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Toll-Free: 866-928-0928 ♦ www.DawsonJames.com ♦ 101 North Federal Highway - Suite 600 ♦ Boca Raton, FL 33432

22nd Century Group, Inc. (NASDAQ: XXII)

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Buy: VLN Driving to Multi-billion Dollar Franchise.

James McIlree, CFA
561-237-2709
jmcilree@dawsonjames.com

Based on the success of the VLN pilot in Chicago, 22nd Century is expanding distribution into the rest of Illinois and Colorado. Additional states will be announced over the coming months and the line of sight to 1% market share suggests a multi-billion VLN franchise value. We reiterate our Buy recommendation and \$8.50 price target.

At the Dawson James conference, 22nd Century indicated VLN's market share midway through the pilot in Chicago was 0.7% and the company had line of sight to 1% market share. These results are far ahead of our assumption of at best 0.5% market share. Based on the success of the that pilot the company announced expansion plans for the rest of Illinois and Colorado and expects to announce expansion into additional states in the coming months. The company estimates that 12 to 15 states generate about half of total combustible cigarette sales in the U.S. and 40 states about 98% of the total. The company is targeting states with high consumption as well as states that have reduced excise taxes on MRTP products. We estimate a 1% market share of the domestic combustible cigarette market could be worth over \$2 billion, or over \$10 per share.

In 2021 Altria generated \$22.9 billion in sales (including excise taxes) from smokeable products. Using its estimated market share of 48.8% puts the domestic combustible market for manufacturers at almost \$47 billion. (The retail market is about \$80 billion). 1% share of this market equates to \$470 million in sales and using the 5x EV/Sales multiple Altria (and Philip Morris International) trade at suggests a value of 1% market share of \$2.4 billion.

We expect the company to expand into the high-usage/low excise tax states over the coming year and believe it may exit 2023 with product available in upwards of half of the total domestic market. Our current revenue estimate for VLN sales in 2023 is a couple of million dollars so there is significant upside to our estimates depending on the timing of markets entered and market share garnered.

We have modeled a significant ramp in revenue from GVB in the second half of this year, and the extraction unit that is coming on line in Q4 should drive margin expansion. The addition of GVB provides much greater scale for 22nd Century and with the front-end plant design expertise, will enable GVB to offer customized products to the CBD market. We think this will put GVB in a unique position relative to competitors and we also believe the regulatory environment will tighten and benefit suppliers like GVB, which has focused from the beginning on being compliant with FDA regulations.

Valuation: Our \$8.50 price target is the sum of: An estimated \$4.58/share for the VLN asset, \$3.18/share for the low-nicotine mandate and \$0.74 for the hemp/cannabis franchise.

Risks to Target include, among others: Our price target assumes the company launches VLN pilots in test markets this year and this could take longer than estimated, and/or its partner could demand different terms than assumed. Our price target also assumes a nicotine mandate. The nicotine mandate may take longer to decide, and the transition period could be longer than estimated. See the Risks Analysis section for additional risks.

Current Price	\$1.25		
Price Target	\$8.50		
Estimates	F2021A	F2022E	F2023E
Revenues (\$000s)	\$ 30,948	\$ 61,512 E	\$ 87,980
1Q March	\$ 6,806	\$ 9,045 A	\$ 20,960
2Q June	\$ 8,371	\$ 14,477 A	\$ 21,598
3Q September	\$ 7,811	\$ 17,870 E	\$ 22,314
4Q December	\$ 7,960	\$ 20,120 E	\$ 23,108
	F2021A	F2022E	F2023E
EPS (diluted)	\$ (0.21)	\$ (0.21)E	\$ (0.16)
1Q March	\$ (0.03)	\$ (0.05)A	\$ (0.04)
2Q June	\$ (0.03)	\$ (0.06)A	\$ (0.04)
3Q September	\$ (0.06)	\$ (0.05)E	\$ (0.04)
4Q December	\$ (0.09)	\$ (0.04)E	\$ (0.04)
EBITDA (\$Ms)	\$ (23.2)	\$ (26.7)	\$ (23.9)
EV/EBITDA (x)	-9.4x	-8.2x	-9.1x
Stock Data			
52-Week Range	\$0.85	-	\$3.52
Shares Outstanding (mil.)	214.8		
Market Capitalization (mil.)	\$268		
Enterprise Value (mil.)	\$218		
Debt to Capital	9%		
Cash (mil.)	\$59.5		
Cash/share	\$0.28		
Average Three Months Trading Volume (K)	1,001		
Insider Ownership	2.6%		
Institutional Ownership	19.4%		
Short interest (mil.)	7.3%		
Dividend / Yield	\$0.00/0.0%		



Valuation. Our price target of \$8.50 comprises three components: We attribute about \$4.58/share for the VLN asset. The non-addictive nicotine mandate is valued at \$3.18 per share. The remainder of the price target, or \$0.74 per share, equals about \$112 million and encompasses the company's investment in Exactus, the Anandia licenses and the potential from its relationship with KeyGene. We have assumed a long gestation period for the hemp/cannabis business because it is in the early stages. However, the Aurora announcement and the restructuring of the Panacea/Exactus investment could be catalysts to more rapid development of the market and 22nd Century's monetization efforts.

Risk Analysis

Our price target assumes the company launches VLN pilots in test markets this year, and this could take longer than estimated and/or its launch partner could demand different terms than assumed. Our price target also assumes a nicotine mandate. The nicotine mandate may take longer to decide, and the transition period could be longer than estimated. There will likely be other paths attempted by the industry to comply, or the industry may opt to focus on other nicotine delivery systems as regulation of the combustible cigarette market increases. This could affect our assumptions on the royalty rate as well as market share.

Exhibit 1. Income Statement

<i>(\$ in 000's except per-share data)</i>	2019	2020	2021	Q1 22 A	Q2 22 A	Q3 22 E	Q4 22 E	2022 E	2023 E
Revenue	\$ 25,833	\$ 28,111	\$ 30,948	\$ 9,045	\$ 14,477	\$ 17,870	\$ 20,120	\$ 61,512	\$ 87,980
Cost Of Goods Sold	25,818	26,673	28,879	8,585	13,585	14,070	15,020	51,260	66,046
Gross Profit	14	1,438	2,069	460	892	3,800	5,100	10,252	21,934
	0.1%	5.1%	6.7%	5.1%	6.2%	21.3%	25.3%	16.7%	24.9%
R&D	8,057	4,128	3,274	972	1,897	1,897	1,897	6,663	7,588
G&A	12,956	14,971	25,881	7,305	9,471	10,471	10,971	38,218	44,707
Impairment Charge	1,142	176	78	0	0	0	0	0	0
Depreciation & Amort.	1,425	1,346	1,248	329	0	0	0	329	0
Opex	23,581	20,621	30,481	8,606	11,368	12,368	12,868	45,210	52,295
Operating Income	\$ (23,566)	\$ (19,183)	\$ (28,412)	\$ (8,146)	\$ (10,476)	\$ (8,568)	\$ (7,768)	\$ (34,958)	\$ (30,361)
Interest and other, net	(2,992)	(490)	(4,183)	(772)	(1,022)	(1,020)	(1,020)	(3,834)	(4,080)
Pretax Income	(26,559)	(19,673)	(32,595)	(8,918)	(11,498)	(9,588)	(8,788)	(38,792)	(34,441)
Income Tax Expense	0	38	14	0	0	0	0	0	0
Net to Common	\$ (26,559)	\$ (19,711)	\$ (32,609)	\$ (8,918)	\$ (11,498)	\$ (9,588)	\$ (8,788)	\$ (38,792)	\$ (34,441)
Shares (000)	125,883	138,813	156,208	163,157	182,044	206,223	215,035	191,615	215,672
EPS	(\$0.21)	(\$0.14)	(\$0.21)	(\$0.05)	(\$0.06)	(\$0.05)	(\$0.04)	(\$0.20)	(\$0.16)
D&A	1,425	1,346	1,248	421	503	503	503	1,930	2,012
Stock Comp	3,540	1,654	3,983	1,213	1,106	1,106	1,106	4,531	4,424
Other	1,142	176	0	0	1,765	0	0	1,765	0
EBITDA	\$ (17,459)	\$ (16,007)	\$ (23,181)	\$ (6,512)	\$ (7,102)	\$ (6,959)	\$ (6,159)	\$ (26,732)	\$ (23,925)

Source: 22nd Century Group, Inc. and Dawson James Securities estimates

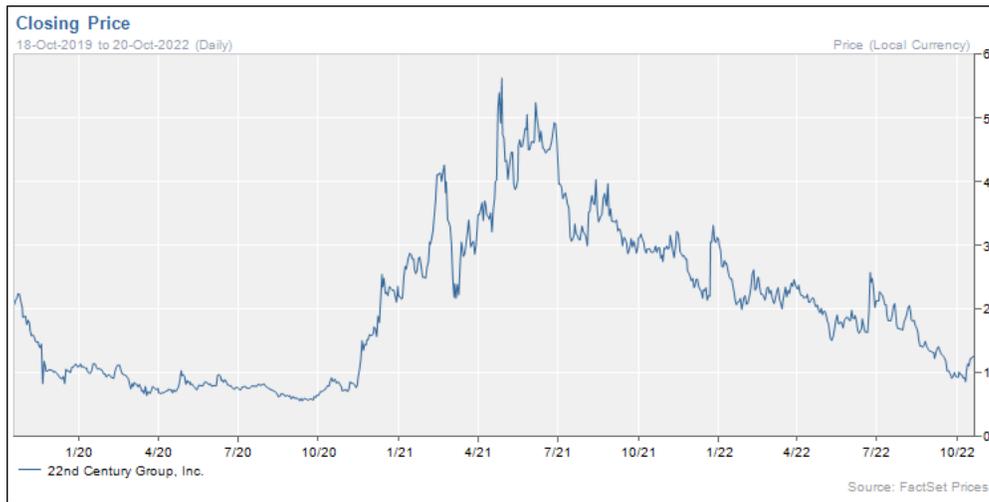
Exhibit 2. Balance Sheet and Cash Flow Statement

(\$ in 000's)	2019	2020	2021	2022 E	2023 E
Cash	485	1,029	1,336	2,668	2,668
Short-Term Investments	38,477	21,313	47,400	46,968	14,476
A/R	867	2,159	585	3,307	6,331
Inventory	2,266	2,034	2,881	5,714	6,677
Prepaid Exp.	648	1,806	2,183	3,765	3,765
Total Current Assets	\$ 42,743	\$ 28,341	\$ 54,385	\$ 62,422	\$ 33,917
PP&E	3,120	2,483	5,841	13,954	12,994
Operating Lease	602	247	1,723	2,348	2,348
Goodwill		0	0	44,200	44,200
Patent, Trademark, other intangibles	8,494	8,211	7,919	7,814	7,662
Equity Investment	8,403	6,536	2,345	1,326	1,326
Other Assets	5,589	5,876	3,741	4,583	4,583
Total Assets	\$ 68,951	\$ 51,694	\$ 75,954	\$ 136,647	\$ 107,030
Bank Loans and N/P	581	539	596	6,328	6,328
Operating Lease	220	247	308	788	788
A/P	1,998	1,116	2,173	4,523	4,523
Accrued Expenses & Payroll	2,619	4,830	5,014	3,546	3,546
Accrued excise taxes and fees		0	0	1,656	1,656
Deferred Income	5	272	119	1,083	1,083
Accrued Severance	359	339	217	189	189
Total Current Liabilities	\$ 5,780	\$ 7,343	\$ 8,427	\$ 18,113	\$ 18,113
Long-Term Debt	292	0	0	253	253
Operating Lease	382	0	1,432	1,652	1,652
Accrued Severance	446	241	21	0	0
Shareholders' Equity	62,051	44,110	66,074	116,629	87,012
Total Liabilities And Equity	\$ 68,951	\$ 51,694	\$ 75,954	\$ 136,647	\$ 107,030
	2019	2020	2021	2022 E	2023 E
Net Income	(26,559)	(19,711)	(32,609)	(38,791)	(34,441)
Depreciation & Amort.	1,425	1,345	1,248	1,930	2,012
Stock Comp	3,540	1,654	3,983	4,531	4,424
Other	7,249	2,722	5,272	3,234	0
Working Capital	(242)	(1,631)	(733)	(162)	(3,987)
Operating Cash Flow	\$ (14,587)	\$ (15,621)	\$ (22,839)	\$ (29,258)	\$ (31,992)
Acquisition of Patents and trademarks	(515)	(468)	(326)	(500)	(500)
CapEx	(527)	(54)	(745)	(1,382)	(400)
Other	5,595	16,991	(26,658)	21,158	0
Investing Activities	\$ 4,552	\$ 16,469	\$ (27,729)	\$ 19,276	\$ (900)
Debt	(700)	(354)	49	1,190	0
Equity	10,616	50	50,826	33,524	400
Other	0	0	0	(6)	0
Financing Activities	\$ 9,916	\$ (304)	\$ 50,875	\$ 34,708	\$ 400
Change in Cash	(\$120)	\$ 544	\$ 307	\$ 24,726	(\$32,492)

Source: 22nd Century Group, Inc. and Dawson James Securities estimates

Important Disclosures:

Price Chart:



Price target and ratings changes over the past three years:

- Initiated – Buy – April 13, 2021 – Price Target \$7.00
- Update – Buy – April 15, 2021 – Price Target \$7.00
- Update – Buy – April 19, 2021 – Price Target \$7.00
- Update – Buy – May 7, 2021 – Price Target \$7.00
- Update – Buy – June 1, 2021 – Price Target \$7.00
- Update – Buy – June 11, 2021 – Price Target \$7.00
- Update – Buy – July 2, 2021 – Price Target \$7.00
- Update – Buy – July 23, 2021 – Price Target \$7.00
- Update – Buy – August 6, 2021 – Price Target \$7.00
- Update – Buy – August 31, 2021 – Price Target \$7.00
- Update – Buy – October 18, 2021 – Price Target \$7.00
- Update – Buy – November 5, 2021 – Price Target \$7.00
- Update – Buy – November 22, 2021 – Price Target \$7.00
- Update – Buy – December 9, 2021 – Price Target \$7.00
- Update – Buy – December 23, 2021 – Price Target \$7.00
- Price Target Change – Buy – January 6, 2022 – Price Target changed from \$7.00 to \$8.50
- Update – Buy – January 24, 2022 – Price Target \$8.50
- Update – Buy – February 16, 2022 – Price Target \$8.50
- Update – Buy – February 24, 2022 – Price Target \$8.50
- Update – Buy – March 4, 2022 – Price Target \$8.50
- Update – Buy – May 2, 2022 – Price Target \$8.50
- Update – Buy – May 6, 2022 – Price Target \$8.50
- Update – Buy – May 16, 2022 – Price Target \$8.50
- Update – Buy – June 13, 2022 – Price Target \$8.50
- Update – Buy – June 22, 2022 – Price Target \$8.50
- Update – Buy – July 1, 2022 – Price Target \$8.50
- Update – Buy – July 26, 2022 – Price Target \$8.50
- Update – Buy – August 10, 2022 – Price Target \$8.50
- Update – Buy – September 21, 2022 – Price Target \$8.50
- Update – Buy – October 20, 2022 – Price Target \$8.50

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- 1) **Buy:** The analyst believes the price of the stock will appreciate and produce a total return of at least 20% over the next 12-18 months.
- 2) **Neutral:** The analyst believes the price of the stock is fairly valued for the next 12-18 months.
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Current as of 19-Oct-22

	Company Coverage		Investment Banking	
Ratings Distribution	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	25	83%	3	12%
Market Perform (Neutral)	4	13%	1	25%
Market Underperform (Sell)	1	3%	0	0%
Total	30	100%	4	13%

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