EMERGING Growth Research

22nd Century Group, Inc.
Nasdaq: XXII

February 18, 2025

Price (close February 18, 2025)
$3.31

Rating
Buy-Emerging

12- Month Target Price
$13.00

Andrew White, CFA
Research@EmergingGrowth.com

52-Week Range	**$3.04 – $315.36**
Shares Outstanding *	**1.7 mil**
Insider/Institutional *	**0%/0%**
Public Float	**Unknown**
Market Cap *	**$5.5 mil**
Total Debt 1Q25E	**$4.6 mil**
Debt/Equity 1Q25E	**89%**
ROE (LTM)	**NM**
Book Value/Share	**NM**
Daily Volume (90-day)	**653,149**
Fwd. Div. & Yield	**--**

* Does not reflect potential warrant conversion

Company Description

22nd Century Group, Inc. provides contract manufacturing (CMO) services for conventional combustible tobacco products to third-party branded companies. The Company also engages in the sale and distribution of its own proprietary VLN® very-low-nicotine tobacco products. 22nd Century Group is pioneering nicotine harm reduction in the tobacco industry enabling smokers to take control of their nicotine consumption. The Company was founded in 1998 and is headquartered in Mocksville, North Carolina.

Shifting from Restructuring to Growth:

New management has now primarily restructured XXII. Operating cash losses reduced in the first nine months of 2024, and debt load declined again in early 2025. Indeed, management now expects EBITDA breakeven in Q4:25 on revamped marketing, growth in VLN® (i.e., first-to-market 95%-reduced nicotine cigarette), and expense discipline. Bankruptcy concerns of late-2023 are no longer valid and share issuance to survive is no longer predicted. That said, there is still one issue of the past to resolve: warrant-based dilution that is likely in the price. Near-term upside is extraordinary based on DCF analysis relative to hammered XXII shares. Therefore, the question is will new management be able to grow the business? We are inclined to believe, so we are bullish on XXII. **We initiate with a Buy-Emerging rating with a $13.00 price target.**

FYE Dec Revenue ($ mil.)	FY 2024E CURRENT	FY 2025E CURRENT	FY 2025E PREVIOUS	FY 2026E CURRENT	FY 2026E PREVIOUS
Q1 Mar	$6.5A	$7.6E		$11.4E	
Q2 Jun	$7.9A	$8.5E		$12.3E	
Q3 Sep	$5.9A	$8.9E		$13.3E	
Q4 Dec	$5.5E	$9.6E		$14.5E	
Year	**$25.9E**	**$34.7E**		**$51.6E**	
Change	(20)%	34%		49%	

FYE Dec EBITDA ($ mil.)	FY 2024E CURRENT	FY 2025E CURRENT	FY 2025E PREVIOUS	FY 2026E CURRENT	FY 2026E PREVIOUS
Q1 Mar	$(4.2)A	$(0.9)E		$0.5E	
Q2 Jun	$(1.5)A	$(0.4)E		$0.8E	
Q3 Sep	$(3.0)A	$(0.1)E		$1.4E	
Q4 Dec	$(2.5)E	$0.0E		$1.7E	
Year	**$(11.2)E**	**$(1.3)E**		**$4.3E**	
Change	NM	NM		NM	

Investment Thesis

- Significant operational and financial restructuring under the new management is almost complete (only warrant overhang remains).
- New management expects Q4:25 EBITDA breakeven on stabilized CMO sales, revamped VLN® strategy, and expense discipline.
- Shares are materially beaten down long-term reflecting concerns about restructuring, share dilution, and late-2023 bankruptcy risk.

Primary Risks

- Share issuance dilution – while no longer expected for survival purposes – remains a risk if the Company's CMO segment customers continue to attrit (post-2024 price hikes) and/or VLN® segment growth plans fail to materialize.
- Warrants' likely 2025 share conversion is a materially dilutive event (up to 25 million shares), though it is likely reflected in the price.

Please refer to the end of this report to obtain important disclosure information.

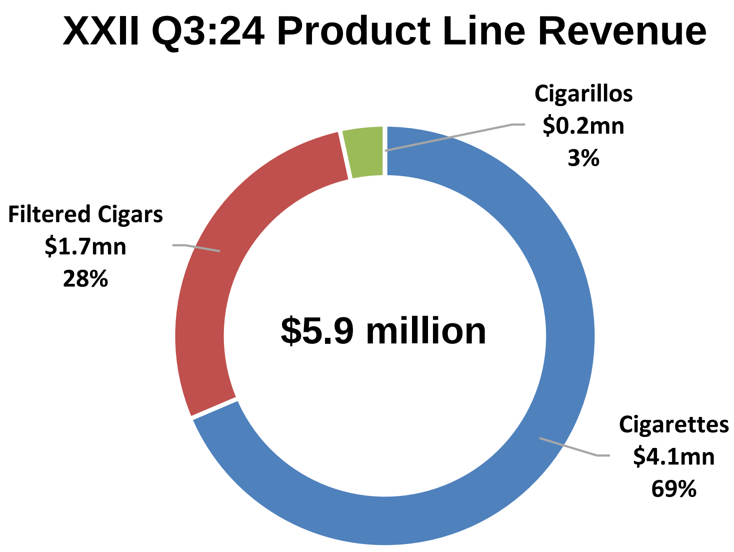
Company Description

22nd Century Group, Inc. (XXII) operates two business segments: Contact Manufacturing Operations (CMO) and VLN®.

- **CMO** provides contract manufacturing services for conventional combustible tobacco products for third-party brands. Through their 60,000-square foot facility in Mocksville, North Carolina, the Company has additional space for expansion with the capacity to produce more than 45 million cartons of combusted tobacco products annually (i.e., estimated 10%-15% currently utilized). This segment accounts for substantially all of the Company's current revenue (see Exhibit 1).

- **VLN®** seeks to mitigate the harms of smoking through proprietary reduced-nicotine content tobacco plants and very-low-nicotine VLN® combustible cigarette products. XXII's mission is to emerge as a tobacco industry leader by introducing and offering a "choice" using its defining VLN® products to widen the market and build its portfolio of brands. While VLN® sold some quantities in prior years, the segment accounted for a minority of total revenue and was not a meaningful contributor in 2024. VLN® has now been re-launched for renewed future material growth.

Exhibit 1: 22nd Century Group, Inc. Product Line Revenue



Source: "22nd Century Group, Inc. Fiscal Third Quarter 2024 10-Q Report." 22nd Century Group, Inc. 30 Sep. 2024

NOTE: In 2023, the Company divested of its prior **GVB hemp/cannabis business**, which is now presented as discontinued operations. All information presented exclude the hemp/cannabis segment and disposal group, unless otherwise noted.

Investment Thesis

Restructuring Almost Complete / Implementing New Growth Strategy

22nd Century Group, Inc. has undergone significant restructuring since 2022, divesting certain material business lines to become a U.S., pure-play, contract private-label, tobacco manufacturing producer as well as sole provider of low-nicotine tobacco cigarettes through its VLN® product line. VLN® provides smokers with a choice to address harm reduction. While CMO provides an ongoing operational base and upside manufacturing capacity, VLN® provides growth potential.

FDA-authorized and patented VLN® products boast 95% less nicotine versus competition. The Company stands to benefit if its VLN® segment consumption even marginally penetrates its management-estimated $12bn non-Tier 1 slice of the larger U.S. tobacco market. This market is supported by billions of external dollars spent on nicotine harm awareness campaigns and governance. XXII's goal is to become the low-nicotine cigarette equivalent to decaf coffee, light beer, and diet soda.

Will new management be able to increase VLN® consumption? Currently, VLN® is sold in 5,000+ retail stores (estimated 2% of total tobacco retailers) in 26 states with ample room for retailer uptake and shelf-space growth. Historically though, little VLN® has been sold since 2022 under older management's marketing strategy. That approach has now changed.

XXII intends to reach its VLN® growth goals via a marketing campaign focusing on consumer awareness through a multimedia emotional connection and R&D (e.g., non-combustible low-nicotine tobacco products, filing new patents to extend low-nicotine tobacco protection, and filing patents in select countries). The newly proposed FDA rule regarding nicotine labeling, if implemented, would be a further game-changing opportunity, though that is a longer-term prospect.

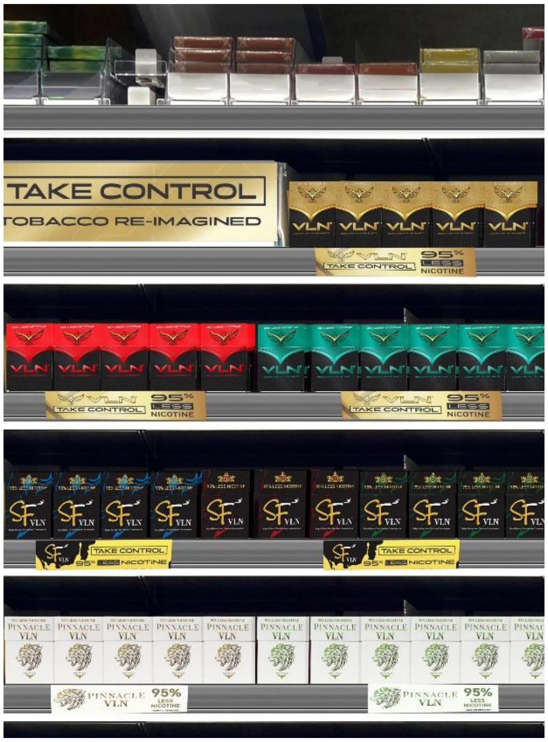
Old management's marketing approach was personnel-heavy. New management's marketing approach is more digital, focuses on shelf space activation that does not compete with majors, and is multi-pronged: strategy (awareness, education, trial, advocacy), more appealing packaging, and a new slogan (i.e., "Take Control" versus "Helps you smoke less"):

Exhibit 2: Change of Company Advertising

Source: 22nd Century Group, Inc.

While the Company is still in a transitional phase, management has now shifted away from a restructuring to growth posture, deploying its CMO asset base of manufacturing, brand, customer relationship, and distribution resources to build a self-funding growth business. It also is moving ahead with plans to launch additional products, including VLN® SKUs within private label CMO customer brand families. For example, XXII's private label VLN® "flanker" strategy – similar to the recently-launched venture with the Smoker Friendly ("SF") brand – demonstrates how management intends to further engage with existing and new CMO customers to sell VLN® IP via private label product (e.g., SF VLN products below):

Exhibit 3: Primary Plus Flanker Strategy Store Display



Source: 22nd Century Group, Inc.

EBITDA Breakeven Expected in 2025

New management now expects Q4:25 EBITDA breakeven on stabilized now-profitable CMO sales (post-2024 price hikes), revamped VLN® marketing strategy, and expense control discipline – with room for upside surprise. Management estimates that 223,000 VLN® cartons (just 3% of XXII production capacity) are needed for profit breakeven. This sea-change moment would mark a new era for XXII, though evidence of renewed growth will likely only begin to appear in Q1:25 or Q2:25.

To that end, management has reported engaging discussions with customers about placing the new VLN® product in stores and now expects store count to grow fairly well by the end of 2025. That said, management is not yet guiding future store count until Q2:25 or Q3:25. Rate of consumer sales uptake is the great unknown right now. Strategic plans include expanding the number of SKU's of VLN® by 2026, which also helps, whether that be the VLN® product or flanker sales.

Reflecting recent management actions, operating cash losses reduced in the first nine months of 2024 due to CMO price hikes, product mix shift away from low-margin filtered cigars, and streamlined discipline. Debt also improved to an estimated $4.6 million in Q1:25. Cash is estimated to now be almost as large as debt, which the Company would like to turn into a revolver line. Moreover, CMO customer attrition is now likely over following a 2024 price hike, which brought CMO production back toward gross margin profitability. Expansion of gross margin thereafter is dependent on future VLN® sales growth.

Shares Materially Beaten Down

XXII shares have been materially beaten down by about 99% over the last 12 months and since 2021, reflecting ill-fated diversification, late-2023 bankruptcy risk, share dilution (stemming from legal settlement and survival tactics like warrant-attached borrowing), and restructuring uncertainty. Nonetheless, at a reported 0.2x 2024E Price/Sales multiple versus a 2.4x industry peer average, XXII is very lowly priced. However, that number does not account for warrant dilution (see Valuation section for more detail). DCF analysis tells the story better, especially as XXII is potentially on the verge of profitability in late 2025.

Notably, XXII also has a November, 2025 court date to finally resolve a long-standing $9 million facility fire insurance claim for business interruption. Should this case be successfully prosecuted or settled out of court, the Company would suddenly become cash-rich well in excess of its remaining debt load – let alone its current reported market capitalization. Management is confident of its legal case, but investors have ignored this potential resolution possibility to date.

Finally, the Company expects that its more retail-oriented investor base will increasingly become more institutionally-based once the warrant overhang is resolved, expected in 2025 (i.e., the last restructuring step). The headlines will appear poor (e.g., >=20 million more potential new shares issued in exercise/induce warrant conversion), but such reality is also likely already priced into shares. Indeed, the Company may one day sooner than imagined see increased interest in its own external buy-out acquisition, should tobacco majors continue to diversify (see Industry section for more detail).

The only question remaining then is will management be able to grow the VLN® business anew? We are inclined to believe. Therefore, **we are bullish on XXII and initiate with a Buy-Emerging rating with a $13.00 price target.**

Investment Risks

- Continued loss of concentrated CMO customer base (post-2024 price hikes) and/or failure of new revenue opportunities in the VLN® segment would have an adverse impact on operational results. Until sustained profitability and positive cash flows from operations are achieved, the Company is potentially dependent upon continued external financing (i.e., debt and equity issuance). Management now does not expect further share issuance for survival purposes though, given their cash level. NOTE: Q1:25 debt-to-equity debt conversion is the primary reason for the large Q1:25 jump in shares.

- As part of the 2024 financial restructuring to survive when the cost of equity financing was excessive, management issued warrants potentially covering up to 25 million shares (versus current 1.7 million shares outstanding). Management now intends to oversee warrant exercise and/or inducement in 2025, completing the Company's operational and financial restructuring era. Accordingly, the deemed dividends from changes in valuation of warrants will likely continue in the Q4:24 earning release due to Q4:24 share issuance and reverse stock price split. Importantly, this issue is likely priced into the current XXII stock price.

- As of Q1:25, XXII's only remaining debt source is a $4.6 million JGB senior debenture with no expected principal amortization remaining in 2025, thus reducing interest expense at this time. While bankruptcy risk was a real concern in late-2023, it is now of lesser note post-restructuring. Indeed, cash is currently estimated to be almost at the debt level in Q1:25. NOTE: the JGB debenture matures in March, 2026, at which time XXII either must renew or refinance.

- Competitors of greater financial resources and name recognition could develop similar or superior products and technologies. Proprietary rights may expire, thus potentially inadequately protecting intellectual property.

- Manufacturing tobacco products subjects the Company to government regulation and litigation that can have a material adverse effect on the Company's business.

- XXII stock price is highly volatile, and management does not expect to issue dividends in the foreseeable future.

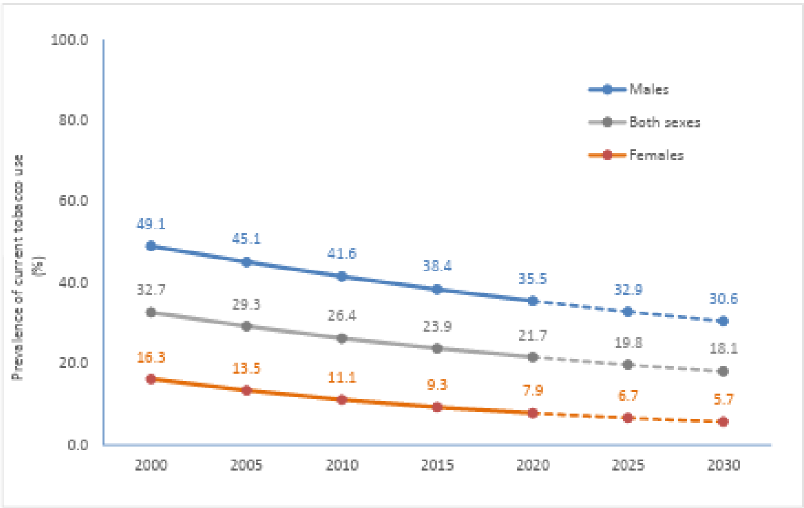
Industry and Competition

Market

The U.S. tobacco market size is estimated between $60 - $85 billion of revenue in 2024 and is dominated by three well-established Tier 1 players: Altria, Reynolds American, and Imperial Brands (with Altria the standout producer). The market is primarily cigarette consumption, but cigars, cigarillos, and new options (e.g., pouches, e-cigarettes, vapor) also contribute.

Men smoke far more. Income demographics have little to do with consumption rates, though prevalence is higher in middle-class consumers. Smoking increases from the teen years and peaks in the 30s-50s, declining thereafter. U.S./Europe are leading the cessation fight, while Asia/Latin America still show higher rates of use, especially regarding smokeless tobacco usage. In America today, about 20% of the population still smokes, which has declined for decades (also reflected globally).

Exhibit 4: Global Prevalence of Tobacco Use (estimates to 2020, projections to 2030)



Source: WHO Global Report on Trends in Prevalence of Tobacco Use (2000 – 2030), who.int/publications/i/item/9789240088283

Divided into menthol and nonmenthol (regular) cigarettes, the cigarette segment held the largest market share of over 85% in 2021. Regular cigarette production is the larger of categories, though menthol cigarettes command a large share of the market, too. Consumers display strong brand loyalty, making it difficult to sway existing companies from a particular brand.

Secular market volume decline has been offset with unit price increases and diversification; thus, industry revenue continues to rise in America and globally over the long-term. That said, the market is estimated to have continued its recent decline (estimated industry revenue -1% in 2024) off of the unusual Covid pandemic volume increase. The market's revenue CAGR was actually +0.5% from 2019-2024.[1] The market is also becoming more concentrated over time. Mergers, acquisitions, and product launches have occurred to gain a competitive edge.

For decades, various U.S. and international governments as well as advocates have relentlessly educated the population of the health dangers associated with smoking, and of note, nicotine's addictive nature that effectively keeps smokers smoking. Many state and class-action lawsuits have further impacted industry structure, including the creation of the Master Settlement Agreement ("MSA") between manufacturers and state governments that restricts producers (e.g., becoming a new producer in America is virtually impossible today). VLN® is an unusual exception to that rule, given FDA authorization of its new very-low-nicotine cigarette in 2021, reflecting smoking cessation management. VLN® focuses on the estimated

[1] "Cigarette & Tobacco Manufacturing in the US - Market Research Report (2014-2029)", *IBISWorld*, Feb. 2024, ibisworld.com/united-states/industry/cigarette-tobacco-manufacturing/293.

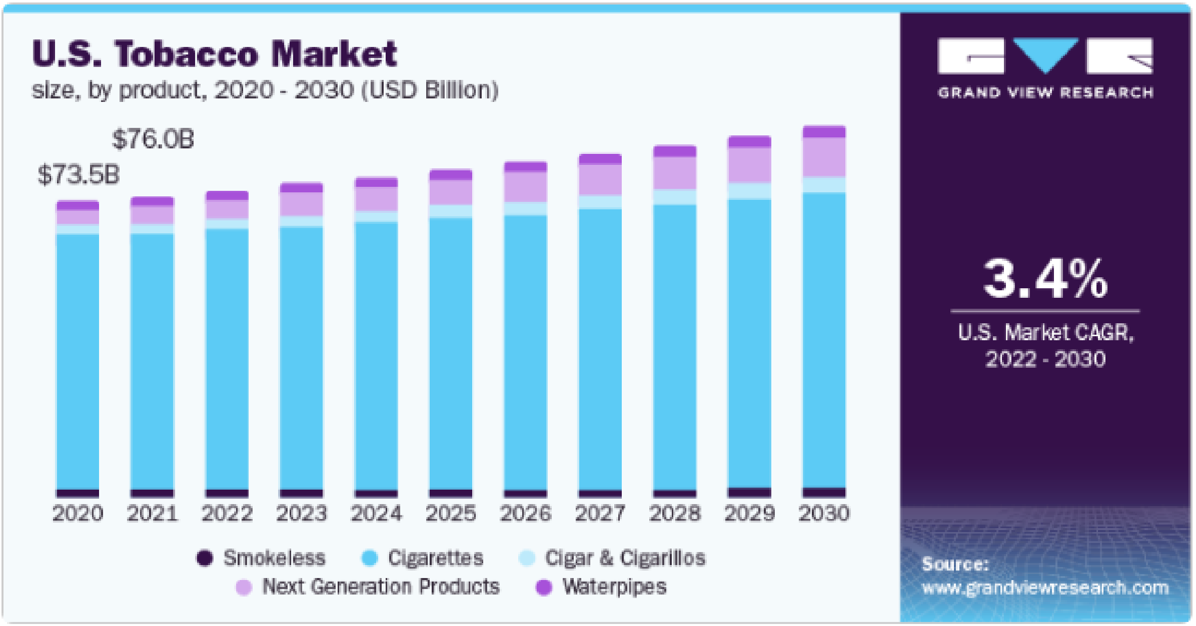
$12 billion revenue sub-market that is comprised of combustibles, other tobacco products, and smoking aids (i.e., pharma-driven).

The smaller brand, Tier 4 contract manufacturing operations account for about 20% of the market and are characterized by high volume and low margins. Production is concentrated to a few Subsequent Participating Manufacturers ("SPM") within the MSA, which are not expected to increase in number given FDA/government restrictions on new entrants.

Trends

The U.S. tobacco market is expected to grow at a 3.4% CAGR from 2022 to 2030 to reach $103 billion by 2030. Cigarettes revenue is expected to expand though at a lower 2.5% CAGR owing to changes in underlying cigarette purchasing patterns. Industry-wide shipments of cigarettes in the U.S. will likely continue to remain moderate as a result of numerous factors including health considerations, diminishing social acceptance of smoking, and a wide variety of federal, state and local laws limiting smoking in public places. As a result of changing consumer preferences, several manufacturers are marketing many novel products like cigars and cigarillos and next-generation products to expand their profit margin.

Exhibit 5: U.S. Tobacco Market Composition and Growth Estimates (2020-2030)



Source: Grandview Research, grandviewresearch.com

Looking forward, smokers will also potentially turn to electronic cigarettes (e-cigarettes) and other vape products in the coming years to attempt to kick the habit of traditional combustible cigarette use, siphoning cigarette producers' main source of revenue. According to the FDA, though, consumers now also have another alternative: VLN®. VLN® is the only very-low-nicotine combustible cigarette on the market, possibly the only one ever as an FDA-authorized PMTA (Premarket Tobacco Product Application) and MRTP (Modified Risk Tobacco Product), which creates high barriers to entry. The next-generation products segment is anticipated to expand at a CAGR of over 10% owing to increased initiation among youth and young adults, as well as assisting adult smokers to switch to potentially less harmful forms of tobacco consumption, which is driving the demand for next-generation products.

The offline channel accounted for a revenue share of over 85% of the market and is slated to remain the primary source for purchasing tobacco products in the U.S. Both small and large-scale companies sell their products through offline retail channels due to a large consumer base, such as in grocery stores. The online channel though is expected to register a faster 5% CAGR from 2022 to 2030. The online channel is an increasingly key avenue to accelerate sales growth.

Regulation

Tobacco use can lead to tobacco dependence (driven by nicotine addiction) and serious health problems. Most adults who smoke cigarettes reportedly want to quit, and half report trying to quit in the past year. However, less than one in ten adults who smoke cigarettes succeed in quitting in a given year.[2] Many adults who smoke do not receive the advice, assistance, and treatments that can help them quit for good. Education and support are important.

Government has been the primary driver of this education over the years. For example, the MSA was a legal settlement in 1998 between major U.S. tobacco companies and 46 states, requiring the companies to pay billions to cover healthcare costs related to smoking and to implement strict marketing restrictions, especially aimed at protecting youth. The agreement also allows Subsequent Participating Manufacturers, SPMs, of which XXII is one. It is possible to sell tobacco without being in the MSA, but it is usually not done given the potential risk – a considerable barrier to entry. As well, the FDA controls the authorization of tobacco products.

For example, in January 2025, the FDA proposed a standard that would regulate nicotine yield by establishing a maximum nicotine level in cigarettes and certain other combusted tobacco products. The FDA has proposed this action to reduce the addictiveness of tobacco products, thus giving people who are addicted and wish to quit the ability to do so more easily.[3] In addition, a federal court has now mandated that stores which sell tobacco-products are now required to display the following signage, which XXII takes advantage of with its own separate add-on signage, as follows:

Exhibit 6: New Signage at Store Which Sell Tobacco Products (combined with separate VLN® signage)

Source: 22nd Century Group, Inc.

Put plainly, industry regulation and legal actions (aside from class action lawsuits) tend to benefit the Company's expected very-low-nicotine growth vehicle, VLN®. Such government efforts are not expected to relent anytime soon.

[2] "Very Low Nicotine Content Cigarettes" *CDC,* Dec. 2024, cdc.gov/tobacco/other-tobacco-products/low-nicotine-cigarettes.html
[3] "Tobacco Product Standard for Nicotine Yield of Cigarettes and Certain Other Combusted Tobacco Products", *Federal Register*, federalregister.gov/documents/2025/01/16/2025-00397/tobacco-product-standard-for-nicotine-yield-of-cigarettes-and-certain-other-combusted-tobacco

Management and Shareholders

The Company is led by CEO Larry Firestone and CFO Daniel Otto. Larry – who joined the Company in late 2023 – has 44 years of senior experience with turnaround and growth businesses in multiple industries. Daniel began his career at Deloitte before joining the Company in late 2022 and assumed the role of CFO in early 2024.

Aside from interim shareholders related to prior financial restructuring (whose shares are now likely already sold into the market), the Company has historically had a retail-oriented investor base. As of February 17, 2025, it is estimated that there are no institutional shareholders accounting for over 5.0% of shares outstanding, though there are two minor institutional shareholders stemming from a recent share-paid legal settlement. Senior insiders have limited equity ownership.

Exhibit 7: Key Shareholders

	% Ownership
Total Insiders	0.1%
Institutional Ownership (Holders Over 5.0%)	0.0%
Total Insiders and Institutional	**0.1%**
Outstanding Shares (millions as of 2/17/2025)	1.7

Source: LSEG Eikon and 22nd Century Group, Inc.

Latest Quarterly Results (Q3:24)

Company revenue declined by 24% YOY in Q3:24 reaching $5.9 million versus $7.9 million in Q3:23 and coincidentally also $7.9 million in Q2:24. The Company lost material customer (i.e., shipment carton) volume reflecting 2024 price hikes in the CMO business. Management estimates customer attrition ended in 2024, as the price hikes' impact fully absorbed.

Gross profit in Q3:24 was $(0.6) million compared to $0.1 million in Q3:23. Sequentially, gross profit fell from +$0.6 million in Q2:24 on YOY net customer decline on recent CMO price increases. Underlying though, per unit gross margins increased as price increases fell to the bottom line, and the Company also shifted away from lower-margin filtered cigar manufacturing.

Operating profit in Q3:24 rose to $(3.4) million compared to $(8.3) million in Q3:23. Sequentially, operating profit fell from $(2.0) million in Q2:24. The YOY improvement in operating profit was primarily due to product mix shift, improving underlying gross margins, and new management's greater operating expense discipline across the board compared to prior years.

The Company's Net Income from Continuing Operations in Q3:24 was $(3.6) million versus $(8.1) million in Q3:23. Sequentially, Net Income fell from $(2.2) million in Q2:24. Interest expense continued to fall reflecting amendments to its credit facility.

EBITDA, a non-GAAP measure, was $(3.0) million in Q3:24 versus $(1.5) million in Q2:24 and $(6.6) million in Q3:23. Company Adjusted EBITDA was $(3.2) million in Q3:24 compared to $(2.6) million in Q3:23. Emerging Growth Research's Adjusted EBITDA estimate was stable throughout the first three quarters of 2024, registering $(2.5) million in Q3:24 versus $(2.4) million in Q2:24.

Total Net Debt (i.e., Debt – Cash) improved to $2.3 million in Q3:24 versus $7.1 million in Q2:24 reflecting cash infusion from common share issuance. Management believes that the era of share issuance for survival purposes has now ended. That said, there may be additional share issuance in 2025, but it will likely be to expand profitable capacity, if so.

EPS Guidance and Estimates

XXII management has high revenue expectations in 2025 (+34% yoy), 2026 (+49%), 2027 (+39%), and 2028 (+39%) reflecting stabilized CMO and market penetration for VLN® (i.e., <1% of estimated $12 billion market). Gross margin is expected to grow to 25% of revenue by 2026 reflecting higher plant capacity utilization, post-attaining EBITDA profitability.

Operating margin is expected to turn positive at about 5% of revenue in 2026 on expense discipline, with profit dropping straight down to the bottom line (reflecting the lack of taxation due to ample Loss Carryforwards) to generate a 5% Net Income Margin in 2026. NOTE: operating profit margin is expected to rise to 25% by 2029 and remain there in perpetuity.

See below our segment revenue estimates used to calculate projected revenue:

Exhibit 8: Estimated Segment Revenue by Year

Revenue ($mn)					
Segment	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**
CMO	$ 25.81	$ 27.31	$ 29.50	$ 33.10	$ 34.85
VLN	$ 0.07	$ 7.34	$ 22.07	$ 38.77	$ 65.40
Total	**$ 25.88**	**$ 34.65**	**$ 51.57**	**$ 71.87**	**$ 100.25**

Revenue % Composition					
Segment	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**
CMO	99.7%	78.8%	57.2%	46.1%	34.8%
VLN	0.3%	21.2%	42.8%	53.9%	65.2%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Revenue % Change					
Segment	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**
CMO	-17.5%	5.8%	8.0%	12.2%	5.3%
VLN	-92.5%	10412.6%	200.6%	75.7%	68.7%
Total	**-19.6%**	**33.9%**	**48.8%**	**39.4%**	**39.5%**

Source: Emerging Growth Research and 22nd Century Group, Inc.

Valuation

We traditionally value companies using a blend of peer group relative valuation multiples and a Discounted Cash Flow (DCF) model. However, XXII is not yet profitable, rendering only the Price/Sales 2024E peer multiple (based on five publicly-traded U.S. tobacco companies) as the only potentially useful relative metric. Given the likely material XXII share dilution from warrants exercise/inducement expected in 2025 though, we believe that the Company's reported 0.2x Price/Sales 2024E multiple does not present an accurate description of XXII relative valuation.

So, we adjust this relative valuation metric using an estimate of warrant-adjusted share count (i.e., 80% conversion of 25 million shares), which shows that XXII is actually valued at about the average 2.4x Price/Sales industry multiple. Given XXII's strong growth outlook though, we also believe an average relative Price/Sales value does not appropriately value XXII. So, we currently downplay relative valuation analysis. Exhibit 9 below summarizes our peer group multiples. Historical and proforma forecast financial statements as well as a DCF model are included in pages 14 - 18 of this report.

Exhibit 9: 22nd Century Group, Inc. Peer Group Multiples and Price Targets

Company Name	Ticker	Price (2/14/2025)	Market Cap ($millions)	Trailing TTM Price-to-Sales
Philip Morris	PM	150.46	233,944	2.6
Altria Group	MO	53.29	90,317	3.8
Turning Pt Brnd	TPB	69.63	1,232	3.0
Inspire Tec Inc	ISPR	4.36	249	1.7
Charlies Holdng	CHUC	0.05	13	1.0
Industry Average (ex: negatives)		**53.29**	**1,232**	**2.4**
22nd Century Group, Inc. (Reported) *1	XXII	3.19	5	0.2
22nd Century Group, Inc. (Adjusted) *2	XXII	3.19	69	2.7
Current DCF Valuation		**13.21**		

**1: Effective Market Capitalization and Price/Sales figures adjusted for actual 1.7mn shares currently outstanding*

**2: Effective Market Capitalization and Price/Sales figures adjusted for expected share dillution from expected 80% warrant exercise/inducement in 2025 (i.e., 20-million share equivalent)*

Source: Emerging Growth Research, Zacks Investment Research, and 22nd Century Group, Inc.

Our DCF model uses financial statement values for 2025-2028 and estimates for years thereafter. We focus on Free Cash Flow, which we expect to become positive in 2026 and grow explosively by about 90% CAGR for four years from 2027-2030 (off of a very low base year) reflecting strong sales growth, expense discipline, and zero taxation due to ample Loss Carryforwards. We expect Free Cash Flows to then flatline for four years from 2031-2034 (reflecting return of active taxation) and grow thereafter by a 3% CAGR in perpetuity on a long-term 25% operating profit margin.

We discount estimated annual free cash flows by an 11.5% WACC, inclusive of risk premiums for the risk-free-rate, equity market, trading liquidity, small-cap status, and 5% bankruptcy risk. The DCF model produces a $13.21/share present value of equity (inclusive of warrant dilution), which we round to $13.00. Terminal value sensitivity analysis (for different terminal growth and discount rates) indicates a min/max share price-estimate range of $11 - $18, which adds confidence in our estimate.

Our price target estimate is higher than the current $3.31 price of XXII shares as of February 18, 2025, though equal to XXII's share price just a few months ago in December, 2024. Investors have mercilessly beaten down XXII shares. That may have been appropriate prior, but that is also the past. We focus on the future. If new management is able to grow the re-imagined business again, the upside is already considerable. Longer-term, as certain risk premiums are potentially priced away, the upside could potentially be enormous.

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Rating Definitions

Buy, 30% or greater price appreciation in the next 12 months.
Buy-Extended, near-term EPS and/or revenue horizon is challenging with strong long-term appreciation possibility.
Buy-Emerging, initial stages with low revenue and the potential for large returns with higher risk and volatility.
Hold, perform similar to market.
Sell, 30% or more decline in the next 12 months.

5-Year Stock Price Chart

22nd Century Group, Inc.
Nasdaq: XXII
Quarterly Results & Estimates
$ in Millions

	2022 Actual	2023 Actual	2024 Estimated					2025 Estimated					2026 Est.
	Fiscal 2022A	Fiscal 2023A	1QA Mar-24	2QA Jun-24	3QA Sep-24	4QE Dec-24	Fiscal 2024E	1QE Mar-25	2QE Jun-25	3QE Sep-25	4QE Dec-25	Fiscal 2025E	Fiscal 2026E
Revenues													
Tobacco	$ 40.50	$ 32.20	$ 6.47	$ 7.95	$ 5.95	$ 5.52	$ 25.88	$ 7.61	$ 8.54	$ 8.91	$ 9.59	$ 34.65	$ 51.57
Total Revenues	**$ 40.50**	**$ 32.20**	**$ 6.47**	**$ 7.95**	**$ 5.95**	**$ 5.52**	**$ 25.88**	**$ 7.61**	**$ 8.54**	**$ 8.91**	**$ 9.59**	**$ 34.65**	**$ 51.57**
YOY Revenue Growth (%)		***-20.5%***	***-27.5%***	***-1.3%***	***-24.5%***	***-25.0%***	***-19.6%***	***17.7%***	***7.5%***	***49.8%***	***73.7%***	***33.9%***	***48.8%***
Cost of Revenues													
Cost of Products Sold	$ 26.04	$ 30.49	$ 4.21	$ 3.87	$ 3.10	$ 2.88	$ 14.06	$ 3.90	$ 4.37	$ 4.34	$ 4.46	$ 17.07	$ 22.81
Excise Taxes	$ 12.62	$ 10.41	$ 3.39	$ 3.51	$ 3.43	$ 2.80	$ 13.12	$ 2.55	$ 2.42	$ 2.76	$ 3.17	$ 10.91	$ 15.51
Cost of Revenues	**$ 38.65**	**$ 40.90**	**$ 7.60**	**$ 7.38**	**$ 6.53**	**$ 5.68**	**$ 27.19**	**$ 6.45**	**$ 6.80**	**$ 7.09**	**$ 7.64**	**$ 27.98**	**$ 38.32**
Cost of Revenues/Revenues (%)	***95.4%***	***127.0%***	***117.5%***	***92.8%***	***109.9%***	***102.9%***	***105.0%***	***84.7%***	***79.6%***	***79.6%***	***79.7%***	***80.8%***	***74.3%***
Gross Profit	**$ 1.85**	**$ (8.70)**	**$ (1.13)**	**$ 0.57**	**$ (0.59)**	**$ (0.16)**	**$ (1.31)**	**$ 1.16**	**$ 1.74**	**$ 1.82**	**$ 1.95**	**$ 6.67**	**$ 13.25**
Gross Margin	***4.6%***	***Negative***	***Negative***	***7.2%***	***Negative***	***Negative***	***Negative***	***15.3%***	***20.4%***	***20.4%***	***20.3%***	***19.2%***	***25.7%***
Product Development	$ 3.58	$ 2.64	$ 0.43	$ 0.25	$ 0.24	$ 0.25	$ 1.16	$ 0.23	$ 0.24	$ 0.24	$ 0.24	$ 0.94	$ 1.10
% of revenues	*8.8%*	*8.2%*	*6.6%*	*3.1%*	*4.0%*	*4.5%*	*4.5%*	*3.0%*	*2.8%*	*2.7%*	*2.5%*	*2.7%*	*2.1%*
Sales & Marketing	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
% of revenues	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
SG&A	$ 32.23	$ 31.06	$ 2.91	$ 2.36	$ 2.55	$ 2.36	$ 10.17	$ 2.09	$ 2.16	$ 1.97	$ 1.99	$ 8.20	$ 9.20
% of Revenues	*79.6%*	*96.5%*	*44.9%*	*29.7%*	*42.8%*	*42.8%*	*96.5%*	*27.5%*	*25.2%*	*22.1%*	*20.7%*	*96.5%*	*96.5%*
Other Operating Expenses (Income)	$ (0.33)	$ 2.53	$ (0.03)	$ 0.01	$ 0.00	$ -	$ (0.02)	$ -	$ -	$ -	$ -	$ -	$ -
% of Revenues	*-0.8%*	*7.8%*	*-0.4%*	*0.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Total Operating Expenses	**$ 35.48**	**$ 36.24**	**$ 3.31**	**$ 2.62**	**$ 2.79**	**$ 2.61**	**$ 11.32**	**$ 2.32**	**$ 2.39**	**$ 2.21**	**$ 2.22**	**$ 9.14**	**$ 10.30**
% of Revenues	***87.6%***	***112.5%***	***51.1%***	***32.9%***	***46.9%***	***47.3%***	***43.7%***	***30.5%***	***28.0%***	***24.8%***	***23.2%***	***26.4%***	***20.0%***
Operating Profit	**$ (33.64)**	**$ (44.93)**	**$ (4.43)**	**$ (2.05)**	**$ (3.38)**	**$ (2.77)**	**$ (12.63)**	**$ (1.16)**	**$ (0.65)**	**$ (0.39)**	**$ (0.28)**	**$ (2.47)**	**$ 2.95**
Operating Margin	***-83.0%***	***-139.5%***	***-68.5%***	***-25.8%***	***-56.8%***	***-50.2%***	***-48.8%***	***-15.2%***	***-7.6%***	***-4.4%***	***-2.9%***	***-7.1%***	***5.7%***
Interest Expense and Financing Charges, Net	$ (0.06)	$ (9.37)	$ (1.02)	$ (0.50)	$ (0.31)	$ (0.31)	$ (2.14)	$ (0.33)	$ (0.35)	$ (0.32)	$ (0.27)	$ (1.27)	$ (0.51)
Interest Income	$ 0.31	$ 0.22	$ -	$ 0.02	$ 0.00	$ 0.02	$ 0.05	$ 0.02	$ 0.02	$ 0.02	$ 0.02	$ 0.08	$ 0.08
Loss on Transfer of Promissory Note	$ -	$ (0.90)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Realized Loss on Panacea Investment	$ (2.79)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other Income (Expense)	$ (0.37)	$ 0.33	$ -	$ 0.34	$ 0.10	$ -	$ 0.44					$ -	$ -
Pretax Income	**$ (36.53)**	**$ (54.64)**	**$ (5.45)**	**$ (2.19)**	**$ (3.59)**	**$ (3.06)**	**$ (14.28)**	**$ (1.47)**	**$ (0.98)**	**$ (0.69)**	**$ (0.52)**	**$ (3.66)**	**$ 2.52**
Income Tax (Benefit)	$ 0.02	$ 0.05	$ -	$ 0.03	$ -	$ -	$ 0.03	$ -	$ -	$ -	$ -	$ -	$ -
GAAP Net Income from Continuing Operations	**$ (36.55)**	**$ (54.69) #**	**$ (5.45)**	**$ (2.21)**	**$ (3.59)**	**$ (3.06)**	**$ (14.31)**	**$ (1.47)**	**$ (0.98)**	**$ (0.69)**	**$ (0.52)**	**$ (3.66)**	**$ 2.52**
Loss from Discontinued Operations Before Income Taxes	$ (23.70)	$ (85.63)	$ (0.29)	$ 1.10	$ (0.17)	$ (0.17)	$ 0.47	$ -	$ -	$ -	$ -	$ -	$ -
Benefit (Provision) for Income Taxes	$ 0.46	$ (0.46)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Loss from Discontinued Operations	**$ (23.25)**	**$ (86.09)**	**$ (0.29)**	**$ 1.10**	**$ (0.17)**	**$ (0.17)**	**$ 0.47**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
GAAP Net Income (Loss)	**$ (59.80) #**	**$ (140.78)**	**$ (5.74)**	**$ (1.11)**	**$ (3.76)**	**$ (3.23)**	**$ (13.84)**	**$ (1.47)**	**$ (0.98)**	**$ (0.69)**	**$ (0.52)**	**$ (3.66)**	**$ 2.52**
Deemed Dividends	$ -	$ (9.99)	$ (3.59)	$ (0.45)	$ (3.68)	$ -	$ (7.71)	$ -	$ -	$ -	$ -	$ -	$ -
Foreign Currency Adjustment	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Comprehensive Income (Loss)	**$ (59.80)**	**$ (150.77)**	**$ (9.33)**	**$ (1.56)**	**$ (7.43)**	**$ (3.23)**	**$ (21.55)**	**$ (1.47)**	**$ (0.98)**	**$ (0.69)**	**$ (0.52)**	**$ (3.66)**	**$ 2.52**
Weighted Shares for Basic EPS *	5,952	9,467	23,612	61,064	97,771	730,000	730,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000
Weighted Shares for Diluted EPS *	5,952	9,467	23,612	61,064	97,771	730,000	730,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000	1,700,000
EPS Basic	NM	NM	NM	NM	NM	NM	NM	$ (0.87)	$ (0.57)	$ (0.41)	$ (0.31)	$ (2.15)	$ 1.48
EPS Diluted	**NM**	**NM**	**NM**	**NM**	**NM**	**NM**	**NM**	**$ (0.87)**	**$ (0.57)**	**$ (0.41)**	**$ (0.31)**	**$ (2.15)**	**$ 1.48**
GAAP Earnings Growth	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*	*NM*

22nd Century Group, Inc.
Nasdaq: XXII
Quarterly EBITDA
$ in Millions

	2022 Actual	2023 Actual	2024 Estimated					2025 Estimated					2026 Est.
	Fiscal 2022A	Fiscal 2023A	1QA Mar-24	2QE Jun-24	3QE Sep-24	4QE Dec-24	Fiscal 2024E	1QE Mar-25	2QE Jun-25	3QE Sep-25	4QE Dec-25	Fiscal 2025E	Fiscal 2026E
GAAP Net Income from Continuing Operations	$ (36.55)	$ (54.69)	$ (5.45)	$ (2.21)	$ (3.59)	$ (3.06)	$ (14.31)	$ (1.47)	$ (0.98)	$ (0.69)	$ (0.52)	$ (3.66)	$ 2.52
Depreciation, depletion & amortization	$ 4.57	$ 4.86	$ 0.27	$ 0.25	$ 0.25	$ 0.25	$ 1.01	$ 0.30	$ 0.30	$ 0.30	$ 0.30	$ 1.20	$ 1.33
Benefit for income tax	$ 0.02	$ 0.05	$ -	$ 0.03	$ -	$ -	$ 0.03	$ -	$ -	$ -	$ -	$ -	$ -
Interest expense	$ (0.26)	$ 9.15	$ 1.02	$ 0.48	$ 0.31	$ 0.29	$ 2.09	$ 0.31	$ 0.33	$ 0.30	$ 0.25	$ 1.18	$ 0.43
EBITDA	**$ (32.22)**	**$ (40.63)**	**$ (4.17)**	**$ (1.46)**	**$ (3.03)**	**$ (2.52)**	**$ (11.18)**	**$ (0.86)**	**$ (0.35)**	**$ (0.09)**	**$ 0.02**	**$ (1.28)**	**$ 4.28**
EBITDA Margin (%)	***-79.6%***	***-126.2%***	***-64.4%***	***-18.4%***	***-50.9%***	***-45.7%***	***-43.2%***	***-11.3%***	***-4.1%***	***-1.0%***	***0.2%***	***-3.7%***	***8.3%***
Inventory write-down	$ 0.24	$ 8.70	$ 0.43	$ -	$ -	$ -	$ 0.43	$ -	$ -	$ -	$ -	$ -	$ -
Restructuring and impairment	$ 0.04	$ (2.42)	$ (0.03)	$ (0.30)	$ (0.02)	$ -	$ (0.35)	$ -	$ -	$ -	$ -	$ -	$ -
Stock based compensation	$ 5.49	$ 2.68	$ 0.18	$ 0.06	$ (0.00)	$ 0.03	$ 0.26	$ 0.03	$ 0.23	$ 0.23	$ 0.23	$ 0.72	$ 1.30
Change in fair value of derivative liabilities	$ -	$ (0.36)	$ 0.08	$ (0.54)	$ (0.02)	$ (0.28)	$ (0.76)	$ (0.28)	$ 0.10	$ 0.10	$ 0.10	$ 0.02	$ 0.40
Change in fair value of warrant liabilities	$ -	$ 0.56	$ -	$ (0.32)	$ (0.10)	$ (0.21)	$ (0.64)	$ (0.21)	$ 0.10	$ 0.10	$ 0.10	$ 0.09	$ 0.40
Company Reported Adjusted EBITDA	**$ (26.46)**	**$ (31.48)**	**$ (3.50)**	**$ (2.57)**	**$ (3.18)**	**$ (2.99)**	**$ (12.23)**	**$ (1.33)**	**$ 0.08**	**$ 0.34**	**$ 0.45**	**$ (0.46)**	**$ 6.38**
Company Reported Adjusted EBITDA Margin (%)	***-65.3%***	***-97.8%***	***-54.1%***	***-32.3%***	***-53.5%***	***-54.1%***	***-47.3%***	***-17.4%***	***0.9%***	***3.8%***	***4.7%***	***-1.3%***	***12.4%***
Impairment of goodwill	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Gain (Loss) on disposal of assets	$ (0.37)	$ 0.07	$ 0.07	$ -	$ -	$ -	$ 0.07	$ -	$ -	$ -	$ -	$ -	$ -
Impairment of other long-lived assets	$ 1.49	$ 3.30	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Acquisition related costs	$ 1.05	$ 0.13	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Public offering costs	$ 2.52	$ 3.26	$ -	$ -	$ 0.32	$ 0.32	$ 0.65	$ -	$ -	$ -	$ -	$ -	$ -
Other income, net	$ 5.08	$ 10.16	$ 0.90	$ 0.28	$ 0.32	$ -	$ 1.50	$ -	$ -	$ -	$ -	$ -	$ -
Interest on trade accounts receivable	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
EmergingGrowth.com Adjusted EBITDA	**$ (16.70)**	**$ (14.56)**	**$ (2.54)**	**$ (2.29)**	**$ (2.54)**	**$ (2.66)**	**$ (10.02)**	**$ (1.33)**	**$ 0.08**	**$ 0.34**	**$ 0.45**	**$ (0.46)**	**$ 6.38**
EmergingGrowth.com Adjusted EBITDA Margin (%)	***-41.2%***	***-45.2%***	***-39.3%***	***-28.8%***	***-42.7%***	***-48.2%***	***-38.7%***	***-17.4%***	***0.9%***	***3.8%***	***4.7%***	***-1.3%***	***12.4%***

22nd Century Group, Inc.
Nasdaq: XXII
Cash Flow Statement
$ in Millions

	2022 Actual	2023 Actual	2024 Estimated					2025 Estimated					2026 Est.
	Fiscal 2022A	Fiscal 2023A	1QA Mar-24	2QA Jun-24	3QA Sep-24	4QE Dec-24	Fiscal 2024E	1QE Mar-25	2QE Jun-25	3QE Sep-25	4QE Dec-25	Fiscal 2025	Fiscal 2026
Net income	$ (59.80)	$ (140.78)	$ (5.74)	$ (1.11)	$ (3.76)	$ (3.23)	$ (13.84)	$ (1.47)	$ (0.98)	$ (0.69)	$ (0.52)	$ (3.66)	$ 2.52
Stock-based compensation	$ 5.49	$ 2.68	$ 0.18	$ 0.06	$ (0.00)	$ 0.03	$ 0.26	$ 0.03	$ 0.23	$ 0.23	$ 0.23	$ 0.72	$ 1.30
Depreciation, depletion and amortization	$ 4.57	$ 4.86	$ 0.27	$ 0.25	$ 0.25	$ 0.25	$ 1.01	$ 0.30	$ 0.30	$ 0.30	$ 0.30	$ 1.20	$ 1.33
Bad debt expense	$ 0.77	$ 1.02	$ 0.00	$ 0.01	$ (0.00)	$ -	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Gain/(loss) on disposal of property and equipment	$ (0.37)	$ 0.07	$ 0.07	$ -	$ -	$ -	$ 0.07	$ -	$ -	$ -	$ -	$ -	$ -
Gain from sale of equipment damaged or lost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Inventory write-down	$ 0.24	$ 8.70	$ 0.43	$ -	$ -	$ -	$ 0.43	$ -	$ -	$ -	$ -	$ -	$ -
Change in fair value of derivative liabilities	$ -	$ (0.36)	$ 0.08	$ (0.54)	$ (0.02)	$ (0.28)	$ (0.76)	$ (0.28)	$ 0.10	$ 0.10	$ 0.10	$ 0.02	$ 0.40
Change in fair value of warrant liabilities	$ -	$ 0.56	$ -	$ (0.32)	$ (0.10)	$ (0.21)	$ (0.64)	$ (0.21)	$ 0.10	$ 0.10	$ 0.10	$ 0.09	$ 0.40
Restructuring and impairment	$ 0.04	$ (2.42)	$ (0.03)	$ (0.30)	$ (0.02)	$ -	$ (0.35)	$ -	$ -	$ -	$ -	$ -	$ -
Impairment of goodwill	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Loss (gain) on sale of business	$ 2.79	$ 58.52	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Impairment of other long-lived assets	$ 1.49	$ 3.30	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Deferred income taxes	$ (0.43)	$ 0.43	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other	$ 5.08	$ 10.16	$ 0.90	$ 0.28	$ 0.32	$ -	$ 1.50	$ -	$ -	$ -	$ -	$ -	$ -
Subtotal	$ (40.14)	$ (53.25)	$ (3.84)	$ (1.69)	$ (3.34)	$ (3.45)	$ (12.32)	$ (1.64)	$ (0.25)	$ 0.04	$ 0.21	$ (1.64)	$ 5.95
Accounts receivable, net - decrease (increase)	$ (2.88)	$ (0.02)	$ (0.08)	$ (0.71)	$ 0.67	$ -	$ (0.12)	$ -	$ -	$ -	$ -	$ -	$ -
Receivables from related parties - decrease (increase)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Inventories - decrease (increase)	$ (8.79)	$ (5.93)	$ 1.03	$ 0.23	$ 0.32	$ 0.27	$ 1.85	$ -	$ -	$ -	$ -	$ -	$ -
Pre-paid expenses and other assets - decrease (increase)	$ (0.92)	$ 0.45	$ 0.49	$ (1.03)	$ 0.83	$ 0.09	$ 0.38	$ -	$ -	$ -	$ -	$ -	$ -
Accounts payable - decrease (increase)	$ 0.42	$ 4.75	$ 0.63	$ (0.61)	$ (0.49)	$ (0.16)	$ (0.62)	$ -	$ -	$ -	$ -	$ -	$ -
Payables to related parties - decrease (increase)	$ 0.75	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Accrued expenses and other liabilities - decrease (increase)	$ (0.14)	$ (1.00)	$ (0.48)	$ (0.91)	$ (0.97)	$ (0.94)	$ (3.29)	$ -	$ -	$ -	$ -	$ -	$ -
Income taxes payable - decrease (increase)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Operating Activities - Net Cash Flow	**$ (51.71)**	**$ (54.99)**	**$ (2.26)**	**$ (4.72)**	**$ (2.98)**	**$ (4.17)**	**$ (14.12)**	**$ (1.64)**	**$ (0.25)**	**$ 0.04**	**$ 0.21**	**$ (1.64)**	**$ 5.95**
Purchases of property and equipment	$ (5.73)	$ (5.62)	$ (0.01)	$ (0.06)	$ (0.07)	$ (0.08)	$ (0.22)	$ (0.08)	$ (0.08)	$ (0.08)	$ (0.25)	$ (0.48)	$ (1.00)
Business divestitures, net of cash transferred	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Purchases of property and equipment from related parties	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Contributions to equity investee	$ (0.68)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Proceeds from disposal of P&E, discontinued operations, and insurance proceeds	$ 0.41	$ 4.19	$ 0.02	$ -	$ -	$ -	$ 0.02	$ -	$ -	$ -	$ -	$ -	$ -
Purchase of short-term investment, net	$ 28.58	$ 18.24	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Investing Activities - Net Cash Flow	**$ 22.58**	**$ 16.82**	**$ 0.02**	**$ (0.06)**	**$ (0.07)**	**$ (0.08)**	**$ (0.19)**	**$ (0.08)**	**$ (0.08)**	**$ (0.08)**	**$ (0.25)**	**$ (0.48)**	**$ (1.00)**
Borrowings on long-term debt	$ (1.66)	$ (3.22)	$ -	$ 0.33	$ (0.31)	$ -	$ 0.02	$ -	$ -	$ -	$ -	$ -	$ -
Borrowings on long-term debt - related parties	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Repayments of long-term debt	$ -	$ (9.70)	$ (0.55)	$ 0.30	$ (0.42)	$ -	$ (0.67)	$ -	$ -	$ -	$ -	$ -	$ -
Proceeds from financing transaction	$ 35.00	$ 53.81	$ 2.25	$ 3.91	$ 8.16	$ 6.91	$ 21.23	$ -	$ -	$ -	$ -	$ -	$ -
Proceeds from sale/leaseback transaction	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Payments on sale/leaseback transaction	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Dividends paid	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Principal payments on financing leases/notes	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Stock/debt issuance costs	$ (2.52)	$ (3.26)	$ -	$ -	$ (0.32)	$ (0.32)	$ (0.65)	$ -	$ -	$ -	$ -	$ -	$ -
Other	$ (0.00)	$ (0.42)	$ (0.00)	$ -	$ -	$ -	$ (0.00)	$ -	$ -	$ -	$ -	$ -	$ -
Financing Activities - Net Cash Flow	**$ 30.82**	**$ 37.21**	**$ 1.70**	**$ 4.54**	**$ 7.11**	**$ 6.59**	**$ 19.94**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Exchange rate effect	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cash and Equivalents - Change	**$ 1.68**	**$ (0.96)**	**$ (0.54)**	**$ (0.24)**	**$ 4.06**	**$ 2.35**	**$ 5.63**	**$ (1.71)**	**$ (0.32)**	**$ (0.04)**	**$ (0.04)**	**$ (2.11)**	**$ 4.95**
Cash Beginning	$ 1.34	$ 3.02	$ 2.06	$ 1.52	$ 1.28	$ 5.34	$ 2.06	$ 7.69	$ 5.98	$ 5.65	$ 5.62	$ 7.69	$ 5.58
Cash End	$ 3.02	$ 2.06	$ 1.52	$ 1.28	$ 5.34	$ 7.69	$ 7.69	$ 5.98	$ 5.65	$ 5.62	$ 5.58	$ 5.58	$ 10.53

22nd Century Group, Inc.
Nasdaq: XXII
Balance Sheet
$ in Millions

	2022 Actual	2023 Actual	2024 Estimated					2025 Estimated					2026 Est.
	Fiscal 2022A *	Fiscal 2023A	1QA Mar-24	2QA Jun-24	3QA Sep-24	4QE Dec-24	Fiscal 2024E	1QE Mar-25	2QE Jun-25	3QE Sep-25	4QE Dec-25	Fiscal 2025	Fiscal 2026
Cash & equivalents	$ 3.02	$ 2.058	$ 1.517	$ 1.279	$ 5.341	$ 7.686	$ 7.686	$ 5.975	$ 5.654	$ 5.619	$ 5.575	$ 5.575	$ 10.530
Short term investments	$ 18.19	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Accounts receivable, net	$ 1.36	$ 3.671	$ 3.747	$ 2.948	$ 2.284	$ 2.284	$ 2.284	$ 2.284	$ 2.284	$ 2.284	$ 2.284	$ 2.284	$ 2.284
Insurance recoveries	$ -	$ 3.768	$ 3.768	$ 3.768	$ 3.768	$ 3.768	$ 3.768	$ 3.768	$ 3.768	$ 3.768	$ 3.768	$ 3.768	$ 3.768
Inventories	$ 7.27	$ 4.346	$ 2.889	$ 2.664	$ 2.340	$ 2.340	$ 2.340	$ 2.340	$ 2.340	$ 2.340	$ 2.340	$ 2.340	$ 2.340
Pre-paid expenses/Other current assets	$ 1.93	$ 1.180	$ 0.699	$ 1.767	$ 0.979	$ 0.979	$ 0.979	$ 0.979	$ 0.979	$ 0.979	$ 0.979	$ 0.979	$ 0.979
Current assets of discontinued operations held for sale	$ 12.83	$ 1.254	$ 1.093	$ 1.058	$ 1.051	$ 1.051	$ 1.051	$ 1.051	$ 1.051	$ 1.051	$ 1.051	$ 1.051	$ 1.051
Total Current Assets	**$ 44.61**	**$ 16.277**	**$ 13.713**	**$ 13.484**	**$ 15.763**	**$ 18.108**	**$ 18.108**	**$ 16.397**	**$ 16.076**	**$ 16.041**	**$ 15.997**	**$ 15.997**	**$ 20.952**
Property & equipment, net	$ 3.69	$ 3.393	$ 3.236	$ 3.093	$ 2.970	$ 2.921	$ 2.921	$ 2.847	$ 2.772	$ 2.698	$ 2.798	$ 2.798	$ 3.131
Operating lease right-of-use assets	$ 0.94	$ 1.894	$ 1.832	$ 1.769	$ 1.705	$ 1.705	$ 1.705	$ 1.705	$ 1.705	$ 1.705	$ 1.705	$ 1.705	$ 1.705
Intangible assets, net	$ 7.21	$ 5.924	$ 5.820	$ 5.728	$ 5.725	$ 5.601	$ 5.601	$ 5.452	$ 5.302	$ 5.153	$ 5.003	$ 5.003	$ 4.336
Other non-current assets	$ 3.42	$ 0.015	$ 0.015	$ 0.015	$ 0.015	$ 0.015	$ 0.015	$ 0.015	$ 0.015	$ 0.015	$ 0.015	$ 0.015	$ 0.015
Noncurrent assets of discontinued operations held for sale	$ 54.78	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL ASSETS	**$ 114.65**	**$ 27.503**	**$ 24.616**	**$ 24.089**	**$ 26.178**	**$ 28.350**	**$ 28.350**	**$ 26.416**	**$ 25.871**	**$ 25.611**	**$ 25.519**	**$ 25.519**	**$ 30.140**
Accounts payable	$ 2.05	$ 4.445	$ 5.046	$ 3.893	$ 3.098	$ 3.098	$ 3.098	$ 3.098	$ 3.098	$ 3.098	$ 3.098	$ 3.098	$ 3.098
Deferred Income	$ 0.69	$ 0.726	$ 0.376	$ 0.389	$ 0.054	$ 0.054	$ 0.054	$ 0.054	$ 0.054	$ 0.054	$ 0.054	$ 0.054	$ 0.054
Accrued expenses	$ 4.85	$ 8.207	$ 8.208	$ 7.462	$ 7.477	$ 7.477	$ 7.477	$ 7.477	$ 7.477	$ 7.477	$ 7.477	$ 7.48	$ 7.48
Short-term operating lease obligations	$ 0.25	$ 0.231	$ 0.238	$ 0.245	$ 0.252	$ 0.252	$ 0.252	$ 0.252	$ 0.252	$ 0.252	$ 0.252	$ 0.25	$ 0.25
Current portion of long term debt and notes payable	$ 0.69	$ 6.391	$ 6.577	$ 2.377	$ 2.069	$ 2.069	$ 2.069	$ -	$ -	$ -	$ -	$ -	$ -
Current liabilities of discontinued operations held for sale	$ 4.14	$ 3.185	$ 3.147	$ 1.397	$ 1.295	$ 1.295	$ 1.295	$ 1.295	$ 1.295	$ 1.295	$ 1.295	$ 1.295	$ 1.295
Other current liabilities	$ 0.35	$ 1.849	$ 1.672	$ 0.309	$ 0.194	$ 0.194	$ 0.194	$ 0.194	$ 0.194	$ 0.194	$ 0.194	$ 0.19	$ 0.19
Total Current Liabilities	**$ 13.02**	**$ 25.034**	**$ 25.264**	**$ 16.072**	**$ 14.439**	**$ 14.439**	**$ 14.439**	**$ 12.370**	**$ 12.370**	**$ 12.370**	**$ 12.370**	**$ 12.37**	**$ 12.37**
Long-term debt, net of current portion	$ -	$ 8.058	$ 8.136	$ 6.046	$ 5.529	$ 5.529	$ 5.529	$ 4.600	$ 4.600	$ 4.600	$ 4.600	$ 4.600	$ 4.600
Long-term operating lease liability	$ 0.71	$ 1.698	$ 1.635	$ 1.571	$ 1.506	$ 1.506	$ 1.506	$ 1.506	$ 1.506	$ 1.506	$ 1.506	$ 1.506	$ 1.506
Noncurrent liabilities of discontinued operations held for sale	$ 4.60	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other long-term liabilities	$ 0.34	$ 1.123	$ 1.205	$ 1.355	$ 1.232	$ 1.232	$ 1.232	$ 1.232	$ 1.232	$ 1.232	$ 1.232	$ 1.232	$ 1.232
TOTAL LIABILITIES	**$ 18.68**	**$ 35.913**	**$ 36.240**	**$ 25.044**	**$ 22.706**	**$ 22.706**	**$ 22.706**	**$ 19.708**	**$ 19.708**	**$ 19.708**	**$ 19.708**	**$ 19.708**	**$ 19.708**
Common Stock	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Additional Paid-in Capital (adjusted for projection error)	$ 333.90	$ 370.297	$ 372.822	$ 384.603	$ 392.787	$ 398.018	$ 398.018	$ 400.552	$ 400.982	$ 401.413	$ 401.844	$ 401.844	$ 403.946
Retained Earnings	$ (237.81)	$ (378.707)	$ (384.446)	$ (385.558)	$ (389.315)	$ (392.374)	$ (392.374)	$ (393.844)	$ (394.820)	$ (395.510)	$ (396.033)	$ (396.033)	$ (393.514)
Accumulated Comprehensive Income/(Loss)	$ (0.11)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Less: Treasury Stock	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL EQUITY	**$ 95.98**	**$ (8.410)**	**$ (11.624)**	**$ (0.955)**	**$ 3.472**	**$ 5.644**	**$ 5.644**	**$ 6.708**	**$ 6.162**	**$ 5.903**	**$ 5.811**	**$ 5.811**	**$ 10.432**
TOTAL LIABILITIES & EQUITY	**$ 114.65**	**$ 27.503 #**	**$ 24.616**	**$ 24.089**	**$ 26.178**	**$ 28.350**	**$ 28.350**	**$ 26.416**	**$ 25.870**	**$ 25.611**	**$ 25.519**	**$ 25.519**	**$ 30.140**

22nd Century Group, Inc.
Nasdaq: XXII
Discounted Cash Flow Model (DCF)
($ in millions, except per share)

Estimates:	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**	**2030E**	**2031E**	**2032E**	**2033E**	**2034E**	**Terminal Value**
Revenue	$ 34.65	$ 51.57	$ 71.87	$ 100.25	$ 130.33	$ 162.91	$ 195.49	$ 224.81	$ 247.29	$ 259.66	
Operating Income	$ (2.47)	$ 2.95	$ 9.09	$ 20.63	$ 32.58	$ 40.73	$ 48.87	$ 56.20	$ 61.82	$ 64.91	
Less: Taxes (benefit)	$ -	$ -	$ -	$ -	$ -	$ -	$ 17.59	$ 20.23	$ 22.26	$ 23.37	
NOPAT	**$ (2.47)**	**$ 2.95**	**$ 9.09**	**$ 20.63**	**$ 32.58**	**$ 40.73**	**$ 31.28**	**$ 35.97**	**$ 39.57**	**$ 41.55**	
Add: Depreciation & Amortization	$ 1.01	$ 1.20	$ 1.43	$ 1.53	$ 2.28	$ 2.85	$ 3.42	$ 3.93	$ 4.33	$ 4.54	
Add: Changes in NWC	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Less: Capital Expenditures	$ 0.48	$ 1.00	$ 2.00	$ 2.00	$ 2.61	$ 3.26	$ 3.91	$ 4.50	$ 4.95	$ 5.19	
Free Cash Flow	**$ (1.94)**	**$ 3.14**	**$ 8.52**	**$ 20.16**	**$ 32.26**	**$ 40.32**	**$ 30.79**	**$ 35.41**	**$ 38.95**	**$ 40.90**	**$ 496.25**
Discount Period - Months	10.00	22.00	34.00	46.00	58.00	70.00	82.00	94.00	106.00	118.00	118.00
Discount Period - Years	0.83	1.83	2.83	3.83	4.83	5.83	6.83	7.83	8.83	9.83	9.83
Discount Factor	0.91	0.82	0.73	0.66	0.59	0.53	0.48	0.43	0.38	0.34	0.34
Present Value of FCF	**$ (1.77)**	**$ 2.58**	**$ 6.26**	**$ 13.29**	**$ 19.07**	**$ 21.38**	**$ 14.64**	**$ 15.11**	**$ 14.90**	**$ 14.04**	**$ 170.33**

Growth Rate Assumptions:	
Revenue (2029 - 2034 / 5% step-down)	35.0%
Stable Free Cash Flow Growth Rate (g)	3.00%
Discount Rate (WACC)	11.49%
Margin Assumptions:	
Operating Income Margin (Long-term)	25.0%
Operating Income Margin (Year 1 - 10 annual step-up)	2.5%
D&A as a % of sales	1.8%
Taxes	36.0%
Changes in NWC	0.0%
Capex as a % of sales	2.0%

Terminal Value Sensitivity Analysis:

		Terminal Growth Rate				
		1.0%	2.0%	3.0%	4.0%	5.0%
Discount Rate	10.5%	435.33	491.44	562.53	655.53	782.43
	11.0%	413.54	464.10	527.32	608.63	717.10
	11.5%	393.82	439.64	496.25	567.99	661.83
	12.0%	375.90	417.63	468.65	532.44	614.48
	12.5%	359.54	397.72	443.95	501.07	573.45

Valuation:			
Shares Outstanding (millions)		21.700	Inclusive of 104k settllement issuance and 25 million warrants exercise/inducement (at 80%)
PV of FCF ($ mil)	$	119.50	
PV of Terminal Value ($ mil)	$	170.33	
Enterprise Value ($ mil)	$	289.83	
less: Debt (net of cash, $ mil)	$	3.10	
less: Minority Interest	$	-	
Estimated Total Value of Equity	$	286.73	
Estimated Equity Value per Share	**$**	**13.21**	