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INSTITUTIONAL RESEARCH Emerging Growth UPDATE REPORT

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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)

Buy: Asset Sales, Debt Reduction, Insider Buying.

22nd Century significantly improved its balance sheet and cost structure with the sale of GVB and has a path to eliminating its debt by mid-year 2024. We expect further cost-cutting and a renewed focus on monetizing its IP in low-nicotine tobacco. The company's new CEO has taken aggressive actions and recently purchased shares in the open market.

The sale of GVB closed late in 2023 for \$3.1 million, \$1 million in cash and a sellers note of \$2 million due in June. The sale of the hemp/cannabis will be used to reduce the company's \$14 million in debt to its senior lender. An additional \$1.1 million from cash on hand and a \$1 million reduction from assignment of an asset in Colorado will bring debt reduction to \$5.2 million. The company is seeking damages of \$9 million from its insurance carrier related to the Grass Valley fire in 2023. Successful collection of that results in elimination of the outstanding principal owed to the senior lender.

The sale and other cost reduction actions will lower the company's cash burn significantly. Through Q3 of 2023, the hemp cannabis business consumed \$20 million in cash. The reduction of cash usage is of paramount importance for the company given the state of the capital markets, even with the recent Fed-driven rally. We expect additional cost-cutting in the tobacco business and corporate overhead.

The appointment of Larry Firestone as CEO is an important step in the recovery of 22nd Century. We believe it is imperative for the company to sharpen its focus, lower costs, and strengthen its balance sheet. The initial actions of the company's CEO are encouraging and unlocking the value of its IP in low-nicotine tobacco is key for the shares. Mr. Firestone purchased 100K shares and insider buying is often a bullish predictor of stock performance.

There are catalysts in the coming months that could help the company's business and the shares. The FDA's rule proposing a menthol ban is in final review. A key concern of the FDA is offering smokers an offramp when new rules are proposed. 22nd Century's menthol VLN combustible cigarettes might be excluded from the ban, as an offramp, giving the company a unique position in the market. A \$4 to \$10 million settlement with the company's insurance carrier would also be positive. We also expect a low-nicotine mandate in the future.

Valuation: Our \$3.33 price is based on the company's ability to monetize a nicotine mandate assuming modest royalty and market share.

Risks to Target: Our price target assumes the FDA implements a nicotine mandate and the company success in negotiating royalties on its technology.

January 8, 2024

James McIlree, CFA

561-237-2709

Current Price						\$0.18
Price Target						\$3.33
Estimates	F20	22A	F20)23E	F20	24E
Revenues (\$M's)	\$	62.1	\$	78.7 E	\$	27.0
1Q March	\$	9.0	\$	22.0 A	\$	6.8
2Q June	\$	14.5	\$	23.4 A	\$	6.8
3Q September	\$	19.4	\$	17.8 A	\$	6.8
4Q December	\$	19.2	\$	15.5 E	\$	6.8
		22A	F20)23E	F20	24E
EBITDA (\$M's)	\$	(39.2)	\$	(51.9)E	\$	(5.8)
1Q March	\$	(6.5)	\$	(14.6)A		(1.4)
2Q June	\$	(6.9)	\$	(16.1)A	\$	(1.4)
3Q September	\$	(11.0)	\$	(11.7)A	\$	(1.5)
4Q December	\$	(14.8)	\$	(9.6)E	\$	(1.5)
EBITDA (\$Ms)	\$	(39.2)	\$	(51.9)	\$	(5.8)
EV/Sales		0.1x		0.1x		0.1x
Stock Data						
52-Week Range		\$0.16		-		\$18.98
Shares Outstanding (mil.)						30.9
Market Capitalization (mil.)						\$6
Enterprise Value (mil.)						\$4
Debt to Capital						66%
Cash (mil.)						\$2.9
Cash/share						\$0.09
Average Three Months Tradi	ng V	olume (к)			431
Insider Ownership						1.3%
Institutional Ownership						8.6%
Short interest (mil.)						2.7%
Dividend / Yield					\$0.0	0/0.0%
22nd Century Group,	Inc. ((XXII-US)			
Volume (Thousands)		,	, 	Pric	e (US	D) 20
35,000						20
30,000 -						- 16
25,000-						- 14
20.000						- 12
25,000 -/ WWW 20,000 - WWWWWW 15,000 -						- 10
15,000-						-8
10,000 -	2					-6
5.000 -	1	In				-4
		m m	-	-	L	-2
Jan Feb Mar Apr May	Jun	Jul Aug	Sep	Oct Nov	De	
Volume — 22nd Cent			000			
				Source: Fa	ictSet	Prices



Over the course of last year, the company has suffered from the worst capital market environment for microcap stocks in our memory, a fire at the company's manufacturing facility in Oregon that hurt revenues and margins, slower than expected take-up of the company's VLN introduction, and resignation of its CEO. These combined to weaken the company's balance sheet and force the company to lower costs and sharpen its focus.

Clarity on the company's focus is paramount as is cutting costs. In Q3 hemp/cannabis normalized operating loss was over \$5 million and eliminating that business will do much to lower the burn. But more costs will have to be reduced, including contracting the VLN business significant reductions in corporate overhead.

Our estimates reflect the elimination of the hemp/cannabis business by year-end, although it will probably take some months into the new year to dispose of it.

The tobacco business has a unique asset: it has the only FDA-approved combustible cigarette with a modified risk claim. We are not aware of any other combustible product even attempting to make this claim. The other advantage for this business is the FDA's long-standing attempt to reduce the harm from cigarette smoking, and its recognition that it must give smokers an off-ramp as it changes the market with menthol bans and a low-nicotine mandate.

One challenge for the tobacco business is building a brand is time-consuming and expensive. That said, the company's success to date in attracting distribution partners is impressive. Unless additional resources become available via asset sales, license agreements, or warrant exchange, a retrenchment on VLN distribution is likely. Another challenge is that the FDA moves at its own pace, often impacted by public opinion and political factors. The menthol ban is likely the most near-term catalyst, and with a final rule submitted to OMB, action is probably weeks to months away. It would be very positive for the company if its menthol VLN combustible cigarettes were exempted from the ban and given the FDA's recognition of the necessity of giving smokers an offramp, we believe there is a chance of an exemption. The low-nicotine mandate, we believe, is also a priority for the FDA, but its willingness and capacity to move on a menthol ban and a low-nic mandate simultaneously is unknown.



Exhibit 1. Income Statement

(\$ in 000's except per-share data)		2020		2021		2022	C	Q1 23 A	C	Q2 23 A	C	Q3 23 A	C	Q4 23 E	2023	E	:	2024 E
Revenue	\$	28,111	\$	30,948	\$	62,111	\$	21,962	\$	· · · · · · · · · · · · · · · · · · ·	\$	17,811	\$	15,500		,700	\$	27,000
Cost Of Goods Sold		26,673		28,879		60,937		23,139		25,772		19,777		15,500		,188		25,200
Gross Profit		1,438		2,069		1,174		(1,177)		(2,345)		(1,966)		0	•	,488)		1,800
		5.1%		6.7%		1.9%		-5.4%		-10.0%		-11.0%		0.0%	-	7.0%		6.7%
SG&A		14,971		25,881		44,517		14,231		14,540		11,199		9,324		,294		12,150
R&D		4,128		3,274		6,561		1,517		1,793		1,613		1,613		,536		1,000
Other		176		78		7,202		898		675		56,704		0	58	,277		0
Depreciation & Amort.		1,346		1,248		0		0		0		0		0		0		0
Opex		20,621		30,481		58,280		16,646		17,008		69,516		10,937		,107		13,150
Operating Income	\$	(19,183)	\$	(28,412)	\$	(57,106)	\$	(17,823)	\$	(19,353)	\$	(71,482)	\$	(10,937)	\$ (119	,595)	\$	(11,350)
Interest and other, net		(490)		(4,183)		(3,129)		(359)		(1,140)		(1,238)		(1,192)	(3	,929)		(4,768)
Pretax Income		(19,673)		(32,595)		(60,235)		(18,182)		(20,493)		(72,720)		(12,129)	(123	,524)		(16,118)
Income Tax Expense		38		14		(434)		0		0		0		0		0		0
Net loss Deemed dividend	\$	(19,711)	\$	(32,609)	\$	(59,801)	\$	(18,182)	\$	(20,493)	\$	(72,720) (564)	\$	(12,129)	\$ (123	,524)	\$	(16,118)
Net to Common											\$	(73,284)						
Shares (000)		9,254		10,414		12,856		14,386		14,900		19,887		25,978	18	,788		39,048
EPS		(\$2.13)		(\$3.13)		(\$4.65)		(\$1.26)		(\$1.38)		(\$3.68)		(\$0.47)	(\$	6.57)		(\$0.41)
	_		_		_													
D&A		1,346		1,536		3,306		1,175		1,442		810		810	4	,237		3,240
Stock Comp		1,654		3,983		5,489		1,175		1,486		576		576		,813		2,304
Other		176		0		9,065		898		336		58,391		0	59	,625		0
EBITDA	\$	(16,007)	\$	(22,893)	\$	(39,246)	\$	(14,575)	\$	(16,089)	\$	(11,705)	\$	(9,551)	\$ (51	,920)	\$	(5,806)

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



Exhibit 2. Balance Sheet and Cash Flow Statement

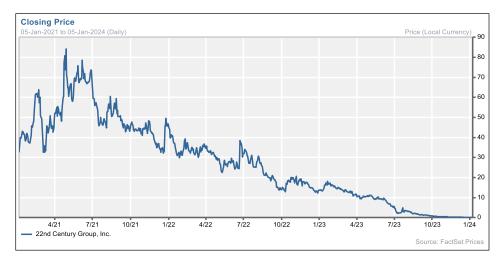
(\$ in 000's)				
(• • • • • • •)	2020	2021	2022	2023 E
Cash & ST Investments Restricted Cash	22,342	48,736	21,213	4,275 0
A/R	2,159	585	5,641	5,651
Inventory	2,034	2,881	10,008	11,273
Insurance Recovery Prepaid Exp.	0 1,806	0 2,183	5,000 2,743	0 4,818
Total Current Assets	\$ 28,341	\$ 54,385	\$ 44,605	\$ 26,017
PP&E	2,483	5,841	13,093	10,225
Operating Lease	247	1,723	2,675	2,984
Goodwill	0	0	33,160	0
Patent, Trademark, other intangibles	8,211	7,919	16,853	6,299
Equity Investment Restricted Cash	6,536	2,345	682	682 0
Other Assets	5,876	3,741	3,583	3,705
Total Assets	\$ 51,694	\$ 75,954	\$ 114,651	\$ 49,912
Bank Loans and N/P	539	596	908	1,441
LTD-Current	0	0	0	10,665
Operating Lease	247	308	681	1,097
A/P Accrued Expenses & Payroll	1,116 4,830	2,173 5,014	4,168 4,627	5,490 5,793
Accrued excise taxes and fees	4,000	0,014	1,423	2,693
Deferred Income	272	119	831	704
Other	339	217	380	1,263
Total Current Liabilities	\$ 7,343	\$ 8,427	\$ 13,018	\$ 29,146
Notes and loans payable	0	0	0	156
Operating Lease	0	1,432	2,141	6,219
Long-Term Debt	0	0	3,001	0
Other	241	21	516	4,266
Shareholders' Equity	44,110	66,074	95,975	10,124
Total Liabilities And Equity	\$ 51,694	\$ 75,954	\$ 114,651	\$ 49,912
	2020	2021	2022	2023 E
Net Income	(19,711)	(32,609)	(59,801)	(123,570)
Depreciation & Amort.	1,345	1,536	3,591	4,237
Stock Comp Other	1,654	3,983	5,489	3,813
Working Capital	2,722 (1,631)	4,984 (733)	10,577 (11,570)	61,322 (1,318)
Operating Cash Flow	\$ (15,621)			
Acquisition of Patents and trademarks	(468)	(326)	(772)	(558)
CapEx	(54)	(745)	(3,657)	(4,951)
Other	16,991	(26,658)		21,736
Investing Activities	\$ 16,469	\$ (27,729)	\$ 22,578	\$ 16,227
Debt	(354)		(3,822)	13,736
Equity	50	50,826	32,335	34,308
Other Financing Activities	0 \$ (304)	0 \$ 50,875	2,307 \$ 30,820	0 \$ 48,044
_	\$ 544	\$ 307	\$ 1,684	\$ 8,755
Change in Cash Inc. and Dawson James Securities estimates	ψ 344	φ 301	ψ 1,004	φ 0,155

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 Update - Buy - October 27, 2022 - Price Target \$8.50 Update - Buy - November 9, 2022 - Price Target \$8.50 Update – Buy – November 22, 2022 – Price Target \$8.50 Update - Buy - February 1, 2023 - Price Target \$8.50 Update - Buy - March 6, 2023 - Price Target \$8.50 Update - Buy - March 10, 2023 - Price Target \$8.50



Price Target Change – Buy – May 10, 2023 – Price Target changed from \$8.50 to \$4.50 Price Target Change – Buy – July 3, 2023 – Price Target changed from \$4.50 to \$1.00 1-15 Stock split July 5, 2023 Price Target Change – Buy – July 25, 2023 – Price Target changed from \$15.00 to \$10.00 Price Target Change – Buy – August 15, 2023 – Price Target changed from \$10.00 to \$7.50 Update – Buy – September 6, 2023 – Price Target \$7.50 Price Target Change – Buy – October 24, 2023 – Price Target \$3.33 Update – Buy – November 7, 2023 – Price Target \$3.33 Update – Buy – December 6, 2023 – Price Target \$3.33 Update – Buy – December 15, 2023 – Price Target \$3.33 Update – Buy – December 15, 2023 – Price Target \$3.33

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- 2) **Neutral**: The analyst believes the price of the stock is fairly valued for the next 12-18 months.
- 3) **Sell**: The analyst believes the price of the stock will decline by at least 20% over the next 12-18 months and should be sold.

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	Company Coverage		Investment Banking	
	Coverage		Daliking	% of
Ratings Distribution	# of Companies	% of Total	# of Companies	Totals
Market Outperform (Buy)	21	61.76%	4	11.80%
Market Perform (Neutral)	13	38.24%	2	5.90%
Market Underperform (Sell)	0	0%	0	0.00%
Total	34	100%	6	17.70%

Current as of 14-Dec-23

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