CHARDAN

Company Update
December 28, 2018
Industrial & Consumer Technology

22nd Century Group, Inc. (XXII - $2.45 - Buy)

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	12/27/18
Price	$2.45
52 Week Range	($1.92 - $4.44)
Price Target	$11.50
Market Cap (mil)	$304.78
Shares out (mil)	124.40
3-Mo Avg Vol	1,976,958
Cash (mil)	$62.1
Total Debt (mil)	$0.7

Revenues ($ millions)

Yr Dec	2017A	2018E		2019E	
	Actual	Curr	Prev	Curr	Prev
Mar	2.2	6.1A	–	–	–
Jun	3.9	6.9A	–	–	–
Sep	4.5	6.3A	–	–	–
Dec	5.9	–	–	–	–
YEAR	16.6	23.3	–	20.0	–

EPS ($)

Yr Dec	2017A	2018E		2019E	
	Actual	Curr	Prev	Curr	Prev
Mar	(0.03)	0.01A	–	–	–
Jun	(0.03)	(0.05)A	–	–	–
Sep	(0.03)	0.04A	–	–	–
Dec	(0.03)	–	–	–	–
YEAR	(0.13)	(0.04)	–	(0.15)	–
			–		–

One year price history XXII

Created by BlueMatrix

XXII: MRTP Filed

22nd Century filed an MRTP, or Modified Risk Tobacco Product application requesting authorization to claim on packaging and in advertising that the cigarettes contain 0.5mg of nicotine per gram of tobacco. This follows the filing, earlier this month, of a Premarket Tobacco Application, or PMTA, with the FDA requesting approval to commercialize a very-low nicotine combustible cigarette. We believe these applications can lead to significant value creation and as importantly, be levers for the FDA to use in moving the industry towards very-low nicotine products and justifying aggressive rule changes on nicotine levels in cigarettes. An NPRM with these proposed rule changes could be issued in the near-term and provide a catalyst for 22nd Century's stock.

We believe these applications will be an important tool the FDA can use to justify and support the NPRM we expect to be issued soon. The FDA has been consistent and clear that it wants to implement a rule that would lower nicotine in combustible cigarettes to non-addictive levels. One major objection industry has made is a claim that technology is not available to accomplish this objective. Approval of 22nd Century's PMTA and MRTP would counter this objection and justify the FDA's rule change.

As the FDA moves down the path of mandating non-addictive levels of nicotine in cigarettes, 22nd Century could have a large time-to-market advantage over current providers in the market as well as demonstrate it has technology available others need to comply with the very-low nicotine mandate.

Valuation:

Our twelve-month price target of $11.50 is based on the company garnering royalty revenue for its technology on 10% of the US market share in the next five years, discounted at a 20% annual rate.

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.

Required Research Disclosures

Distribution of Ratings/IB Services
Chardan Capital Markets

			IB Serv./Past 12 Mos.	
Rating	**Count**	**Percent**	**Count**	**Percent**
BUY [BUY]	**64**	**68.82**	**20**	**31.25**
HOLD [NEUTRAL]	**21**	**22.58**	**0**	**0.00**
SELL [SELL]	**0**	**0.00**	**0**	**0.00**
NOT RATED [NR]	**8**	**8.60**	**0**	**0.00**

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RATINGS

Buy: Expected to materially outperform sector average over 12 months and indicates total return of at least 10% over the next 12 months.

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.

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Price Target $11.50

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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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