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

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Buy: GVB Biopharma Acquisition. More than Doubles Revenue.

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22nd Century announced the acquisition of GVB Biopharma, one of the largest producers of hemp-derived active ingredients. The acquisition will create an integrated provider of end-to-end solutions in the hemp/cannabis industry. The addition of GVB will double revenue and provide positive cash flow. The acquisition adds scale, scope and diversification to the company's operations. We reiterate our Buy recommendation and \$8.50 price target.

22nd Century announced the acquisition of GVB Biopharma, a Nevada-based producer of hemp-derived cannabinoid active ingredients and white label product formulation. GVB produces a wide range of wholesale CBD isolates and distillates, in various bulk quantities and white-label end products for customers such as Cookies, Nuleaf and Canaxis Pharma. GVB's market share of the hemp-derived active ingredients market is estimated at 15%. Combined, 22nd Century and GVB will be able to offer plant profile and roadmap development with CannaMetrix, genetic engineering and plant line development with KeyGene, global year-round breeding capabilities, plant cultivation at the company-owned Needle Rock Farms and customized isolates and distillates with the capabilities of GVB.

GVB expects revenue this year of \$48 million, up 55%, from \$31 million in 2021, and with gross margin of 44% and positive cash flow. GVB operates manufacturing facilities in Oregon and Nevada. In Oregon GVB operates a 30,000 square foot manufacturing facility, an extraction facility and a 300-acre organic hemp farm. GVB also operates a 40,000 square foot facility in Las Vegas for white-label, finished product manufacturing

22nd Century will issue 32.9 million in unregistered shares and assume \$4.5 million of debt. Based on the Friday closing price of 22nd Century, this equates to about \$60 million, or 1.25x sales. We believe this is a very attractive multiple given the current robust gross margins and the opportunity to scale in the consumer market. We expect further leverage as 22nd Century's capabilities are integrated with GVB. We also expect penetration into the pharmaceutical market since management at 22nd Century has expertise in this area and GVB can become an FDA-qualified supplier with a modest investment.

We will revisit our model and evaluate our price target when additional financial data is available.

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	\$1.68		
Price Target	\$8.50		
Estimates	F2021A	F2022E	F2023E
Revenues (\$000s)	\$ 30,948	\$ 35,555 E	\$ 39,400
1Q March	\$ 6,806	\$ 9,045 A	\$ 9,520
2Q June	\$ 8,371	\$ 8,520 E	\$ 9,700
3Q September	\$ 7,811	\$ 8,870 E	\$ 9,940
4Q December	\$ 7,960	\$ 9,120 E	\$ 10,240
	F2021A	F2022E	F2023E
EPS (diluted)	\$ (0.21)	\$ (0.20)E	\$ (0.19)
1Q March	\$ (0.03)	\$ (0.05)A	\$ (0.05)
2Q June	\$ (0.03)	\$ (0.05)E	\$ (0.05)
3Q September	\$ (0.06)	\$ (0.05)E	\$ (0.05)
4Q December	\$ (0.09)	\$ (0.05)E	\$ (0.05)
EBITDA (\$Ms)	\$ (23.2)	\$ (25.8)	\$ (26.0)
EV/EBITDA (x)	-10.3x	-9.3x	-9.2x
Stock Data			
52-Week Range	\$1.42	-	\$5.25
Shares Outstanding (mil.)	164.5		
Market Capitalization (mil.)	\$276		
Enterprise Value (mil.)	\$239		
Debt to Capital	0%		
Cash (mil.)	\$38.6		
Cash/share	\$0.23		
Average Three Months Trading Volume (K)	6,154		
Insider Ownership	3.6%		
Institutional Ownership	27.4%		
Short interest (mil.)	8.8%		
Dividend / Yield	\$0.00/0.0%		



22nd Century was an early entrant into the CBD market with an investment and sublicense agreement with Anandia in 2014. The investment gave the company access to intellectual property surrounding gene production in cannabinoids and producing low-THC hemp plants. In 2019, 22nd Century acquired a minority interest in Panacea Life Sciences, a supplier of hemp-derived cannabinoid products. Panacea was unable to achieve the scale it desired and in 2021 22nd Century's investment in Panacea was restructured, giving it equity in Panacea and ownership of Needle Rock Farms, a 224 acre hemp farm in Crawford, Colorado.

Since Jim Mish was named CEO, the company has been building key capabilities in the hemp market. In 2019 it signed an exclusive worldwide agreement with KeyGene to develop hemp/cannabis plants with specific cannabinoid profiles for medical and therapeutic use. In early 2021 it secured an exclusive agreement with CannaMetrix to develop and commercialize new hemp/cannabis plant lines. Partnerships with global breeders allowed the company to breed and trial new plant lines year-round. Now with the acquisition of GVB, the company has scale in the business and an end-to-end offering starting with plant design (CannaMetrix), genetic engineering and plant line development (KeyGene), breeding and trials, cultivation (Needle Rock, GVB) and isolate and distillate manufacturing, proprietary and white-label product development (GVB).

The hemp market has been growing rapidly since passage of the Farm Bill, or the Agricultural Improvement Act of 2018. There is widespread availability of CBD-infused products for the consumer market and an increasing interest by pharmaceutical companies for CBD therapeutics. With its portfolio of technology, long expertise in the industry and scale with the acquisition of GVB, 22nd Century is well positioned to serve this large and growing market.

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 E	Q3 22 E	Q4 22 E	2022 E	2023 E
Revenue	\$ 25,833	\$ 28,111	\$ 30,948	\$ 9,045	\$ 8,520	\$ 8,870	\$ 9,120	\$ 35,555	\$ 39,400
Cost Of Goods Sold	25,818	26,673	28,879	8,585	7,780	7,955	8,080	32,400	34,484
Gross Profit	14	1,438	2,069	460	740	915	1,040	3,155	4,916
	0.1%	5.1%	6.7%	5.1%	8.7%	10.3%	11.4%	8.9%	12.5%
R&D	8,057	4,128	3,274	972	972	972	972	3,888	3,888
G&A	12,956	14,971	25,881	7,305	7,500	7,500	8,000	30,305	32,222
Impairment Charge	1,142	176	78	0	0	0	0	0	0
Depreciation & Amort.	1,425	1,346	1,248	329	329	329	329	1,316	1,316
Opex	23,581	20,621	30,481	8,606	8,801	8,801	9,301	35,509	37,426
Operating Income	\$ (23,566)	\$ (19,183)	\$ (28,412)	\$ (8,146)	\$ (8,061)	\$ (7,886)	\$ (8,261)	\$ (32,354)	\$ (32,510)
Interest and other, net	(2,992)	(490)	(4,183)	(772)	45	45	45	(637)	180
Pretax Income	(26,559)	(19,673)	(32,595)	(8,918)	(8,016)	(7,841)	(8,216)	(32,991)	(32,330)
Income Tax Expense	0	38	14	0	0	0	0	0	0
Net to Common	\$ (26,559)	\$ (19,711)	\$ (32,609)	\$ (8,918)	\$ (8,016)	\$ (7,841)	\$ (8,216)	\$ (32,991)	\$ (32,330)
Shares (000)	125,883	138,813	156,208	163,157	164,537	164,787	165,287	164,442	165,924
EPS	(\$0.21)	(\$0.14)	(\$0.21)	(\$0.05)	(\$0.05)	(\$0.05)	(\$0.05)	(\$0.20)	(\$0.19)
D&A	1,425	1,346	1,248	421	421	421	421	1,684	1,684
Stock Comp	3,540	1,654	3,983	1,213	1,213	1,213	1,213	4,852	4,852
Other	1,142	176	0	0	0	0	0	0	0
EBITDA	\$ (17,459)	\$ (16,007)	\$ (23,181)	\$ (6,512)	\$ (6,427)	\$ (6,252)	\$ (6,627)	\$ (25,818)	\$ (25,974)

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

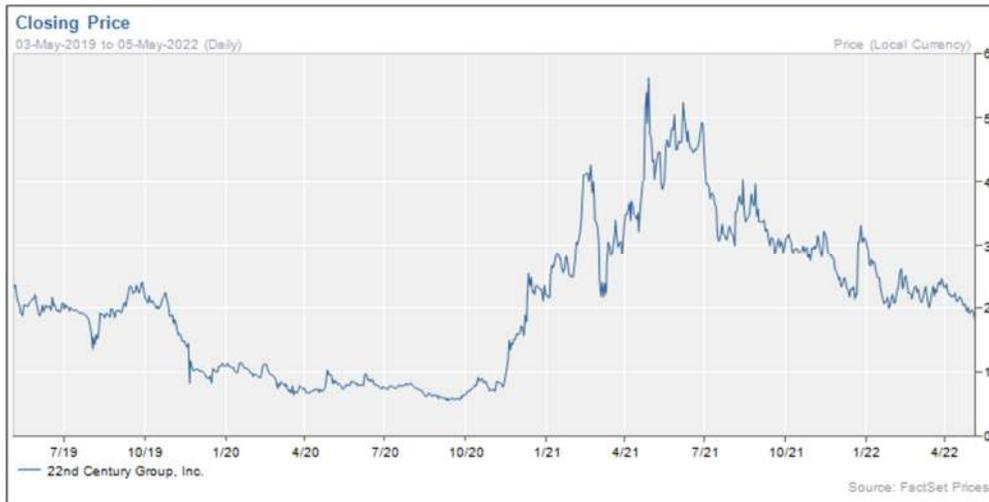
Exhibit 2. Balance Sheet and Cash Flow Statement

(\$ in 000's)	2019	2020	2021	2022 E	2023 E
Cash	485	1,029	1,336	1,584	1,584
Short-Term Investments	38,477	21,313	47,400	15,881	7,873
A/R	867	2,159	585	1,499	2,805
Inventory	2,266	2,034	2,881	3,074	3,381
Prepaid Exp.	648	1,806	2,183	1,389	1,389
Total Current Assets	\$ 42,743	\$ 28,341	\$ 54,385	\$ 23,427	\$ 17,033
PP&E	3,120	2,483	5,841	5,745	5,473
Operating Lease	602	247	1,723	1,631	1,631
Patent, Trademark, other intangibles	8,494	8,211	7,919	7,550	7,038
Equity Investment	8,403	6,536	2,345	2,211	2,211
Convertible Note Receivable	5,589	5,876	3,741	3,770	3,770
Total Assets	\$ 68,951	\$ 51,694	\$ 75,954	\$ 44,334	\$ 37,156
Bank Loans and N/P	581	539	596	0	0
Operating Lease	220	247	308	359	359
A/P	1,998	1,116	2,173	1,512	1,512
Accrued Expenses	2,619	4,830	5,014	2,632	2,632
Accrued excise taxes and fees					
Accrued Severance	359	339	217	187	187
Deferred Income	5	272	119	483	483
Total Current Liabilities	\$ 5,780	\$ 7,343	\$ 8,427	\$ 5,173	\$ 5,173
Long-Term Debt	292	0	0	0	0
Operating Lease	382	0	1,432	1,326	1,326
Accrued Severance	446	241	21	0	0
Shareholders' Equity	62,051	44,110	66,074	37,835	30,657
Total Liabilities And Equity	\$ 68,951	\$ 51,694	\$ 75,954	\$ 44,334	\$ 37,156
	2019	2020	2021	2022 E	2023 E
Net Income	(26,559)	(19,711)	(32,609)	(32,991)	(32,330)
Depreciation & Amort.	1,425	1,345	1,248	1,684	1,684
Stock Comp	3,540	1,654	3,983	4,852	4,852
Other	7,249	2,722	5,272	936	0
Working Capital	(242)	(1,631)	(733)	(3,189)	(1,614)
Operating Cash Flow	\$ (14,587)	\$ (15,621)	\$ (22,839)	\$ (28,708)	\$ (27,408)
Acquisition of Patents and trademarks	(515)	(468)	(326)	(480)	(500)
CapEx	(527)	(54)	(745)	(558)	(400)
Other	5,595	16,991	(26,658)	9,135	0
Investing Activities	\$ 4,552	\$ 16,469	\$ (27,729)	\$ 8,097	\$ (900)
Debt	(700)	(354)	49	(596)	0
Equity	10,616	50	50,826	300	20,300
Other	0	0	0	0	0
Financing Activities	\$ 9,916	\$ (304)	\$ 50,875	\$ (296)	\$ 20,300
Change in Cash	(\$120)	\$ 544	\$ 307	(\$20,907)	(\$8,008)

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

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Information about valuation methods and risks can be found in the "Valuation" and "Risk Analysis" sections of this report.

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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 26-Apr-22

	Company Coverage		Investment Banking	
Ratings Distribution	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	32	74%	4	13%
Market Perform (Neutral)	11	26%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Total	43	100%	4	9%

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