

## ZS Pharma

### 3Q Snapshot & Model Update

We are updating our ZSPH model based on the company's 3Q results (there was no conference call). The press release largely recaps recent progress, namely top-line data from ZS004 (see note [here](#)), which will be presented in full as an oral Late Breaker at AHA in Chicago (Nov 17<sup>th</sup>, 7:22am). Everything remains on track for an NDA filing for ZS-9 in hyperkalemia in 1H15. We continue to see ZS-9 as a differentiated treatment option in a large market with significant unmet need, which we think could lead to a majority market share over time vs. competitor RLYP's patiromer. Even assuming equal share, we believe ZSPH's valuation is compelling given the potential size of the hyperkalemia market. Maintain Overweight.

- **Upcoming events: Full ZS004 results to be presented at AHA.** The key remaining catalyst for ZSPH in 2014 should be full Phase 3 data from the ZS004 trial (28-day treatment); recall there was very little data in the top-line press release. While we don't anticipate the full data presentation will be a significant catalyst for shares (since we already know it's positive), we think long-term data on the efficacy/safety of maintenance dosing will be important for doc (and investor) perception of the market opportunity (given the relative shorter duration of data to date). NDA/MAA filings for ZS-9 are anticipated in 1H15.
- **3Q results.** 3Q EPS was \$(0.81) vs. JPMe of (\$0.82), driven largely by pre-IPO share counts. 3Q OpEx of \$16.6M was slightly higher than JPMe of \$15.2M. That said, ZSPH is not yet an earnings story.
- **Estimate changes.** We have updated our model for 3Q results, changes were minimal. We are maintaining our Dec 15 \$43 target.
- **Balance sheet update.** ZSPH ended 3Q with \$122M in cash (and no debt), after having raised \$112M in its June IPO (J.P. Morgan acted as a joint book-runner). The current cash position should be sufficient through the expected approval of ZS-9 in early 2016.

## Overweight

ZSPH, ZSPH US

Price: \$36.79

Price Target: \$43.00

### Biotechnology

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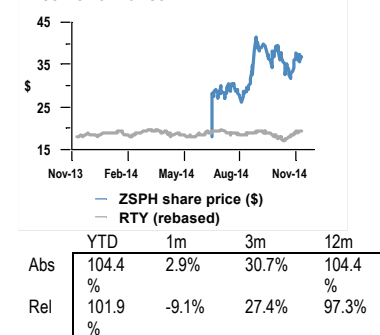
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### Price Performance



### ZS Pharma, Inc (ZSPH;ZSPH US)

FYE Dec	2012A	2013A	2014E	2014E	2015E	2015E	2016E	2016E
			(Prev)	(Curr)	(Prev)	(Curr)	(Prev)	(Curr)
EPS Reported (\$)								
Q1 (Mar)	-	(1.35)	(2.57)A	(2.57)A	-	-	-	-
Q2 (Jun)	-	-	(4.72)A	(4.72)A	-	-	-	-
Q3 (Sep)	-	-	(0.82)	(0.81)A	-	-	-	-
Q4 (Dec)	-	-	(0.85)	(0.84)	-	-	-	-
FY	(2.63)	(8.52)	(5.01)	(4.99)	(3.16)	(3.09)	(4.71)	(4.65)

Source: Company data, Bloomberg, J.P. Morgan estimates.

### Company Data

Price (\$)	36.79
Date Of Price	10 Nov 14
52-week Range (\$)	43.00-25.51
Market Cap (\$ mn)	765.93
Fiscal Year End	Dec
Shares O/S (mn)	21
Price Target (\$)	43.00
Price Target End Date	31-Dec-15

### See page 6 for analyst certification and important disclosures.

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## Pipeline

Figure 1: ZSPH Pipeline

### Product Pipeline Highlights

Program	P/C	Ph 1	Ph 2	Ph 3	FDA	Mkt.	Partner	Comments
<b>ZS-9</b> Hyperkalemia							--	
<b>ZS-1</b> Elevated Ammonia							--	

Source: Company reports and J.P. Morgan estimates.

## Upcoming Events

Figure 2: ZSPH Upcoming Events

Program	Event	Expected Timing	Significance
<b>ZS-9</b>	Full ZS004 data presentation at AHA	Nov 17th	High
	Initiate ZS005 study to assess long-term safety/efficacy	2Q14	Low
	NDA and MAA filings	1H15	Medium
	US Launch	2016	High

Source: Company reports and J.P. Morgan estimates.

Figure 3: ZSPH Income Statement

ZS Pharmaceuticals Income Statement

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	1Q13A	2Q13A	3Q13A	4Q13A	2013A	1Q14A	2Q14A	3Q14A	4Q14E	2014E	2015E	2016E	2017E	2018E	2019E
ZS-9 Revenues	-	-	-	-	-	-	-	-	-	-	-	51.7	189.5	402.5	728.9
US Revenues	-	-	-	-	-	-	-	-	-	-	-	-	3.6	14.8	33.9
Ex-US Royalty	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Revenues</b>	-	-	-	-	-	-	-	-	-	-	-	<b>51.7</b>	<b>193.1</b>	<b>417.3</b>	<b>762.8</b>
COGS	-	-	-	-	-	-	-	-	-	-	-	15.5	59.9	112.7	175.4
R&D	4.4	-	-	-	24.5	5.3	10.0	10.9	11.5	37.7	41.0	44.0	48.0	54.0	70.0
SG&A	0.7	-	-	-	7.7	4.0	4.6	5.7	5.9	20.1	25.5	114.3	117.8	123.1	128.6
<b>Total Operating Expenses</b>	<b>5.1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>32.2</b>	<b>9.3</b>	<b>14.5</b>	<b>16.6</b>	<b>17.4</b>	<b>57.8</b>	<b>66.5</b>	<b>173.8</b>	<b>225.7</b>	<b>289.8</b>	<b>374.1</b>
<b>Operating Income</b>	<b>(5.1)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(32.2)</b>	<b>(9.3)</b>	<b>(14.5)</b>	<b>(16.6)</b>	<b>(17.4)</b>	<b>(57.8)</b>	<b>(66.5)</b>	<b>(122.1)</b>	<b>(32.6)</b>	<b>127.5</b>	<b>388.7</b>
Net interest & other income	(0.3)	-	-	-	(2.1)	(1.5)	(1.9)	(0.2)	(0.2)	(3.9)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)
Income Tax (benefit)	-	-	-	-	-	-	-	-	-	-	-	-	-	12.7	77.6
<b>GAAP Net Income</b>	<b>(5.4)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(34.3)</b>	<b>(10.7)</b>	<b>(16.4)</b>	<b>(16.9)</b>	<b>(17.6)</b>	<b>(61.6)</b>	<b>(67.3)</b>	<b>(122.8)</b>	<b>(33.4)</b>	<b>114.1</b>	<b>310.4</b>
<b>Non-GAAP Net Income</b>	<b>(5.4)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(34.3)</b>	<b>(10.5)</b>	<b>(16.2)</b>	<b>(16.7)</b>	<b>(17.4)</b>	<b>(60.8)</b>	<b>(65.8)</b>	<b>(120.1)</b>	<b>(29.4)</b>	<b>119.3</b>	<b>316.9</b>
<b>GAAP Basic EPS</b>	<b>(1.35)</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>(8.52)</b>	<b>(2.57)</b>	<b>(4.72)</b>	<b>(0.81)</b>	<b>(0.84)</b>	<b>(4.99)</b>	<b>(3.09)</b>	<b>(4.65)</b>	<b>(1.17)</b>	<b>3.68</b>	<b>9.06</b>
<b>GAAP Diluted EPS</b>	<b>(1.35)</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>(8.52)</b>	<b>(2.57)</b>	<b>(4.72)</b>	<b>(0.81)</b>	<b>(0.84)</b>	<b>(4.99)</b>	<b>(3.09)</b>	<b>(4.65)</b>	<b>(1.17)</b>	<b>3.08</b>	<b>7.70</b>
Basic Shares Outstanding	4.0	-	-	-	4.0	4.2	3.5	20.8	21.0	12.4	21.8	26.4	28.4	31.0	34.3
Diluted Shares Outstanding	4.0	-	-	-	4.0	4.2	3.5	20.8	21.0	12.4	21.8	26.4	28.4	37.0	40.3
<b>Margin Analysis:</b>															
Gross margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	70%	69%	73%	77%
Operating margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	30.56%	50.96%
Net margin	#REF!	#REF!	#REF!	#REF!	NM	NM	NM	NM	NM	NM	NM	NM	NM	27.34%	40.69%
Tax Rate	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.0%	0.0%	5.0%	10.0%	20.0%
<b>Cost Analysis:</b>															
COGS as % of tot. prod. sales	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	30%	31%	27%	23%
R&D as % of tot. revenue	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	85%	25%	13%	9%
SG&A as % of tot. revenue	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	221%	61%	29%	17%
<b>Year-over-year growth:</b>															
Total revenue						NM	NM	NM	NM	NM	NM	NM	273.41%	116.13%	82.80%
R&D Expense						19.28%	NM	NM	NM	53.66%	8.87%	7.32%	9.09%	12.50%	29.63%
SG&A Expense						461.82%	NM	NM	NM	162.03%	26.61%	348.04%	3.11%	4.49%	4.50%
Total operating expenses						81.03%	NM	NM	NM	79.53%	15.06%	161.30%	29.86%	28.41%	29.10%
Operating income						NM	NM	NM	NM	NM	NM	83.54%	-73.31%	-491.43%	204.80%
Net income						NM	NM	NM	NM	NM	NM	NM	NM	NM	512.13%
EPS						NM	NM	NM	NM	NM	NM	50.58%	-74.75%	-362.07%	150.12%
Basic Shares						4.58%	NM	NM	NM	207.13%	76.10%	21.25%	7.58%	9.24%	10.48%
Diluted Shares						NM	NM	NM	NM	NM	NM	7.14%	17.21%	7.58%	9.24%

Source: J.P. Morgan estimates, Company data.

## Investment Thesis, Valuation and Risks

### ZS Pharma (Overweight; Price Target: \$43.00)

#### Investment Thesis

We have an OW rating on ZSPH based on the potential of ZS-9 for the treatment of hyperkalemia – a relatively common and potentially lethal condition in CKD and CHF patients. We see ZS-9 as a differentiated treatment option in a large market with significant unmet need, which we think could lead to a majority market share over time vs. competitor RLYP's patiomer. Even assuming equal share, we believe ZSPH's valuation is highly compelling on both a comp and absolute basis. Maintain Overweight.

#### Valuation

Our probability-weighted Dec-15 PT of \$43 is based on a blended average of our proprietary probability-adjusted sum-of-the-parts scenario analysis (50% weighting) and risk-adjusted NPV model (50% weighting).

#### ZSPH Valuation Summary

ZSPH Valuation Summary			
Discount rate	13%		
4Q15 Fully Diluted Shares (mm)	27.8		
<b>Main value drivers</b>	<b>Prob of approval</b>	<b>Peak WW sales est (avg. scenario)</b>	<b>Avg peak yr</b>
ZS-9 US	70%	\$ 1,105	2020
ZS-9 EU/Japan	50%	\$ 570	2022
<b>Valuation methodology</b>	<b>Value / share</b>	<b>Weighting</b>	<b>Adj. value/ share</b>
DCF			
P/E 2016			
Real options scenario analysis	\$ 45.21	50%	22.61
Risk adjusted NPV analysis	\$ 40.69	50%	20.34
Total			\$ 42.95
Catalyst/liquidity discount			0%
<b>YE15 Price Target</b>			<b>\$ 43</b>

Source: J.P. Morgan estimates.

#### Risks to Rating and Price Target

ZSPH is susceptible to the standard risks that apply to the entire biotech industry, including development, regulatory, commercial, manufacturing, financing, and IP pitfalls. More specific risks to the downside include clinical setbacks for ZS-9, regulatory hurdles, commercial setbacks, and personnel risk.

## ZS Pharma: Summary of Financials

Income Statement - Annual	FY13A	FY14E	FY15E	FY16E	Income Statement - Quarterly	1Q14A	2Q14A	3Q14A	4Q14E
Revenues	0	0	0	52	Revenues	0A	0A	0A	0
Cost of products sold	0	0	0	(16)	Cost of products sold	0A	0A	0A	0
Gross profit	-	-	-	-	Gross profit	-	-	-	-
SG&A	(8)	(20)	(26)	(114)	SG&A	(4)A	(5)A	(6)A	(6)
R&D	(25)	(38)	(41)	(44)	R&D	(5)A	(10)A	(11)A	(12)
Operating income	(32)	(58)	(67)	(122)	Operating income	(9)A	(15)A	(17)A	(17)
EBITDA	(32)	(58)	(67)	(122)	EBITDA	(9)A	(15)A	(17)A	(17)
Net interest (income) / expense	(2)	(4)	(1)	(1)	Net interest (income) / expense	(1)A	(2)A	(0)A	(0)
Other income / (expense)	-	-	-	-	Other income / (expense)	-	-	-	-
Income taxes	0	0	0	0	Income taxes	0A	0A	0A	0
Net income - GAAP	(34)	(62)	(67)	(123)	Net income - GAAP	(11)A	(16)A	(17)A	(18)
Net income - recurring	(34)	(62)	(67)	(123)	Net income - recurring	(11)A	(16)A	(17)A	(18)
Diluted shares outstanding	4	12	22	26	Diluted shares outstanding	4A	3A	21A	21
EPS - excluding non-recurring	(8.52)	(4.99)	(3.09)	(4.65)	EPS - excluding non-recurring	(2.57)A	(4.72)A	(0.81)A	(0.84)
EPS - recurring	(8.52)	(4.99)	(3.09)	(4.65)	EPS - recurring	(2.57)A	(4.72)A	(0.81)A	(0.84)
Balance Sheet and Cash Flow Data	FY13A	FY14E	FY15E	FY16E	Ratio Analysis	FY13A	FY14E	FY15E	FY16E
Cash and cash equivalents	9	89	24	55	Sales growth	-	-	-	-
Accounts receivable	-	-	-	-	EBIT growth	295.6%	79.5%	15.1%	83.5%
Inventories	-	-	-	-	EPS growth - recurring	224.3%	(41.5%)	(38.0%)	50.6%
Other current assets	0	0	0	0	Gross margin	-	-	-	-
Current assets	9	90	24	55	EBIT margin	-	-	-	(236.1%)
PP&E	5	10	12	12	EBITDA margin	-	-	-	(236.1%)
Total assets	14	99	35	67	Tax rate	0.0%	0.0%	0.0%	0.0%
Total debt	-	-	-	-	Net margin	-	-	-	(237.6%)
Total liabilities	8	8	8	8	Net Debt / EBITDA	-	-	-	-
Shareholders' equity	6	92	27	59	Net Debt / Capital (book)	-	-	-	-
Net income (including charges)	(34)	(62)	(67)	(123)	Return on assets (ROA)	(172.9%)	(108.6%)	(99.7%)	(239.2%)
D&A	1	3	6	7	Return on equity (ROE)	(235.2%)	(125.7%)	(113.1%)	(285.1%)
Change in working capital	3	0	0	0	Enterprise value / sales	-	-	-	13.8
Other	4	2	3	4	Enterprise value / EBITDA	NM	NM	NM	NM
Cash flow from operations	(27)	(56)	(58)	(112)	Free cash flow yield	(19.0%)	(13.3%)	(8.1%)	(12.2%)
Capex	(4)	(8)	(8)	(8)					
Free cash flow	(28)	(61)	(65)	(118)					
Cash flow from investing activities	(4)	(8)	(8)	(8)					
Cash flow from financing activities	15	145	0	150					
Dividends	-	-	-	-					
Dividend yield	-	-	-	-					

Source: Company reports and J.P. Morgan estimates.

Note: \$ in millions (except per-share data). Fiscal year ends Dec

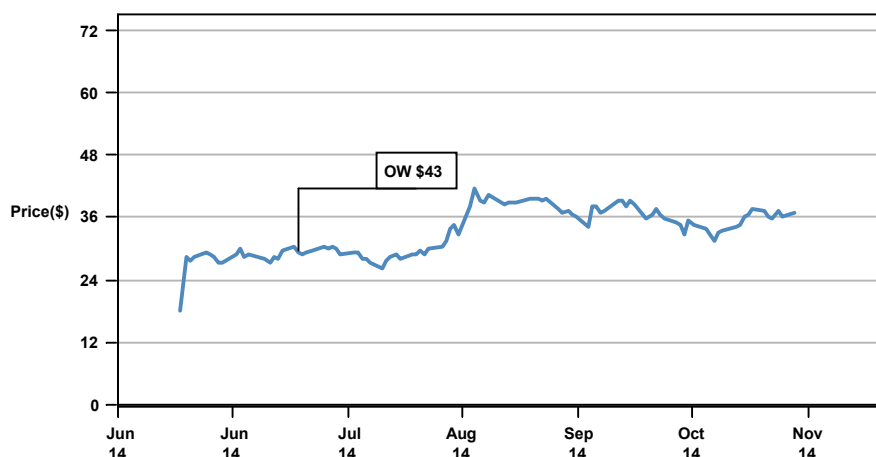
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ZS Pharma (ZSPH, ZSPH US) Price Chart



Date	Rating	Share Price (\$)	Price Target (\$)
14-Jul-14	OW	29.49	43.00

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends.  
Initiated coverage Jul 14, 2014.

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