ROTH Capital Partners

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Healthcare: BioPharmaceuticals

Concert Pharmaceuticals, Inc. | CNCE - $8.64 - NASDAQ | *Buy*

Company Update

Rating Changed, Target Price Changed

Stock Data	
52-Week Low - High	$7.12 - $16.26
Shares Out. (mil)	17.90
Mkt. Cap.(mil)	$154.7
3-Mo. Avg. Vol.	160,015
12-Mo.Price Target	$28.00
Cash (mil)	$108.0
Tot. Debt (mil)	$13.0

EPS $

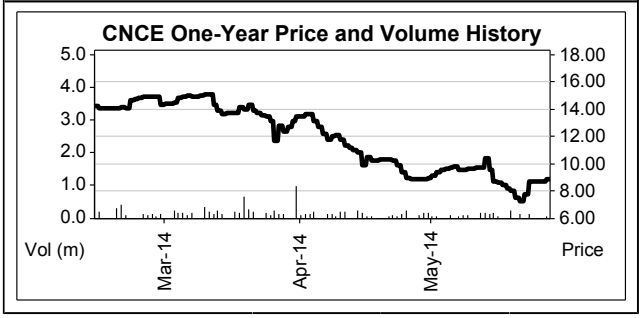
Yr Dec	—2013—	—2014E—	—2015E—
		Curr	Curr
1Q	-	(0.76)A	(0.52)E
2Q	-	(0.47)E	(0.53)E
3Q	-	(0.48)E	(0.33)E
4Q	-	(0.58)E	(0.12)E
YEAR	(4.99)A	(1.71)E	(1.51)E
P/E	NM	NM	NM

Concert's IPO was on February 9, 2014

Quarterly EPS may not add to full year due to increases in share count and rounding

Revenue ($ millions)

Yr Dec	—2013—	—2014E—	—2015E—
		Curr	Curr
1Q	-	1.6A	0.0E
2Q	-	0.3E	0.0E
3Q	-	0.3E	4.0E
4Q	-	0.9E	8.0E
YEAR	25.4A	5.0E	12.0E



CNCE: Deuterium, Pipeline and Partners, Oh My; Reinstate Buy and $28 Target

With a 1) proprietary platform in modifying drugs with deuterium, 2) growing internal pipeline, 3) three partnerships in hand, to date and 4) a strong IP portfolio, we believe Concert is poised for success, which should be supported by upcoming catalysts. We reinstate our Buy rating and $28 price target.

Event

We are reinstating our Buy rating and $28 price target on shares of CNCE.

Impact

Driving our investment case on Concert are the following:

- **Platform technology supported by robust IP**. Using the deuterium platform, Concert has the ability to generate both potential first-in-class drugs as well as deuterated analogs of approved drugs, which we believe provides a long term "pipeline fill" for the company.
- **Phase II data for most advanced product pointing in right direction**. A hallmark of investors' assessments of a company's potential is clinical data. Concert has already generate meaning clinical data, in our belief. The company's most advanced product, CTP-499, has generated Phase II data in diabetic kidney disease, including data supporting the drug's mechanism of action in reducing markers of fibrosis in the kidneys. The company will be meeting with the FDA in mid-2014 to discuss potential next steps and pivotal program for the program. CTP-354 is being developed for spasticity associated with multiple sclerosis and spinal cord injury and a Phase II program is expected to begin in 2H14.
- **Partnering validation**. In our opinion, Concert has already started to check off an important box with regard to validation by having signed three partnerships already. These partnerships include Celgene, Avanir, and Jazz, with these three deals worth, in total, approximately $1.7 billion to Concert should all milestones be met from the programs. Additionally, Concert is entitled to mid single-digit to low double-digit royalties on any commercial revenue generated. At this point in Concert's history, we believe the company has important flexibility with regard to future partnerships. The company may choose to invest internally in product candidates and bring them further along in the clinic to potentially garner more lucrative economics.

Action

We are reinstating our Buy rating and $28 price target. With a 1) proprietary platform in modifying drugs with deuterium, 2) growing internal pipeline, 3) three partnerships in hand, to date and 4) a strong IP portfolio, we believe Concert is poised for success, which should be supported by upcoming catalysts

Investment Case

Concert's platform technology is based on deuterium, which is one of the two-naturally occurring stable isotopes of hydrogen (one atom in 6,420 atoms of hydrogen in the ocean). The chemical properties of the molecule are being translated into potential pharmaceutical use based on certain advantages. The primary advantage of deuterium is increased chemical bond stability, which can yield unique properties to a compound. While the chemical bonds are stronger, there are no material changes to a compound's biochemical potency or selectivity. Additionally, the substituted deuterium could result in improved effectiveness, safety and tolerability. Concert is taking a two-pronged approach with its platform which we believe addresses both the near and long term potential of the company:

1. **Deuterated analogs of approved drugs**. This provides the opportunity for faster advancement into clinical development and a potentially expedited clinical path forward.
2. **Potential first-in-class drugs**. This avenue provides for potential long term growth of the pipeline, by building on known pharmacology of molecules and looking to improve therapeutic properties. This approach also provides an opportunity for faster advancement into clinical development.

Key Drivers

- **Platform technology supported by robust IP**. Using the deuterium platform, Concert has the ability to generate both potential first-in-class drugs as well as deuterated analogs of approved drugs, which we believe provides a long term "pipeline fill" for the company. An important aspect of the deuterium platform is the ability to file and receive strong patent protection as these chemical entities are considered "novel". Concert has an extensive IP portfolio with 100 patents issued world-wide and 52 patents issued in the US, covering Concert's DCE technological platform and composition of matters of their various products in development
- **Phase II data for most advanced product pointing in right direction**. A hallmark of investors' assessments of a company's potential is clinical data. To this end, while a platform technology can provide scientific and long term promise, Concert has already generate meaning clinical data, in our belief. The company's most advanced product, CTP-499, has generated Phase II data in diabetic kidney disease, including data supporting the drug's mechanism of action in reducing markers of fibrosis in the kidneys. The company will be meeting with the FDA in mid-2014 to discuss potential next steps and pivotal program for the program. CTP-354 is being developed for spasticity associated with multiple sclerosis and spinal cord injury. Phase I data to date has been positive and supports once per day dosing and a Phase II program is expected to begin in 2H14. For both internal and partnered programs, up to five compounds are expected to be in the clinic by the end of 2014.
- **Partnering validation**. In our opinion, Concert has already started to check off an important box with regard to validation by having signed three partnerships already. These partnerships include Celgene, Avanir, and Jazz, with these three deals worth, in total, approximately $1.7 billion to Concert should all milestones be met from the programs. Additionally, Concert is entitled to mid single-digit to low double-digit royalties on any commercial revenue generated. At this point in Concert's history, we believe the company has important flexibility with regard to future partnerships. The company may choose to invest internally in product candidates and bring them further along in the clinic to potentially garner more lucrative economics. Alternatively, companies may approach Concert with regard to their compounds and potential life cycle expansions.

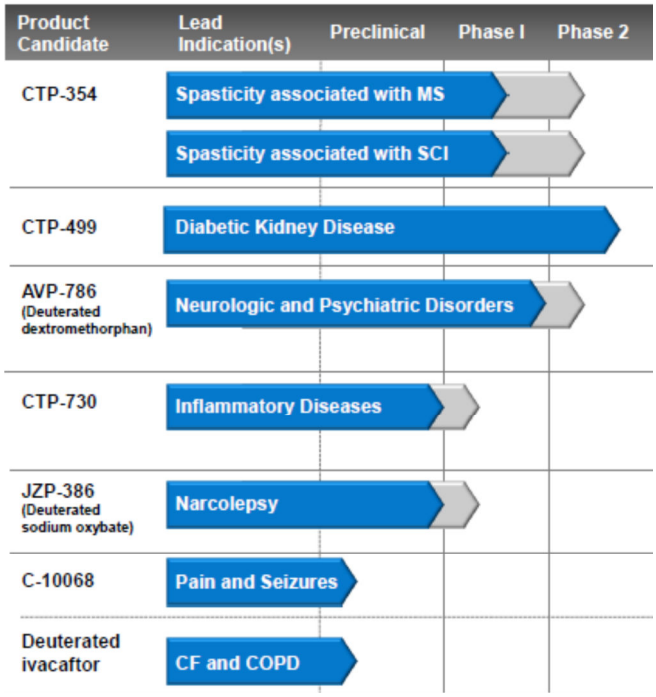
Key Risks

- **Pipeline product risk** – Concert's pipeline consists of earlier stage developmental candidates. With this stage of development comes increased risk from negative trial readouts. Additionally, CPT-499 and CTP-354 represent major contributors to our valuation and any negative readouts, clinical or regulatory delays could negatively impact the stock. We believe Concert looks to mitigate some of this risk by having a platform technology which can generate a broad set of drug candidates for its pipeline.

- **Partnering risk** – Concert currently has signed partnerships and is continually engaging in business development activities. Because these progreams are under the direction of other companies, there is no guarantee those programs will progress to meaningful catalysts, including potential commercialization. Any delays or terminated partnerships in the future, could have a negative impact on Concert's valuation.
- **Regulatory risk** – Should Concert's products successfully complete pivotal registrational studies, there is no guarantee that regulatory agencies would approve these products. Unforeseen issues may arise during clinical development which could impact the approvability of a therapeutic candidate.
- **Financing risk** – As with all non-profitable biotechnology companies, funding is continuously necessary to fund operations and ongoing clinical studies. Should Concert encounter problems in raising sufficient funds to continue its operations, this could significantly impact that stock"s valuation

Pipeline and Upcoming Catalysts

Concert Pipeline



Source: Concert May 2014 investor presentation

Catalysts (by product): Up to five compounds are expected to be in the clinic by the end of 2014

Up to five compounds expected to be in the clinic by the end of 2014

CTP-354:

- Phase I top-line data in 2H14
- Phase II initiation in 4Q14 (two programs: spasticity associated with multiple sclerosis or spinal cord injury)

CTP-499:

- End of Phase II FDA meeting in mid-2014
- Completion of open-label study by end of 2014

AVP-786 (Avanir):

- Initiate Phase II in patients with treatment-resistant major depressive disorder in 2H14

CTP-730 (Celgene):

- Phase I initiation in patients with inflammatory diseases by end of 2014

JZP-386 (Jazz):

- Phase I initiation in patients with narcolepsy by the end of 2014

Valuation Methodology

We reinstate our Buy rating and $28 price target on shares of Concert. Our valuation of Concert is based on our probability-weighted clinical net present value (NPV) valuation model. We believe this method is appropriate in capturing the value of the clinical stage pipeline. It allows for the flexing of assumptions based on key factors such as chance of success, peak sales estimates, and year of commercial launch. Our current valuation of Concert is based primarily on the two lead internal programs, CTP-499 ($12.93 NPV per share) and CTP-354 ($9.86 NPV per share). A level of conservatism in our valuation model comes from our assigned multiple and discount rate for which we apply the historical values for large pharma (17.0x P/E and 15% discount rate) rather than the sometimes inflated non-profitable biotech multiples in the 30-40x range.

Concert Clinical NPV Valuation Model

Drug name	Indication	Status	Launch	Success	Peak Sales (US$m)	Royalty	Profitability	NPV (US$)
CTP-499	Diabetic kidney disease	Phase II	2020	20%	990	100%	30%	12.93
CTP-354	Spasticity assoc w/ MS / SCI	Phase I	2019	15%	875	100%	30%	9.86
AVP-786 (Avanir)	Neuro/psychiatric	Phase I	2019	10%	780	10%	100%	1.95
CTP-730 (Celgene)	Inflammatory	Phase I	2019	10%	690	10%	100%	1.73
JZP-386 (Jazz)	Narcolepsy	Phase I	2019	10%	580	10%	100%	1.45
							Total	27.92

Source: ROTH Capital Partners estimates

Valuation upside potential – Our valuation of Concert is based currently on the five lead indications, including the three partnered products. We see upside potential to our valuation based on increasing the chance of success for a particular indication and increasing the peak sales numbers should any of the products gain more market traction than expected. We believe our current projected chances of success reflect the development stage of the individual products and clinical data in hand. Additionally, each drug individually has the potential to reach blockbuster status, in our opinion, based on the size of the addressable markets for each indication.

Valuation downside potential – As with the majority of companies in clinical development, there exists the risk of failed or inconclusive clinical trials, which could lead to downward pressure on the stock. We believe that Concert's risk has been mitigated somewhat based on the number of potential indications being addressed by the company's current products and the pipeline fill potential from its platform technology.

Financial Outlook

Following a successful IPO in February 2014 (gross proceeds of $93 million), Concert ended 1Q14 with $108 million in cash and equivalents. Management believes this cash balance provides runway into 2016. We expect the company's expenses to increase over 2014 and 2015 as clinical trial expenses increase. EPS may be volatile based on the timing of potential milestone payments. For 2012, we project the receipt of $5 million in total revenue. We are projecting losses of $30.9 million in 2014 and $27.9 million in 2015 – or ($1.71) and ($1.53) per share, respectively and assume an equity raise by 2016. We estimate that for 2014, R&D expenses will be $23.5 million and SG&A expenses will be $10.4 million.

Debt:
CNCE has $13.2 million of outstanding debt as of March 31, 2014. This is the current amount remaining to be paid under the loan and security agreement with Hercules Technology Growth Capital, Inc. CNCE is required to repay the loan in monthly installments through October 2015. The loan from Hercules was received in two tranches: 1) $7.5 million on December 22, 2011 and 2) an additional amount of up to $12.5 million on March 29, 2012, with the maximum amount of principal outstanding allowable being $20 million. Both advances had an interest rate of 8.5% through March 31, 2014. Under the agreement the interest rate is variable but will not exceed 11%. CNCE began paying interest-only payments monthly on the month following the month of advance receipt until April 30, 2013. Following that, CNCE began repaying the outstanding principal balance in 30 equal monthly installments of principal and interest starting May 30, 2013 through the maturity date of October 1, 2015. CNCE will pay $6.7 million for the remainder of 2014 and $7.5 million in 2015.

Program Updates

CTP-499 – Phase II Update at National Kidney Foundation – April 25, 2014

CTP-499 is a deuterated analog of 1-(S)-5-hydroxyhexyl-3,7-diemthylxanthine (HDX) which is the active metabolite of pentoxifylline. Pentoxifylline is approved for treatment of claudication and more importantly was shown to be effective in treating patients with chronic kidney disease, including diabetic patients. CTP-499 is an oral multi-subtype selective inhibitor of phosphodiesteratses (PDEs), considered to be playing a role in type 2 diabetic kidney disease.

The Phase II study with CTP-499 was initially designed as a randomized double-blind controlled 24 week study to evaluate the effects on UACR as the primary endpoint. This initial design is now called “Part 1” of the Phase II program. During Part 1 of the study, Concert received strong advice from KOLs indicating that 24 weeks would not be long enough to see a potential benefit on kidney function benefit. Therefore, during Part 1, the study was extended to 48 weeks to evaluate longer term effects of the drug (Part 2) while maintaining the blind of the study. Prior to the unblinding of the 48 week data at the April 2014 NKF meeting, a 48 week open-label extension (OLE) study was also added and is currently ongoing.

The primary endpoint for Part 1 was UACR change from baseline and the secondary endpoints for Part 2 included SCr, eGFR and UACR.

177 patients were randomized 1:1 to CTP-499 600 mg BID or placebo on ACE or ARB background therapy. Prior to randomization, patients underwent a 5-week screening and stabilization period. Multiple baseline measurements were taken including eGFR/serum creatinine and albumin excretion during the screening period. Patients were also stratified based on eGFR levels (+/- 45 ml/min/1.73m^2) and UACR (measure of damage at the cellular level) (+/- 1,500 mg/g).

Patients enrolled into the study were patients diagnosed with Type 2 diabetes Mellitus and subsequent diagnosis of chronic kidney disease and are on stable regiments of ACE inhibitors and/ or ARBs >9 weeks prior to randomization. Patients were also on stable background therapies including statins, CCBs, aldosterone antagonists, antidiabetic drugs, ESAs and iron also >9 weeks prior to randomization. The baseline characteristics of enrolled patients are found in the table below.

Baseline Characteristics (Safety Population)

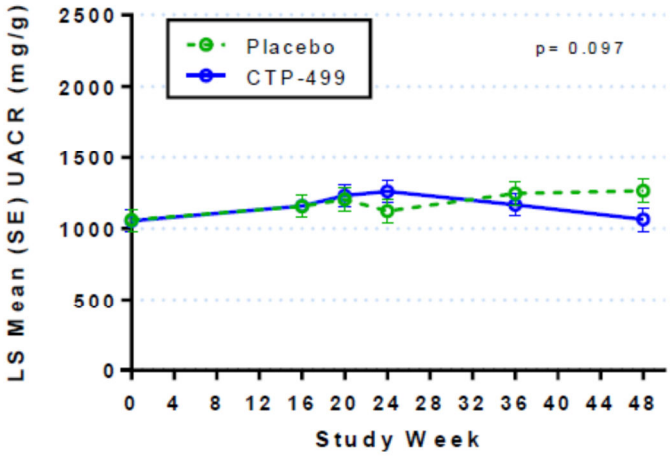
	CTP-499 (n=89)	Placebo (n=88)
Age, years (range)	64.1 (40 – 86)	63.3 (29 – 83)
Sex, male	70.8%	85.2%
Race: White	71.9%	63.6%
Black	21.3%	27.3%
Asian	3.4%	6.8%
Other	3.3%	2.2%
Diabetes duration, years	17.0	15.5
Blood Pressure, mm Hg, mean	132.1 / 74.8	131.5 / 75.1
Hemoglobin A1c, %, mean (SD)	7.7 (1.4)	7.3 (1.3)
Serum Creatinine, mg/dL, mean (SD)	1.65 (0.52)	1.69 (0.49)
eGFR, ml/min/1.73m^2, mean (SD)	45.6 (15.7)	46.4 (15.3)
UACR, mg/g ,mean (SD)	1103 (800)	1071 (786)
UACR, mg/g , median	861	846

Source: Singh et al., National Kidney Foundation Spring Meeting – April 25, 2014

Efficacy data

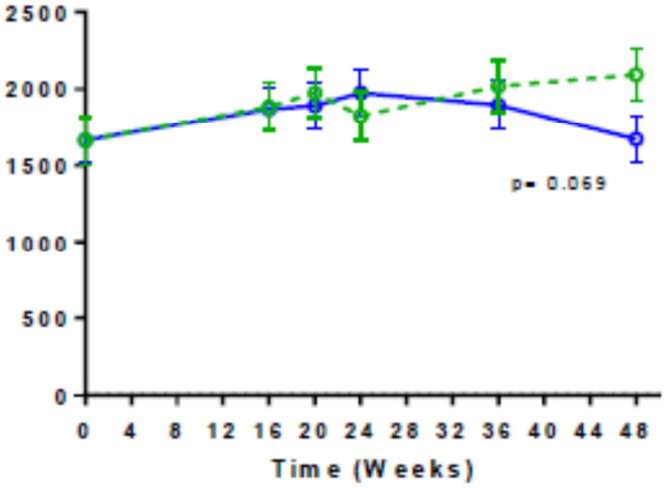
The table below indicates the UACR changes from baseline at both 24-weeks and 48-weeks. As discussed previously, the 24-week data did not show a difference, though was completely expected by KOLs, prompting the extension of the study through 48 weeks. In the subsequent two tables, it was observed that the positive impact on UACR was a result of those patients who had above-median baseline levels (≥850 mg/g).

UACR – 48-Week Data



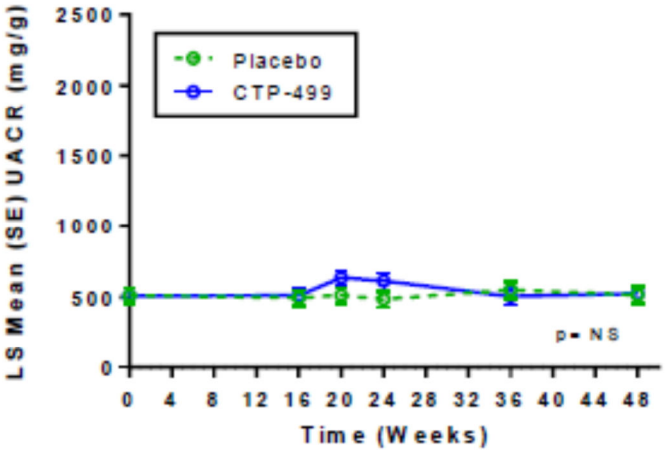
Source: Singh et al., National Kidney Foundation Spring Meeting – April 25, 2014

Baseline UACR ≥850 mg/g



Source: Singh et al., National Kidney Foundation Spring Meeting – April 25, 2014

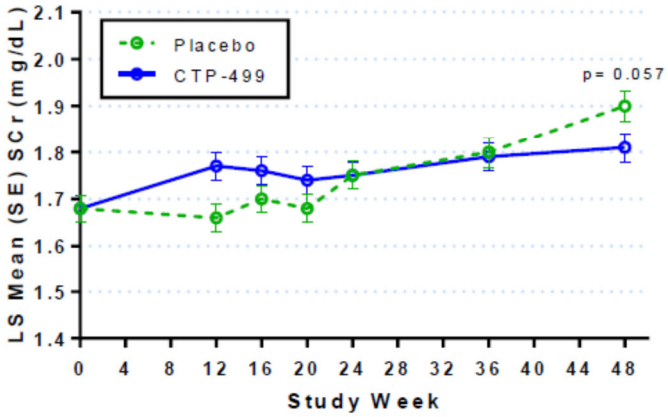
Baseline UACR <850 mg/g



Source: Singh et al., National Kidney Foundation Spring Meeting – April 25, 2014

The data measuring serum creatinine levels showed positive trends at 48-weeks (shown below), but also showed the importance of picking out the rapid progressors again with UACR levels ≥850 mg/g showing a more beneficial impact (not shown). Creatinine is a muscle waste product and serum levels are a measure of the kidney's ability to purify the blood.

48-Week Serum Creatinine Results

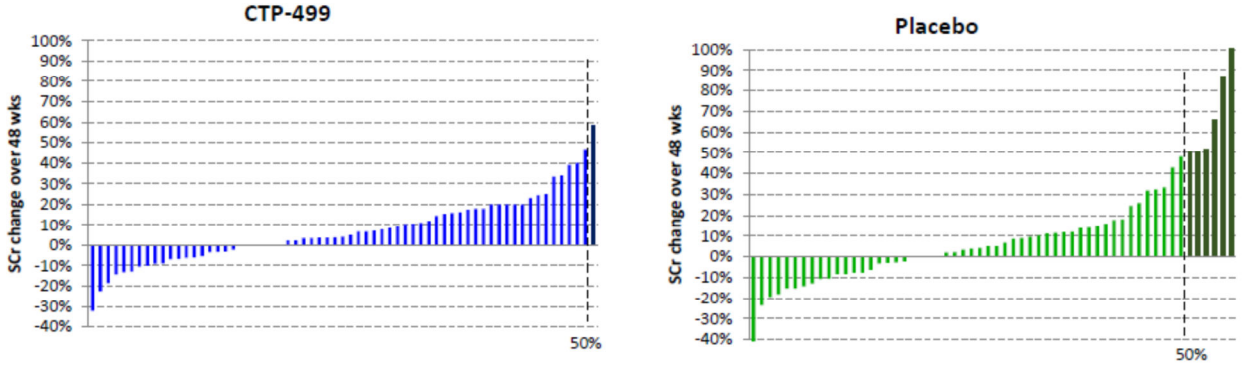


Source: Singh et al., National Kidney Foundation Spring Meeting – April 25, 2014

Of note, and we believe this remains a "work in progress" with the FDA, fewer large (50%+) increases in serum creatinine were seen with patient receiving CTP-499. The FDA is in process of assessing endpoints for smaller than 100% increases, which would represent less advanced patient endpoints. In the E.U., we believe this will be negotiated on a sponsor by sponsor basis. An important precedent was set though, which we believe will have a positive impact on future discussions with the FDA. Previously the FDA considered a 100% increase in creatinine as the relevant endpoint. In 2013, NephroGenex (NRX – NC) was able to obtain a Special Protocol Assessment with the FDA, which includesa new and novel fully approvable endpoint of a 50% increase in SCr versus the prior 100%.

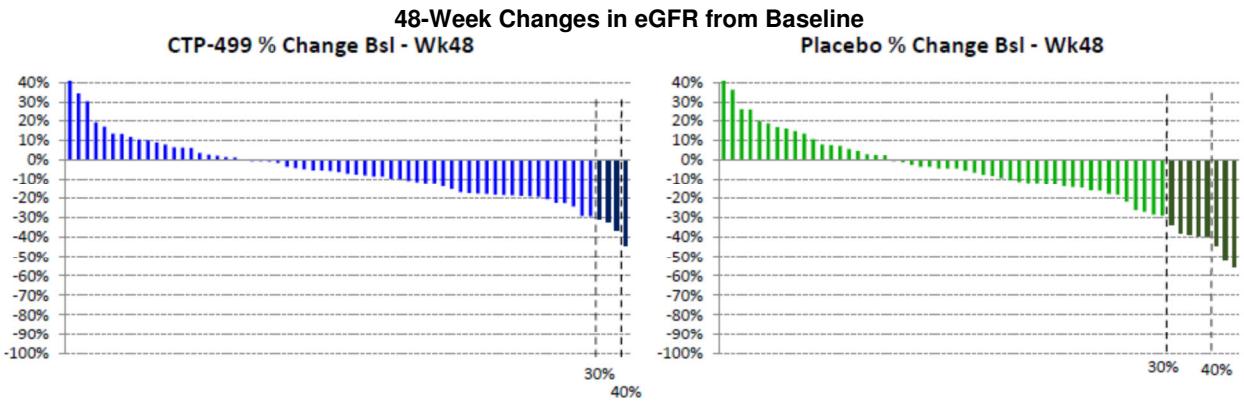
The waterfall charts below show the SCr changes over 48-weeks with the dotted line delineating those patients who saw >50% increases in their creatinine levels. On the CTP-499 arm, 1/65 (1.5%) saw a 50% or greater increase and on the placebo arm, 6/58 (10.3%) saw a 50% or greater increase.

Serum Creatinine Change from Baseline



Source: Singh et al., National Kidney Foundation Spring Meeting – April 25, 2014

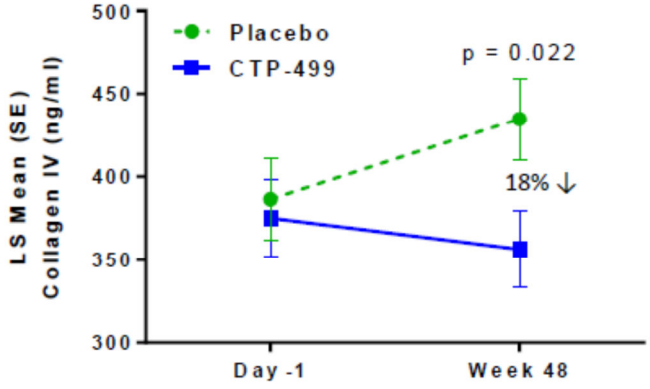
Similar observations to the creatinine results were made for eGFR levels, while the results represent the inverse to creatinine. On the CTP-499 arm, 4/65 (6.2%) saw a 30% or greater drp and 1/65 (1.5%) saw a 40% or greater drop. On the placebo arm, 8/58 (15%) saw a 30% or greater drop and 3/58 (5.2%) saw a 40% or greater drop.



Source: Singh et al., National Kidney Foundation Spring Meeting – April 25, 2014

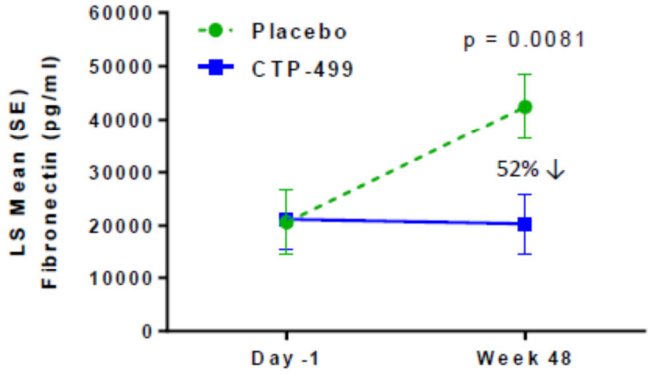
Lastly, positive new data were presented, which talk to the underlying mechanism of action of CTP-499. During the progression of kidney failure the fibrotic response is a result of the extracelluar matrix (ECM) expanding and hypertrophies, preventing bloodflow in the kidney. The first chart shows 48 week reductions in plasma collagen IV relative to placebo and the second chart show 48 week reductions in urine fibronectin.

48-Week Reductions in Plasma Collagen IV



Source: Singh et al., National Kidney Foundation Spring Meeting – April 25, 2014

48-Week Reductions in Urine Fibronectin



Source: Singh et al., National Kidney Foundation Spring Meeting – April 25, 2014

Study conclusions:

- CTP-499 appears to ameliorate CKD progression in Type 2 diabetics following 48 weeks of administration
  - 48 weeks of treatment with CTP-499 appears to slow the rise in serum creatinine
  - After 48 weeks of treatment, fewer patients on CTP-499 experienced a >50% increase in serum creatinine compared to placebo
  - Despite no apparent effect on UACR at 24 weeks, administration of CTP-499 appears to reduce the expected rise in UACR after 48 weeks
  - The time course of changes in clinical readouts is consistent with an anti-fibrotic mechanism suggested by reductions in specific fibrotic markers
- Patients with baseline UACR greater than the median value of 850 mg/g had greater rises in serum creatinine than those with baseline values of <850 mg/g
- CTP-499 was well tolerated – the most common adverse event was transient, mild to moderate nausea
- Serious adverse events were similar for CTP-499 and placebo
- These results are encouraging and suggest that CTP-499 merits further study as a candidate for the treatment of type 2 diabetic kidney disease

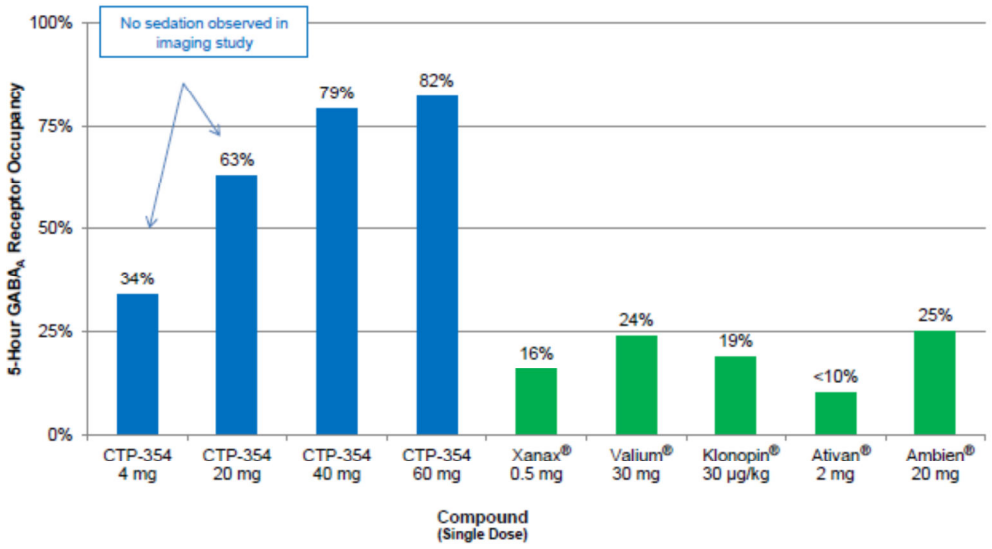
Next steps:
Concert is now looking to conduct and end-of-Phase II meeting with the FDA in mid-2014 to discuss potential next steps for a pivotal program. These discussions will likely include the opportunity to enroll enriched populations in a more efficient Phase III based on the Phase II data. Over the coming year, we expect additional clinical findings from the study to be presented as the open label extension study remains ongoing. The company will also potentially look at additional fibrotic diseases of the kidney and other organs. While these activities are being conducted, management is continuing to explore partnering opportunities for the drug.

CTP-354 – Moving Quickly Toward Phase II

CTP-354 is a subtype selective modulator of the $GABA_A$ receptor, involved in inhibitory neurotransmission in the CNS. CTP-354 is a deuterated analog of a Merck (MRK-NC) compound which they've found to activate three $GABA_A$ receptor subtypes associated with spasticity, seizure and muscle-relaxation. However, Roche's compound had a limited PK profile and did not progress into the clinic. Concert designed CTP-354 to preserve its activity while overcoming the original PK issues.

The Phase I program for CTP-354 remains ongoing. To date, the company has completed a single ascending dose study, which supports once-per day dosing. Additionally, a Phase I imaging study for single ascending doses was completed showing that CTP-354 is less sedating at higher $GABA_A$ receptor occupancy than benzodiazepines. Dosing of the currently marketed $GABA_A$ modulators is limited by sedative effects. The results from this study are highlighted in the chart below.

Phase I Imaging Study – $GABA_A$ Receptor Occupancy



Source: May 2014 Concert investor presentation

The ongoing Phase I studies include multiple ascending dose, formulation food effect and receptor occupancy assessments. Two Phase II trials are planned to assess the safety and efficacy in spasticity associated with multiple sclerosis and spinal cord injury and the Phase II program is expected to begin in 2H14.

Partnered programs

CNCE has three partnered program with Celgene, Avanir and Jazz Pharmaceuticals.

Celgene: In April 2013, CNCE entered into an agreement with Celgene granting Celgene a worldwide exclusive license to develop, manufacture and commercialize products containing deuterated analogs of non-deuterated compounds. The collaboration with Celgene currently focuses on the CTP-730 program for treatment of inflammatory diseases but has the potential to include up to four more programs. CNCE will initiate a Phase I study by year's end and completion of the study will trigger an $8 million milestone payment, after which they will carry on with development of the product. Celgene made an upfront non-refundable payment of $35 million to CNCE upon entering the collaboration agreement. CNCE is eligible for up to $23 million in development milestone payments, up to $247.5 million in regulatory milestone payments, up to $50 million in sales-based milestone payments and mid-single digit to low double digit net sales royalties.

Jazz Pharmaceuticals: In February 2013, CNCE entered into an agreement with Jazz Pharmaceuticals granting Jazz the worldwide rights to develop and commercialize CNCE's deuterated sodium oxybate (D-SXB) compounds. Jazz will bear the responsibility for ongoing development of these products, with a Phase I expected to be initiated by the end of 2014, focusing on JZP-386 for treatment of narcolepsy. JZP-386 is a deuterated analog of the sodium oxybate found in Xyrem, which reached $569 million in revenues in 2013. CNCE received a non-refundable $4 million upfront payment and is entitled to up to $8 million in development and milestone payments, up to $35 million in regulatory milestone payments, up to $70 million in sales-based milestone payments and mid-single to low double digit net sales royalties.

Avanir Pharmaceuticals: In February 2012, CNCE entered into an agreement with Avanir Pharmaceuticals granting Avanir worldwide rights to develop and commercialize CNCE's deuterated dextromethorphan (D-DM) products. Avanir will bear responsibility for ongoing R&D and commercialization of these products, with a Phase II study expected to be initiated in 2H14 focusing on AVP-786 for treatment of treatment-resistant major depressive disorder. CNCE received a non-refundable $2 million upfront payment and is entitled to up to $4 million in development and milestone payments, up to $37 million in regulatory milestone payments, up to $125 million in sales-based milestone payments and mid-single to low double digit net sales royalties. Initiation of the Phase II program will trigger a

payment of $2 million. AVP-786 is D-DM analog with ultra-low dose of quinidine, a substance that can potentially cause multiple unwanted side effects. CNCE is entitled for up to an additional $43 million for licensed D-DM without quinidine.

VALUATION

We reinstate our Buy rating and $28 price target. Our valuation of Concert is based on our probability-weighted clinical net present value (NPV) valuation model. We believe that this method is appropriate in capturing the value of the clinical stage pipeline. It allows for the flexing of assumptions based on key factors such as chance of success, peak sales estimates, and year of commercial launch.

Factors that could impede shares from reaching our price target include negative clinical data flow from Concert's clinical stage programs as well as any potential delays or issues on the regulatory front and financing risk.

RISKS

- **Pipeline product risk** - Concert's pipeline consists of earlier stage developmental candidates. With this stage of development comes increased risk from negative trial readouts. Additionally, CPT-499 and CTP-354 represent major contributors to our valuation and any negative readouts, clinical or regulatory delays could negatively impact the stock. We believe Concert looks to mitigate some of this risk by having a platform technology which can generate a broad set of drug candidates for its pipeline.
- **Partnering risk** - Concert currently has signed partnerships and is continually engaging in business development activities. Because these programs are under the direction of other companies, there is no guarantee those programs will progress to meaningful catalysts, including potential commercialization. Any delays or terminated partnerships in the future, could have a negative impact on Concert's valuation.
- **Regulatory** - Should Concert's products successfully complete pivotal registrational studies, there is no guarantee that regulatory agencies would approve these products. Unforeseen issues may arise during clinical development which could impact the approvability of a therapeutic candidate.
- **Financing risk**- As with all non-profitable biotechnology companies, funding is continuously necessary to fund operations and ongoing clinical studies. Should Concert encounter problems in raising sufficient funds to continue its operations, this could significantly impact that stock"s valuation

COMPANY DESCRIPTION

Concert Pharmaceuticals create novel medicines that address medically important needs by applying its DCE Platform (Deuterated Chemical Entity Platform) to compounds with well-characterized pharmacological activity. This approach may enable drug discovery and clinical development that is more efficient and less expensive than conventional small molecule drug research and development. The company was co-founded in 2006 by Richard Aldrich, Roger Tung and Christoph Westphal, and is located in the historic town of Lexington, Massachusetts.

($ in millions except per share data)

Profit & Loss	2012A	2013A	2014E	2015E	2016E	2017E
Licensing and R&D revenue	11.3	23.4	3.0	0.0	0.0	0.0
Milestone revenue	1.5	2.0	2.0	12.0	13.2	14.5
Product and Royalties	0.0	0.0	0.0	0.0	0.0	0.0
Other revenues	0.0	0.0	0.0	0.0	0.0	0.0
Revenues	**12.8**	**25.4**	**5.0**	**12.0**	**13.2**	**14.5**
CoGS	0.0	0.0	0.0	0.0	0.0	0.0
Gross Profit	**12.8**	**25.4**	**5.0**	**12.0**	**13.2**	**14.5**
Gross margin	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*
G&A	7.3	8.0	10.4	10.9	12.0	13.2
R&D	24.2	21.8	23.5	27.1	30.3	33.9
Other op ex	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	**(18.6)**	**(4.4)**	**(28.9)**	**(25.9)**	**(29.1)**	**(32.6)**
EBIT margin	*nm*	*nm*	*nm*	*nm*	*nm*	*nm*
Depreciation	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation Intangibles	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	**(18.6)**	**(4.4)**	**(28.9)**	**(25.9)**	**(29.1)**	**(32.6)**
EBITDA margin	*nm*	*nm*	*nm*	*nm*	*nm*	*nm*
Non operating expenses	0.0	0.0	0.0	0.0	0.0	0.0
Net Interest Income/Other	0.0	0.0	(0.2)	(0.2)	0.1	0.1
Interest expense	1.9	1.7	1.8	1.8	0.2	0.2
EBT	**(20.4)**	**(6.1)**	**(30.9)**	**(27.9)**	**(29.1)**	**(32.6)**
EBT margin	*nm*	*nm*	*nm*	*nm*	*nm*	*nm*
Provision for taxes	0.0	0.0	0.0	0.0	0.0	0.0
Net Income	**(20.4)**	**(6.1)**	**(30.9)**	**(27.9)**	**(29.1)**	**(32.6)**
Participation of preferred stock	(0.4)	(0.4)	0.0	0.0	0.0	0.0
Net Income to common	**(20.8)**	**(6.5)**	**(30.9)**	**(27.9)**	**(29.1)**	**(32.6)**
net margin	*nm*	*nm*	*nm*	*nm*	*nm*	*nm*
NoSH	1.3	1.3	18.1	18.5	22.0	22.5
EPS - basic	**(16.15)**	**(4.99)**	**(1.71)**	**(1.51)**	**(1.32)**	**(1.45)**
EPS - diluted	**(16.15)**	**(4.99)**	**(1.71)**	**(1.51)**	**(1.32)**	**(1.45)**

Source: SEC filings and ROTH Capital Partners estimates

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Quarterly P&L

	Q1'14A	Q2'14E	H1'14E	Q3'14E	9M'14E	Q4'14E	FY'14E	Q1'15E	Q2'15E	H1'15E	Q3'15E	9M'15E	Q4'15E	FY'15E
Licensing and R&D revenue	1.61	0.25	1.86	0.26	2.12	0.88	3.0	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Milestone revenue	0.00	0.00	0.00	0.00	2.00	0.00	2.0	0.00	0.00	0.00	4.00	4.00	8.00	12.0
Product and Royalties	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Other revenues	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Revenues	**1.61**	**0.25**	**1.86**	**0.26**	**4.12**	**0.88**	**5.0**	**0.00**	**0.00**	**0.00**	**4.00**	**4.00**	**8.00**	**12.0**
CoGS	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Gross Profit	**1.61**	**0.25**	**1.86**	**0.26**	**4.12**	**0.88**	**5.0**	**0.00**	**0.00**	**0.00**	**4.00**	**4.00**	**8.00**	**12.0**
Gross margin	*nm*	*nm*	*nm*	*nm*	*nm*	*nm*	*100%*	*nm*	*nm*	*nm*	*nm*	*nm*	*nm*	*100%*
G&A	2.54	2.56	5.10	2.59	7.69	2.67	10.4	2.68	2.70	5.38	2.72	8.10	2.77	10.9
R&D	5.59	5.68	11.27	5.82	17.09	6.44	23.5	6.53	6.62	13.15	6.90	20.05	7.01	27.1
Other op ex	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.0
EBITDA	**(6.5)**	**(8.0)**	**(14.5)**	**(8.2)**	**(20.7)**	**(8.2)**	**(28.9)**	**(9.2)**	**(9.3)**	**(18.5)**	**(5.6)**	**(24.2)**	**(1.8)**	**(25.9)**
EBITDA margin							*nm*							*nm*
Non operating expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Net Interest Income/Other	(0.06)	(0.06)	(0.12)	(0.06)	(0.18)	(0.07)	(0.2)	(0.04)	(0.04)	(0.08)	(0.04)	(0.12)	(0.04)	(0.2)
Interest expense	0.43	0.43	0.86	0.46	1.32	0.48	1.8	0.43	0.44	0.87	0.45	1.32	0.48	1.8
EBT	**(7.0)**	**(8.5)**	**(15.5)**	**(8.7)**	**(22.2)**	**(8.8)**	**(30.9)**	**(9.7)**	**(9.8)**	**(19.5)**	**(6.1)**	**(25.6)**	**(2.3)**	**(27.9)**
EBT margin							*nm*							*nm*
Provision for taxes	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Participation of preferred stock														
Net income to common	**(7.0)**	**(8.5)**	**(15.5)**	**(8.7)**	**(22.2)**	**(8.8)**	**(30.9)**	**(9.7)**	**(9.8)**	**(19.5)**	**(6.1)**	**(25.6)**	**(2.3)**	**(27.9)**
net margin							*nm*							*nm*
NoSH	9.2	18.0	13.59	18.10	15.10	15.10	18.10	18.5	18.5	18.50	18.50	18.50	18.50	18.50
EPS - basic	**(0.76)**	**(0.47)**	**(1.14)**	**(0.48)**	**(1.47)**	**(0.58)**	**(1.71)**	**(0.52)**	**(0.53)**	**(1.05)**	**(0.33)**	**(1.38)**	**(0.12)**	**(1.51)**

Source: SEC filings and ROTH Capital Partners estimates

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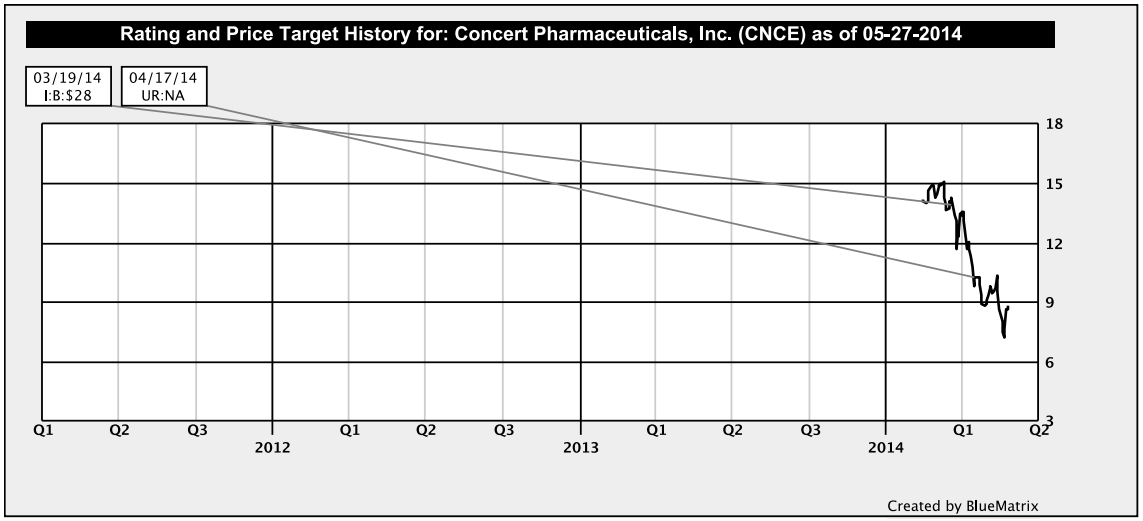
Within the last twelve months, ROTH has received compensation for investment banking services from Concert Pharmaceuticals, Inc..

ROTH makes a market in shares of Concert Pharmaceuticals, Inc. and as such, buys and sells from customers on a principal basis.

Within the last twelve months, ROTH has managed or co-managed a public offering for Concert Pharmaceuticals, Inc..

On September 28, 2010, ROTH changed its rating system in order to replace the Hold rating with Neutral.

On May 26, 2011, ROTH changed its rating system in order to incorporate coverage that is Under Review.



Each box on the Rating and Price Target History chart above represents a date on which an analyst made a change to a rating or price target, except for the first box, which may only represent the first note written during the past three years. **Distribution Ratings/IB Services** shows the number of companies in each rating category from which Roth or an affiliate received compensation for investment banking services in the past 12 month.

Distribution of IB Services Firmwide

			IB Serv./Past 12 Mos. as of 05/28/14	
Rating	**Count**	**Percent**	**Count**	**Percent**
Buy [B]	**184**	**81.06**	**101**	**54.89**
Neutral [N]	**24**	**10.57**	**9**	**37.50**
Sell [S]	**1**	**0.44**	**0**	**0**
Under Review [UR]	**17**	**7.49**	**11**	**64.71**

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Sell: A rating, which at the time it is instituted and or reiterated, that indicates an expectation that the price will depreciate by more than 10% over the next 12 months.

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