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SCYNEXIS

Biotechnology

US Equity Research
23 December 2014

BUY

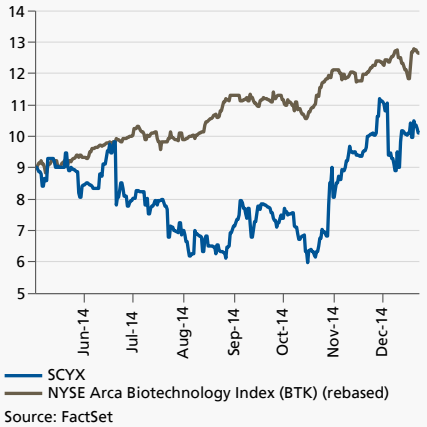
PRICE TARGET US$16.00
Price (22-Dec) US$10.10
Ticker SCYX-NASDAQ

52-Week Range (US$):	5.96 - 11.20
Avg Daily Vol (M) :	0.0
Shares Out. (M) :	8.5
Market Cap (US$M):	85.9
Net Cash (US$M):	34.0

FYE Dec	2013A	2014E	2015E	2016E
Sales (US$M)	16.9	18.2	17.5	17.5
EPS Adj&Dil (US$)	(0.22)	(7.57)	(1.91)	(2.35)

Quarterly Sales	Q1	Q2	Q3	Q4
2013A	-	-	-	-
2014E	4.7A	4.6A	4.4A	4.5
2015E	4.4	4.4	4.4	4.4
2016E	-	-	-	-

Quarterly EPS Adj&Dil	Q1	Q2	Q3	Q4
2013A	-	-	-	-
2014E	(5.51)A	(0.89)A	(0.39)A	(0.78)
2015E	(0.38)	(0.48)	(0.48)	(0.58)
2016E	-	-	-	-



Source: FactSet

SCYNEXIS is a pharmaceutical company committed to the discovery, development and commercialization of novel anti-infectives to address significant unmet therapeutic needs.

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Initiation of Coverage

There's a new antifungus among us

Investment recommendation

Scynexis' novel enfumafungin, SCY-078, has shown potent antifungal activities *in vitro* against fluconazole-resistant and caspofungin-resistant strains of *Candida* species and a gamut of *Aspergillus* species. Such effects were replicated in mouse models of these infections, which are known to be predictive of clinical outcomes for antifungal agents. Key reasons for success: 1) *in vitro* studies of antifungal agents are very predictive of approval because if one determines the agent kills the bugs – especially resistant strains – it usually also works in humans, 2) early Ph1 work showed '078 is safe, 3) FDA's QIDP procedure expedites approval times and four antibiotics have already been approved in 2014 under the designation, 4) despite many drugs for systemic fungal infections there is still escalating resistance, a lack of both an IV and oral form for more cost-effective, earlier hospital release, and mortality rates are still high 30-50%; 5) limited competition.

Investment highlights

- **Resistance prompts changes in guideline.** As the only systemic antifungal class with both IV and oral formulations (Pfizer's Vfend being the largest), azoles' rising popularity in treating candidiasis and aspergillosis resulted in high frequencies of resistance. Although medical associations are shifting echinocandins (e.g. Merck's Cancidas) to front-line therapies, this class is only available in IV, and resistance is emerging. Most azoles and echinocandins will be generic by the time '078 is approved,but we think its superior efficacy and lack of brand competition should carry the day.
- **Little competition.** Since most big pharmas are focused on larger therapeutic areas, there isn't much competition in the horizon. Isavuconazole, developed by Basilea and Astellas, is perhaps the only new entrant into the antifungal space in the near term. While the $3.6B worldwide antifungal may seem small, it's a growing market, and the dearth of major competitors is a great opportunity for Scynexis.
- **Accelerated timeline with QIDP designation.** Oral SCY-078 has already been granted QIDP status; we expect the IV form to obtain the designation as well. After reporting Ph2a and Ph1 data from oral and IV respectively in 2015, SCY-078 could go directly into a Ph2/3 study in resistant strains and receive FDA approval as early as 2018.

Valuation/risks

We use a discounted P/E model to derive our $16 price target; we apply a 30x multiple to our 2023 EPS estimate of $4.39 discounted at 30% for 8 years. Risks include: failure to hit primary endpoint in SCY-078 Ph2 trial, and/or failure to gain FDA approval

INVESTMENT THESIS

Our Scynexis investment thesis hinges on the assumptions that its lead drug SCY-078 will have positive Ph2a data readout in 2015 in invasive candidiasis, the IV formulation will have positive Ph1 data in the same timeframe, and it will receive a qualified infectious disease product (QIDP) designation. We like the stock for several reasons:

1. **We see SCY-078 positioned as the treatment of choice for patients recalcitrant and/or intolerant to currently available therapies, and a potential alternative to echinocandins.** Invasive candidiasis (IC) and aspergillosis (IA) are treated with three main classes of drugs – azoles (oral and IV), echinocandins (IV only) and polyenes (IV only). The popularity of azoles has resulted in resistance frequencies as high as 30% in *C. glabrata*, the second most prevalent strain in IC. There's also high cross-resistance among azoles. This then led to the increased utilization of echinocandins in hospitals. Without an oral formulation, patients either have to be hospitalized longer or stepped down to an azole, risking relapses. Polyenes are used the least due to nephrotoxicity. If approved, SCY-078 could replace oral azoles as a step-down therapy and echinocandins by offering an IV-to-oral step-down within a single therapeutic class.

2. **SCY-078 has good preclinical efficacy data against azole- and echinocandin-resistant strains.** SCY-078 has shown potent antifungal activities in *in vitro* against 650 laboratory and clinically important strains of *Candida* and *Aspergillus*. In fluconazole-resistant strains of *C. albican*, SCY-078 was comparable to caspofungin, the most widely used echinocandin. The drug was also active in echinocandin-resistant strains of *C. glabrata*, suggesting its potential therapeutic effects in multidrug-resistant species. While some experiments hinted that human serum increased the minimum inhibitory concentration (MIC) of SCY-078 an average of 16-fold across *Candida* species, we don't perceive this as a concern since the drug showed strong antifungal effects in mouse models of *Candida* and *Aspergillus*, which have been known to be predictive of clinical efficacy. In seven Ph1's, the majority of reported adverse events (AE) were GI related.

3. **We're more conservative than consensus.** We have SCY-078 related revenue growing from $23.8M in 2020 to $123.0M in 2023. Consensus, on the other hand, models revenue ramping from $54.8M in 2020 to $165.7 in 2023. Our numbers are less heroic because:

    a. Of the four azoles used for invasive candidiasis and aspergillosis, fluconazole, itraconazole and voriconazole are all generic, and posaconazole (branded as Noxafil by Merck) patents expire around 2019. Caspogungin (branded as Cancidas by Merck), anidulafungin (branded as Eraxis by Pfizer) and micafungin (branded as Mycamine by Astella) will lose exclusivity in 2017, 2020 and 2021, respectively, which is around the time that SCY-078 will become commercially available. Therefore, SCY-078 will need to prove its superiority over the standard of care in order to achieve meaningful adoption in hospitals. As we believe it's still too early predict without Ph2 data in hand, we're comfortable with our conservative penetration rates.

b. Although there are concerns over potential relapses of resistant strains due to subsequent step-down to an oral azole, we believe they are exaggerated. In a Ph4 trial with 250 hospitalized patients tested positive for candidemia and invasive candidiasis, they were treated with five days of IV anidulafungin for at least five days, then allowed to step down to oral fluconazole or voriconazole. In the "early switcher" population (68% of all switchers), ~80% achieved the primary end point of global response rate composed of a clinical and microbiological component at the end of the 28-day study period.

We note that SCY-078 doesn't need to be a blockbuster drug to render Scynexis profitable. At a tax rate of 0% and assuming total OpEx of ~$50M a year, $50M of revenue would yield a positive non-GAAP EPS.

4. **Since the systemic antifungals market is only ~$3.2B worldwide, there's an absence of drugs in development from big pharmas, creating opportunities for small companies like Scynexis.** Given the size of the market and the inpatient use of systemic antifungals, this therapeutic area is much less attractive to big pharma than chronic conditions with high prevalence and/or pricing flexibilities (e.g. oncology). The overall competitive landscape is relatively benign, in our view, as isavuconazole from Basilea Pharmaceutica (private) and Astella is the only new competitor in the foreseeable future. It has a PDUFA date of March 8, 2015. However, the NDA is slightly different from what SCY-078 is seeking –IA and mucormycosis, rather than IA and IC.

5. **Oral SCY-078 has already received QIDP designation, and we don't know why the IV version wouldn't be able to as well.** Under the GAIN Act, a QIDP designation would give SCY-078 additional five-year exclusivity, summing to a potential 10-year period of exclusivity. Furthermore, a drug that receives QIDP designation is eligible for fast track designation and priority review. This year, four antibiotics with QIDP designations – Dalvance, Sivextro, Orbactiv and Zerbaxa – received approval, hence demonstrating the FDA's commitment to foster the development new antimicrobial drugs. With the agency's favorable stance, we believe SCY-078 could come to market in four to five years.

6. **There're two potentially stock-moving catalysts in 2015.**

   a. Ph2a study with oral SCY-078 in hospitalized patients with IC

   b. Ph1 study with IV SCY-078 is slated for a 1H2015 start

VALUATION

Since Scynexis is unlikely to be profitable until 2021, we believe a discounted P/E multiple valuation methodology is appropriate. We use our 2023 EPS estimate of $4.39 (third year of profitability) and a P/E multiple of 30x, and discount that back eight years at 30% to derive a one-year forward price target of $16.

Figure 1: Price target sensitivity analysis by multiple and discount rate

EPS:	$4.39		Multiple				
Period:	8		20.0x	25.0x	30.0x	35.0x	40.0x
		15.0%	$29	$36	$43	$50	$57
		20.0%	$20	$26	$31	$36	$41
	Discount	25.0%	$15	$18	$22	$26	$29
		30.0%	$11	$13	$16	$19	$22
		35.0%	$8	$10	$12	$14	$16
		40.0%	$6	$7	$9	$10	$12
		45.0%	$4	$6	$7	$8	$9

	2021	2022	2023	2024
PE multiple	30.0x	30.0x	30.0x	30.0x
EPS	$1.77	$2.36	$4.39	$6.55
Total	53.01	70.90	131.66	196.54
Discount Rate	30%	30%	30%	30%
Discount Years	6.0	7.0	8.0	9.0
Price Target	$11	$11	$16	$19
Current price:	$10.48	$10.48	$10.48	$10.48
	4.8%	7.8%	54.0%	76.8%

Source: Canaccord Genuity estimates
Priced at the close on December 19, 2014

REVENUE AND MARKET MODEL

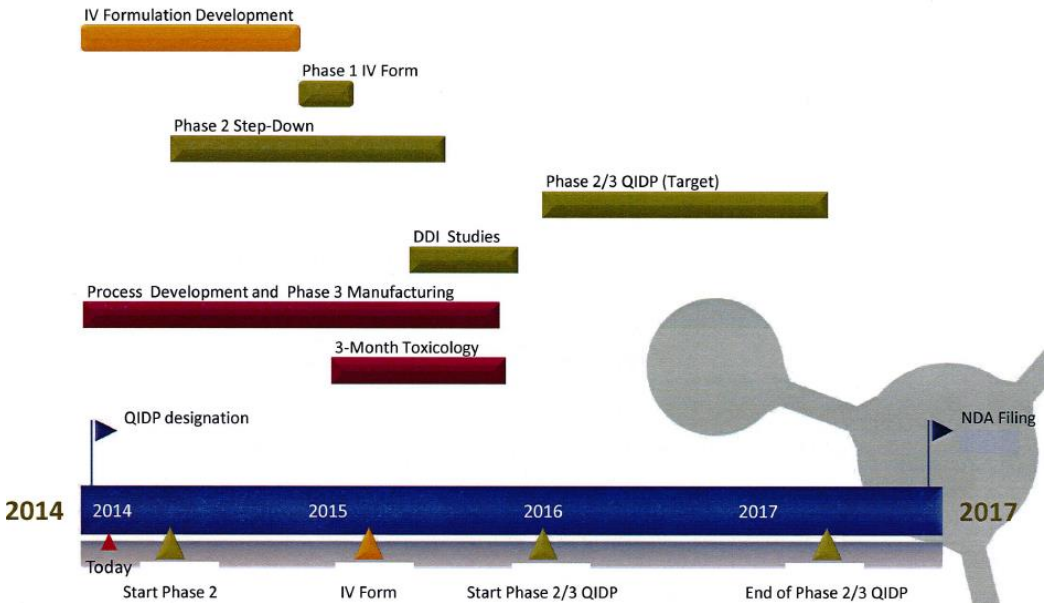
Scynexis' lead programs are oral and IV formulations of SCY-078 for treating invasive *Candida* and *Aspergillus* fungal infections. The drug was exclusively licensed from Merck in 2013. In early November, Scynexis licensed SCY-635, a cyclophilin inhibitor, to Waterstone Pharmaceuticals (HK) Limited, thus focusing primarily on the development of SCY-078.

Figure 2: Scynexis pipeline

PROGRAMS	DISCOVERY	PRE-CLINICAL	PHASE 1	PHASE 2	PHASE 3
SCY-078 (Oral)*	Invasive Fungal Infections				
SCY-078 (IV)	Invasive Fungal Infections				
Other compounds	Fungal Infections				

Source: Company presentation

Figure 3: Scynexis provisional timeline to NDA filing



Source: Company presentation

Our market model is built on the assumption that SCY-078 will receive FDA approval for treating IC and IA in patients that are recalcitrant to and/or intolerable of currently available therapies (i.e., azoles, echinocandins and polyenes) in 2018, and approved as a front-line treatment option in 2019. The drug will be commercialized in the US in 2019 through a focused, hospital-based sales force assembled by Scynexis. We also assume that European launches are one year behind and will be done by a partner,

with Scynexis collecting 25% of sales as royalty. To get an idea on the number of IC patients in the US, we referred to surveillance studies in Atlanta and Baltimore reported by the CDC, which estimated *Candida* infection rates in the range of 13 to 26 per 100,000 persons between 2008 and 2011. These rates correspond to 40,000 to 80,000 cases per year, and we use the 80,000 as the 2014 base number for modeling. We then apply an annual growth rate of 3.5% (based on 1996-2003 CAGR from the paper "Nosocomial Fungal Infections: Epidemiology, Infection Control, and Prevention" by George J. Alangaden) to project the number of IC cases in the US going forward. For IA, it's estimated that each incident incur a hospitalization-related cost of $62,000, for a total of $633M a year, thus we get ~10,000 cases per year. For simplicity's sake, we apply the same growth rate as IC. We then derive SCY-078 revenue forecasts using a market share approach, which takes the increase in resistance to echinocandins and azoles into consideration.

For pricing, we refer to the major branded drugs that are on the market today: 1) Merck's Cancidas (caspofungin) is ~$350/day and 2) Astellas' Mycamine (micafungin) is ~ $200/day. We believe SCY-078 IV can be priced at a slight premium, so we use $450/day, administered for ~10days; then the patient would step down to the oral therapy, for a total cost of $5,500/patient.

Figure 4: Revenue estimates

(In millions)

	SCY-078 Sales											Other Revenues			TOTAL
	US Sales					EU Sales									
	Resistant Invasive Candidiasis	Non-Resistant Invasive Candidiasis	Resistant Invasive Aspergillosis	Non-Resistant Invasive Aspergillosis	078 Total	End-User	to SCYX	royalty	US Revenue	EU Revenue	Total	Related Party	Other	Total	REVENUE
2012	$0.0	$0.0	$0.0	$0.0	**$0.0**	$0.0	$0.0		**$0.0**	**$0.0**	**$0.0**	$7.4	$9.4	$16.8	**$16.8**
2013	$0.0	$0.0	$0.0	$0.0	**$0.0**	$0.0	$0.0		**$0.0**	**$0.0**	**$0.0**	$7.3	$9.6	$16.9	**$16.9**
2014E	$0.0	$0.0	$0.0	$0.0	**$0.0**	$0.0	$0.0		**$0.0**	**$0.0**	**$0.0**	$7.5	$10.8	$18.2	**$18.2**
2015E	$0.0	$0.0	$0.0	$0.0	**$0.0**	$0.0	$0.0		**$0.0**	**$0.0**	**$0.0**	$7.5	$10.0	$17.5	**$17.5**
2016E	$0.0	$0.0	$0.0	$0.0	**$0.0**	$0.0	$0.0		**$0.0**	**$0.0**	**$0.0**	$7.5	$10.0	$17.5	**$17.5**
2017E	$0.0	$0.0	$0.0	$0.0	**$0.0**	$0.0	$0.0		**$0.0**	**$0.0**	**$0.0**	$7.5	$10.0	$17.5	**$17.5**
2018E	$0.0	$0.0	$0.0	$0.0	**$0.0**	$0.0	$0.0		**$0.0**	**$0.0**	**$0.0**	$7.5	$10.0	$17.5	**$17.5**
2019E	$2.3	$0.0	$0.4	$0.0	**$2.7**	$0.0	$0.0		**$2.7**	**$0.0**	**$2.7**	$7.5	$10.0	$17.5	**$20.2**
2020E	$5.6	$13.2	$0.8	$1.5	**$21.1**	$10.6	$2.6	*25%*	**$21.1**	**$2.6**	**$23.8**	$7.5	$10.0	$17.5	**$41.3**
2021E	$9.9	$33.2	$1.4	$3.7	**$48.2**	$24.1	$6.0	*25%*	**$48.2**	**$6.0**	**$54.3**	$7.5	$10.0	$17.5	**$71.8**
2022E	$19.5	$50.9	$2.7	$5.8	**$78.9**	$39.4	$9.9	*25%*	**$78.9**	**$9.9**	**$88.7**	$7.5	$10.0	$17.5	**$106.2**
2023E	$32.4	$65.4	$4.0	$7.6	**$109.4**	$54.7	$13.7	*25%*	**$109.4**	**$13.7**	**$123.0**	$7.5	$10.0	$17.5	**$140.5**
2024E	$49.2	$75.9	$8.9	$8.9	**$143.0**	$69.7	$17.4	*25%*	**$143.0**	**$17.4**	**$160.4**	$7.5	$10.0	$17.5	**$177.9**
2025E	$64.5	$90.5	$10.9	$10.9	**$176.8**	$86.1	$21.5	*25%*	**$176.8**	**$21.5**	**$198.4**	$7.5	$10.0	$17.5	**$215.9**
2026E	$86.4	$99.2	$7.3	$12.3	**$205.3**	$102.6	$25.7	*25%*	**$205.3**	**$25.7**	**$230.9**	$7.5	$10.0	$17.5	**$248.4**
% Growth															
19E/18E													0.0%		**15.5%**
20E/19E	137.6%		126.3%		680.3%				680.3%				0.0%		**104.2%**
21E/20E	78.0%	150.6%	69.7%	151.8%	128.4%	128.4%	128.4%		128.4%	128.4%	128.4%		0.0%		**74.0%**
22E/21E	97.6%	53.3%	88.5%	54.1%	63.5%	63.5%	63.5%		63.5%	63.5%	63.5%		0.0%		**48.0%**
23E/22E	65.7%	28.6%	49.9%	30.8%	38.7%	38.7%	38.7%		38.7%	38.7%	38.7%		0.0%		**32.3%**
24E/23E	52.0%	16.0%	122.3%	18.5%	30.7%	27.5%	27.5%		30.7%	27.5%	30.4%		0.0%		**26.6%**
25E/24E	31.2%	19.3%	21.9%	21.9%	23.7%	23.5%	23.5%		23.7%	23.5%	23.7%		0.0%		**21.3%**
26E/25E	33.8%	9.6%	-32.8%	13.0%	16.1%	19.1%	19.1%		16.1%	19.1%	16.4%		0.0%		**15.1%**

Source: Company reports, Canaccord Genuity estimates

Figure 5: SCY-078 market model

Scynexis Market Model	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E
Invasive Candidiasis												
Total Number of Cases in the US	82,800	85,698	88,697	91,802	95,015	98,340	101,782	105,345	109,032	112,848	116,798	120,885
% Growth		3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
% Receiving Treatment	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%
% Receiving Echinocandins	22.0%	23.1%	24.3%	25.5%	26.7%	28.1%	29.5%	31.0%	32.5%	34.1%	35.8%	37.6%
% Receiving Fluconazole	48.0%	48.3%	48.4%	48.4%	48.3%	48.0%	47.7%	47.2%	46.6%	45.9%	45.0%	44.0%
% Receiving Amphotericin B	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
% Receiving Other Azoles	27.0%	25.7%	24.4%	23.1%	22.0%	20.9%	19.8%	18.9%	17.9%	17.0%	16.2%	15.4%
% Resistant to Echinocandins	3.0%	3.3%	3.6%	4.0%	4.4%	4.8%	5.3%	5.8%	6.4%	7.1%	7.8%	8.6%
% Resistant to Fluconazole	10.0%	11.5%	12.7%	13.9%	15.3%	16.8%	18.5%	20.4%	22.4%	24.7%	27.1%	31.2%
% Resistant to Amphotericin B	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
% Resistant to Other Azoles	5.0%	5.5%	6.1%	6.7%	7.3%	8.1%	8.9%	9.7%	10.7%	11.8%	13.0%	14.3%
Patients with Resistance	4,966	5,824	6,612	7,498	8,495	9,612	10,864	12,265	13,828	15,571	17,508	20,290
Patients without Resistance	67,484	69,162	70,998	72,828	74,643	76,436	78,195	79,912	81,575	83,171	84,689	85,485
Invasive Aspergillosis												
Total Number of Cases in the US	10,000	10,000	10,350	10,712	11,087	11,475	11,877	12,293	12,723	13,168	13,629	14,106
% Growth		3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
% Receiving Treatment	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%	87.5%
% Receiving Non-Azoles	55.0%	57.3%	59.4%	61.4%	63.3%	65.2%	66.9%	68.6%	70.1%	71.6%	73.1%	74.4%
% Receiving Azoles	45.0%	42.8%	40.6%	38.6%	36.7%	34.8%	33.1%	31.4%	29.9%	28.4%	26.9%	25.6%
% Resistant to Non-Azoles	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
% Resistant to Azoles	20.0%	22.0%	24.2%	26.6%	29.3%	32.2%	35.4%	39.0%	40.0%	40.0%	40.0%	40.0%
Patients with Resistance	1,028	1,073	1,159	1,251	1,348	1,453	1,566	1,686	1,720	1,720	1,721	1,723
Patients without Resistance	7,722	7,677	7,897	8,123	8,353	8,587	8,827	9,070	9,413	9,802	10,205	10,620
Total Patient with Resistance	5,995	6,897	7,771	8,749	9,843	11,066	12,430	13,951	15,548	17,291	19,229	22,013
Total Patient without Resistance	75,205	76,838	78,896	80,951	82,996	85,023	87,022	88,982	90,987	92,973	94,894	96,105
SCY-078 in Resistant Population					5.0%	10.0%	15.0%	25.0%	35.0%	45.0%	50.0%	55.0%
SCY-078 in Non-resistant Population						3.0%	7.0%	10.0%	12.0%	13.0%	14.5%	15.0%
SCY-078 Treated Patients					492	3,657	7,956	12,386	16,360	19,867	23,374	26,523
Price/Patient					$5,500	$5,775	$6,064	$6,367	$6,685	$7,020	$7,371	$7,739
US End-User Sales ($M)					**$2.7**	**$21.1**	**$48.2**	**$78.9**	**$109.4**	**$139.5**	**$172.3**	**$205.3**
European Sales												
EU End-User Sales						**$10.6**	**$24.1**	**$39.4**	**$54.7**	**$69.7**	**$86.1**	**$102.6**
Royalty Rate						25%	25%	25%	25%	25%	25%	25%
EU Royalty Revenue ($M)						**$2.6**	**$6.0**	**$9.9**	**$13.7**	**$17.4**	**$21.5**	**$25.7**
TOTAL REVENUE ($M)					**$2.7**	**$23.8**	**$54.3**	**$88.7**	**$123.0**	**$156.9**	**$193.8**	**$230.9**
Growth						778%	128%	63%	39%	28%	24%	19%

Source: Canaccord Genuity Estimates

INVASIVE CANDIDIASIS & ASPERGILLOSIS

Candidiasis

Candida species are the main causes of invasive fungal infections in humans, resulting in mortality rate as high as 47% (even with treatments). To put this into perspective, these fungi are now the top three or four organisms to be isolated from hospitalized patients' blood. In 2013, the incidence of systemic candidiasis in the US is ~20 cases per 100,000 people. What's alarming is that these rates represent a 20-fold increase compare to 20 years ago.

The major risk factors for infection are the use of antibiotics, renal replacement therapy, neutropenia, use of implantable prosthetics and receipt of immunosuppressive agents. Although >17 species of *Candida* have been found to be associated with infections in humans, 90% of them are due to:

1. *C. albicans*
2. *C. glabrata*
3. *C. parapsilosis*
4. *C. tropicalis*
5. *C. krusei*

Figure 6: Species distribution of *Candida* from cases of IC

Species	% of total no. of cases[b]					
	1997–1998	1999	2000	2001	2002	2003
C. albicans	73.3	69.8	68.1	65.4	61.4	62.3
C. glabrata	11.0	9.7	9.5	11.1	10.7	12.0
C. tropicalis	4.6	5.3	7.2	7.5	7.4	7.5
C. parapsilosis	4.2	4.9	5.6	6.9	6.6	7.3
C. krusei	1.7	2.2	3.2	2.5	2.6	2.7
C. guilliermondii	0.5	0.8	0.8	0.7	1.0	0.8
C. lusitaniae	0.5	0.5	0.5	0.6	0.5	0.6

Source: Pfaller, MA and Diekema, DJ. Epidemiology of invasive candidiasis: a persistent public health problem. *Clinical Microbiology Reviews*: 133-163, 2007

According to Gagne et al. and Brizendine et al., the length of stay in patients with infection is ~21 and 10 days longer in children and adults respectively. As a result, the additional cost of each incident of IC in hospitals is ~$40,000, or ~$2.6B in direct healthcare cost.

Aspergillosis

Aspergillus species are molds found in the environment. Their spores are airborne, thus are normally inhaled, yet rarely cause pulmonary infections in immunocompetent individuals. In recent years, IA incidences have been on the rise due to increase in immunocompromised patients, specifically those who are hematopoietic stem cell transplantation recipients and neutropenic patients with hematologic malignancies. *Aspergillus fumigatus* is the most common species recovered from IA cases, making up 90% of infections. Without treatment, the mortality rate is 80-95%; after 12-weeks of treatment with voriconazole or amphotericin B (which we'll elaborate further in the next section), the mortality rate drops to 29.2% and 42.1%, respectively. In a paper

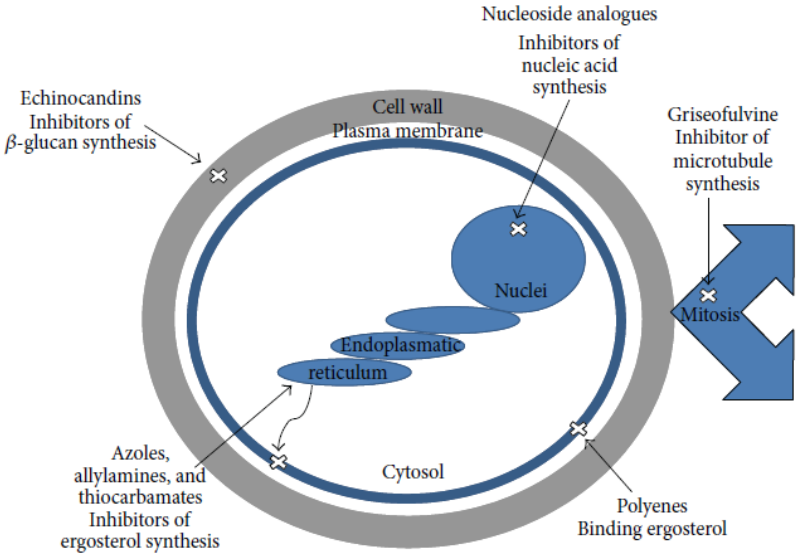
authored by Dr. George Alangaden, it's estimated that the mean length of stay for hospitalization-related Aspergillosis is 17 days at a cost of ~$62,000, giving rise to an overall cost of $633M.

Together, *Candida* and *Aspergillus* species are responsible for ~85% of all invasive fungal infections in the US and EU, with *Candida* accounting for 70-90% and *Aspergillus* for 10-20%.

Treatments and resistance

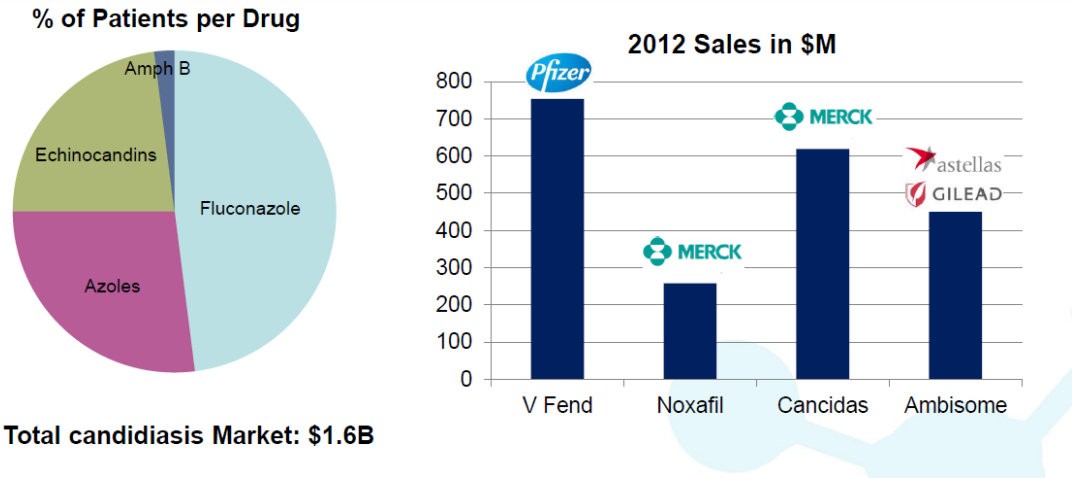
Invasive fungal infections are currently treated by four major classes of antifungals, as depicted in the figure below.

Figure 7: Mechanisms of actions of various antifungal agents



Source: Spampinato, C and Leonardi, D. Candida infections, causes, targets, and resistance mechanisms: traditionals and alternative antifungal agents.*BioMed Research International*: 2013

Figure 8: The candidaiasis market



Source: Company presentations

Note: V Fend = voriconazole, Noxafil = posaconazole, Cancidas = caspofungin, Ambisome = amphotericin B

1. Azole (IV/oral) – high level of resistance

This class is composed of fluconazole, itraconazole, voriconazole and posaconazole. They all have the same mechanism of action – disruption of the cell membrane by inhibiting lanosterol 14-α-demethylase, which synthesizes ergosterol (the fungal counterpart of cholesterol). Azoles are used broadly for prevention and in unconfirmed cases, with fluconazole being the standard therapy for oropharyngeal, esophageal, and vaginal candidiasis. Resistance, especially to fluconazole, has become a serious concern. The ARTEMIS DISK Surveillance Program (1997 to 2003) reported that of the five most commonly infection-inducing *Candida* species (Figure 9), fluconazole resistance has escalated for almost all of them over 6.5 years. Upon first glance, the percentage of *C. glabrata* that are resistant appear to be decreasing, but in fact from 2001 to 2010 as high as 30% have become resistant.

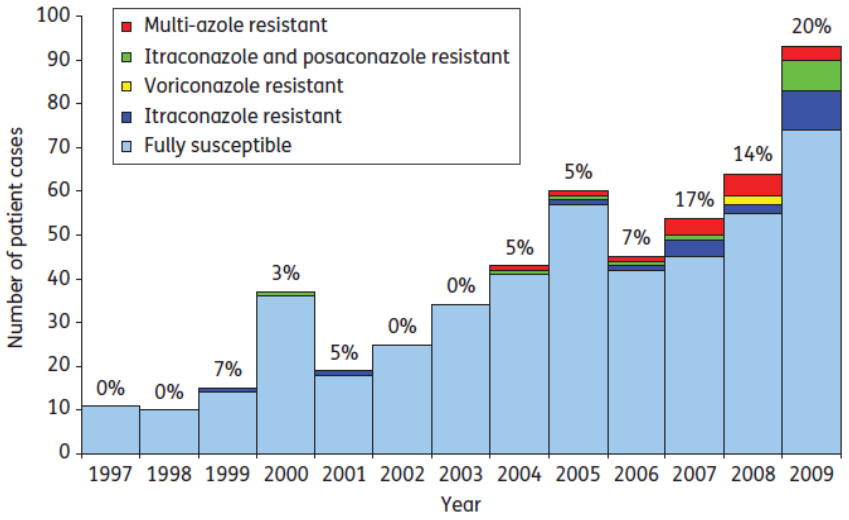
Figure 9: Trends in *in vitro* resistance to fluconazole among *Candida* species determined by CLSI disk diffusion testing

Species	Isolates resistant to fluconazole (zone ≤ 14 mm)[b]											
	1997–1998		1999		2000		2001		2002		2003	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
C. albicans	16,514	0.8	14,677	0.8	7,961	1.5	14,268	1.0	15,147	1.5	20,576	1.4
C. glabrata	2,475	18.5	2,047	22.8	1,112	14.3	2,431	18.3	2,635	14.7	3,974	16.9
C. tropicalis	1,036	4.2	1,117	3.5	843	3.1	1,634	3.0	1,838	6.6	2,487	5.0
C. parapsilosis	955	2.0	1,028	2.8	650	2.9	1,501	4.2	1,632	3.9	2,406	3.0
C. krusei	372	56.5	459	71.5	376	68.1	544	70.4	639	78.9	884	80.2

Source: Pfaller, MA and Diekema, DJ. Epidemiology of invasive candidiasis: a persistent public health problem. *Clinical Microbiology Reviews*: 133-163, 2007

Azoles are also major agents for treating and preventing IA. Fluconazole is not active against IA. Voriconazole is available in both oral and IV preparations. It's superior to amphotericin B in hematology unit patients, and is the preferred drug. However, its clinical use has been limited to being a step-down oral option for patients with *C. krusei* infection and those affected by fluconazole-resistant, voriconazole-susceptible *C. glabrata*. Itraconazole is approved for treating IA in patients who are refractory to or can't stand standard therapies but isn't recommended for those with life-threatening infections. Posaconazole, only available in the oral form, is used in the prophylactic setting for patients treated with myeloid leukemia, myelodysplasia, or those with graft versus after bone marrow transplant. Itraconazole and voriconazole are the two first-line agents for chronic infection.

Figure 10: Azole resistance frequency in *A. fumigatus* from 1997 to 2009



Source: Bueid, A et al. Azole antifungal resistance in *Aspergillus fumigatus*: 2008 and 2009. *Journal of Antimicrobial Chemotherapy*:2116-2118, 2010

In addition to resistance, we believe two other limitations exist:

- **Drug-drug interactions –** All azoles inhibit cytochrome P450 in varying degrees. Voriconazole is a substrate and an inhibitor of CYP2C19, CYP2C9, and CYP3A4. Itraconazole is a substrate of CYP3A4 but also interacts with the heme component of CYP3A4, resulting in noncompetitive inhibition of oxidative metabolism of many CYP3A4 substrates. Hence, physicians must consider the patient's drug regimen when adding or removing an azole.
- **Cross-resistance –** The global risk of cross-resistance among azoles is high. In a British study of 519 *A. fumigatus* strains isolated from patients between 1992 and 2007, 34 itraconazole-resistant strains were identified, of which 74% and 65% were resistant to posaconazole and voriconazole respectively.

2. **Echinocandins – only available in IV, thus patients need to stay in hospitals longer or step down to an different drug class, i.e. azoles**

Echinocandins are lipopeptides that work by noncompetitively inhibiting 1,3-β-D glucan, a polysaccharide of the cell wall of the fungal cell wall. Three drugs of this class have been approved by the FDA – caspofungin in 2001, micafungin in 2005 and anidulafungin in 2006 – for esophageal candidiasis and IC, including candidemia, empirical therapy in febrile neutropenic patients and prophylaxis in patients undergoing hematopoietic stem cell transplantation. Caspofungin is also indicated in patients with probable or proven IA that is refractory to or intolerant of other approved therapies. Micafungin and anidulafungin are active against *Aspergillus* species but the optimal dose has yet to be established and is not approved for that indication.

Echinocandins have few side effects and don't have cross-resistance with existing antifungals. As a result of the emergence of azole-resistant strains, the Infectious Diseases Society of America (IDSA) now favors echinocandin therapy for those with mod-to-severe infections, recent azole exposure, cadidemia caused by *C.*

glabrata or *C. krusei* (recall that these species are highly resistant to fluconazole). In the figure below, we see that anidulafungin, caspofungin and micafungin all exhibit excellent activity against fluconazole-resistant strains.

Figure 11: Antifungal activities of enchinocandins in 315 isolates of fluconazole-resistant *Candida* species

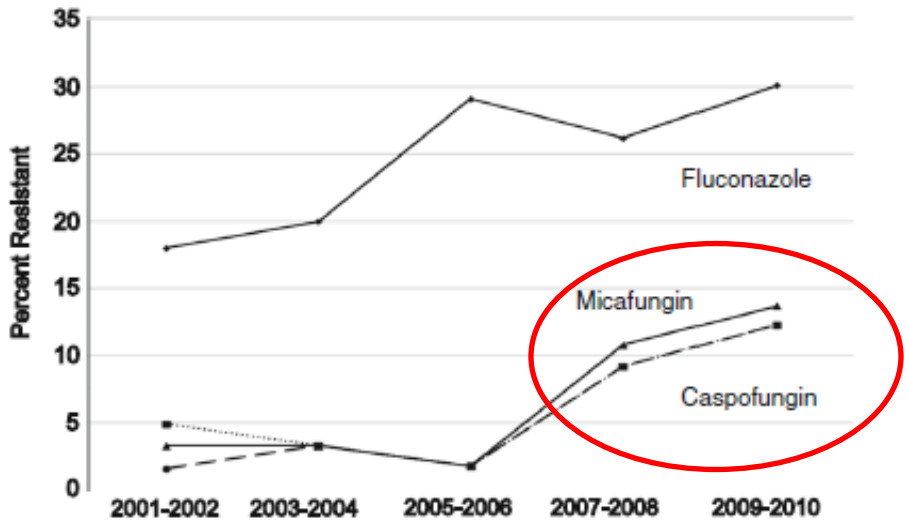
Species (no. of isolates tested)	Antifungal agent	Cumulative % susceptible at MIC (µg/ml)								
		0.007	0.015	0.03	0.06	0.12	0.25	0.5	1	2
C. albicans (41)	Anidulafungin	15	42	66	95	95	95	98	100	
	Caspofungin	2	10	61	95	95	98	98	98	100
	Micafungin	10	76	95	98	98	100			
C. glabrata (110)	Anidulafungin	1	3	36	81	98	100			
	Caspofungin	0	1	59	91	96	100			
	Micafungin	19	93	97	100					
C. krusei (146)	Anidulafungin	1	3	40	82	97	99	100		
	Caspofungin	0	1	1	42	82	97	100		
	Micafungin	1	2	26	93	99	100			
All *Candida* spp. (315)	Anidulafungin	3	9	42	81	94	96	98	99	100
	Caspofungin	1	2	31	66	87	97	99	99	100
	Micafungin	9	44	60	93	96	98	99	100	

Can be considered as resistant

Source: Pfaller, MA and Diekema, DJ. Epidemiology of invasive candidiasis: a persistent public health problem. *Clinical Microbiology Reviews*: 133-163, 2007

Despite the occurrence of spontaneous resistance to echinocandins *in vitro*, clinical case reports have been scarce until 2005. Since then, isolates that are unsusceptible to this class have continued to emerge. While the overall incidence is still low – about 2-3% for most *Candida* species – resistance for *C. glabrata* is becoming unpleasantly high.

Figure 12: Trends in antifungal resistance of *C. glabrata*



Source: Perlin, S David. Echinocandin resistance, susceptibility testing and prophylaxis : implications for patient management. *Drugs*: 74:1573-1585

Furthermore, the surge in echinocandin resistance in *C. glabrata* appears to track closely with the rise in fluconazole resistance, suggesting multidrug resistance.

The second limitation with echinocandins is that they're only available for IV administration. In order to allow patients to be discharged as soon as possible, the IDSA guides that patients should step down to oral azole therapies once they become clinically stable and are tested negative for the fungus. Similarly, the European Society for Clinical Microbiology and Infectious Diseases suggests "*stepping down to oral fluconazole after 10 days of treatment if the patient is stable and tolerates oral therapy*" (Vazquez, J et al. Evaluation of an early strategy from intravenous anidulafungin to oral azole therapy for the treatment of candidemia and other forms of invasive candidiasis: results from an open-label trial. *BMC Infectious Diseases* 2014). This strategy is based on little clinical evidence, and many worry about the risk of re-emergence of an infection that may be azole-resistant and the lack of certainty around the minimum duration required for the initial IV therapy. However, we found one Ph4 study concluding that stepping down to azole is actually an effective approach. It involved 44 centers in the US and four in Korea. All patients received 200mg IV anidulafungin as a loading dose, and then 100mg daily for a maximum of 28 days. After five days of IV, investigators could transition patients to an oral azole provided that the patient(s) could tolerate the drug, had documented clearance of *Candida* from bloodstream, stable and afebrile for >24 hr. In the MITT population of 250 (282 received IV treatment, 32 excluded due to lack of positive baseline culture), 150 switched to oral therapy, with 68% being "early switchers" (stepped down by day 7). At the end of treatment, 79.4% of early switch population achieved the primary endpoint of clinical and microbiological response rates (assuming missing/unknown values as failures), and 68% for the MITT population. We think it is fair to say that the step-down approach worked, but definitely not as well as one would like, thus more oral options are needed to help to reduce hospital stays and costs.

3. **Polyenes – only available in IV, is the last resort**

Polyenes bind to ergosterol to disrupt the key lipid component of the fungal cell membrane. The most commonly used polyene for fungal infections is amphotericin B (AmB), which has several preparations – AmB deoxycholate, liposomal formulation, AmB in lipid complex, and AmB in colloidal dispersion. These compounds have different pharmacological properties and rates of AEs and shouldn't be interchanged carelessly. Nephrotoxicity is the most serious AE associated with AmB deoxycholate, where acute renal failure can occur in up to 50% of patients. The lipid formulations have reduced toxicities but are also more expensive. Despite safety issues, lipid AmBs generated $450M in sales in 2012.

4. **Flucytosine (oral) – another smaller player**

Flucytosine is a pyrimidine or nucleoside analogue that is delivered into fungal cells by cytosine permeases. It then becomes deaminated and phosphorylated to interfere with fungal DNA synthesis. Flucytosine is rarely administered as a single agent because of the frequent development of resistance for IC. In combination with AmB, the regimen is recommended for induction treatment of cryptococcal meningitis in immunocompromised and immunocompetent patients.

Figure 13: Resistance mechanisms of major systemic antifungal drugs

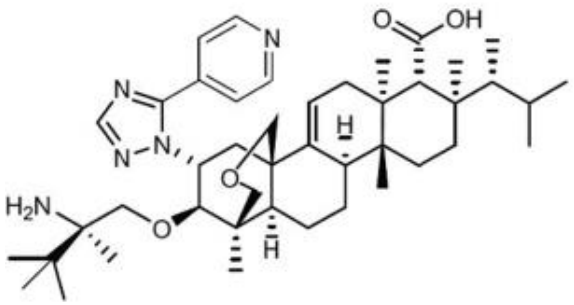
Antifungal class	Genetic basis for resistance	Functional basis for resistance
Azoles	Upregulation of *CDR1*/*CDR2* and *MDR1* by point mutations in *TAC1* and *MRR1* transcription factors	(i) Upregulation of drug transporters
	Point mutations in *ERG11*	(ii) Decreased lanosterol 14-α-demethylase binding affinity for the drug
	Upregulation of *ERG11* by gene duplication and transcription factor regulation	(iii) Increased concentration of lanosterol 14-α-demethylase
	Point mutations in *ERG3*	(iii) Inactivation of C5 sterol desaturase leading to alterations in the ergosterol synthetic pathway
Echinocandins	Point mutations in *FKS1* and *FKS2*	(ii) Decreased glucan synthase processivity for the drug
Polyenes	Point mutations in *ERG3* and *ERG6*	(iii) Decreased ergosterol content in cells
Nucleoside analogues	Point mutations in *FCY2*	(i) Inactivation of cytosine permease affecting drug uptake
	Point mutations in *FCY1*	(iii) Inactivation of cytosine deaminase leading to alterations in the metabolism of 5-fluorocytosine
	Point mutations in *FUR1*	(iii) Inactivation of uracil phosphoribosyl transferase leading to alterations in the metabolism of 5-fluorocytosine

Source: Spampinato, C and Leonardi, D. Candida infections, causes, targets, and resistance mechanisms: traditional and alternative antifungal agents. *Biomed Research International*: 2013

SCY-078 (formerly known as MK-3118)

SCY-078 is an orally active, semi-synthetic derivative of the natural product enfumafungin – a structurally distinct class of glucan synthase inhibitors for treating systemic fungal diseases.

Figure 14: Molecular structure of SCY-078



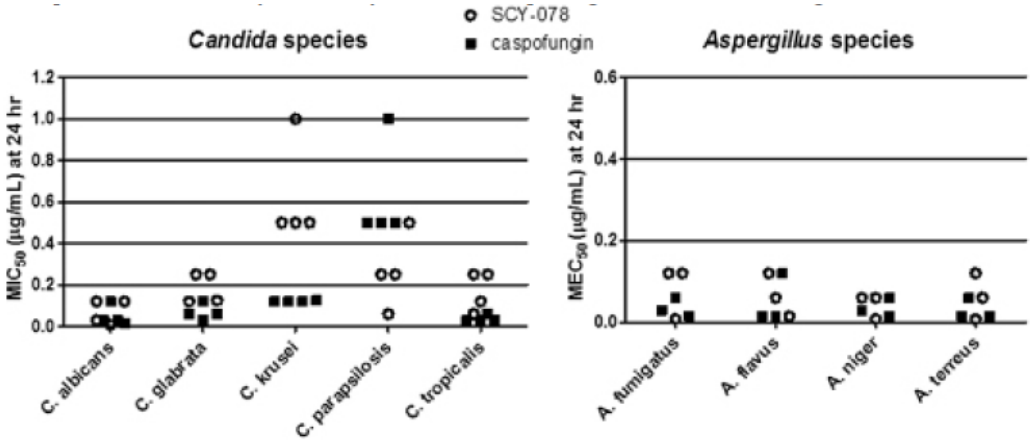
Source: Jimenez-Ortigosa, C et al. Enfumafungin derivative MK-3118 shows increased *in vitro* potency against clinical echinocandin-resistant *Candida* species and *Aspergillus* species isolates. *Antimicrobial Agents and Chemoterapy* 58(2): 1248-1251

In vitro and *in vivo*, SCY-078 has shown to retain antifungal activities against most azole- and echinocandin-resistant *Candida* strains. Also, the spontaneous mutation frequency of SCY-078 in *C.albicans* for conferring resistance was $<4.6 \times 10^{-9}$ mutations per cell per generation, a level of mutant generation that portends a low occurrence of resistance, except at high burdens. However, this has yet to be determined experimentally.

Preclinical data

In vitro, SCY-078 showed effective antifungal activities against >500 strains from 11 *Candida* species and >150 strains from four *Aspergillus* species. From Figure 14, we can see that SCY-078 is comparable to caspofungin against *C. albicans*, *C. glabrata, C. parapsilosis*, *C. tropicalis* and *Aspergillus* species, as measured by MIC_{50}. We note that capsofungin's activities observed here are also consistent with the two prior contemporary surveillance studies analyzing >5,346 global *Candida* and *Aspergillus* isolates (MIC_{50} is 0.03, 0.03, 0.03, 0.12 and 0.25, for *C. albicans, C. glabrata, C. tropicalis, C. krusei* and *C. parapsilosis* respectively. While SCY-078 appears to be less efficacious than caspofungin in inhibiting *C. krusei* growth in the data presented, we don't think this is an issue since this species only contributes to ~3% of all IC cases.

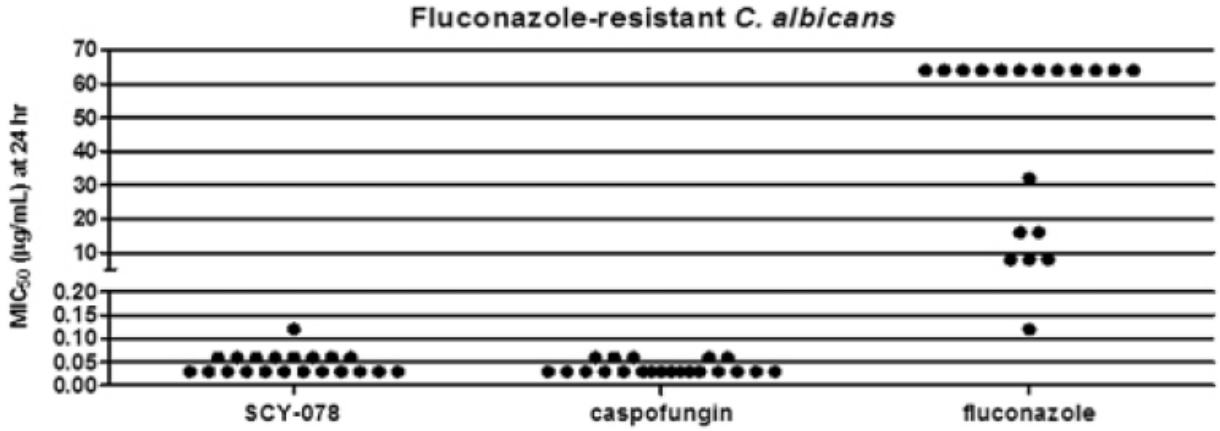
Figure 15: SCY-078 is active in vitro against the most common *Candida* and *Aspergillus* species



Source: Company reports

SCY-078 was also active against azole-resistant strains. Its *in vitro* activity is comparable to that of caspofungin and to that of itself in wild type strains.

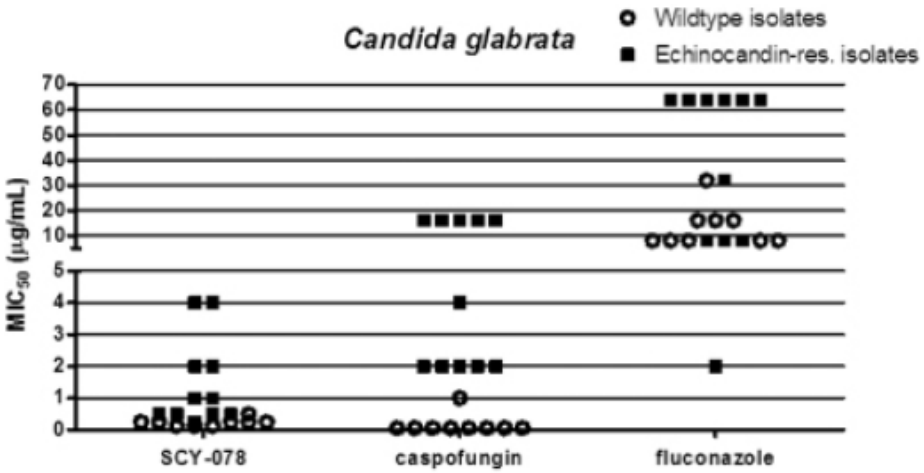
Figure 16: SCY-078 is active *in vitro* against fluconazole-resistant strains



Source: Company reports

As illustrated in Figure 17, SCY-078 exhibited strong antifungal activities in caspofungin-resistant *C. glabrata*, the species with the highest resistance to echinocandins.

Figure 17: SCY-078 is active *in vitro* against caspofungin-resistant *Candida* strains



Source: Company reports

Further, Jimenez-Ortigosa et al. evaluated the *in vitro* activity of SCY-078 against wild-type and echinocandin-resistant isolates containing mutations in the FKS gene(s) of *Candida* and *Aspergillus* species. SCY-078 demonstrated enhanced efficacy for almost all resistant isolates relative to caspofungin, with decreased MICs and MECs (minimal effective concentration, defined as the lowest drug concentration giving rise to aberrant hyphal growth).

Figure 18: MIC distribution of caspofungin and SCY-078 in *Candida* and *Aspergillus* isolates

		MIC50 (mg/L); no serum		
Species	Phenotype	Caspofungin	SCY-078	Preferred
C. albicans	WT	≤0.03-0.06	≤0.03-0.06	Tie
	Echinocandin-resistant	≤0.03-4	≤0.03-1	SCY-078
C. glabrata	WT	≤0.03-1	0.12-0.5	SCY-078
	Echinocandin-resistant	1-16	0.25-8	SCY-078
C. krusei	WT	0.12-0.5	0.25-0.5	Caspofungin
	Echinocandin-resistant	0.12-8	0.25-2	SCY-078
C. parapsilopsis	WT	0.12-16	0.25-8	SCY-078
	Echinocandin-resistant	N/A	N/A	N/A
C. tropicalis	WT	≤0.03-0.06	0.06-0.25	Caspofungin
	Echinocandin-resistant	≤0.03-2	0.25-4	Caspofungin
		MEC50 (mg/L)		
Species	Phenotype	Caspofungin	SCY-078	
A. fumigatus	WT	0.06-0.25	≤0.03-8; isolates that are sensitive to triazoles have 0.12-8	SCY-078
	Echinocandin-resistant	>16	0.12	SCY-078

Source: Jimenez-Ortigosa, C et al. Enfumafungin derivative MK-3118 shows increased *in vitro* potency against clinical echinocandin-resistant *Candida* species and *Aspergillus* species isolates. *Antimicrobial Agents and Chemotherapy* 58(2): 1248-1251

We believe this suggests that SCY-078 acts in a manner distinct from drugs in the same class, meaning that it could potentially be an option against multidrug resistant strains, which as we noted before is growing.

In determining how *in vitro* and *in vivo* results correlate with clinical outcome, several factors must be considered. They include:

- Impacts of various MICs, as we have examined previously.
- Results from clinical studies confirmed that SCY-078 may be used, at certain doses, in combination with moderate inhibitors of CYP3A, the common drug metabolizing enzyme.
- Pharmacodynamic parameters and relationships; two aspects are of particular importance:1) impact of drug concentration on the rate and extent of organism killing; and 2) organism growth dynamics after the drug has been administered (i.e., some drugs continue to show antifungal capabilities even when it is no longer at MIC; this is referred as the post-antibiotic effect (PAE)).

Figure 19: *In vivo* antifungal pharmacodynamics characteristics

Drug class	Time course of activity		Pharmacodynamic parameter	
	Killing	PAE	Type	Magnitude[a]
Triazole	Static	Long	AUC/MIC	25
Polyene	Cidal	Long	Peak/MIC	4 (10)
Flucytosine	Static	Short	$T > MIC$	25[b]
Echinocandin	Cidal	Long	Peak/MIC	3 (10)

Note: a=dose needed to achieve 50% of the maximal effect; it is expressed as a ratio of AUC/MIC and the percentage of the dosing interval for T>MIC; b=dose associated with maximal efficacy; AUC = area under the curve

Source: Andes, David. In vivo pharmacodynamics of antifungal drugs in treatment of Candidiasis. *Antimicrobial Agents and Chemotherapy*: 1179-1186, 2003

- It's generally accepted that only free drug can be therapeutically effective, and this is related to the extent at which the drug binds to proteins and their ability to diffuse across membranes to reach the target. As stated in the paper "In Vivo Pharcodynamics of Antifungal Drugs in Treatment of Candidiasis" by David Andes, fluconazole has a low degree of protein binding (10%), and the newer azoles have levels >90%. Although findings have been inconclusive, in studies with ravuconazole, a highly bound azole, it has been suggested that a significantly larger amount of drugs is needed for efficacy compared to the amount of fluconazole required. The same case appears to apply to echinocandins and SCY-078, in which the former is >96% protein bound. Simply put, adding 50% human serum sharply increased MICs of these compounds, with MICs still favoring SCY-078, but the superiority is much less pronounced.

Figure 20: MIC distributions of caspofungin and MK-3118 in 50% of serum

MIC50 (mg/L); 50% human serum						
Species	Phenotype	Caspofungin	Fold Δ	SCY-078	Fold Δ	Preferred
C. albicans	WT	0.12-1	4	0.5-1	16	Caspofungin
	Echinocandin-resistant	1-≥16	8	0.5-≥16	2-16	SCY-078
C. glabrata	WT	0.5-2	8	2-8	16-32	Caspofungin
	Echinocandin-resistant	≥16	1	4-≥16	32	SCY-078
C. krusei	WT	2-4	16	8-≥16	16	Caspofungin
	Echinocandin-resistant	2-≥16	2-133	1-≥16	8-64	SCY-078
C. parapsilopsis	WT	4-≥16	16	2-≥16	32	SCY-078
	Echinocandin-resistant	N/A	N/A	N/A	N/A	N/A
C. tropicalis	WT	0.25-0.5	16	1-8	16	Caspofungin
	Echinocandin-resistant	≥16	8	4-≥16	16-32	Caspofungin

MIC50 (mg/L); 50% human serum					
Species	Caspofungin	Fold Δ	SCY-078	Fold Δ	Preferred
A. fumigatus	0.25	512	N/A	N/A	N/A

Source: Enfumafungin derivative MK-3118 shows increased in vitro potency against clinical echinocandin-resistant Candida Species and Aspergillus species isolates; Effects of serum on in vitro susceptibility testing of echinocandins

- Pharmacodynamics data from animal models often predicts antimicrobials' efficacy in humans. In fact, Scynexis said that "*mouse models of* Candida *and* Aspergillus *infections have been predictive of clinical efficacy for all approved glucan synthesis inhibitors*". SCY-078 was evaluated in multiple studies in *C. albicans*-infected mice, where treated animals had no measurable *Candida* in organs after receiving doses that produced in serum drug levels similar to those that have been safely achieved in humans. Comparable results were observed in mice infected with other species, including *C. glabrata*.

  SCY-078's *in vivo* efficacy was also evaluated in *A. fumigatus*-infected mice with partially deficient immune defenses that generally result in death. After treatment, these mice presented dose-dependent increases in survival rates up to 90%, as measured in the first 21 days after infection.

  Therefore, even though some concerns may stem from SCY-078's loss of efficacy in human serums, we think the drug's *in vivo* antifungal effect in mouse models lends us confidence to the clinical efficacy of SCY-078.

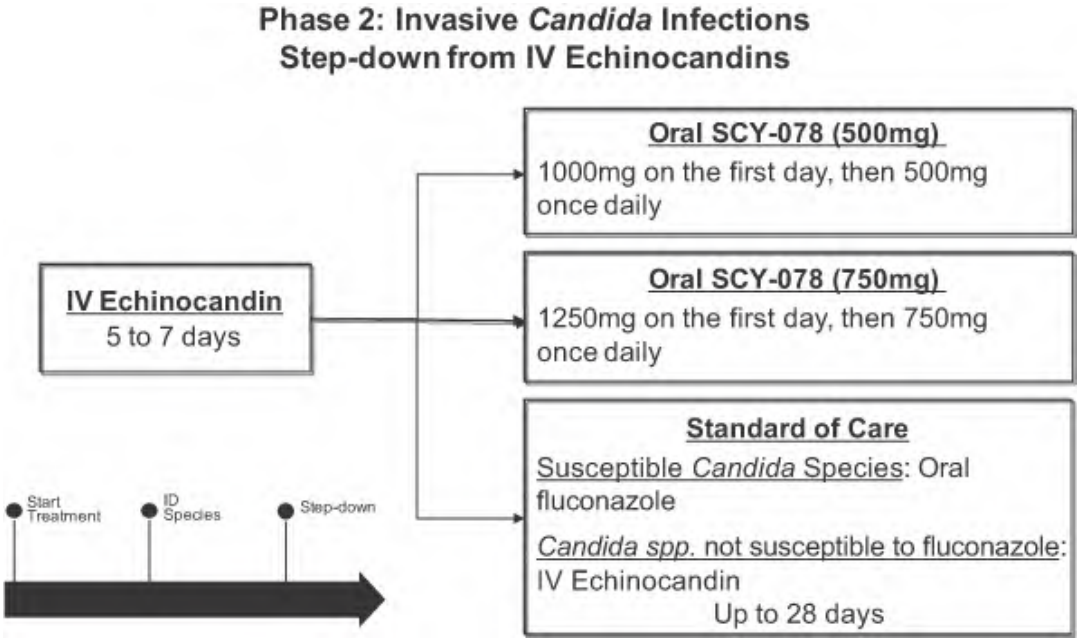
Clinical experience with SCY-078

Seven Ph1 safety and pharmacokinetics studies have been completed to date. Altogether, over 100 healthy volunteers have received ≥1 dose of SCY-078. The drug was well-tolerated in general at initial oral doses of up to 1800mg in one day and up to 800mg/day for 28 days, with the most frequently reported AE being GI upsets. One subject, however, experienced *significant* liver function tests increases after one dose and withdrew from the study. While the investigators thought the AE was drug-related, we don't believe any definite conclusions can be drawn at this point since the individual already had signs of liver injury prior to dosing, but it's definitely something to pay attention to as the drug advances.

PHASE 2a: ORAL STEP-DOWN FROM IV MICAFUNGIN

Initiated in September 2014, SCY-078 is currently being assessed in a 120-patient, open-label Ph2 trial as an oral step-down agent following initial IV micafungin in patients with IC. After 5-7 days of treatment, patients will be randomized into three arms: 1) oral SCY-078 dosed at 1000mg on the first day, then 500mg once daily; 2) oral SCY-078 dosed at 1250mg on the first day, then 750mg once daily; and 3) standard of care – oral fluconazole 400mg daily or IV micafungin 100mg daily.

Figure 21: Oral SCY-078 Ph2a trial design



Source: Company reports

The study's primary objectives are safety and to determine the dose that achieves target exposure, measured by AUC. Data is expected in 2015.

Other trials and Ph3 design

Scynexis plans to commence a Ph1 study for IV SCY-078 in 1H2015, with data readout in late 2015 or early 2016.

Were oral SCY-078 Ph2 deemed successful, it could advance to a pivotal Ph2/3 in 2016, with results in hand in 2017 and approval in 2018. Although it's still too early to think about trial design, we believe several factors need to be considered:

- According to FDA guidance, antimicrobial Ph3s include a non-inferiority endpoint as it's unethical to not treat infected patients when therapies are available. The agency uses *"two-tailed 95% confidence level around the difference in outcomes approach to determine such statistical equivalent between products"* (Guidance for Industry, Division of Anti-infective Drug Products; 1998).
- The active comparator could be an echinocandin and/or an azole used as the standard of care for the patient population studied.

- The FDA keeps a close eye on the "bio-creep" phenomenon, where less effective comparator agents are selected successively to fit a statistical confidence interval relative to the drug being investigated.
- Scynexis has noted publically that they plan to conduct Ph3 studies in patients with IC infections including those with previous experience with azoles and/or echinocandins. For IA, the Ph3 could be evaluating SCY-078 as a salvage therapy and/or exploring first-line treatment compared to voriconazole.
- The focus will be on infections due to *C. glabrata*, *C. krusei* and patients who don't respond well to current treatments.

Overall, competition from other drugs in development is limited

Figure 22: Antifungal competitive landscape

Drug	Company	Type	Status	Comments
Isavuconazole	Basilea, Astellas	Azole	Ph3	Being studied in oral and IV forms, with the oral form showing excellent bioavilability; three Ph3 studies have been conducted; it showed non-inferiority to voriconazole in mortality and succes rate, but lower AE occurrence; NDA for treatment of invasive aspergillosis and mucormycosis was accepted, **March 8, 2015 PDUFA date**
Ravuconazole	Bristol-Myers	Azole	Ph1/2	Limited human trial data; a Ph1/2 trial has been completed in 24 adults allogeneic HSCT patients, but no published results are available
Albaconazole	GlaxoSmithKline	Azole	Ph2	Displays excellent in vitro activity against Candida and Aspergillus, however the trial for vulvovaginitis candida was terminated
Aminocandin	Endo	Echinocadin	N/A	No clinical trials found and the status is uncertain
Efungumab	Novartis	Monoclonal antibody	Ph2	No ongoing trials and two cryptococcal meningitis studies have been terminated
VT-1161	Viamet	CYP51 inhibitor	Ph2	Showed good efficacy in animal models; currently being investigated for tinea pedis, onychomycosis and vulvovaginal candidiasis, markets are different from what SCY-078 is targeting
MGCD290	Mirati Therapeutics	Hos2 inhibitor	Ph2	Ph2 in vulvovaginal candidiasis was completed in early 2013, no activity since then

Source: Company reports; clinicaltrial.gov; Drew, RH et al. Recent advances in treatment of life-threatening, invasive fungal infections. *Expert Opin Pharmacother*: 2361-2374, 2013

INTELLECTUAL PROPERTY

Scynexis currently owns 14 issued US patents and 154 issued non-US patents claiming composition of matter, methods of use and manufacturing. The company is also actively pursuing 10 provisional and non-provisional patent applications, one international application and 86 non-US applications in more than 35 jurisdictions.

Figure 23: Summary of Scynexis's issued US patents

Compound	Patent #	Name	Type	Expiration	Extensions
SCY-078	8,188,085	Antifungal agents	Composition of matter	2030	386 days
SCY-641	6,583,265	Cyclosporins	Composition of matter	2019	N/A
	8,188,052	Methods for the treatment and prevention of ocular disorders	Method of use	2029	604 days
	8,551,952	Methods for the treatment and prevention of ocular disorders	Method of use	2027	N/A

Source: Company reports; USPTO

Oral SCY-078 has obtained Qualified Infection Disease Product designation; in addition to the five years of exclusivity granted for NCEs, the drug is eligible for five more years of data exclusivity. In the near future, Scynexis will also submit a QIDP application for the IV form of SCY-078, and we don't perceive this as a high hurdle.

MANAGEMENT TEAM

Yves J. Ribeill, Ph.D. – President and CEO

From 1982 to 2000, Dr. Ribeill was at Aventis Pharma. His roles included Discovery Chemistry Group Leader for Anti-Viral Research. He also served as a member of the CNS Group and as a Director in the Anti-Viral Group. Dr. Ribeill was a member of the Scientific Advisory Committee of the WHO. He holds a Ph.D. in Chemistry from the University of Montpellier in France.

Charles F. Osborne Jr. – CFO

Before joining Scynexis in 2003 as CFO, he was CFO of Nobex Corporation in North Carolina, where he completed two VC rounds totaling more than $60M. From 1992 to 1998, Mr. Osborne was VP of Finance for International Murex Technologies. He ran the company's worldwide finance group and was involved with the sale of the company to Abbott. He has a B.S. in Accounting from the University of North Carolina at Chapel Hill.

Carole Sable, MD – Chief Medical Officer

Before joining Scynexis as CMO in 2014, Dr. Sable was a VP at Merck from 2010 to 2013, in the Infectious Disease division, then in Neurosciences and Ophthalmology. From 2007 to 2010, she was the CMO and President of Novexel. She was responsible for clinical development of two antibacterial programs and two NDAs, which resulted in acquisition of Novexel by AstraZeneca. Prior to that, Dr. Sable was at Merck, ultimately becoming Executive Director in 2006.She was key in the development of anti-bacterial and antifungal programs, including Cancidas. Previously, she was an Assistant Professor of Medicine and Infectious Disease at the University of Virginia. She received her MD from Jefferson Medical College.

Figure 24: Scynexis balance sheet

(In millions)	Dec-12	Dec-13	Mar-14	Jun-14	Sep-14
ASSETS					
Current Assets:					
Cash and cash equivalents	2.4	1.4	0.7	38.4	34.0
Accounts Receivable, net allowance for bad debts	1.7	0.7	0.9	1.0	1.0
Unbilled Services	0.8	0.3	0.4	0.6	0.4
Prepayments and Other	0.4	0.5	0.3	0.8	1.4
Total Current Assets	5.2	3.0	2.3	40.8	36.8
Property and equipment	6.3	5.4	5.3	5.0	5.1
Deferred financing costs	0.5	2.1	1.6	0.0	0.0
Other	0.1	0.1	0.1	0.1	0.1
Deferred offering costs	0.0	1.8	3.6	0.0	0.0
TOTAL ASSETS	**12.1**	**12.4**	**13.0**	**46.0**	**42.0**
Working Capital	**(9.0)**	**(15.5)**	**(18.2)**	**37.0**	**33.6**
LIABILITIES & STOCKHOLDERS EQUITY					
Current Liabilities					
Accounts payable and accrued liabilities	1.0	1.9	2.7	0.6	0.6
Accrued Expenses	0.8	1.1	1.6	2.5	2.0
Current portion of deferred revenue	0.2	0.5	1.3	0.6	0.5
Current portion of long term debt	0.0	15.0	15.0	0.0	0.0
Other	12.2	0.0	0.0	0.0	0.0
Total current liabilities	14.2	18.5	20.5	3.8	3.2
Long-term Liabilities					
Deferred revenue, net of current portion	0.0	1.1	1.4	1.3	1.2
Long term debt	15.0	0.0	0.0	0.0	0.0
Derivative liability	0.7	12.2	10.0	0.0	0.0
Deferred rent	1.5	1.5	1.5	1.4	1.4
Total Liabilities	31.4	33.3	33.4	6.5	5.8
Stockholders' Equity					
Preferred stock	46.1	87.2	88.8	0.0	0.0
Common stock	0.0	0.0	0.0	0.0	0.0
Additional paid-in capital	17.4	5.2	3.7	150.0	150.6
Accumulated deficit	(82.8)	(113.3)	(112.9)	(110.6)	(114.4)
Total stockholders' equity	(19.3)	(21.0)	(20.4)	39.4	36.1
TOTAL LIABILITITES AND EQUITY	**12.1**	**12.4**	**13.0**	**46.0**	**42.0**

Source: Company reports

Figure 25: Scynexis statement of cash flow

(In millions)	Dec-12	Dec-13	Mar-14	Jun-14	Sep-14
	12 mo	12 mo	3 mo	6 mo	9 mo
CASH FLOWS FROM OPERATING ACTIVITIES					
Net income (loss)	(11.5)	(30.5)	0.4	2.6	(1.2)
Other non-cash adjustments					
Gain on insurance recovery	0.0	0.0	0.0	(0.2)	(0.2)
Gain on sale of asset	(3.4)	(1.0)	0.0	0.0	0.0
Loss on extinguishment of debt	0.0	0.0	0.0	1.4	1.4
Recovery of bad debt	(0.2)	(0.0)	0.0	(0.1)	(0.1)
Depreciation	1.5	1.3	0.3	0.6	0.9
Stock-based compensation	0.4	0.2	0.1	0.4	0.8
Amortization of differed financing costs	2.9	3.5	0.5	0.8	0.8
Change in fair value of derivative liabilities	(0.2)	7.9	(2.8)	(10.1)	(10.1)
Changes in deferred rent	(0.0)	(0.1)	(0.0)	(0.1)	(0.1)
Other	0.0	10.8	0.0	0.0	0.0
Change in operatinging assets & liabilities					
Accounts and other amounts receivable	(0.4)	1.4	(0.3)	(0.4)	(0.3)
Prepayments and deposits	0.1	(0.1)	0.2	(0.4)	(0.9)
Accounts payable and accrued liabilities	(0.4)	(0.1)	0.6	0.9	0.9
Interest payable - related party	0.7	0.9	0.0	0.0	0.0
Deferred revenue	(0.0)	1.4	1.0	0.3	0.1
Net Cash from Operations	**(10.6)**	**(4.3)**	**0.2**	**(4.1)**	**(7.8)**
CASH FLOWS FROM INVESTING ACTIVITIES					
Proceed from insurance recovery	0.0	0.0	0.0	0.2	0.2
Sale of Asset	3.4	1.0	0.0	0.0	0.0
Purchase of property and equipment	(0.4)	(0.4)	(0.1)	(0.3)	(0.6)
Net Cash from Investing	**3.1**	**0.6**	**(0.1)**	**(0.1)**	**(0.4)**
CASH FLOWS FROM FINANCING ACTIVITIES					
Proceeds from initial public offering	0.0	0.0	0.0	62.0	62.0
Proceeds from issance of convertible notes	5.9	0.9	0.0	0.0	0.0
Proceeds from sale of preferred stock	0.0	2.5	0.5	0.5	0.5
Repayment of debt	0.0	0.0	0.0	(15.0)	(15.0)
Preferred stock issuance cost	0.0	(0.1)	0.0	0.0	0.0
Payments of deferred offering costs	0.0	(0.5)	(1.4)	(6.4)	(6.9)
Proceeds from employee stock purchase plan issuance	0.0	0.0	0.0	0.0	0.1
Proceeds from exercise of stock warrants	0.0	0.0	0.0	0.1	0.1
Proceeds from exercise of stock options	0.0	0.0	0.0	0.0	0.0
Net Cash from Financing	6.0	2.8	(0.8)	41.2	40.8
Net Increase in Net Cash	**(1.6)**	**(1.0)**	**(0.8)**	**37.0**	**32.6**
Net Cash at beginning of period	4.0	2.4	1.4	1.4	1.4
Short term investments.					
Net Cash/Investments, End of Period	**2.4**	**1.4**	**0.7**	**38.4**	**34.0**

Source: Company reports

Figure 26: Scynexis complete P&L

	TOTAL REVS	COGS	Gross Margin Profit	% rev	R&D	% rev	SG&A	% rev	Loss (Gain) on Sale of Asset	Total OpEx	Op Income	% rev	Total Other Income	Pretax Inc	% rev	Total Adjust.	Inc. Tax Tax Rate	Net Income	Net Income	% rev	EPS (diluted)	EPS (diluted)	Diluted shares
2012	**$16.8**	14.4	2.5	15%	8.9	53%	4.7	28%	(3.4)	10.3	(7.8)	nm	(3.7)	(11.5)	nm	3.8	0.0 0%	(11.5)	**(7.6)**	nm	**($1.73)**	**($1.15)**	6.6
2013	**$16.9**	16.3	0.6	3%	4.4	26%	4.4	26%	(1.0)	7.8	(7.2)	nm	(15.3)	(22.5)	nm	15.2	0.0 0%	(22.5)	**(7.2)**	nm	**($0.70)**	**($0.22)**	32.3
1Q	$4.7	4.0	0.7	16%	1.3	28%	1.2	26%	0.0	2.5	(1.8)	nm	(2.2)	(4.0)	nm	0.6	0.0 0%	(4.0)	**(3.4)**	nm	**($6.57)**	**($5.51)**	0.6
2Q	$4.6	4.2	0.5	10%	1.8	39%	2.3	49%	(0.2)	3.9	(3.5)	nm	(1.9)	(5.3)	nm	0.5	0.0 0%	(5.3)	**(4.8)**	nm	**($0.98)**	**($0.89)**	5.5
3Q	$4.4	3.7	0.7	16%	2.5	57%	2.0	47%	0.0	4.5	(3.8)	nm	0.0	(3.8)	nm	0.5	0.0 0%	(3.8)	**(3.3)**	nm	**($0.45)**	**($0.39)**	8.5
4QE	$4.5	4.0	0.5	11%	2.0	44%	2.0	44%	0.0	8.0	(7.5)	nm	0.0	(7.5)	nm	0.8	0.0 0%	(7.5)	**(6.7)**	nm	**($0.87)**	**($0.78)**	8.6
2014E	**$18.2**	15.8	2.4	13%	7.6	42%	7.5	41%	(0.2)	19.0	(16.5)	nm	(4.1)	(20.6)	nm	2.4	0.0 0%	(20.6)	**(18.2)**	nm	**($8.87)**	**($7.57)**	5.8
1QE	$4.4	4.0	0.4	9%	2.0	46%	2.0	46%	0.0	4.0	(3.6)	nm	(0.0)	(3.7)	nm	0.4	0.0 0%	(3.7)	**(3.3)**	nm	**($0.43)**	**($0.38)**	8.6
2QE	$4.4	4.0	0.4	9%	2.5	57%	2.5	57%	0.0	5.0	(4.6)	nm	(0.0)	(4.6)	nm	0.5	0.0 0%	(4.6)	**(4.1)**	nm	**($0.54)**	**($0.48)**	8.6
3QE	$4.4	4.0	0.4	9%	2.5	57%	2.5	57%	0.0	5.0	(4.6)	nm	0.0	(4.6)	nm	0.5	0.0 0%	(4.6)	**(4.1)**	nm	**($0.53)**	**($0.48)**	8.7
4QE	$4.4	4.0	0.4	9%	3.0	69%	3.0	69%	0.0	6.0	(5.6)	nm	0.0	(5.6)	nm	0.6	0.0 0%	(5.6)	**(5.0)**	nm	**($0.65)**	**($0.58)**	8.7
2015E	**$17.5**	16.0	1.5	9%	10.0	57%	10.0	57%	0.0	20.0	(18.5)	nm	(0.0)	(18.5)	nm	2.0	0.0 0%	(18.5)	**(16.5)**	nm	**($2.14)**	**($1.91)**	8.7
2016E	**$17.5**	15.0	2.5	14%	20.0	114%	10.0	57%	0.0	30.0	(27.5)	nm	(3.0)	(30.5)	nm	3.0	0.0 0%	(30.5)	**(27.5)**	nm	**($2.60)**	**($2.35)**	11.7
2017E	**$17.5**	15.0	2.5	14%	25.0	143%	10.0	57%	0.0	35.0	(32.5)	nm	(3.0)	(35.5)	nm	3.5	0.0 0%	(35.5)	**(32.0)**	nm	**($3.00)**	**($2.70)**	11.8
2018E	**$17.5**	15.0	2.5	14%	30.0	171%	18.0	103%	0.0	48.0	(45.5)	nm	(3.0)	(48.5)	nm	4.8	0.0 0%	(48.5)	**(43.7)**	nm	**($3.78)**	**($3.40)**	12.8
2019E	**$20.2**	15.5	4.7	23%	20.0	99%	19.8	98%	0.0	39.8	(35.1)	nm	(3.0)	(38.1)	nm	4.0	0.0 0%	(38.1)	**(34.2)**	nm	**($2.94)**	**($2.63)**	13.0
2020E	**$41.3**	18.2	23.1	56%	22.0	53%	25.0	61%	0.0	47.0	(23.9)	nm	(3.0)	(26.9)	nm	4.7	0.0 0%	(26.9)	**(22.2)**	nm	**($2.05)**	**($1.70)**	13.1
2021E	**$71.8**	22.2	49.5	69%	24.2	34%	26.3	37%	0.0	50.5	21.3	nm	(3.0)	18.3	nm	5.0	0.0 0%	18.3	**23.4**	33%	**$1.39**	**$1.77**	13.2
2022E	**$106.2**	22.9	83.3	78%	26.6	25%	27.6	26%	0.0	54.2	29.1	nm	(3.0)	26.1	nm	5.4	0.0 0%	26.1	**31.6**	30%	**$1.96**	**$2.36**	13.4
2023E	**$140.5**	25.9	114.6	82%	29.3	21%	28.9	21%	0.0	58.2	56.4	40%	(3.0)	53.4	nm	5.8	0.0 0%	53.4	**59.2**	42%	**$3.96**	**$4.39**	13.5
2024E	**$177.9**	29.3	148.6	84%	32.2	18%	30.4	17%	0.0	62.6	86.0	48%	(3.0)	83.0	47%	6.3	0.0 0%	83.0	**89.3**	50%	**$6.09**	**$6.55**	13.6
2025E	**$215.9**	32.7	183.2	85%	35.4	16%	31.9	15%	0.0	67.3	115.9	54%	(3.0)	112.9	52%	6.7	0.0 0%	112.9	**119.6**	55%	**$8.20**	**$8.69**	13.8
2026E	**$248.4**	35.5	212.9	86%	39.0	16%	33.5	13%	0.0	72.5	140.4	57%	(3.0)	137.4	55%	5.8	27.5 20%	109.9	**115.7**	47%	**$7.91**	**$8.33**	13.9
% Growth																							
14E/13E	**8.1%**	-3.1%	339.7%		74.7%		71.4%			144.5%													
15E/14E	**-4.0%**	1.3%	-38.2%		31.2%		33.2%			5.5%						-16.4%							49.5%
16E/15E	**0.0%**	-6.3%	66.7%		100.0%		0.0%			50.0%						50.0%							35.4%
17E/16E	**0.0%**	0.0%	0.0%		25.0%		0.0%			16.7%						16.7%							1.0%
18E/17E	**0.0%**	0.0%	0.0%		20.0%		80.0%			37.1%						37.1%							8.4%
19E/18E	**15.5%**	3.6%	86.6%		-33.3%		10.0%			-17.1%						-17.1%							1.0%
20E/19E	**104.2%**	16.9%	395.0%		10.0%		26.3%			18.1%						18.1%							1.0%
21E/20E	**74.0%**	22.4%	114.5%		10.0%		5.0%			7.3%						7.3%							1.0%
22E/21E	**48.0%**	2.9%	68.2%		10.0%		5.0%			7.4%						7.4%			**35.1%**			**33.7%**	1.0%
23E/22E	**32.3%**	13.3%	37.5%		10.0%		5.0%			7.5%						7.5%		104.2%	**87.6%**			**85.7%**	1.0%
24E/23E	**26.6%**	13.0%	29.7%		10.0%		5.0%			7.5%	52.5%			55.5%		7.5%		55.5%	**50.8%**		**54.0%**	**49.3%**	1.0%
25E/24E	**21.3%**	11.6%	23.3%		10.0%		5.0%			7.6%	34.7%			36%		7.6%		36.0%	**34.0%**		**34.6%**	**32.6%**	1.0%
26E/25E	**21.3%**	8.7%	16.2%		10.0%		5.0%			7.6%	34.7%			21.8%		7.6%		-2.6%	**-3.2%**		**-3.6%**	**-4.2%**	1.0%

Source: Canaccord Genuity estimates; Company reports

Figure 27: Scynexis summary P&L

($ In millions, except per share amount)

Year End: December 31	2012	2013	1Q14	2Q14	3Q14	4Q14E	2014E	1Q15E	2Q15E	3Q15E	4Q15E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E
SCY-078 US Sales	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$2.7	$21.1	$48.2	$78.9	$109.4	$143.0	$176.8	$205.3
SCY-078 EU Royalty	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$2.6	$6.0	$9.9	$13.7	$17.4	$21.5	$25.7
Other	$16.8	$16.9	$4.7	$4.6	$4.4	$4.5	$18.2	$4.4	$4.4	$4.4	$4.4	$17.5	$17.5	$17.5	$17.5	$17.5	$17.5	$17.5	$17.5	$17.5	$17.5	$17.5	$17.5
Total Revenue	**$16.8**	**$16.9**	**$4.7**	**$4.6**	**$4.4**	**$4.5**	**$18.2**	**$4.4**	**$4.4**	**$4.4**	**$4.4**	**$17.5**	**$17.5**	**$17.5**	**$17.5**	**$20.2**	**$41.3**	**$71.8**	**$106.2**	**$140.5**	**$177.9**	**$215.9**	**$248.4**
Gross Profit	$2.5	$0.6	$0.7	$0.5	$0.7	$0.5	$2.4	$0.4	$0.4	$0.4	$0.4	$1.5	$2.5	$2.5	$2.5	$4.7	$23.1	$49.5	$83.3	$114.6	$148.6	$183.2	$212.9
Gross Margin	*14.7%*	*3.3%*	*15.8%*	*10.0%*	*16.4%*	*11.1%*	*13.3%*	*8.6%*	*8.6%*	*8.6%*	*8.6%*	*8.6%*	*14.3%*	*14.3%*	*14.3%*	*23.1%*	*56.0%*	*69.0%*	*78.5%*	*81.5%*	*83.5%*	*84.9%*	*85.7%*
SG&A	$4.7	$4.4	$1.2	$2.3	$2.0	$2.0	$7.5	$2.0	$2.5	$2.5	$3.0	$10.0	$10.0	$10.0	$18.0	$19.8	$25.0	$26.3	$27.6	$28.9	$30.4	$31.9	$33.5
R&D	8.9	4.4	1.3	1.8	2.5	2.0	7.6	2.0	2.5	2.5	3.0	10.0	20.0	25.0	30.0	20.0	22.0	24.2	26.6	29.3	32.2	35.4	39.0
Adj. Operating Income	**(7.8)**	**(7.2)**	**(1.8)**	**(3.5)**	**(3.8)**	**(7.5)**	**(16.5)**	**(3.6)**	**(4.6)**	**(4.6)**	**(5.6)**	**(18.5)**	**(27.5)**	**(32.5)**	**(45.5)**	**(35.1)**	**(23.9)**	**21.3**	**29.1**	**56.4**	**86.0**	**115.9**	**140.4**
Adj. Operating Margin																		*29.7%*	*27.4%*	*40.1%*	*48.3%*	*53.7%*	*56.5%*
Non-Op	(3.7)	(15.3)	(2.2)	(1.9)	0.0	0.0	(4.1)	(0.0)	(0.0)	0.0	0.0	(0.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)
Tax Rate																							
Adj. Net Income	(7.6)	(7.2)	(3.4)	(4.8)	(3.3)	(6.7)	(18.2)	(3.3)	(4.1)	(4.1)	(5.0)	(16.5)	(27.5)	(32.0)	(43.7)	(34.2)	(22.2)	23.4	31.6	59.2	89.3	119.6	115.7
Net Margin																		*32.6%*	*29.7%*	*42.1%*	*50.2%*	*55.4%*	*46.6%*
GAAP EPS (diluted)	($1.73)	($0.70)	($6.57)	($0.98)	($0.45)	($0.87)	($8.87)	($0.43)	($0.54)	($0.53)	($0.65)	($2.14)	($2.60)	($3.00)	($3.78)	($2.94)	($2.05)	$1.39	$1.96	$3.96	$6.09	$8.20	$8.33
Adjusted EPS (diluted)	**($1.15)**	**($0.22)**	**($5.51)**	**($0.89)**	**($0.39)**	**($0.78)**	**($7.57)**	**($0.38)**	**($0.48)**	**($0.48)**	**($0.58)**	**($1.91)**	**($2.35)**	**($2.70)**	**($3.40)**	**($2.63)**	**($1.70)**	**$1.77**	**$2.36**	**$4.39**	**$6.55**	**$8.69**	**$8.33**
Diluted Shares (M)	0.0	32.3	0.6	5.5	8.5	8.6	5.8	8.6	8.6	8.7	8.7	8.7	11.7	11.8	12.8	13.0	13.1	13.2	13.4	13.5	13.6	13.8	13.9
Year-over-Year Growth																							
Total Revenue																*15%*	*104%*	*74%*	*48%*	*32%*	*27%*	*21%*	*9%*
Gross Profit																*87%*	*395%*	*115%*	*68%*	*38%*	*30%*	*23%*	*16%*
SG&A							*71%*					*33%*	*0%*	*0%*	*80%*	*10%*	*26%*	*5%*	*5%*	*5%*	*5%*	*5%*	*5%*
R&D							*75%*					*31%*	*100%*	*25%*	*20%*	*(33%)*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*	*10%*
Operating Income																	*0%*	*0%*	*0%*	*0%*	*53%*	*35%*	*35%*
Net Income																			*35%*	*88%*	*51%*	*34%*	*(3%)*
Adj. EPS																			**34%**	**86%**	**49%**	**33%**	**(4%)**

Source: Canaccord Genuity estimates; Company reports

INVESTMENT RISKS

Clinical/regulatory risk – Although Scynexis has applied for a QIDP under the GAIN act for the IV form of SCY-078, there is no guarantee that the designation will be granted. Also, if oral SCY-078 fails to demonstrate superiority over the standard of care in the planned Ph2 trial, it will have a negative impact on the stock.

Commercial risk – If approved, SCY-078 will be facing competition from established branded drugs; they include: V-fend, Cancidas, AmBisome, Eraxis, Noxafil, Mycamine, generic voriconazole, fluconazole and itraconazole. Further, there are drug candidates currently in various stages of development; if approved, they would further intensify the competition.

Financing risk – Scynexis ended Q3/14 with $34M in cash and equivalents. Based on our projection, it should be sufficient to fund operations through the end of next year. Undoubtedly, additional capital will be needed to move the pipeline forward; thus in the event that adequate funds can't be obtained, the company may need to reduce or eliminate R&D activities or commercial efforts.

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SCYNEXIS - SCYX:

We use a discounted P/E model to derive our $16 price target; we apply a 30x multiple to our 2023 EPS estimate of $4.39 discounted at 30% for 8 years.

Risks to achieving Target Price / Valuation:

SCYNEXIS - SCYX:

Clinical/regulatory risk – Although Scynexis has applied for a QIDP under the GAIN act for the IV form of SCY-078, there is no guarantee that the designation will be granted. Also, if oral SCY-078 fails to demonstrate superiority over the standard of care in the planned Ph2 trial, it will have a negative impact on the stock.

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Hold	319	29.76%	12.85%
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Speculative Buy	51	4.76%	62.75%
	1072*	100.0%	

*Total includes stocks that are Under Review

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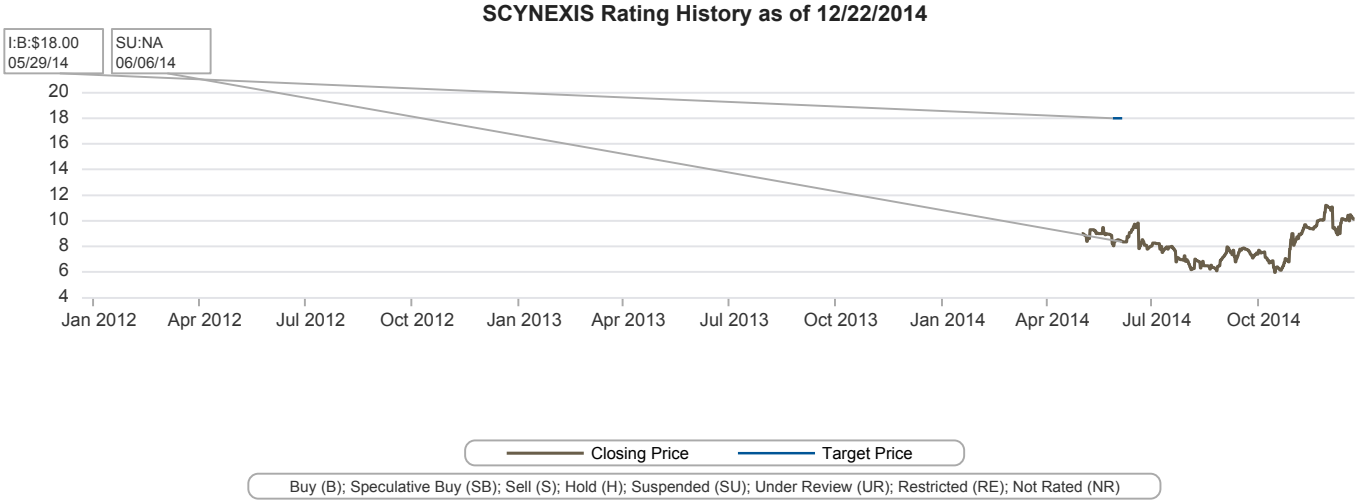

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