

22nd Century Group, Inc. (XXII - \$1.85 - Buy)

Estimate Change

COMPANY NOTE

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Sales and trading 7 a.m. to 7 p.m. ET, (646) 465-9090

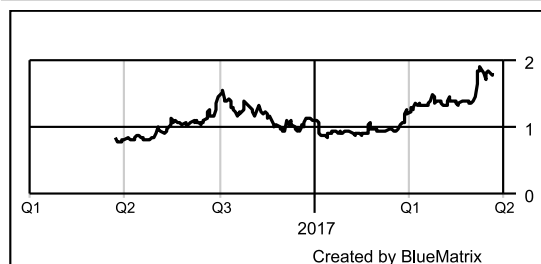
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Stock Data		06/22/17
Price		\$1.85
52 Week Range		(\$0.77 - \$2.00)
Price Target		\$3.50
Market Cap (mil)		\$167.80
Shares out (mil)		90.70
3-Mo Avg Vol		1,142,788
Cash per share		\$0.12
Total Debt (mil)		\$0.31

Revenues (\$ millions)						
Yr Dec	2016A		2017E		2018E	
	Actual	Curr	Prev	Curr	Prev	
Mar	3.0	2.2	-	-	-	
Jun	2.8	2.6	-	-	-	
Sep	3.1	6.0	-	-	-	
Dec	3.3	6.6	-	-	-	
YEAR	12.3	16.5	-	21.5	-	

EPS (\$)						
Yr Dec	2016A		2017E		2018E	
	Actual	Curr	Prev	Curr	Prev	
Mar	(0.04)	(0.03)A	-	-	-	
Jun	(0.04)	(0.03)	-	-	-	
Sep	(0.03)	(0.02)	-	-	-	
Dec	(0.03)	(0.02)	-	-	-	
YEAR	(0.15)	(0.09)	(0.10)	(0.09)	(0.10)	

One year price history XXII



Working with FDA on Multiple Paths to Commercialization

We reiterate our Buy recommendation and \$3.50 price target on 22nd Century and expect continued momentum in revenue growth for the remainder of the year as well as progress on the multiple paths the company is pursuing to commercialize its technology that regulates nicotine in tobacco plants. Recently, the company strengthened its balance sheet with a warrant exchange that raised over \$13 million resulting in a cash runway well in to 2019. We expect a strong Q2 and even stronger 2H as it delivers on a large contract manufacturing agreement. There has also been advancements recently on 22nd Century's three-pronged approach to monetizing its technology for the smoking cessation and traditional smoking market. In our view, this is bullish for the shares and supports our Buy recommendation and \$3.50 price target.

22nd Century is pursuing three paths with the FDA with three different products: 1) Brand A 2) X-22 and 3) Brand B. Earlier this month the company met with the FDA and based on those meetings has decided to "significantly expand" its Modified Risk Tobacco Product (MRTP) application and will request FDA approval of packaging and marketing disclosing that its Brand A Very Low Nicotine cigarettes reduce smokers' exposure to nicotine. We still expect 22nd Century to bifurcate the application into a Premarket Tobacco Product application (PMTA) and MRTP. The PMTA could advance quickly while the MRTPA would likely take 12 months to conclude.

This week, the FDA and 22nd Century received guidance regarding design and implementation of two parallel, Phase III clinical trials of 22nd Century's X-22 prescription-based smoking cessation product. Further work will be required to reach agreement on the construction of these trials which could begin in the first half of 2018, depending on funding.

We expect the company to also receive guidance from the FDA on an MRTP for Brand B, the company's low tar-to-nicotine product. This is a third path for commercialization in a market that has been prevented by government from innovating. However, because of the company's unique technology as well as progress on determining, in conjunction with the FDA, the efficacy of 22nd Century's products on smoking cessation and smoking behavior, it could end up offering a truly innovate product to the market.

This week, the company raised over \$13 million via the exercise of 11.3 million warrants and also issued 11.3 million warrants in consideration of the warrant holders exercising their warrants for cash. The new warrants have an exercise price of \$2.15 per share. Pro forma for the transaction, Q1 cash would equal over \$23 million, and at current cash consumption rates of about \$2.5 million would give the company runway will into 2019.

Contract manufacturing does not generate positive margins, yet, but will with scale. Because of the recently announced manufacturing agreement, 22nd Century expects to generate \$16 million in sales this year and significantly over \$20 million next year. Even so, this will be a low-margin business, but will contribute to covering corporate overhead as revenues scale.

We value X-22/Modified risk at \$2.50 per share and the combined value of the potential BAT royalty stream and commercial products at \$1.00 per share to reflect a modest tempo in the roll-out of commercial products as well as a less steep ramp for the BAT royalties. We have not given any value for the company's 25% ownership of Anandia or its exclusive US rights to four genes required for cannabinoid production in the cannabis plant. Risks to achieving our price target include delays in the FDA process, ability to find partners for X-22, challenges in attracting contract manufacturing and selling product overseas and possibility of requiring additional capital.

Investment Summary:

The company's path to value creation remains the same: monetizing its extensive intellectual property which allows it to modulate the level of nicotine in tobacco plants through genetic engineering and plant breeding. There are a number of paths the company is pursuing to monetize this technology.

One of the most promising paths for 22nd Century is the pending application with the FDA for a reduced exposure designation for its Brand A, low-nicotine cigarette.

Most of the company's revenues this year have been for contract manufacturing which it is seeking to expand.

Recently, in testimony for the Crede litigation, the company stated that its patents are worth more than \$200 million, or greater than \$2.50 per share. We value X-22/Modified risk at \$2.50 per share and the combined value of the potential BAT royalty stream and commercial products at \$1.00 per share to reflect a modest tempo in the roll-out of commercial products as well as a less steep ramp for the BAT royalties. We have not given any value for the company's 25% ownership of Anandia or its exclusive US rights to four genes required for cannabinoid production in the cannabis plant. Risks to achieving our price target include delays in the FDA process, ability to find partners for X-22, challenges in attracting contract manufacturing and selling product overseas and possibility of requiring additional capital. The company is fully funded for almost two years.

Valuation:

We value X-22/Modified risk at \$2.50 per share and the combined value of the potential BAT royalty stream and commercial products at \$1.00 per share. We have not included a value for the company's investment in Anandia.

Risks to achievement of target price:

Risks to achieving our price target include delays in the FDA process, ability to find partners for X-22, challenges in attracting contract manufacturing and selling product overseas and possibility of requiring additional capital.

Company description:

22nd Century owns or exclusively controls over 200 issued patents, 50 pending patent applications. The company's proprietary technology enables the control of nicotine levels in tobacco plants by controlling the genes responsible for nicotine production in tobacco plants.

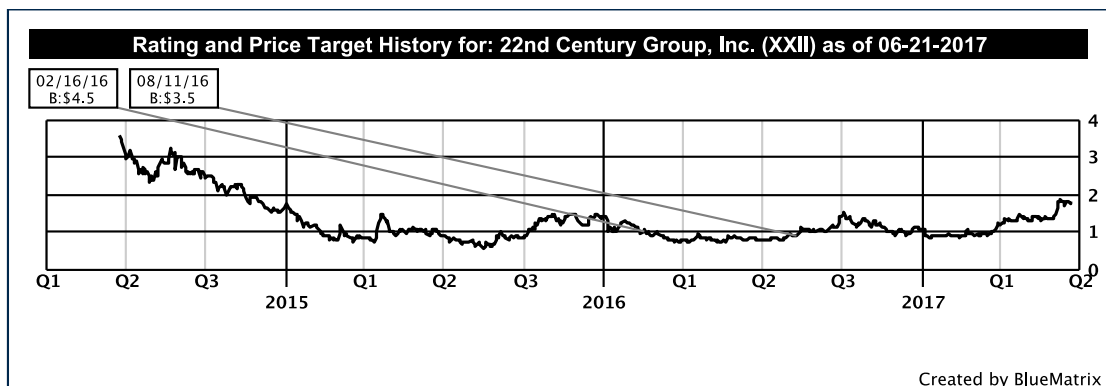
22nd Century Group, Inc
Income Statement \$ in 000s

	2014	2015	2016	Q1 17	Q2 17 E	Q3 17 E	Q4 17 E	2017 E	2018 E
Revenue	\$ 529	\$ 8,522	\$ 12,280	\$ 2,232	\$ 2,582	\$ 5,087	\$ 6,642	\$ 16,543	\$ 21,500
Cost Of Goods Sold	498	9,103	12,710	2,505	2,600	4,644	6,021	15,770	19,350
Gross Profit	31	(581)	(430)	(274)	(18)	444	621	773	2,150
R&D	1,249	1,669	2,341	551	550	550	550	2,201	2,314
G&A	8,793	7,760	6,193	1,620	1,400	1,400	1,400	5,820	6,806
Pre-Mfg. Facility Costs	1,177	0	0					0	0
Sales & marketing	86	1,358	1,582	296	350	350	350	1,346	1,242
Depreciation & Amort.	463	676	842	229	193	193	193	807	770
Opex	11,768	11,463	10,958	2,696	2,493	2,493	2,493	10,174	11,132
Operating Income	\$ (11,737)	\$ (12,044)	\$ (11,388)	\$ (2,970)	\$ (2,511)	\$ (2,049)	\$ (1,872)	\$ (9,401)	\$ (8,982)
Interest Expense	(7)	(22)	(21)	8	(2)	(2)	(2)	2	(8)
Other	(30)	889	(202)	346	0	0	0	346	0
Warrant Charge	(3,821)	145	30	(5)	0	0	0	(5)	0
Pretax Income	(15,595)	(11,032)	(11,581)	(2,621)	(2,513)	(2,051)	(1,874)	(9,058)	(8,990)
Income Tax Expense	0	0	0	0	0	0	0	0	0
Net before Minority Interest	(15,595)	(11,032)	(11,581)	(2,621)	(2,513)	(2,051)	(1,874)	(9,058)	(8,990)
Minority Interest	0	0	0					0	0
Net to Common	\$ (15,595)	\$ (11,032)	\$ (11,581)	\$ (2,621)	\$ (2,513)	\$ (2,051)	\$ (1,874)	\$ (9,058)	\$ (8,990)
Shares	59,993	68,143	79,843	90,700	91,000	102,023	102,073	96,449	102,198
EPS	(\$0.26)	(\$0.16)	(\$0.15)	(\$0.03)	(\$0.03)	(\$0.02)	(\$0.02)	(\$0.09)	(\$0.09)

22nd Century Group, Inc
Balance Sheet and Cash Flow Statement \$ in 000s

	2014	2015	2016	Q1 17	Q2 17 E	Q3 17 E	Q4 17 E	2017 E	2018 E
Cash	6,403	3,760	13,468	10,729	20,448	18,690	17,070	17,070	9,889
Due from related party and officers	46	0	0	0	0	0	0	0	0
A/R	0	51	41	2	478	482	528	528	616
Inventory	2,065	2,706	3,093	3,035	3,136	4,814	5,945	5,945	4,973
Prepaid Consulting Fees	1,979	0	0	0	0	0	0	0	0
Prepaid Exp.	214	636	196	434	448	688	850	850	711
Total Current Assets	\$ 10,707	\$ 7,154	\$ 16,797	\$ 14,200	\$ 24,510	\$ 24,674	\$ 24,393	\$ 24,393	\$ 16,189
Patent and Trademark costs	7,078	7,364	7,390	7,439	7,378	7,316	7,255	7,255	7,010
PP&E	2,851	2,556	2,435	2,360	2,396	2,428	2,455	2,455	2,519
Equity Investment	1,318	1,223	1,020	1,366	1,366	1,366	1,366	1,366	1,366
Total Assets	\$ 21,954	\$ 18,296	\$ 27,642	\$ 25,365	\$ 35,650	\$ 35,785	\$ 35,469	\$ 35,469	\$ 27,085
Bank Loans and N/P	495	309	308	314	314	314	314	314	314
A/P	884	1,283	1,340	1,729	1,786	2,742	3,386	3,386	2,833
Accrued Expenses	1,294	1,570	1,601	1,376	1,422	2,183	2,696	2,696	2,256
Deferred Revenue	0	0	0	0	0	0	0	0	0
Total Current Liabilities	\$ 2,673	\$ 3,162	\$ 3,249	\$ 3,419	\$ 3,522	\$ 5,239	\$ 6,397	\$ 6,397	\$ 5,402
Long-Term Debt	605	308	0	0	0	0	0	0	0
Accrued Severance	412	200	0	0	(69)	0	0	0	0
Warrant Liability & Other	3,043	2,898	59	64	64	64	64	64	64
Shareholder's Equity	15,220	11,729	24,334	21,882	32,133	30,482	29,008	29,008	21,619
Total Liabilities And Equity	\$ 21,954	\$ 18,296	\$ 27,642	\$ 25,365	\$ 35,650	\$ 35,785	\$ 35,469	\$ 35,469	\$ 27,085
Net Income	(15,595)	(11,032)	(11,581)	(2,621)	(2,513)	(2,051)	(1,874)	(9,058)	(8,990)
Depreciation & Amort.	463	774	842	205	150	155	159	668	681
Stock Comp	2,293	1,326	881	169	350	350	350	1,219	1,400
Other	6,740	2,341	241	(318)	(69)	69	0	(318)	0
Working Capital	(483)	(731)	(270)	(129)	(488)	(205)	(181)	(1,003)	28
Operating Cash Flow	\$ (6,583)	\$ (7,322)	\$ (9,888)	\$ (2,695)	\$ (2,569)	\$ (1,683)	\$ (1,545)	\$ (8,493)	\$ (6,881)
Acquisition of Patents and trademarks	(727)	(413)	(357)	(30)	0	0	0	(30)	0
Capx	(212)	(37)	(197)	(14)	(125)	(125)	(125)	(389)	(500)
Other	(1,769)	0	0	0	0	0	0	0	0
Investing Activities	\$ (2,708)	\$ (451)	\$ (554)	\$ (44)	\$ (125)	\$ (125)	\$ (125)	\$ (419)	\$ (500)
Debt	(4)	(508)	(333)	0	0	0	0	0	0
Equity	9,859	5,592	20,483	0	12,413	50	50	12,513	200
Other	7	46	0	0	0	0	0	0	0
Financing Activities	\$ 9,863	\$ 5,130	\$ 20,149	\$ -	\$ 12,413	\$ 50	\$ 50	\$ 12,513	\$ 200
Change in Cash	\$ 572	(\$2,642)	\$ 9,708	(\$2,739)	\$ 9,719	(\$1,758)	(\$1,620)	\$ 3,602	(\$7,181)

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			Count	Percent
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Neutral: Returns expected to be in line with sector average over 12 months and indicates total return between negative 10% and 10% over the next 12 months.

Sell: Returns expected to be materially below sector average over 12 months and indicates total price decline of at least 10% over the next 12 months.

22nd Century Group, Inc. (XXII) - \$1.85 - Buy

Price Target \$3.50

VALUATION:

We value X-22/Modified risk at \$2.50 per share and the combined value of the potential BAT royalty stream and commercial products at \$1.00 per share. We have not included a value for the company's investment in Anandia.

RISKS TO ACHIEVEMENT OF TARGET PRICE:

Risks to achieving our price target include delays in the FDA process, ability to find partners for X-22, challenges in attracting contract manufacturing and selling product overseas and possibility of requiring additional capital.

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