

CONCERT PHARMACEUTICALS INC.

Jazz Movements - Next-Gen Xyrem Into Phase 1

CNCE (NASDAQ)

Company & Market Data

Closing Price (as of July 21, 2014):	\$7.97
Rating:	BUY
Price Target:	\$24.00
52 Week Range:	\$7.12 - \$16.26
Shares Outstanding (MM):	18
Market Capitalization (MM):	\$143
Cash (MM):	\$108.0
Debt (MM):	\$13.0
Fiscal Year End:	Dec

Estimates

EPS	2013A	2014E	2015E
1Q	—	\$(0.76)A	—
2Q	—	\$(0.37)	—
3Q	—	\$(0.38)	—
4Q	—	\$(0.28)	—
Full Year	\$(4.99)	\$(1.61)	\$(0.52)
Revenue (MM)	\$25.4	\$10.4	\$27.5

Ratios

P/E	NA	NA	NA
-----	----	----	----

Concert Pharmaceuticals, founded in 2006 by Richard Aldrich, Roger Tung, and Christoph Westphal, creates novel medicines by applying its DCE (Deuterated Chemical Entity) Platform technologies to molecules. The DCE approach involves the selective addition of deuterium, a stable isotope of hydrogen, to molecules, resulting in clinical therapeutic candidates with improved pharmacology. This approach has the potential to enable more efficient drug discovery and clinical development. Concert's proprietary programs include CTP-354, a novel GABA-A modulator for spasticity and anxiety, and CTP-499, a PDE inhibitor for diabetic kidney disease. Promising partnered programs include Jazz's JZP-386, a long-acting Xyrem, Avanir's AVP-786, an improved Neudexta, and multiple programs with Celgene. Concert has also developed a broad portfolio of deuterated molecules that are expected to migrate into and through the clinic over time.

JZP-386 Movements. Concert's deuteration collaborations include Jazz Pharmaceutical's JZP-386, a deuterated analog of sodium oxybate, the active ingredient in Xyrem, a Jazz brand which reached revenue of \$569mm (+50%) in 2013 for narcolepsy uses. JZP-386 is designed to have extended pharmacokinetics, providing the potential to avoid Xyrem's inconvenient intra-night dosing. The companies announced JZP-386's move into Phase 1, and successful completion triggers a \$4mm milestone. Concert can earn up to \$117mm in milestones, and a royalty in the mid-single digits to low double digits on JZP-386.

Avanir's AVP-786 Moving Into Phase 2 In Depression. Avanir's AVP-786, a deuterated dextromethorphan that contains less quinidine than Avanir's Neudexta, could have broader consideration than the approved Neudexta. Recently Avanir announced 786 is moving into P2 for depression, triggering a \$2mm milestone to Concert upon dosing. 786 can utilize extensive data generated by Neudexta, a notable efficiency that could help 786 move rapidly into other advanced stages of other indications as well. Concert could receive \$164mm in additional milestones and royalties from the mid-single digit to low double digits on sales of AVP-786.

CTP-354 Recently Gained Room to Maneuver From FDA. CTP-354, is a subtype-selective GABA-A modulator, with familiar yet distinctive GABA activity, and a profile with minimal sedation compared to benzodiazepines. FDA recently permitted doses of 354 in humans to be increased, a positive safety signal. We believe '354 has potential not only in spasticity associated with both multiple sclerosis (MS) and spinal cord injury, but also for use in anxiety and pain settings. '354 should move into Phase 2 for spasticity in spinal cord injury in 2H14, and into other indications during 2015.

Recent Positive Discussions With FDA for CTP-499. CTP-499, a deuterated-PDE inhibitor for diabetic kidney disease, recently finished up encouraging Phase 2 work, where it demonstrated a reduction in the number of patients progressing toward more serious forms of that condition. After discussions with FDA, Concert is able to conduct a single large trial or two Phase 3 studies utilizing a relatively new endpoint, the reduction of a composite endpoint of increases in serum creatinine (greater than or equal to 50%) or end stage renal disease. In Phase 2, CTP-499 demonstrated a statistically significant reduction in large serum creatinine increases in diabetic kidney disease patients, which bodes well for the molecule for this new endpoint. The company is seeking a SPA and prefers to partner 499, which we believe can occur during 2015.

Concert's Celgene Partnership Expected To Progress As Well. Concert has a broad-ranging agreement with Celgene for multiple deuterated compounds in inflammation and oncology. These include CTP-730, which is moving into Phase 1 for inflammatory diseases. Though the specific molecules have not yet been disclosed, the Celgene agreement is potentially very lucrative, with \$35mm upfront, \$1.4B in milestones, and low double-digit royalties.

CNCE Valuation: Attractive In Our View. We value CNCE shares at \$24, based on fully-taxed, risk-weighted NPV calculations that totals \$24.20. We assess Concert's major assets at the following NPV/CNCE share: CTP-354 at \$7.17, CTP-499 at \$5.16, and the Avanir, Jazz, and Celgene collaborations at \$3.87, \$2.37, and \$3.61, respectively, with cash and other assets comprising the difference. We continue to rate CNCE shares Buy.

Disclosures and Analyst Certifications can be found in Appendix A.

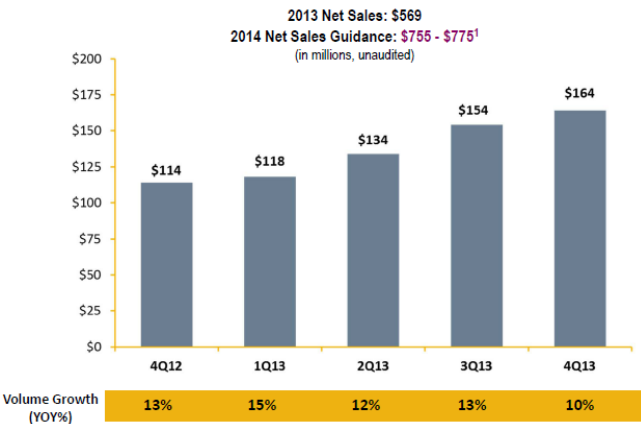
570 Lexington Avenue 11th Floor • New York, New York 10022 • Telephone: 212-409-2000 • 800-LAD-THAL

Member: NYSE, NYSE MKT, FINRA, all other principal exchanges and SIPC

Jazz Pharmaceuticals – JZP-386: Toward A Better Xyrem

Jazz Deal Background for Deuterated Xyrem. In February 2013, Concert signed a license agreement with Jazz Pharmaceuticals providing Jazz with the worldwide rights to Concert’s deuterated sodium oxybate (D-SXB) compounds; sodium oxybate is the active ingredient in Xyrem. Jazz has responsibility for ongoing development activities, though Concert is providing development support services through a single Phase 1 clinical trial. JZP-386, is a product candidate containing a deuterated analog of sodium oxybate for potential use in patients with narcolepsy. Xyrem, a drug that is Schedule III by the DEA, is being successfully marketed by Jazz for narcolepsy (for those with cataplexy and excessive daytime sleepiness). The drug’s growth has been significant with the product achieving revenue of nearly \$570 million during 2013.

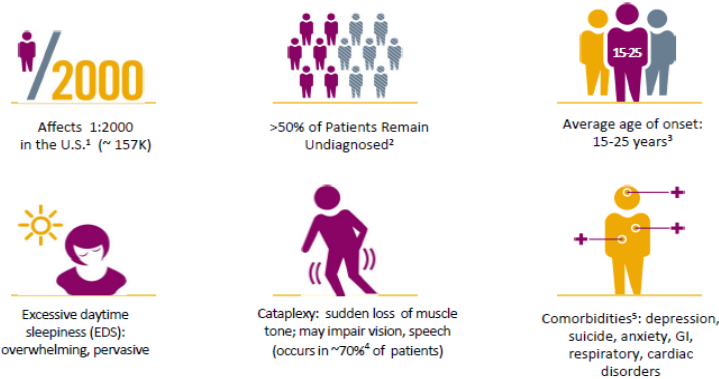
Exhibit 1: Jazz’s Xyrem Franchise – A Major Success



Source: Jazz Pharmaceuticals Corporate Presentation March 2014.

Jazz Deal Economics to Concert. Concert received a \$4 million upfront payment from Jazz, and could earn up to \$8 million in development milestones, \$35 million in regulatory milestones, and \$70 million in sales-based milestones. In addition, Concert is to receive royalties at mid-single digits to low double digits, on a country-by-country and licensed product-by-licensed product basis, on worldwide net product sales of licensed products. The next milestone for JZP-386 could be \$4 million for the completion of a Phase 1 clinical trial in the EU, which is expected during 2015.

Exhibit 2: Jazz’s Narcolepsy Focus: A Large Orphan Opportunity



¹ Baumann, Bassett, Scammell, editors. Narcolepsy: Pathophysiology, Diagnosis and Treatment. Springer: NY 2011.
² Saper, J., Thorpy M. Clinical Features, diagnosis and treatment of narcolepsy. Clin Chest Med. 2010;31(2):371-381.
³ The International Classification of Sleep Disorders: Diagnostic and Coding Manual. 2nd edition 2005.
⁴ National Institute of Neurological Disorders and Stroke. http://www.ninds.nih.gov/disorders/narcolepsy/detail_narcolepsy.htm. Accessed October 25, 2012.
⁵ Ouyang MM. Medical Conditions & Psychiatric Disorders Associated with Narcolepsy. Annals of Neurology 2012; V.72, Issue Supplement S16, p.S2 (in press).
©IPGastrointestinal

Source: Jazz Pharmaceuticals Corporate Presentation March 2014.

The JZP-386 Opportunity: Reducing Middle-of-the-Night Dosing. Xyrem is the only product approved by the FDA for the treatment of cataplexy and excessive daytime sleepiness with narcolepsy, and was first approved in 2002. As noted above, growth with the therapy has recently been quite robust, generating revenue of \$569 million and growth of 50% in 2013. JZP-386 is a deuterated analog of sodium oxybate being developed for potential use in patients with narcolepsy. In vivo testing with JZP-386 demonstrated an extended pharmacokinetic profile compared to Xyrem, providing JZP-386 with the potential for reducing the middle-of-the-night dosing that is required for Xyrem.

In December 2013, Jazz filed an Investigational Medicinal Product Dossier (IMPD), the basis for initiating clinical trials in the EU, signaling its enthusiasm for JZP-386. Jazz has reported that it expects a Phase 1 clinical trial of JZP-386 to commence in 2014, with completion of enrollment also expected in 2014; when the trial completes, Concert is entitled to a milestone for the program. With JZP-378's potential to replace and improve Xyrem, potentially expanding the original brand materially, given the growth of the Xyrem brand, we model its peak revenue in excess of \$1 billion. All in, somewhat low development risks assumed with the program, and revenue and milestones noted above, we estimate the NPV at \$2.37 to Concert (Exhibit 3).

Exhibit 3: JZP-386 NPV Calculation to Concert

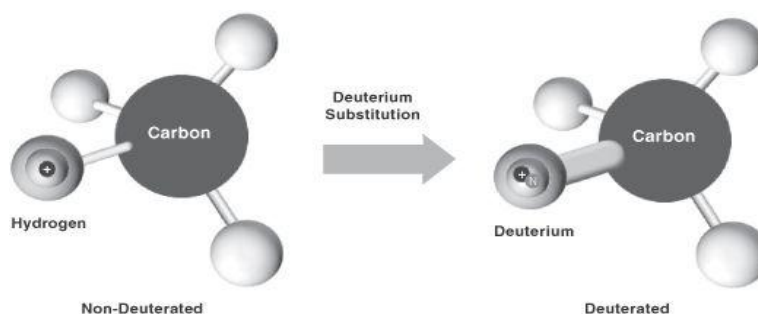
	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Jazz JZP-386 - sleep indications	-	-	-	-	-	55,000	170,000	272,500	375,000	477,500	580,000	682,500	785,000	887,500	990,000	1,092,500	1,195,000
US Sales	-	-	-	-	-	45,000	105,000	170,000	235,000	300,000	365,000	430,000	495,000	560,000	625,000	690,000	755,000
Int'l Sales	-	-	-	-	-	10,000	65,000	102,500	140,000	177,500	215,000	252,500	290,000	327,500	365,000	402,500	440,000
Royalty Rate	-	-	-	-	-	5%	5%	7.5%	7.5%	7.5%	10%	10%	10%	12%	12%	12%	12%
Royalty	-	-	-	-	-	2,750	8,500	20,438	28,125	35,813	58,000	68,250	78,500	106,500	118,800	131,100	143,400
Milestones	-	4,000	-	2,000	4,000	35,000	-	-	-	-	20,000	-	-	-	-	20,000	-
Total Revenue to Concert	-	4,000	-	2,000	4,000	37,750	8,500	20,438	28,125	35,813	78,000	68,250	78,500	106,500	118,800	151,100	143,400
Net to Concert	-	4,000	-	2,000	4,000	37,750	8,500	20,438	28,125	35,813	78,000	68,250	78,500	106,500	118,800	151,100	143,400
Days to End	25.0	390.0	756.0	1121.0	1486.0	1851.0	2217.0	2582.0	2947.0	3312.0	3678.0	4043.0	4408.0	4773.0	5138.0	5504.0	5869.0
Years to end	0.1	1.1	2.1	3.1	4.1	5.1	6.1	7.1	8.1	9.1	10.1	11.1	12.1	13.1	14.1	15.1	16.1
NPV/year	0.0	3445.1	0.0	1007.9	1612.6	9978.9	1727.2	3194.4	3381.6	3312.2	5545.2	3732.4	3302.2	3446.2	2955.0	2891.1	2110.6
Discount Rate	15%	15%	20%	25%	25%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
Tax rate used	0%	0%	0%	0%	0%	0%	0%	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
NPV Taxed (effective rate)	\$ -	\$ 3,445	\$ -	\$ 1,008	\$ 1,613	\$ 9,979	\$ 1,727	\$ 2,076	\$ 2,198	\$ 2,153	\$ 3,604	\$ 2,426	\$ 2,146	\$ 2,240	\$ 1,921	\$ 1,879	\$ 1,372
Total Value																	
NPV Per Share																	
Total Value taxed																	
NPV/share taxed																	

Source: Ladenburg Thalmann BioPharmaceuticals Research.

Concert Pharmaceuticals – Executive Summary

Concert Pharmaceuticals: Developing Deuterium-Based Drugs. Founded in 2006, Concert Pharmaceuticals focuses on creating and developing new medicines through its proprietary DCE (deuterated chemical entity) Platform. The DCE Platform selectively employs deuterium, a naturally-occurring relative of hydrogen. Deuterium modification of a molecule has the potential to improve its metabolic properties, with minimal change to its intrinsic pharmacology. Concert's business strategy initially involved establishing novel intellectual property for a number of deuterium-modified molecules across a wide range of therapeutic classes, and then advancing the most promising initial candidates, even as it continued to develop others. Five of these more mature deuterated assets are now currently in active development under the guidance of either Concert or its strategic partners, and all five should be advancing in the clinic by year-end 2014.

Exhibit 4: Deuterium Substitution



Source: Concert Corporate Fact Sheet, May 2013.

The application of deuterium medicinal chemistry to compounds with well understood therapeutic utility can potentially provide an approach with modestly reduced risk with regard to creating new drugs. Concert believes (and we concur) that since its assets are generally materially related to a parent molecule, once Phase 1 is established for the deuterated molecule, especially in an indication that the parent shares, the program has been materially de-risked.

Deuterium Medicinal Chemistry In Brief. Deuterium is one of two naturally-occurring stable isotopes of hydrogen. Where hydrogen has one electron and one proton, deuterium also has a neutron in its nucleus, resulting in an atomic mass that is double that of hydrogen. Deuterium is not radioactive, and possesses physicochemical properties that are similar to those of hydrogen, but because of its increased mass, bonds involving deuterium are generally stronger than similar bonds with hydrogen. This strengthening can be enough to make significant changes in biological reactions with deuterium-based compounds compared to hydrogen-based ones. Many drugs are metabolized by pathways that involve the breakdown of carbon-hydrogen bonds, and the stronger deuterium-based bonds have the potential to alter or deflect the breakdown of the molecule or its metabolites. Deuterium modification therefore offers an approach to potentially creating significantly differentiated new medicines, and importantly, because the behavior of deuterium based bonds is not inherently predictable, novel intellectual property can be established.

Concert's Drug Development Approach. Concert's strategic development of deuterium-based molecules began with management initially broadly examining a host of both approved and novel molecules to selectively apply deuterium and establish intellectual property. Having now established a broad portfolio of deuterated molecules that span multiple therapeutic areas, it continues with that process. We note that

Concert's management team is well-seasoned in therapeutics development, having material experience at Vertex, Merck, Amgen, and other organizations; because of this, we believe Concert should have the ability to successfully navigate the development of its wide range of assets. With existing therapies, Concert is often utilizing significant information regarding the related non-deuterated (parent) compound, allowing it to efficiently identify lead compounds. In some cases, Concert or its partners can truncate the development timeline of a deuterated molecule compared to conventional drug development by sourcing the data from the related parent molecule.

Concert's Pipeline: Five In The Clinic During 2015. Concert has a solid pipeline of deuterated compounds as noted in Exhibit 2. Concert's five most advanced programs are all expected to be materially progressing at various stages in the clinic by the end of 2014. Concert has two proprietary compounds and three partnered programs of significant importance. Given the urgency with which Concert has established its intellectual property, we expect continued advancement of new compounds in its proprietary pipeline into the clinic.

Concert's Proprietary Pipeline: CTP-354 Has A Familiar Yet Distinctive GABA Profile. CTP-354 is Concert's GABA-A selective modulator moving into Phase 2 for spasticity associated with both multiple sclerosis and spinal cord injury. It also could be considered for other much broader indications such as anxiety and neuropathic pain. CTP-354 is attempting to demonstrate efficacy in these settings without the sedation seen with other common GABA-focused therapies, and the larger opportunities such as anxiety and pain with limited sedation gives this compound considerable potential. Phase 2 should begin in 2H14 for the spasticity settings.

Concert's Proprietary Pipeline: CTP-499--Through Phase 2 in Diabetic Kidney Disease. CTP-499 is a PDE-inhibitor with anti-inflammatory and anti-fibrotic characteristics that has shown encouraging results in Phase 2 for diabetic kidney disease, and recent changes in trial endpoints have become helpful to the development of therapeutics for this indication. Also, since its parent molecule is pentoxifylline, CTP-499 could have potential for long-term consideration in hepatic settings such as alcoholic liver disease and NASH. '499 could be partnered after the recent positive end-of-Phase 2 meeting with FDA, and the upcoming issuance of a potential SPA for the program.

Exhibit 5: Concert Pharmaceuticals - Pipeline

Product Candidate	Lead Indication(s)	Preclinical	Phase 1	Phase 2	Anticipated Milestones	Potential Deal Value	Worldwide Rights
CTP-354	Spasticity associated with MS				<ul style="list-style-type: none"> Ph1 MAD data expected 2H14 Ph2 program expected to begin 2H14 		CoNCERT Pharmaceuticals Inc.
	Spasticity associated with SCI						
CTP-499	Diabetic Kidney Disease				<ul style="list-style-type: none"> End of Ph2 FDA meeting expected mid-2014 		CoNCERT Pharmaceuticals Inc.
AVP-786 (Deuterated dextromethorphan)	Neurologic and Psychiatric Disorders				<ul style="list-style-type: none"> Ph2 trial for treatment-resistant major depressive disorder expected to begin 2H14 	\$170 Million	AVANIR pharmaceuticals
CTP-730	Inflammatory Diseases				<ul style="list-style-type: none"> Phase 1 expected to begin 2014 	\$1.4 Billion	Celgene
JZP-386 (Deuterated sodium oxybate)	Narcolepsy				<ul style="list-style-type: none"> Phase 1 expected to begin 2014 	\$117 Million	Jazz Pharmaceuticals
C-10068	Pain and Seizures						CoNCERT Pharmaceuticals Inc.
Deuterated ivacaftor	CF and COPD						CoNCERT Pharmaceuticals Inc.

Source: Concert Pharmaceuticals corporate presentation; June 2014.

Partnered Programs With Avanir, Jazz, and Celgene, Are Advancing. Concert initially implemented a partnering strategy for the development of its molecules in order to defer risk, and help establish and validate its DCE platform. It has three corporate agreements so far, and we believe there is the potential for additional collaborations over time. Concert has structured its partnerships with material developmental milestones, providing the company with potential for material cash and revenue generation from those programs even prior to the introduction of its own proprietary therapies.

AVP-786 with Avanir for Neurologic/Psychiatric Disorders. Avanir's (AVNR, \$5.37; Not Rated) AVP-786's is a deuterated version of Avanir's approved Neudexta, indicated for pseudobulbar affect (sudden, frequent episodes of laughing and/or crying). AVP-786 contains much less quinine than Neudexta, which could make its appeal much broader. '786 is being developed in treatment-resistant depression and neuropathic pain, and is now entering Phase 2 for major depressive disorder. Indications such as agitation in Alzheimer's disease and Parkinson's dyskinesia are also likely. Concert can earn up to \$166 million in additional regulatory, development, and sales milestones, and a royalty in the mid-single digits to low double digits on global sales.

Jazz's JZP-386 – A Better Xyrem? Jazz's (JAZZ, \$147.19; Not Rated) JZP-386 is a deuterated analog of sodium oxybate that is nearing Phase 1 development for narcolepsy; sodium oxybate is the active ingredient in Jazz's large and rapidly growing Xyrem franchise; Xyrem posted revenue of \$569 million in 2013, up +50% from the previous year. JZP-386 has the potential to materially expand the franchise by avoiding the cumbersome middle-of-the-night dosing. Concert can earn up to \$117 million in regulatory, development, and sales milestones, and a royalty in the mid-single digits to low double digits on worldwide sales.

Celgene's Inflammation/Oncology Programs. Celgene's (CELG, \$86.80; Not Rated) deuterated CTP-730 is in development for inflammatory diseases, and is expected to enter the clinic this year, with Phase 1 results expected in 2015. Though the specific target and parent molecule of CTP-730 has not been disclosed, milestones of up to \$1.4 billion point to the deal's significance (the deal also includes three other potential assets). In terms of inflammatory indications and franchises of importance to Celgene, we note that Thalomid has one inflammatory indication, and Celgene's pipeline contains Otezla/apremilast, pomalidomide, CC-220, CC-292, and others that are being examined for inflammatory indications. We expect greater visibility for this collaboration in 2015.

Exhibit 6: Concert – Recent Events/Upcoming Catalysts

Date	Event	Comment	Significance
Feb-12	Avanir deal for deuterated dextromethorphan	Program gives solid PK profile with less quinidine	◆◆◆
Feb-13	Jazz deal for deuterated Xyrem (sodium oxybate)	Extension of significant Xyrem franchise	◆◆◆◆
Apr-13	Celgene collaboration - CTP-730, others	Large deal: \$35mm UF, \$1.4B MS, SD/low DD royalty	◆◆◆◆◆
Feb-14	Concert IPO	Capital to advance internal programs more rapidly	◆◆◆◆◆
Apr-14	P2 data for CTP-499 in diabetic kidney disease	Showed signal, leading to end of P2 FDA meeting	◆◆◆◆
2H14	Avanir AVP-786 into Phase 2 in treatment res't dep'n	Phase 2 start triggers \$2mm milestone to Concert	◆◆◆
2H14	Jazz JZP-386 moves into P1 in narcolepsy	Completion of P1 in 2015 to trigger milestone	◆◆◆
2H14	CTP-354 completes MAD study	Important for '854 in a range of indications	◆◆◆
2H14	CTP-354 FDA discussion about higher doses	Could lead to '854 in pain, other indications	◆◆◆◆
2H14	CTP-354 into Phase 2 in spasticity (spinal)	Data for this indication, should help establish PoC	◆◆◆
2H14	CTP-499 end P2 Meeting w/FDA	Should clarify Phase 3, lead to SPA, pot. partner	◆◆◆◆
2H14	Celgene's CTP-730 to start Phase 1 study	Program progress good visibility for Concert	◆◆◆◆◆
2015	CTP-354 moves into Phase 2 in spasticity (MS)	Data for this indication, should help establish PoC	◆◆◆
2015	Avanir to move '786 into P3 in Alzheimer's agitation	Phase 3 start triggers \$2mm milestone to Concert	◆◆◆◆
2015	Additional Concert proprietary assets progress	Concert's DCE platform should broaden during 2015	◆◆◆◆
2015	Jazz JZP-386 completes P1 in narcolepsy	Completion of P1 triggers \$4 milestone	◆◆◆
2015	Celgene's CTP-730 Phase 1 data	Results trigger \$8mm milestone, visibility for Concert	◆◆◆◆
2016	CTP-354 Phase 2 data in spasticity (MS, spinal)	Data in the indications could be a major catalyst	◆◆◆◆

(Significance: ◆ least important., ◆◆◆◆◆ most important.)

Source: Ladenburg Thalmann BioPharmaceuticals Research.

Concert Pharmaceuticals – Potential Catalyst for 2014, 2015

Concert's Proprietary Programs

- **CTP-354** completed additional preclinical toxicology work, and FDA has recently allowed repeated dosing with the molecule above 6mg. We expect clearance from the agency during mid-2014, providing some room for this drug to be dosed higher, if necessary in the pain indications. '354's top-line receptor occupancy data, important for licensing, should be released mid-year.
- **CTP-354** should also move into phase 2 during 2H14 for spasticity associated with spinal cord injury, and in early 2015 for spasticity associated with multiple sclerosis. Data from these Phase 2 studies should read out during 2016. Other larger opportunities such as anxiety and pain also have the potential to begin during 2015.
- **CTP-499** has shown encouraging results in Phase 2 for diabetic kidney disease, and recent changes in trial endpoints have become helpful to the drug development for this indication. Clarity on Phase 3 trial design, an SPA, and a potential partnership could happen in that order over the next 12 months.

Concert's Partnered Programs

- **Avanir's AVP-786**, a deuterated Neudexta, just entered Phase 2 for treatment resistant major depressive disorders, triggering a \$2 million milestone upon dosing initiation. AVP-923 (Neudexta) is now fully enrolled in a Phase 2 study in patients who have material agitation associated with Alzheimer's disease. Avanir has stated repeatedly that it intends to move forward with AVP-786 for the indication, creating the potential for '786 to move into Phase 3 during 2015, with a favorable readout for the Phase 2 study. Movement into additional indications for 786 is possible in 2014/15.
- **Jazz's JZP-386**, a deuterated analog of Xyrem is now moving into Phase 1 for narcolepsy; when JZP-386 completes this P1 study, a \$4 million milestone payment is due to Concert. Advancement of this next-gen version of Xyrem, a \$500+mm program, should be an ongoing catalyst for CNCE shares.
- **Celgene's deuterated CTP-730** is in development for inflammatory diseases, and is expected to enter the clinic this year, with Phase 1 completion expected in 2015, triggering an \$8mm milestone. Advancement of this program has the potential to be a material catalyst for CNCE shares, despite not knowing material program specifics at this point.

Concert Pharmaceuticals - Valuation

Concert and CNCE Shares Valuation. Because Concert's operations have the potential for significant revenue and earnings variability over the coming quarters and years, we value the company and its assets using a fully-taxed, risk-weighted net present value methodology for each of its assets. We note that with its multiple partnerships and advancing clinical programs, Concert has a diverse portfolio of therapeutic assets, and we assess the total value of these programs at \$24.20 per CNCE share, which underpins our \$24 CNCE price target (see Exhibit 7).

Valuing Concert's Proprietary Pipeline. Concert's two most advanced proprietary assets, CTP-354 for spasticity, and CTP-499 for diabetic kidney disease, have material

valuation potential, in our view. CTP-354 for spasticity as a result of multiple sclerosis and/or spinal cord injury and possibly other indications such as anxiety and neuropathic pain, is moving into Phase 2. We believe that a GABA-A modulator with familiar GABA mechanism, yet a distinct profile, with once-daily dosing and less sedation, should have material potential for consideration in spasticity, anxiety, and even pain settings, and have the potential to exceed \$1 billion in peak revenue. We value its collective opportunities at \$7.17 per share. CTP-499, for diabetic kidney disease appears to have achieved material validation after a more full analysis of its Phase 2 trial data, which bodes well for Phase 3 consideration. We assume licensing is to occur after discussions with FDA now that Phase 2 is winding up. Despite risks to the Phase 3 endpoints that remain, we believe more reasonable guidance is emerging along those lines from FDA, and estimate CTP-499 at \$1 billion peak revenue, and value the program at \$5.16 per CNCE share. Other less mature proprietary products are much more modest opportunities at this point and valued at \$0.31 per CNCE share, though proof of concept comes at Phase 1 for many of these deuterated programs, and this part of the portfolio could appreciate quite quickly.

Exhibit 7: Concert – CNCE Share NPV Summary (\$000, except per share amts)

Concert Pharmaceuticals - Assets	NPV Value	NPV/Share
CTP-354 - Spasticity, Anxiety, others	\$ 128,386	\$7.17
CTP-499 - Diabetic Kidney Disease	\$ 92,330	\$5.16
Other Proprietary Deuterated Assets	\$ 5,468	\$0.31
AVP-786 - CNS indications (Avanir)	\$ 69,267	\$3.87
JZP-386 - Sleep indications (Jazz)	\$ 42,464	\$2.37
CTP-730 - Inflammation (Celgene)	\$ 54,214	\$3.03
Other Celgene - Onc/Inflam (Celgene)	\$ 10,421	\$0.58
Other Corporate	\$ (74,354)	(\$4.15)
Net Cash	\$ 95,006	\$5.31
NOLs, Credits, etc.	\$ 10,052	\$0.56
Concert - Company Valuation	\$ 433,253	\$24.20

Source: Ladenburg Thalmann BioPharmaceuticals Research.

Valuing Concert's Collaborations. Regarding Concert's partnered portfolio, Avanir seems to be operating with a good urgency with AVP-786, and is exploring dextromethorphan's broad neurotransmitter receptor activity with the molecule, looking at the therapy in multiple additional indications in addition to depression, including agitation and dyskinesia. Because of these multiple indications, and its potential for its rapid advancement, the economics of this program are valued at \$3.87 per CNCE share. The Jazz program JZP-386 attempts to provide the Xyrem franchise with a product that doesn't have middle of the night dosing, and can help protect against potential loss of exclusivity. Xyrem is growing rapidly (+50% yr/yr) and is large at \$569 million in 2013, and making a more convenient dosing form with longer patent life appears to be a material opportunity, generating a \$2.37 NPV per CNCE share. Finally Celgene has not disclosed the mechanism of CTP-730 inflammation collaboration, though the very large regulatory milestones and peak revenue along the lines of Xyrem, give this collaboration a \$3.03 NPV, by our calculation. The remainder of the Celgene assets are estimated at \$0.58, and net cash, NOLs and the drag of general corporate expense totals \$1.72 per CNCE share, yielding the \$24.20 total, driving our \$24 CNCE shares price target.

Concert Pharmaceuticals - Risks

The following Risks include, but are not limited to:

Regulatory/FDA. As with any company whose main business focuses on the development of pharmaceuticals, Concert is subject to the strenuous regulatory requirements of the US Food and Drug Administration (FDA) and other international regulatory agencies such as the EMEA to have its new drugs approved. Promotion of its approved drug products is also highly regulated by FDA and related agencies throughout the globe. Also, in general, though the company's specific focus on ethical (prescription) pharmaceuticals places significant risk on its operations due to the scrutiny of FDA and other governmental regulatory bodies, we believe this specific risk over time should be no greater than that for any other research-based drug development company.

Material Dependence Upon CTP-499, CTP-354 Progress. CTP-354 and CTP-499 are two of Concert's most advanced proprietary clinical candidates in development. These novel molecules may take material time and resources to finish clinical development, if they are able to complete at all, and there is certainly no guarantee that the company will be successful in doing so. In addition, Concert may seek one or more collaborators for future development of CTP-499. There is a risk that the company may not be able to enter into a collaboration for the therapy, or is able to enter into one with terms that are beneficial to CNCE shareholders. These development programs have garnered major investor interest within Concert's operations; if they do not progress, there is material risk that CNCE shares could trade downward.

Risks With Partnered Programs. Concert has a number of partnered programs, including material efforts with Celgene, Jazz Pharmaceuticals, and Avanir Pharmaceuticals. These partnered development programs have garnered major investor interest within Concert's operations. Because these programs are ultimately under the direction of other companies, there is no guarantee those programs will progress at all, or in a way that is beneficial to Concert or CNCE shareholders. If any or all of these programs do not progress in a way that is beneficial to Concert, it is possible that CNCE shares may come under material negative pressure.

Deuteration: Approval, Manufacturing Risks. To the best of our knowledge, no deuterated drug has ever been successfully approved or commercialized. There may be specific risks to gaining licensure for these types of agents from regulatory authorities, though these do not appear to have not emerged at this point. In addition, the company may also incur unforeseen manufacturing challenges with deuterated compounds, or manufacturing costs that are required for the production of any product candidate that receives marketing approval may turn out to be substantial, though excessive cost have not specifically manifested at this point.

Other Risks. Concert has incurred significant losses since inception, expects to incur losses for at least the next several years, and may never sustain profitability. Concert also has a limited operating history and no history of commercializing pharmaceutical products, which may make it difficult to evaluate the prospects for future viability. It is an "emerging growth company," and the reduced disclosure requirements applicable to emerging growth companies may make its common stock less attractive to investors.

Concert Pharmaceuticals, Inc.

	2011A	2012A	2013A	1Q14A	2Q14E	3Q14E	4Q14E	2014e	2015E	2016E	2017E	2018E
Income Statement (\$000, except per share amts.)												
Product Revenue												
CTP-354 Total (Int'l to partner)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CTP-499 Total (top line to partner)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other/Collab revenue	0	0	0	0	0	0	0	0	0	0	0	0
Total Proprietary Sales Revenue	0	0	0	0	0	0	0	0	0	0	0	0
Milestone & Royalty Revenue												
Total Royalties from Partners	0	0	0	-	-	-	-	0	-	-	-	-
Upfront, Milestones from Partners	\$ 5,500	\$ 1,500	\$ 2,000	\$ -	\$ -	\$ -	\$ 2,000	\$ 2,000	\$ 19,000	\$ 13,750	\$ 40,750	\$ 152,750
License and Development Revenue	13,967	11,349	23,408	1,613	2,000	2,250	2,500	\$ 8,363	8,500	8,500	9,000	9,000
Total Concert Revenue	\$19,467	\$12,849	\$25,408	\$1,613	\$2,000	\$2,250	\$4,500	\$10,363	\$27,500	\$22,250	\$49,750	\$161,750
Expenses:												
COGS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
R & D	23,436	24,193	21,790	5,594	6,000	6,500	6,750	\$ 24,844	26,500	30,000	30,000	35,000
S G & A	7,377	7,266	8,028	2,538	2,400	2,500	2,600	\$ 10,038	10,000	10,200	13,000	20,000
Total Expenses	\$30,813	31,459	29,818	\$8,132	\$8,400	\$9,000	\$9,350	\$ 34,882	\$36,500	\$40,200	\$43,000	\$55,000
Operating Income	(11,346)	(18,610)	(4,410)	(6,519)	(6,400)	(6,750)	(4,850)	\$ (24,519)	(9,000)	(17,950)	6,750	106,750
Operating Margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Interest Income	44	22	20	4	60	65	60	\$ 189	150	175	200	800
Interest Expense	(18)	(1,856)	(1,666)	0	0	0	0	\$ -	0	(200)	(200)	(200)
Other Income (Expense)	0	0	0	0	0	0	0	\$ -	0	0	0	0
Other financing income (expense)	0	0	0	(435)	(100)	(100)	(100)	\$ (735)	(500)	(400)	(350)	0
Total Other Income, net	26	(1,834)	(1,646)	(431)	(40)	(35)	(40)	(546)	(350)	(425)	(350)	600
Pretax Income	(11,320)	(20,444)	(6,056)	(6,950)	(6,440)	(6,785)	(4,890)	\$ (25,065)	(9,350)	(18,375)	6,400	107,350
Pretax Margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Effective Taxes	-	-	-	-	-	-	-	-	-	-	448	9,125
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.0%	8.5%
Fully Taxed rate	(4,302)	(7,769)	(2,301)	(2,641)	(2,447)	(2,578)	(1,858)	\$ (9,525)	(3,553)	(6,983)	2,432	40,793
Tax Rate	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%	38.0%
Other Convertible Preferred, other securities transactions	(1,069)	(388)	(396)	(55)	(50)	(45)	(40)	(190)	-	-	-	-
Net Income (Loss) - Effective taxed	(12,389)	(20,832)	(6,452)	(7,005)	(6,490)	(6,830)	(4,930)	\$ (25,255)	(9,350)	(18,375)	5,952	98,225
Income - Fully taxed	(7,018)	(12,675)	(3,755)	(4,309)	(4,043)	(4,207)	(3,032)	\$ (15,590)	(5,797)	(11,393)	3,968	66,557
Margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Other Comprehensive Income (Loss)	16	(5)	(1)	(8)	-	-	-	(8)	-	-	-	-
Comprehensive Income (Loss)	(11,304)	(20,449)	(6,057)	(6,958)	(6,440)	(6,785)	(4,890)	\$ (25,073)	(9,350)	(18,375)	6,400	107,350
EPS (ex-charges; eff. taxed)	(\$9.66)	(\$16.15)	(\$4.99)	(\$0.76)	(\$0.37)	(\$0.38)	(\$0.28)	(\$1.61)	(\$0.52)	(\$1.02)	\$0.31	\$5.15
EPS (ex-charges; fully-taxed)	(\$5.47)	(\$9.83)	(\$2.91)	(\$0.47)	(\$0.23)	(\$0.24)	(\$0.17)	(\$1.00)	(\$0.32)	(\$0.63)	\$0.21	\$3.44
EPS - comprehensive Income (eff taxes)	(\$8.81)	(\$15.85)	(\$4.69)	(\$0.76)	(\$0.36)	(\$0.38)	(\$0.27)	(\$1.60)	(\$0.52)	(\$1.02)	\$0.33	\$5.54
Shares O/S (000), Basic	1,283	1,290	1,292	9,188	17,750	17,800	17,850	15,647	17,875	17,975	18,975	19,075
Shares O/S (000), Diluted	1,283	1,290	1,292	9,188	17,750	17,800	17,850	15,647	17,875	17,975	19,275	19,375
-- Expenses (% of sales) --												
Cost of Sales (product sales)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	NM	NM	NM
Gross	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
R & D	NM	NM	NM	NM	NM	NM	NM	NM	96.4%	134.8%	60.3%	21.6%
S G & A	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%	31.0%
Total	158.3%	244.8%	117.4%	504.2%	420.0%	400.0%	207.8%	336.6%	132.7%	180.7%	86.4%	34.0%
-- Year / Year Growth --												
Revenue	NM	NM	NM	NM	NM	NM	NM	NM	96.4%	-19.1%	123.6%	225.1%
Operating Income	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Pretax Income	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Income	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EPS (ex-charges)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
EPS (ex-charges; fully-taxed)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

Source: Concert Pharmaceuticals Inc. SEC documents and Ladenburg Thalmann BioPharmaceuticals estimates.

Contact Information: Robert (Bert) Hazlett, Managing Director, Ladenburg Thalmann, rhazlett@ladenburg.com, 212-409-2062.

Concert Pharmaceuticals, Inc.**Balance Sheet & Statement of Cash Flow (\$mm)**

	12/31/2011A	12/31/2012A	12/31/2013A	12/31/2014E	12/31/2015E	12/31/2016E	12/31/2017E
BALANCE SHEET							
ASSETS							
Cash & equivalents	\$22.9	\$7.5	\$9.6	\$69.3	\$78.7	\$77.5	\$80.0
Investments/Mktb. Securities	\$19.7	\$20.1	\$23.0	\$23.0	\$23.0	\$23.0	\$23.0
Account receivable	\$0.6	\$0.1	\$0.3	\$2.1	\$4.1	\$3.3	\$7.5
Prepaid & other current assets	\$0.9	\$1.2	\$1.1	\$0.1	\$0.3	\$0.2	\$0.5
Total Current Assets	\$44.1	\$28.9	\$34.0	\$94.6	\$106.1	\$104.1	\$111.0
Property & Equipment, net, other	\$4.4	\$3.5	\$2.5	\$2.5	\$2.5	\$2.5	\$2.5
Long term investment/Restricted Cash	\$0.0	\$0.0	\$0.7	\$0.7	\$0.7	\$0.7	\$0.7
Other Assets	\$0.8	\$0.8	\$2.5	\$2.5	\$2.5	\$2.5	\$2.5
Total Assets	\$49.4	\$33.1	\$39.8	\$100.3	\$111.9	\$109.8	\$116.7
LIABILITIES & S.E.							
Accounts payable	\$1.6	\$0.8	\$1.0	\$1.4	\$2.8	\$3.3	\$7.5
Accrued expenses	\$1.5	\$2.0	\$2.5	\$2.7	\$2.9	\$3.1	\$3.4
Deferred short-term revenue	\$6.9	\$0.0	\$4.3	\$1.0	\$0.0	\$0.0	\$0.0
Leasehold improvement loan	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3
Loans payable, net of discount	\$0.0	\$4.8	\$7.8	\$5.6	\$8.3	\$3.3	\$10.0
Total Current Liabilities	\$10.3	\$7.9	\$15.9	\$11.0	\$14.2	\$10.1	\$21.1
Deferred revenue, net of current	\$4.1	\$2.8	\$15.3	\$9.0	\$3.0	\$0.0	\$0.0
Leasehold improvement loan, net of current	\$0.9	\$0.6	\$0.2	\$2.0	\$2.0	\$2.0	\$2.0
Deferred lease incentive	\$1.4	\$0.9	\$0.4	\$2.0	\$2.0	\$2.0	\$2.0
Deferred rent, net of current	\$0.6	\$0.5	\$0.2	\$2.0	\$2.0	\$2.0	\$2.0
Warrant to purchase redeemable securities	\$0.2	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5	\$0.5
Note Payable/Long-term Liabilities	\$7.1	\$14.9	\$7.1	\$7.1	\$7.1	\$7.1	\$7.1
Total Liabilities	\$24.7	\$28.0	\$39.6	\$33.6	\$30.8	\$23.7	\$34.7
Total Shareholders Equity	\$24.7	\$5.2	\$0.1	\$66.7	\$81.1	\$86.1	\$82.0
Total Liabilities and Shareholders Equity	\$49.4	\$33.1	\$39.8	\$100.3	\$111.9	\$109.8	\$116.7
CASH FLOW STATEMENT							
Cash Flow from Operating Activities							
Net income (loss)	(11.3)	(\$20.4)	(6.1)	(20.3)	(9.4)	(18.4)	6.4
Other adjustments	0.0	\$0.0	0.0	0.0	20.0	20.0	(15.0)
Depreciation & Amortization	1.6	\$1.5	1.3	1.1	1.2	1.4	2.0
Noncash compensation expense	0.9	\$0.9	1.0	1.0	1.5	2.0	2.5
Other non-cash financing expense	0.8	\$0.4	0.3	0.0	0.0	0.0	0.0
Amortization of financing costs, warrants	(0.5)	(\$0.1)	(0.4)	0.0	0.0	0.0	0.0
Accounts receivable	1.0	\$0.5	(0.2)	(1.8)	(2.0)	0.8	(4.1)
Interest receivable	0.1	\$0.0	0.0	0.0	0.0	0.0	0.0
Prepaid expenses, and other current assets	(0.0)	(\$0.4)	0.0	1.0	(0.1)	0.1	(0.3)
Other assets	(0.1)	\$0.0	0.1	0.0	0.0	0.0	0.0
Accounts payable and accrued expenses	0.7	(\$0.3)	0.1	0.6	1.6	0.8	4.4
Other oper.activities (deferred rent, revenue)	(11.2)	(\$8.4)	16.7	(8.5)	(3.4)	(7.9)	6.6
Cash Flow from Operating Activities	(18.1)	(26.4)	13.0	(26.9)	9.4	(1.2)	2.5
Cash Flow from Investing Activities							
Maturities of Investments	64	\$37.7	27	0	0	0	0
Purchase of investments	(41)	(\$38.4)	(30)	0	0	0	0
Capital Expenditures, net	(0.3)	(\$0.5)	(0.4)	0.0	0.0	0.0	0.0
Other	-	\$0.0	-	-	-	-	-
Cash Flow from Investing Activities	22.9	(1.2)	(3.64)	0.00	0.00	0.00	0.00
Cash Flow from Financing Activities							
Issuance of loan payable, net	7.3	\$12.5	0	0	0	0	0
Principle pmts of loan payable	0.0	\$0.0	(5)	0	0	0	0
Repayment of leasehold impt loan	(0.3)	(\$0.3)	(0)	0	0	0	0
Proceeds from iss. of common stock (net)	0.0	\$0.0	0	86.6	0.0	0.0	0.0
Proceeds/Retirement of Debt, Other	0.0	\$0.0	0	0.0	0.0	0.0	0.0
Payment of IPO/offering costs	0.0	\$0.0	(2)	0.0	0.0	0.0	0.0
Cash Flow from Financing Activities	7.0	12.2	(7.2)	86.6	0.0	0.0	0.0
Beginning cash balance	11.1	\$22.9	7.5	9.6	69.3	78.7	77.5
Net increase (decrease) in cash	11.8	(\$15.5)	2.1	59.7	9.4	(1.2)	2.5
Ending cash balance	22.9	7.5	9.6	69.3	78.7	77.5	80.0

Source: Concert Pharmaceuticals Inc. SEC documents and Ladenburg Thalmann BioPharmaceuticals estimates.

Contact information: Robert (Bert) Hazlett, Managing Director, Ladenburg Thalmann, rhazlett@ladenburger.com, 212-409-2062.

APPENDIX A: IMPORTANT RESEARCH DISCLOSURES

ANALYST CERTIFICATION

I, Robert C. Hazlett, attest that the views expressed in this research report accurately reflect my personal views about the subject security and issuer. Furthermore, no part of my compensation was, is, or will be directly or indirectly related to the specific recommendation or views expressed in this research report, provided, however, that:

The research analyst primarily responsible for the preparation of this research report has or will receive compensation based upon various factors, including the volume of trading at the firm in the subject security, as well as the firm's total revenues, a portion of which is generated by investment banking activities.

Additional information regarding the contents of this publication will be furnished upon request. Please contact Ladenburg Thalmann, Compliance Department, 570 Lexington Avenue, 11th floor, New York, New York 10022 (or call 212-409-2000) for any information regarding current disclosures, and where applicable, relevant price charts, in regard to companies that are the subject of this research report.

COMPANY BACKGROUND

Concert Pharmaceuticals, founded in 2006 by Richard Aldrich, Roger Tung, and Christoph Westphal, creates novel medicines by applying its DCE (Deuterated Chemical Entity) Platform technologies to molecules. The DCE approach involves the selective addition of deuterium, a stable isotope of hydrogen, to molecules, resulting in clinical therapeutic candidates with improved pharmacology. This approach has the potential to enable more efficient drug discovery and clinical development. Concert's proprietary programs include CTP-354, a novel GABA-A modulator for spasticity and anxiety, and CTP-499, a PDE inhibitor for diabetic kidney disease. Promising partnered programs include Jazz's JZP-386, a long-acting Xyrem, Avanir's AVP-786, an improved Neudexta, and multiple programs with Celgene. Concert has also developed a broad portfolio of deuterated molecules that are expected to migrate into and through the clinic over time.

VALUATION METHODOLOGY

Concert Pharmaceuticals Valuation. Concert and CNCE Shares Valuation. Because Concert's operations have the potential for significant revenue and earnings variability over the coming quarters and years, we value the company and its assets using a fully-taxed, risk-weighted net present value methodology for each of its assets. We note that with its multiple partnerships and emerging clinical programs, Concert has a diverse portfolio that contributes to its valuation. Our total of the programs yield a value of \$24.20 per CNCE share, driving our \$24 CNCE shares price target.

Concert's Proprietary Pipeline. Concert's two most advanced proprietary assets, CTP-354 for spasticity, and CTP-499 for diabetic kidney disease, have material valuation. CTP-354 for spasticity as a result of multiple sclerosis and/or spinal cord injury and possibly other indications such as anxiety and neuropathic pain, is moving into Phase 2. We believe that a GABA-A modulator with familiar mechanism, yet a distinct profile, with once-daily dosing and less sedation, should have material potential for consideration in spasticity, anxiety, and even pain settings, and have the potential to exceed \$1 billion in peak revenue; we value its collective opportunities at \$7.17 per share. CTP-499, for diabetic kidney disease appears to have achieved material validation after a more full analysis of its Phase 2 trial data, which bodes well for Phase 3 consideration. We assume international licensing should be able to occur after discussions with FDA of their end of Phase 2 meetings in 2H14, and that could be a validating event for the CTP-499 program. We estimate CTP-499 at \$1 billion peak revenue in the US, despite risks to the endpoints that remain, value the program at \$5.16 per CNCE share. Other less mature proprietary products are much more modest opportunities at this point and valued at \$0.31 per CNCE share, though proof of concept comes at Phase 1 for many of these deuterated programs, and this part of the portfolio could appreciate quite quickly.

Concert's Collaborations. Regarding Concert's partnered portfolio, Avanir seems to be operating with a good urgency with AVP-786, and is exploring dextromethorphan's broad neurotransmitter receptor activity with the molecule, looking at the therapy in multiple additional indications in addition to depression, including agitation and dyskinesia. Because of these multiple indications, and its potential for its rapid advancement, the economics of this program are valued at \$3.87 per CNCE share. The Jazz program JZP-386 attempts to provide the Xyrem franchise with a product that doesn't have middle of the night dosing, and can help protect against potential loss of exclusivity. Xyrem is growing rapidly (+50% yr/yr) and is large at \$569 million annually, and making a more convenient dosing form with longer patent life appears to be a materially opportunity, generating a \$2.37 NPV per CNCE share. Finally, Celgene has not disclosed what the mechanism of CTP-730 inflammation collaboration, though the very large regulatory milestones and peak revenue along the lines of Xyrem, give this collaboration a \$3.61 NPV. The remainder of the Celgene assets are estimated at \$0.58, and net cash, NOLs and the drag of general corporate expense totals (\$4.15) per CNCE share, yielding the \$24.20 total, driving our \$24 CNCE shares price target.

Factors which could impede CNCE shares from reaching our price target include the lack of progress for Concert's proprietary therapeutics CTP-499 and CTP-354 in their respective indications. Progress by indirect competition in indications for chronic kidney failure or spasticity could also impede CNCE shares from reaching our target. Concert has a number of partnered programs, including efforts with Celgene, Jazz Pharmaceuticals, and Avanir, and there is no guarantee those programs will progress at all or in a way that is beneficial to Concert; a lack of progress with any or all of these partnered programs could be an impediment to CNCE shares reaching our target price. In addition, negative

equity market conditions overall, or in particular with regard to the biotechnology sector, or healthcare in general, could be an impediment to CNCE shares reaching our target. Also a change in the regulatory requirements for drugs in development could be an impediment to the advancement in CNCE shares. These risks listed are merely a sample of the types of issues that could impede CNCE shares from advancing, and are not meant to be all inclusive.

RISKS

Regulatory/FDA. As with any company whose main business focuses on the development of pharmaceuticals, Concert is subject to the strenuous regulatory requirements of the US Food and Drug Administration (FDA) and other international regulatory agencies such as the EMEA to have its new drugs approved. Promotion of its approved drug products is also highly regulated by FDA and related agencies throughout the globe. **Dependence on Proprietary Programs.** CTP-354 and CTP-499 are two of Concert's most advanced proprietary clinical candidates in development. These novel molecules may take material time and resources to finish clinical development, if they are able to complete is at all, and there is certainly no guarantee that the company will be successful in doing so. In addition, Concert may seek one or more collaborators for future development of CTP-499. There is a risk that the company may not be able to enter into a collaboration for the therapy, or is able to enter into one with terms that are beneficial to CNCE shareholders. **Risks With Partnered Programs.** Concert has a number of partnered programs, including material efforts with Celgene, Jazz Pharmaceuticals, and Avanir Pharmaceuticals. Because these programs are ultimately under the direction of other companies, there is no guarantee those programs will progress at all, or in a way that is beneficial to Concert or CNCE shareholders. **Deuteration: Approval, Manufacturing Risks.** To the best of our knowledge, no deuterated drug has ever been successfully approved or commercialized. There may be specific risks to gaining licensure for these types of agents from regulatory authorities, though these do not appear to have not emerged at this point.

STOCK RATING DEFINITIONS

Buy: The stock's return is expected to exceed 12.5% over the next twelve months.

Neutral: The stock's return is expected to be plus or minus 12.5% over the next twelve months.

Sell: The stock's return is expected to be negative 12.5% or more over the next twelve months.

Investment Ratings are determined by the ranges described above at the time of initiation of coverage, a change in risk, or a change in target price. At other times, the expected returns may fall outside of these ranges because of price movement and/or volatility. Such interim deviations from specified ranges will be permitted but will become subject to review.

RATINGS DISPERSION AND BANKING RELATIONSHIPS AS OF (July 22, 2014)

Rating	%	IB %
BUY	75.5	57.6
NEUTRAL	24.5	40.8
SELL	0.0	0.0

COMPANIES UNDER ROBERT'S COVERAGE

Acadia Pharmaceuticals Inc. (ACAD)
CTI BioPharma Corp. (CTIC)
Prothena Corporation plc (PRTA)

Concert Pharmaceuticals Inc. (CNCE)
Nektar Therapeutics (NKTR)
Targacept, Inc. (TRGT)

COMPANY SPECIFIC DISCLOSURES

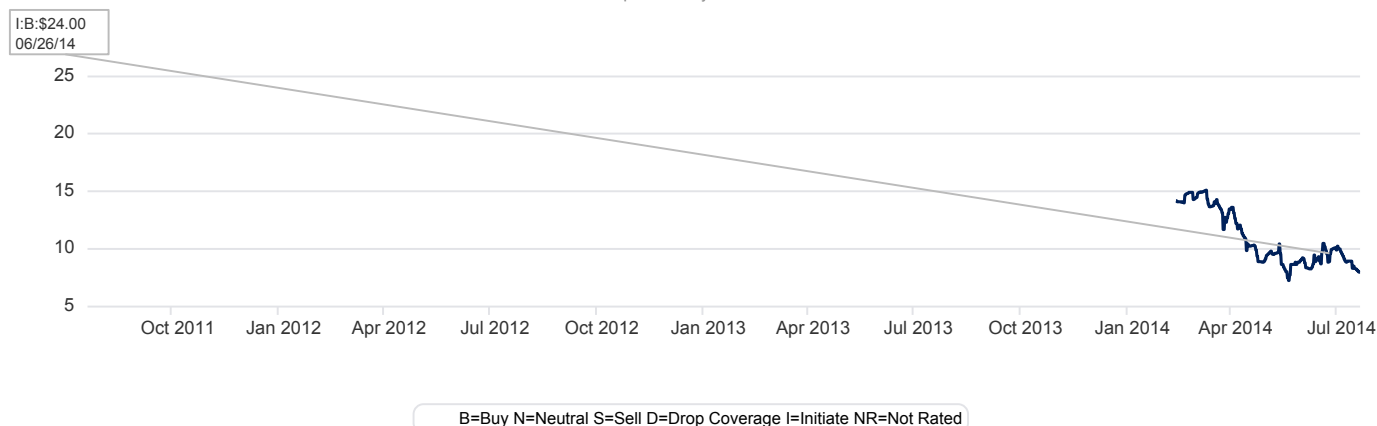
Ladenburg Thalmann & Co. Inc. makes a market in Concert Pharmaceuticals Inc..

Ladenburg Thalmann & Co. Inc. intends to seek compensation for investment banking and/or advisory services from Concert Pharmaceuticals Inc. within the next 3 months.

OTHER COMPANIES MENTIONED

INVESTMENT RATING AND PRICE TARGET HISTORY**Concert Pharmaceuticals Inc. Rating History as of 07/21/2014**

powered by: BlueMatrix

**GENERAL DISCLAIMERS**

Information and opinions presented in this report have been obtained or derived from sources believed by Ladenburg Thalmann & Co. Inc. to be reliable. The opinions, estimates and projections contained in this report are those of Ladenburg Thalmann as of the date of this report and are subject to change without notice.

Ladenburg Thalmann & Co. Inc. accepts no liability for loss arising from the use of the material presented in this report, except that this exclusion of liability does not apply to the extent that such liability arises under specific statutes or regulations applicable to Ladenburg Thalmann & Co. Inc. This report is not to be relied upon in substitution for the exercise of independent judgment. Ladenburg Thalmann & Co. Inc. may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and Ladenburg Thalmann & Co. Inc. is under no obligation to ensure that such other reports are brought to the attention of any recipient of this report. Investors should consider this report as only a single factor in making their investment decisions.

Some companies that Ladenburg Thalmann & Co. Inc. follows are emerging growth companies whose securities typically involve a higher degree of risk and more volatility than the securities of more established companies. The securities discussed in Ladenburg Thalmann & Co. Inc. research reports may not be suitable for some investors. Investors must make their own determination as to the appropriateness of an investment in any securities referred to herein, based on their specific investment objectives, financial status and risk tolerance.

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. The price, value of and income from any of the securities mentioned in this report can fall as well as rise. The value of securities is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities. Investors in securities such as ADRs, the values of which are influenced by currency volatility, effectively assume this risk. Securities recommended, offered or sold by Ladenburg Thalmann & Co. Inc. (1) are not insured by the Federal Deposit Insurance Company; (2) are not deposits or other obligations of any insured depository institution; and (3) are subject to investment risks, including the possible loss of some or all of principal invested. Indeed, in the case of some investments, the potential losses may exceed the amount of initial investment and, in such circumstances; you may be required to pay more money to support these losses.

The information and material presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or the solicitation of an offer to sell or to buy any securities mentioned herein. This publication is confidential for the information of the addressee only and may not be reproduced in whole or in part, copies circulated, or disclosed to another party, without the prior written consent of Ladenburg Thalmann & Co. Inc.

Member: NYSE, NYSE MKT, FINRA, all other principal exchanges and SIPC

Additional Information Available Upon Request

©2014 - Ladenburg Thalmann & Co. Inc. All Rights Reserved.

EQUITY RESEARCH

ENERGY, POWER & INFRASTRUCTURE

Power & Electric Utilities

Brian J. Russo, CFA (646) 432-6312 brusso@ladenburg.com

Energy Exploration & Production, Master Limited Partnerships, Upstream

Noel A. Parks (212) 409-2023 nparks@ladenburg.com
Michael Schmitz, CFA (212) 409-2028 mschmitz@ladenburg.com

Master Limited Partnerships, Midstream

Eduardo Seda (212) 409-2034 eseda@ladenburg.com

Master Limited Partnerships, Downstream & Others

Richard A. Verdi (212) 409-2060 rverdi@ladenburg.com

Closed-End MLP Funds

Eduardo Seda (212) 409-2034 eseda@ladenburg.com

Water & Sustainable Infrastructure

Richard A. Verdi (212) 409-2060 rverdi@ladenburg.com

HEALTHCARE

Biotechnology

Matthew L. Kaplan (212) 891-5247 mkaplan@ladenburg.com

Biotechnology (BioPharmaceuticals)

Robert C. Hazlett, III (Bert) (212) 409-2062 rhazlett@ladenburg.com

Biotechnology (Personalized Medicine)

Kevin DeGeeter (212) 409-2027 kdegeeter@ladenburg.com

Healthcare Equipment & Medical Technologies

Jeffrey S. Cohen (305) 572-4110 jcohen@ladenburg.com

FINANCIAL INSTITUTIONS

Financial Services – Business Development Cos. & Specialty Finance

Mickey M. Schleien, CFA (305) 572-4131 mschleien@ladenburg.com

Financial Services – Equity REITs

Daniel P. Donlan (212) 409-2056 ddonlan@ladenburg.com
John J. Massocca (212) 409-2543 jmassocca@ladenburg.com

Financial Services – Mortgage REITs

David Walrod, CFA (212) 409-2031 dwalrod@ladenburg.com

TECHNOLOGY

Internet & Software Services

Jon R. Hickman (510) 918-4045 jhickman@ladenburg.com

TECHNICAL ANALYSIS

Adolfo R. Rueda, CMT (212) 409-2039 arueda@ladenburg.com

ADDITIONAL CONTACTS

Kenneth Brush, Head of Trading (212) 409-2011 kbrush@ladenburg.com
Eric Novotny (212) 409-2011 enovotny@ladenburg.com

570 Lexington Avenue 11th Floor New York, NY 10022 (212) 409-2000

NEW YORK, NY MELVILLE, NY BOSTON, MA MIAMI, FL NAPLES, FL BOCA RATON, FL HOUSTON, TX