

22nd Century Group, Inc. (XXII - \$0.73 - Buy)
Estimate Change

COMPANY NOTE

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

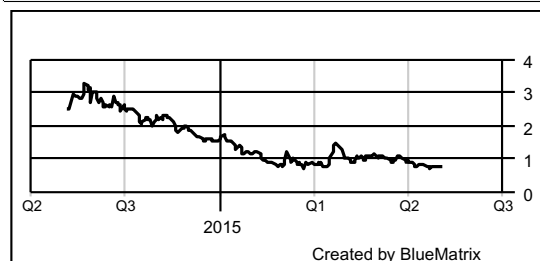
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Stock Data	08/06/15
Price	\$0.73
52 Week Range	(\$0.65 - \$3.35)
Price Target	\$9.00
Market Cap (mil)	\$51.74
Shares out (mil)	70.87
3-Mo Avg Vol	427,060
Cash per share	\$0.12
Total Debt (mil)	\$1.11

EPS (\$)						
Yr Dec	2014A		2015E		2016E	
	Actual	Curr	Prev	Curr	Prev	
Mar	(0.09)	(0.06)A	–	(0.03)	(0.02)	
Jun	(0.03)	(0.02)A	–	(0.03)	(0.02)	
Sep	(0.05)	(0.03)	–	(0.02)	–	
Dec	(0.09)	(0.02)	(0.03)	(0.02)	(0.01)	
YEAR	(0.26)	(0.13)	(0.15)	(0.10)	(0.07)	
P/E	(2.8)x	(5.6)x	–	(7.3)x	–	

Revenues (\$ millions)						
Yr Dec	2014A		2015E		2016E	
	Actual	Curr	Prev	Curr	Prev	
Mar	0.4	0.6A	–	2.4	–	
Jun	0.0	2.3A	1.3A	3.0	–	
Sep	0.1	2.3	1.3	3.8	–	
Dec	0.0	2.3	1.6	4.5	–	
YEAR	0.5	7.5	4.7	13.6	–	

One year price history XXII



Q2 Better than Expected.

22nd Century reported better than expected Q2 revenue of \$2.3 million, far in excess of our \$1.25 million estimate. We have raised our revenue estimate for the year from \$4.7 million to \$7.5 million to reflect the better than expected Q2 results as well as an improved outlook for the rest of the year. The company indicated Q3 could be as good or better than Q2 and we believe Q4 will benefit from the company's success in attracting contract manufacturing and greater distribution of REDSUN and MAGIC.

The catalysts for the shares this year remain the roll-out of RED SUN in the US, MAGIC in Europe and contract manufacturing. Other pivot points for the stock include 22nd Century's pursuit of multiple JVs in Asia (China, Japan, and South Korea) and it intends on consummating at least one of them this year. 22nd Century expects to submit an application for modified risk designation for its Brand A, very low nicotine cigarette this fall. It had previously expected to submit the application this summer. In addition, the company is hoping to close a deal to fund a phase 3 study for X-22. We have not built the latter two events into our estimates.

The company did not segment sales into contract manufacturing and proprietary sales, but we believe, partly based on the gross margin, the major portion was contract manufacturing. Gross margin was negative for the quarter, a function of mix and continue under-absorption of overhead. As volume rises, we estimate gross margin will as well.

In the US, there are now over 320 (280 a month ago) REDSUN retail outlets listed on the company's website but that only captures a subset of the total retailers selling the product. At the middle of May there were 170 stores listed on the company's website. The goal was 500 stores by the end of the Q2, which we believe was achieved. More will come as the year progresses and distributors expand into existing markets. 22nd Century has deployed about a dozen "brand ambassadors" in key markets focusing on about 340 events during the remainder of the year to increase consumer awareness of the product.

MAGIC has been launched in Spain, but the anticipated launch in the UK in June has been delayed to the fall. By year-end 22nd Century also hopes to have MAGIC available in Spain, the UK, Netherlands, Italy and France as well as other countries.

The take-up rate, is still an unknown. To date sales have been made to distributors but the real success of the product depends on end-user demand. Early indications probably won't be available until the end of this quarter. At that point, re-orders by retailers, to distributors, will indicate how successful the company has been in the initial launch phase. It will take time to build demand and for that reason we have modeled modest growth this year for both RED SUN

and MAGIC.

At the end of Q2 the company had \$8.2 million in cash and is set to receive \$600 thousand this month in settlement of a legal dispute. The company anticipates this gives it a 12 month runway but we think it is longer than that, and that assumes the operating losses remain at current levels, and we do not believe that will be the case. We do not anticipate the company to need to tap the capital markets over the next 24 months unless the sales ramp of REDSUN and MAGIC are far in excess of what we anticipate.

Other catalysts for the shares include an application for modified risk cigarettes, X-22 and the China JV. 22nd Century will submit an application for modified risk to the FDA this fall. The application will be positive, but it will take 12-18 months (maybe more) for the FDA to make a decision. The company is also seeking a partner to fund a phase 3 study for X-22. The JV with Crede to pursue the China market has been terminated, but 22nd Century continues to pursue partnerships with others as well as Crede.

We remain positive on the shares given near-term revenue generation for multiple sources but clearly the story has taken longer to develop than we expected. We believe there is a good chance the company will exceed our revenue estimates and there is upside possible from its Asian joint venture. Our \$9 price target is driven by a sum-of-the-parts methodology comprised of the discounted present value of the projected BAT license revenue, the discounted value of commercial product sales, RED SUN and MAGIC, and a value for the company's modified risk and X-22 initiatives.

Investment Summary:

We expect meaningful revenues to begin from product sales of the company's proprietary RED SUN and MAGIC brands. Over the longer-term 22nd Century will pursue the \$1 billion US smoking-cessation market with its proprietary X-22 cigarette, and will file with the FDA applications for modified risk cigarettes.

The value of this technology was validated by BAT in October of 2013 when it signed a worldwide research license agreement with 22nd Century. The company received a \$7 million payment in Q4 of 2013. BAT has the option to turn this research license into a royalty-bearing commercial license at any time.

Valuation:

We approached valuation from a sum-of-the-parts perspective to arrive at our \$9.00 price target. We discounted the projected BAT license revenue at 10% and in the low case assumed the license terminated in 2028, while in the high case we assumed the license was extended by an additional 15 years.

For the commercial products we assume RED SUN and MAGIC can achieve \$150 to \$200 million in sales by 2023. Our EV/Sales valuation ranges are comparable to the 3.6x to 5.2x EV/Sales multiples awarded to Altira, British American Tobacco, Lorillard, Reynolds American and Philip Morris International.

Our modified risk/X-22 valuation of \$2 to \$4 per share is derived in a number of ways. E-cigarette makers, Victory Electronic Cigarettes and Vapor Corp., proxies for modified risk valuations, have enterprise values of \$499 million and \$141 million respectively. This equates to \$2.42 per share using the lower EV as a bogey. X-22 valuation using a modest market share of the smoking cessation market and EV/Sales of 2x to 3x also yields per share valuation to 22nd Century of over \$2 per share. We have heavily discounted these assumptions due to the longer-term nature of development of these lines of business as well as the additional capital required for them.

Risks to achievement of target price:

Risks to achieving our price target: We have assumed the commercial product growth trajectory will be similar to American Spirit, but changes in the industry can hinder 22nd Century from achieving our estimates. We have also assumed the BAT license will change from a research license to a commercial royalty-bearing license, but that too is not assured. The industry is subject to significant regulatory constraints, litigation, societal views on smoking and changing legislation. Any one of these could have a deleterious impact on our assumptions.

Company description:

22nd Century owns or exclusively controls 185 issued patents, 54 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.

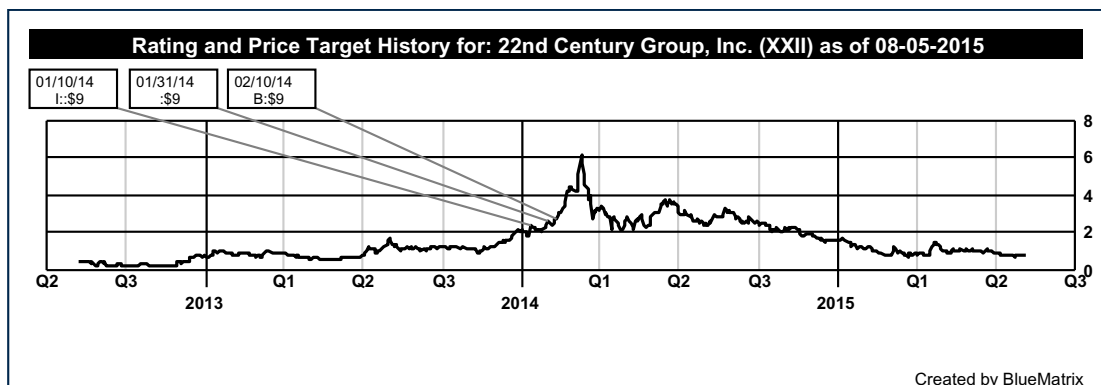
22nd Century Group, Inc
Income Statement \$ in 000s

	2012	2013	2014	Q1 15	Q2 15	Q3 15 E	Q4 15 E	2015 E	2016 E
Revenue	\$ 19	\$ 7,278	\$ 529	\$ 616	\$ 2,307	\$ 2,250	\$ 2,300	\$ 7,473	\$ 13,625
Cost Of Goods Sold	68	462	498	633	2,600	1,945	1,890	7,068	9,813
Gross Profit	(49)	6,817	31	(16)	(293)	305	410	405	3,813
R&D	729	744	1,249	183	308	400	400	1,291	2,000
G&A	2,205	4,107	8,793	3,644	1,291	1,291	1,291	7,516	7,380
Pre-Mfg. Facility Costs	0	0	1,177	0	0	0	0	0	0
Sales & marketing	62	9	86	115	291	250	250	906	1,400
Depreciation & Amort.	198	144	463	161	164	150	150	625	700
Opex	3,195	5,004	11,768	4,103	2,053	2,091	2,091	10,337	11,480
Operating Income	\$ (3,244)	\$ 1,812	\$ (11,737)	\$ (4,119)	\$ (2,347)	\$ (1,786)	\$ (1,681)	\$ (9,932)	\$ (7,668)
Interest Expense	(1,495)	(749)	(7)	(6)	(14)	(2)	(2)	(23)	(8)
Other	0	122	(30)	(51)	959	0	0	908	0
Warrant Charge	(1,998)	(27,339)	(3,821)	59	113	0	0	172	0
Pretax Income	(6,737)	(26,153)	(15,595)	(4,117)	(1,289)	(1,788)	(1,683)	(8,876)	(7,676)
Income Tax Expense	0	0	0	0	0	0	0	0	0
Net before Minority Interest	(6,737)	(26,153)	(15,595)	(4,117)	(1,289)	(1,788)	(1,683)	(8,876)	(7,676)
Minority Interest	1	0	0	0	0	0	0	0	0
Net to Common	\$ (6,735)	\$ (26,153)	\$ (15,595)	\$ (4,117)	\$ (1,289)	\$ (1,788)	\$ (1,683)	\$ (8,876)	\$ (7,676)
Shares	30,420	43,635	59,993	64,188	66,617	67,117	67,617	66,384	78,617
EPS	(\$0.22)	(\$0.60)	(\$0.26)	(\$0.06)	(\$0.02)	(\$0.03)	(\$0.02)	(\$0.13)	(\$0.10)

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

	2012	2013	2014	Q1 15	Q2 15	Q3 15 E	Q4 15 E	2015 E	2016 E
Cash	0	5,831	6,403	3,844	8,197	8,011	7,095	7,095	2,266
Due from related party and officers	41	50	46	46	46	46	46	46	46
A/R	0	0	0	209	449	370	575	575	2,055
Settlement proceeds receivable	0	0	0	0	600	0	0	0	0
Inventory	1,231	1,406	2,065	2,563	2,382	2,598	2,552	2,552	3,587
Prepaid Consulting Fees	0	0	1,979	0	0	0	0	0	0
Prepaid Exp.	10	458	214	458	456	497	488	488	686
Total Current Assets	\$ 1,281	\$ 7,744	\$ 10,707	\$ 7,120	\$ 12,130	\$ 11,521	\$ 10,757	\$ 10,757	\$ 8,641
Patent and Trademark costs	1,353	1,545	7,078	7,166	7,206	7,145	7,083	7,083	6,838
PP&E	6	2,998	2,851	2,794	2,716	2,748	2,777	2,777	2,844
Equity Investment	0	0	1,318	1,267	1,227	1,227	1,227	1,227	1,227
Total Assets	\$ 2,645	\$ 12,287	\$ 21,954	\$ 18,347	\$ 23,278	\$ 22,641	\$ 21,844	\$ 21,844	\$ 19,550
Bank Loans and N/P	2,686	175	495	495	507	507	507	507	507
A/P	1,411	55	884	1,414	985	1,074	1,055	1,055	1,483
Accrued Expenses	503	576	1,294	537	1,435	1,565	1,538	1,538	2,161
Deferred Revenue	0	179	0	0	0	0	0	0	0
Total Current Liabilities	\$ 4,603	\$ 984	\$ 2,673	\$ 2,446	\$ 2,927	\$ 3,146	\$ 3,100	\$ 3,100	\$ 4,152
Long-Term Debt	0	0	605	605	605	605	605	605	605
Accrued Severance	0	0	412	364	307	238	170	170	0
Warrant Liability & Other	4,173	3,780	3,043	2,984	2,871	2,871	2,871	2,871	2,871
Shareholder's Equity	(6,131)	7,523	15,220	11,948	16,568	15,780	15,098	15,098	11,922
Total Liabilities And Equity	\$ 2,645	\$ 12,287	\$ 21,954	\$ 18,347	\$ 23,278	\$ 22,641	\$ 21,844	\$ 21,844	\$ 19,550
Net Income	(6,737)	(26,153)	(15,595)	(4,117)	(1,289)	(1,788)	(1,683)	(8,876)	(7,676)
Depreciation & Amort.	198	144	463	185	139	154	158	637	677
Stock Comp	808	980	2,293	354	332	500	500	1,686	2,500
Other	3,866	29,386	6,740	2,139	15	(69)	(69)	2,017	(170)
Working Capital	100	(501)	(483)	(1,082)	(281)	642	(198)	(919)	(1,661)
Operating Cash Flow	\$ (1,764)	\$ 3,856	\$ (6,583)	\$ (2,521)	\$ (1,083)	\$ (561)	\$ (1,291)	\$ (5,455)	\$ (6,329)
Acquisition of Patents and trademarks	(163)	(290)	(727)	0	(139)	0	0	(139)	0
Capx	0	(3,452)	(212)	(4)	(1)	(125)	(125)	(255)	(500)
Other	0	0	(1,769)	0	0	0	0	0	0
Investing Activities	\$ (163)	\$ (3,743)	\$ (2,708)	\$ (4)	\$ (140)	\$ (125)	\$ (125)	\$ (394)	\$ (500)
Debt	225	(1,810)	(4)	0	0	0	0	0	0
Equity	1,468	7,536	9,859	(35)	5,576	500	500	6,542	2,000
Other	(17)	(9)	7	0	0	0	0	0	0
Financing Activities	\$ 1,675	\$ 5,717	\$ 9,863	\$ (35)	\$ 5,576	\$ 500	\$ 500	\$ 6,542	\$ 2,000
Change in Cash	(\$252)	\$ 5,830	\$ 572	(\$2,559)	\$ 4,353	(\$186)	(\$916)	\$ 693	(\$4,829)

Important Research Disclosures



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Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
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