst certifications All estimates/forecasts are as of 05/14/14 unless otherwise stated.

Wells Fargo Securities, LLC 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 the report and investors should consider this report as only a single factor in making their investment decision.



Outperform / V

Sector: Biotechnology Market Weight

Earnings Estimate Revised Down

•	2013A	2014	E	2015	E
EPS		Curr.	Prior	Curr.	Prior
Q1 (Mar.)	NE	(\$0.76) A	(0.52)	NE	
Q2 (June)	NE	(0.32)	(0.30)	NE	
Q3 (Sep.)	NE	(0.45)	(0.44)	NE	
Q4 (Dec.)	(4.66)	(0.49)	(0.47)	NE	
FY	(\$4.99)	(\$1.88)	(1.71)	(\$0.74)	(0.66)
CY	(\$4.99)	(\$1.88)		(\$0.74)	
FY P/E	NM	NM		NM	
Rev.(MM)	\$25,408	\$6,253		\$22,520	

Source: Company Data, Wells Fargo Securities, LLC estimates, and Reuters $NA = Not \ Available, \ NC = No \ Change, \ NE = No \ Estimate, \ NM = Not \ Meaningful \ V = Volatile, \ = Company is on the Priority Stock List$

Ticker	CNCE
Price (05/14/2014)	\$9.85
52-Week Range:	\$7-17
Shares Outstanding: (MM)	17.9
Market Cap.: (MM)	\$176.2
S&P 500:	1,894.38
Avg. Daily Vol.:	113,641
Dividend/Yield:	\$0.00/0.0%
LT Debt: (MM)	\$0.0
LT Debt/Total Cap.:	0.0%
ROE:	NM
3-5 Yr. Est. Growth Rate:	NM
CY 2014 Est. P/E-to-Growth:	NM
Last Reporting Date:	05/14/2014
	Before Open

Source: Company Data, Wells Fargo Securities, LLC estimates, and Reuters

Brian Abrahams, M.D., Senior Analyst

(212) 214-8060 /

brian.abrahams@wellsfargo.com

Matthew J. Andrews, Associate Analyst (617) 603-4218 /

matthew.j.andrews@wellsfargo.com

Shin Kang, Ph.D., Associate Analyst

(212) 214-5036

shin.kang@wellsfargo.com

Together we'll go far



Company Description:

Concert Pharmaceuticals (CNCE), Inc., headquartered in Lexington, Massachusetts, is a biotechnology company focused on improving therapies in a variety of areas such as neurology and kidney disease, using its platform technology around deuterium substitution. The company's lead development candidate is CTP-354, a GABA-A partial agonist in development for muscle spasticity. Another development candidate is CTP-499, a phosphodiesterase enzyme inhibitor in development for diabetic kidney disease. Alongside '354 and '499, its partnered pipeline includes CTP-730, a deuterated anti-inflammatory drug partnered with Celgene, AVP-786 for major depressive disorder partnered with Avanir, and JZP-386, a deuterated version of Xyrem for narcolepsy, partnered with Jazz.

Upcoming Milestones

Product	Event	Timeline	
CTP-354	Data from Ph.I MAD study, GABA _A receptor occupancy study	mid-2014	
	Preclinical toxicology study of higher doses, to enable dosing >6mg/day in clinical trials	mid-2014	
	Initiate ph.II trials in MS/SCI spasticity patients	year-end 2014	*
	Report ph.II spasticity results	1H16	•
CPT-499	End-of-ph.II meeting with FDA	mid-2014	
	Sign partnership agreement	2H14+	
AVP-786	Ph.II for treatment-resistant MDD initiation	2H14	
CTP-730	Ph.I study initiation	2H14	
JZP-386	Ph.I study initiation	2014	

Source: Company reports and Wells Fargo Securities, LLC estimates

Product Pipeline

Product (partner)	Indication/mechanism	Status
CTP-354	Spasticity, anxiety, pain; subtype selective GABAa receptor modulator	Phase I
CTP-499	Diabetic nephropathy; multi-subtype selective inhibitor of phosphodiesterases	Phase II
AVP-786 (AVNR)	Neurologic and psychiatric disorders, depresion; deuterium- substituted dextromethorphan analog plus low-dose quinidine	Entering phase II
CTP-730 (CELG)	Inflammatory diseases	Entering phase I
JZP-386 (JZP)	Narcolepsy; deuterium-substituted Xyrem analog	Entering phase I
C-10068	Pain and seizures; deuterium-substituted dextromethorphan/analog	Preclinical
d-ivacaftor	CF, COPD	Preclinical
d-praziquantel (NIH)	Parasitic diseases	Preclinical

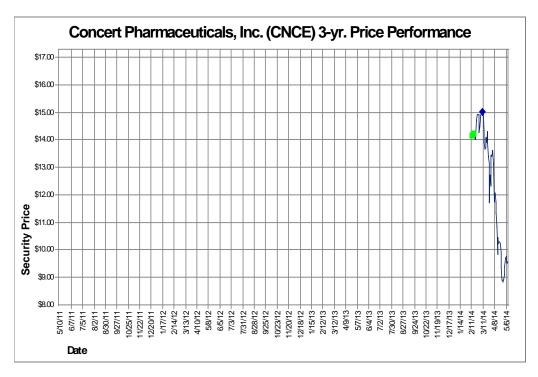
Source: Company reports and Wells Fargo Securities, LLC

Concert Pharma (CNCE) Statement of Operations (Income Statement)

	2012A	1QA	2013A	1QE	2QE	3QE	4QE	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E
Revenues (1)																	
Revenues from CTP-354														\$48,920	\$102,009	\$251,076	\$432,811
Royalties from sales of CTP-499												\$15,202	\$33,127	\$54,922	\$79,442	\$106,951	\$137,737
Royalties from sales of AVP-786															\$10,032	\$23,732	\$41,304
Royalties from sales of JZP-386																\$24,733	\$62,972
Milestones	\$1,500	\$2,000	\$2,000	\$0	\$2,000	\$0	\$0	\$2,000	\$14,000	\$30,000	\$15,000	\$34,000	\$45,000	\$0	\$48,000	\$72,000	\$15,000
icense and research and development revenue	\$11,349	\$3,873	\$23,408	\$1,613	\$880	\$880	\$880	\$4,253	\$8,520	\$12,520	\$12,520	\$12,520	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000
Fotal revenues, net	\$12,849	\$5,873	\$25,408	\$1,613	\$2,880	\$880	\$880	\$6,253	\$22,520	\$42,520	\$27,520	\$61,722	\$87,127	\$112,843	\$248,483	\$487,493	\$698,824
Expenses Onet of monds solid														\$4.892	69 689	\$15.536	\$22,622
Research and development	\$24,193	\$5,039	\$21,790	\$5,594	\$5,700	\$6,100	\$6,700	\$24,094	\$24,817	\$25,561	\$26,328	\$27,118	\$27,932	\$28,769	\$29,633	\$30,522	\$31,437
Selling, general and administrative	\$7,266	\$1,964		\$2,538	\$2,600	\$2,700	\$2,900	\$10,738	\$11,275	\$11,726	\$12,195	\$14,634	\$32,195	\$54,731	\$82,096	\$102,620	\$102,620
otal operating expenses	\$31,459	\$7,003	29,818	\$8,132	\$8,300	\$8,800	\$9,600	\$34,832	\$36,092	\$37,287	\$38,523	\$41,752	\$60,126	\$88,392	\$121,397	\$148,678	\$156,680
Operating Income	(\$18,610)	(\$1,130)	(\$4,410)	(\$6,519)	(\$5,420)	(\$7,920)	(\$8,720)	(\$28,579)	(\$13,572)	\$5,233	(\$11,003)	\$19,970	\$27,001	\$24,450	\$127,086	\$338,815	\$542,144
nvestment income	\$22	\$0	\$21	\$0	\$26	\$24	\$22	\$72	26\$	\$127	\$132	\$122	\$133	\$175	\$262	\$469	\$828
interest and other expense	(\$1,856)	(\$649)	(\$1,667)	(\$431)	(\$265)	(\$207)	(\$148)	(\$1,051)	(\$294)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CTP-499 commercialization payment to GSK												(\$2,750)					
Loss) income before benefit from income taxes	(\$20,444)	(\$1,779)	(\$6,056)	(\$6,950)	(\$2,658)	(\$8,103)	(\$8,846)	(\$29,558)	(\$13,769)	\$5,360	(\$10,871)	\$17,342	\$27,134	\$24,625	\$127,348	\$339,284	\$543,002
Benefit (expense) from income taxes	0\$	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	(\$347)	(\$543)	(\$492)	(\$7,641)	(\$27,143)	(\$59,730)
Net (loss) income	(\$20,444)	(\$1,779)	(\$6,056)	(\$6,950)	(\$2,658)	(\$8,103)	(\$8,846)	(\$29,558)	(\$13,769)	\$5,360	(\$10,871)	\$16,995	\$26,591	\$24,132	\$119,708	\$312,142	\$483,272
Accretion on redeemable convertible preferred stock	(\$388)	(86\$)	(\$396)	(\$22)	(\$100)	(\$100)	(\$100)	(\$322)	(\$300)	\$0	0\$	0\$	\$0	0\$	\$0	\$0	\$0
Net loss applicable to common shareholders	(\$20,832)	(\$1,877)	(\$6,452)	(\$2,005)	(\$2,758)	(\$8,203)	(\$8,946)	(\$29,913)	(\$14,069)	\$5,360	(\$10,871)	\$16,995	\$26,591	\$24,132	\$119,708	\$312,142	\$483,272
Earnings per share (EPS)	(\$16.15)	(\$1.46)	(\$4.99)	(\$0.76)	(\$0.32)	(\$0.45)	(\$0.49)	(\$1.88)	(\$0.74)	\$0.25	(\$0.54)	\$0.75	\$1.14	\$0.94	\$4.56	\$11.62	\$17.59
Shares Outstanding (Basic)	1,290	1,290	1,292	9,188	17,900	18,100	18,300	15,872	18,900	19,500	20,100	20,700	21,300	23,566	24,166	24,766	25,366
Shares Outstanding (Diluted)	1,290	13,237	13,237	11,296	20,008	20,208	20,408	17,980	21,008	21,608	22,208	22,808	23,408	25,674	26,274	26,874	27,474
Source: Company; Wells Fargo Securities, LLC estimates																	
Note: We do not provide estimates of 2015 quarterly EPS at this point.	at																

Note: In 000's \$, except per share amounts; FY ends 12/31 (1) Not probability weighted

Required Disclosures



	Date	Publication Price (\$)	Rating Code	Val. Rng. Low	Val. Rng. High	Close Price (\$)
	2/13/2014		IPO at \$14.00			
	3/10/2014		Abrahams, M.D.			
•	3/10/2014	14.88	1	21.00	23.00	15.03

Source: Wells Fargo Securities, LLC estimates and Reuters data

Sym	bol Key			Rat	ing Code Key		
▼	Rating Downgrade	•	Initiation, Resumption, Drop or Suspend	1	Outperform/Buy	SR	Suspended
A	Rating Upgrade		Analyst Change	2	Market Perform/Hold	NR	Not Rated
•	Valuation Range Change		Split Adjustment	3	Underperform/Sell	NE	No Estimate

Additional Information Available Upon Request

I certify that:

- 1) All views expressed in this research report accurately reflect my personal views about any and all of the subject securities or issuers discussed; and
- 2) No part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by me in this research report.
- Wells Fargo Securities, LLC maintains a market in the common stock of Concert Pharmaceuticals, Inc.
- Wells Fargo Securities, LLC or its affiliates managed or comanaged a public offering of securities for Concert Pharmaceuticals, Inc. within the past 12 months.
- Wells Fargo Securities, LLC or its affiliates intends to seek or expects to receive compensation for investment banking services in the next three months from Concert Pharmaceuticals, Inc.
- Wells Fargo Securities, LLC or its affiliates received compensation for investment banking services from Concert Pharmaceuticals, Inc. in the past 12 months.
- Concert Pharmaceuticals, Inc. currently is, or during the 12-month period preceding the date of distribution of the research report
 was, a client of Wells Fargo Securities, LLC. Wells Fargo Securities, LLC provided investment banking services to Concert

Pharmaceuticals, Inc.

CNCE: Key risks, in our view, are failure of '354 and/or '499 to show efficacy in subsequent studies and regulatory hurdles in spasticity or CKD.

Wells Fargo Securities, LLC does not compensate its research analysts based on specific investment banking transactions. Wells Fargo Securities, LLC's research analysts receive compensation that is based upon and impacted by the overall profitability and revenue of the firm, which includes, but is not limited to investment banking revenue.

STOCK RATING

1=Outperform: The stock appears attractively valued, and we believe the stock's total return will exceed that of the market over the next 12 months. BUY

2=Market Perform: The stock appears appropriately valued, and we believe the stock's total return will be in line with the market over the next 12 months. HOLD

3=Underperform: The stock appears overvalued, and we believe the stock's total return will be below the market over the next 12 months. SELL

SECTOR RATING

O=Overweight: Industry expected to outperform the relevant broad market benchmark over the next 12 months.

M=Market Weight: Industry expected to perform in-line with the relevant broad market benchmark over the next 12 months.

U=Underweight: Industry expected to underperform the relevant broad market benchmark over the next 12 months.

VOLATILITY RATING

V = A stock is defined as volatile if the stock price has fluctuated by +/-20% or greater in at least 8 of the past 24 months or if the analyst expects significant volatility. All IPO stocks are automatically rated volatile within the first 24 months of trading.

As of: May 14, 2014

50% of companies covered by Wells Fargo Securities, LLC	Wells Fargo Securities, LLC has provided investment bankir
Equity Research are rated Outperform.	services for 46% of its Equity Research Outperform-rate
	companies.

	Wells Fargo Securities, LLC has provided investment banking
Equity Research are rated Market Perform.	services for 34% of its Equity Research Market Perform-rated
	companies

3% of companies covered by Wells Fargo Securities, LLC	Wells Fargo Securities, LLC has provided investment banking
Equity Research are rated Underperform.	services for 14% of its Equity Research Underperform-rated
	companies

Important Disclosure for International Clients

EEA – The securities and related financial instruments described herein may not be eligible for sale in all jurisdictions or to certain categories of investors. For recipients in the EEA, this report is distributed by Wells Fargo Securities International Limited ("WFSIL"). WFSIL is a U.K. incorporated investment firm authorized and regulated by the Financial Conduct Authority. For the purposes of Section 21 of the UK Financial Services and Markets Act 2000 ("the Act"), the content of this report has been approved by WFSIL a regulated person under the Act. WFSIL does not deal with retail clients as defined in the Markets in Financial Instruments Directive 2007. The FCA rules made under the Financial Services and Markets Act 2000 for the protection of retail clients will therefore not apply, nor will the Financial Services Compensation Scheme be available. This report is not intended for, and should not be relied upon by, retail clients.

Australia — Wells Fargo Securities, LLC is exempt from the requirements to hold an Australian financial services license in respect of the financial services it provides to wholesale clients in Australia. Wells Fargo Securities, LLC is regulated under U.S. laws which differ from Australian laws. Any offer or documentation provided to Australian recipients by Wells Fargo Securities, LLC in the course of providing the financial services will be prepared in accordance with the laws of the United States and not Australian laws.

Hong Kong – This report is issued and distributed in Hong Kong by Wells Fargo Securities Asia Limited ("WFSAL"), a Hong Kong incorporated investment firm licensed and regulated by the Securities and Futures Commission to carry on types 1, 4, 6 and 9 regulated activities (as defined in the Securities and Futures Ordinance, "the SFO"). This report is not intended for, and should not be relied on by, any person other than professional investors (as defined in the SFO). Any securities and related financial instruments described herein are not intended for sale, nor will be sold, to any person other than professional investors (as defined in the SFO).

Japan — This report is distributed in Japan by Wells Fargo Securities (Japan) Co., Ltd, registered with the Kanto Local Finance Bureau to conduct broking and dealing of type 1 and type 2 financial instruments and agency or intermediary service for entry into investment advisory or discretionary investment contracts. This report is intended for distribution only to professional investors (Tokutei Toushika) and is not intended for, and should not be relied upon by, ordinary customers (Ippan Toushika).

The ratings stated on the document are not provided by rating agencies registered with the Financial Services Agency of Japan (JFSA) but by group companies of JFSA-registered rating agencies. These group companies may include Moody's Investors Services Inc, Standard & Poor's Rating Services and/or Fitch Ratings. Any decisions to invest in securities or transactions should be made after reviewing policies and methodologies used for assigning credit ratings and assumptions, significance and limitations of the credit ratings stated on the respective rating agencies' websites.

About Wells Fargo Securities, LLC

Wells Fargo Securities is the trade name for the capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including but not limited to Wells Fargo Securities, LLC, a U.S. broker-dealer registered with the U.S. Securities and Exchange Commission and a member of NYSE, FINRA, NFA and SIPC, Wells Fargo Institutional Securities, LLC, a member of FINRA and SIPC, Wells Fargo Prime Services, LLC, a member of FINRA, NFA and SIPC, Wells Fargo Bank, N.A. and Wells Fargo Securities International Limited, authorized and regulated by the Financial Conduct Authority.

Wells Fargo Securities, LLC is a U.S. broker-dealer registered with the U.S. Securities and Exchange Commission and a member of the New York Stock Exchange, the Financial Industry Regulatory Authority and the Securities Investor Protection Corp.

This report is for your information only and is not an offer to sell, or a solicitation of an offer to buy, the securities or instruments named or described in this report. Interested parties are advised to contact the entity with which they deal, or the entity that provided this report to them, if they desire further information. The information in this report has been obtained or derived from sources believed by Wells Fargo Securities, LLC, to be reliable, but Wells Fargo Securities, LLC, does not represent that this information is accurate or complete. Any opinions or estimates contained in this report represent the judgment of Wells Fargo Securities, LLC, at this time, and are subject to change without notice. For the purposes of the U.K. Financial Conduct Authority's rules, this report constitutes impartial investment research. Each of Wells Fargo Securities, LLC, and Wells Fargo Securities International Limited is a separate legal entity and distinct from affiliated banks. Copyright © 2014 Wells Fargo Securities, LLC.

SECURITIES: NOT FDIC-INSURED/NOT BANK-GUARANTEED/MAY LOSE VALUE