

UNITED STATES  
SECURITIES AND EXCHANGE  
COMMISSION WASHINGTON, D.C. 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Quarterly Period Ended March 31, 2017

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Transition Period From \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 001-36338

**22nd Century Group, Inc.**

(Exact name of registrant as specified in its charter)

**Nevada**

(State or other jurisdiction  
of incorporation)

**98-0468420**

(IRS Employer  
Identification No.)

**9530 Main Street, Clarence, New York 14031**

(Address of principal executive offices)

**(716) 270-1523**

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input checked="" type="checkbox"/>
Non-accelerated filer (Do not check if smaller reporting company)	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

As of May 8, 2017, there were 90,895,234 shares of common stock issued and outstanding.

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22nd CENTURY GROUP, INC.

INDEX

	Page Number
<b>PART I. FINANCIAL INFORMATION</b>	
<b>Item 1. Financial Statements</b>	
<a href="#">Consolidated Balance Sheets as of March 31, 2017 (unaudited) and December 31, 2016</a>	3
<a href="#">Consolidated Statements of Operations for the Three Months Ended March 31, 2017 and 2016 (unaudited)</a>	4
<a href="#">Consolidated Statement of Changes in Shareholders' Equity for the Three Months Ended March 31, 2017 (unaudited)</a>	5
<a href="#">Consolidated Statements of Cash Flows for the Three Months Ended March 31, 2017 and 2016 (unaudited)</a>	6
<a href="#">Notes to Consolidated Financial Statements (unaudited)</a>	7
<b>Item 2. <a href="#">Management's Discussion and Analysis of Financial Condition and Results of Operations</a></b>	21
<b>Item 3. <a href="#">Quantitative and Qualitative Disclosures About Market Risk</a></b>	27
<b>Item 4. <a href="#">Controls and Procedures</a></b>	27
<b>PART II. <a href="#">OTHER INFORMATION</a></b>	27
<b>Item 1. <a href="#">Legal Proceedings</a></b>	27
<b>Item 1A. <a href="#">Risk Factors</a></b>	28
<b>Item 2. <a href="#">Unregistered Sales of Equity Securities and Use of Proceeds</a></b>	28
<b>Item 3. <a href="#">Default Upon Senior Securities</a></b>	28
<b>Item 4. <a href="#">Mine Safety Disclosures</a></b>	28
<b>Item 5. <a href="#">Other Information</a></b>	28
<b>Item 6. <a href="#">Exhibits</a></b>	28
<b><a href="#">SIGNATURES</a></b>	29

**22nd CENTURY GROUP, INC. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
**March 31, 2017 with Comparative Figures at December 31, 2016**

	<u>March 31,</u> <u>2017</u>	<u>December 31,</u> <u>2016</u>
	<u>(unaudited)</u>	
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash	\$ 10,729,022	\$ 13,468,188
Accounts receivable, net	2,134	40,992
Inventory, net	3,034,973	3,092,686
Prepaid expenses and other assets	433,680	195,569
<b>Total current assets</b>	<u>14,199,809</u>	<u>16,797,435</u>
<b>Machinery and equipment, net</b>	2,360,253	2,434,663
<b>Other assets:</b>		
Intangible assets, net	7,438,849	7,389,946
Investment	1,366,493	1,020,313
<b>Total other assets</b>	<u>8,805,342</u>	<u>8,410,259</u>
<b>Total assets</b>	<u>\$ 25,365,404</u>	<u>\$ 27,642,357</u>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
<b>Current liabilities:</b>		
Current portion of note payable	\$ 314,226	\$ 307,938
Accounts payable	1,728,605	1,340,156
Accrued expenses	1,227,122	1,401,566
Accrued severance	149,365	199,657
<b>Total current liabilities</b>	<u>3,419,318</u>	<u>3,249,317</u>
<b>Warrant liability</b>	64,025	58,681
<b>Total liabilities</b>	<u>3,483,343</u>	<u>3,307,998</u>
<b>Commitments and contingencies (Note 12)</b>	-	-
<b>Shareholders' equity</b>		
Capital stock authorized:		
10,000,000 preferred shares, \$.00001 par value		
300,000,000 common shares, \$.00001 par value		
Capital stock issued and outstanding:		
90,799,041 common shares (90,698,113 at December 31, 2016)	908	907
Capital in excess of par value	102,640,885	102,471,907
Accumulated deficit	(80,759,732)	(78,138,455)
<b>Total shareholders' equity</b>	<u>21,882,061</u>	<u>24,334,359</u>
<b>Total liabilities and shareholders' equity</b>	<u>\$ 25,365,404</u>	<u>\$ 27,642,357</u>

See accompanying notes to consolidated financial statements.

**22nd CENTURY GROUP, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**Three Months Ended March 31,**  
**(unaudited)**

	<u>2017</u>	<u>2016</u>
<b>Revenue:</b>		
Sale of products, net	\$ 2,231,517	\$ 3,019,056
<b>Cost of goods sold (exclusive of depreciation shown separately below):</b>		
Products	<u>2,505,414</u>	<u>2,895,410</u>
<b>Gross (loss) profit</b>	(273,897)	123,646
<b>Operating expenses:</b>		
Research and development (including equity based compensation of \$13,950 and \$45,056, respectively)	550,851	597,391
General and administrative (including equity based compensation of \$128,449 and \$226,175, respectively)	1,620,479	1,846,607
Sales and marketing costs (including equity based compensation of \$26,580 and \$11,636, respectively)	295,713	702,614
Depreciation	88,121	80,597
Amortization	140,888	124,841
	<u>2,696,052</u>	<u>3,352,050</u>
<b>Operating loss</b>	(2,969,949)	(3,228,404)
<b>Other income (expense):</b>		
Warrant liability (loss) gain - net	(5,344)	71,065
Gain (loss) on investment	346,180	(87,232)
Interest income	15,755	2,493
Interest expense	(7,919)	(10,374)
	<u>348,672</u>	<u>(24,048)</u>
<b>Loss before income taxes</b>	(2,621,277)	(3,252,452)
<b>Income taxes</b>	-	-
<b>Net loss</b>	<u>\$ (2,621,277)</u>	<u>\$ (3,252,452)</u>
<b>Loss per common share - basic and diluted</b>	<u>\$ (0.03)</u>	<u>\$ (0.04)</u>
<b>Common shares used in basic and diluted earnings per share calculation</b>	<u>90,699,874</u>	<u>74,031,148</u>

See accompanying notes to consolidated financial statements.

**22nd CENTURY GROUP, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY**  
**Three Months Ended March 31, 2017**  
**(unaudited)**

	<u>Common Shares Outstanding</u>	<u>Par value of Common Shares</u>	<u>Contributed Capital</u>	<u>Accumulated Deficit</u>	<u>Shareholders' Equity</u>
<b>Balance at December 31, 2016</b>	<b>90,698,113</b>	<b>\$ 907</b>	<b>\$ 102,471,907</b>	<b>\$ (78,138,455)</b>	<b>\$ 24,334,359</b>
Stock based compensation	-	-	168,979	-	168,979
Stock issued in connection with warrant exercises	100,928	1	(1)	-	-
Net loss	-	-	-	(2,621,277)	(2,621,277)
<b>Balance at March 31, 2017</b>	<b>90,799,041</b>	<b>\$ 908</b>	<b>\$ 102,640,885</b>	<b>\$ (80,759,732)</b>	<b>\$ 21,882,061</b>

See accompanying notes to consolidated financial statements.

**22nd CENTURY GROUP, INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**Three Months Ended March 31,**  
**(unaudited)**

	<b>2017</b>	<b>2016</b>
<b>Cash flows from operating activities:</b>		
Net loss	\$ (2,621,277)	\$ (3,252,452)
Adjustments to reconcile net loss to cash used in operating activities:		
Amortization and depreciation	204,503	180,932
Amortization of license fees	24,506	24,506
(Gain) loss on investment	(346,180)	87,232
Accretion of interest on note payable and accrued severance	7,919	10,374
Warrant liability loss (gain)	5,344	(71,065)
Equity based employee compensation expense	168,979	259,994
Equity based payments for outside services	-	22,873
Decrease in allowance for doubtful accounts	(10,000)	-
Decrease (increase) in assets:		
Accounts receivable	48,858	(51,684)
Inventory	57,713	(214,553)
Prepaid expenses and other assets	(238,111)	90,036
Increase (decrease) in liabilities:		
Accounts payable	228,754	301,955
Accrued expenses	(174,444)	(126,741)
Accrued severance	(51,923)	(60,578)
<b>Net cash used in operating activities</b>	<b>(2,695,359)</b>	<b>(2,799,171)</b>
<b>Cash flows from investing activities:</b>		
Acquisition of patents and trademarks	(30,097)	-
Acquisition of machinery and equipment	(13,710)	(1,520)
<b>Net cash used in investing activities</b>	<b>(43,807)</b>	<b>(1,520)</b>
<b>Cash flows from financing activities:</b>		
Proceeds from exercise of warrants	-	196
Net proceeds from February 2016 registered direct offering	-	5,091,791
<b>Net cash provided by financing activities</b>	<b>-</b>	<b>5,091,987</b>
<b>Net (decrease) increase in cash</b>	<b>(2,739,166)</b>	<b>2,291,296</b>
<b>Cash - beginning of period</b>	<b>13,468,188</b>	<b>3,760,297</b>
<b>Cash - end of period</b>	<b>\$ 10,729,022</b>	<b>\$ 6,051,593</b>
<b>Supplemental disclosures of cash flow information:</b>		
Net cash paid for:		
Cash paid during the period for interest	\$ 1,631	\$ 10,374
Cash paid during the period for income taxes	\$ -	\$ -
Non-cash transactions:		
Patent and trademark additions included in accounts payable	\$ 159,693	\$ 143,828
Reclassification of warrant liability to capital in excess of par due to voiding of exchange rights clause in Crede Tranche 1A warrant	\$ -	\$ 2,810,000

See accompanying notes to consolidated financial statements.

**22nd CENTURY GROUP, INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
**March 31, 2017 (unaudited)**

**NOTE 1. - NATURE OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**Basis of Presentation** - The accompanying unaudited consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (GAAP) for interim financial information and with the instructions to Form 10-Q. Accordingly, they do not include all the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments consisting of normal recurring accruals considered necessary for a fair and non-misleading presentation of the financial statements have been included.

Operating results for the three months ended March 31, 2017 are not necessarily indicative of the results that may be expected for the year ending December 31, 2017. The balance sheet at December 31, 2016 has been derived from the audited consolidated financial statements at that date, but does not include all the information and footnotes required by GAAP for complete financial statements. These interim consolidated financial statements should be read in conjunction with the December 31, 2016 audited consolidated financial statements and the notes thereto.

**Principles of Consolidation** - The accompanying consolidated financial statements include the accounts of 22nd Century Group, Inc. ("22nd Century Group"), its three wholly-owned subsidiaries, 22nd Century Limited, LLC ("22nd Century Ltd"), NASCO Products, LLC ("NASCO"), and Botanical Genetics, LLC ("Botanical Genetics"), and two wholly-owned subsidiaries of 22nd Century Ltd, Goodrich Tobacco Company, LLC ("Goodrich Tobacco") and Heracles Pharmaceuticals, LLC ("Heracles Pharma") (collectively, the "Company"). All intercompany accounts and transactions have been eliminated.

**Nature of Business** - 22nd Century Ltd is a plant biotechnology company specializing in technology that allows (i) for the level of nicotine and other nicotinic alkaloids (e.g., nornicotine, anatabine and anabasine) in tobacco plants to be decreased or increased through genetic engineering and plant breeding and (ii) the levels of cannabinoids in cannabis/hemp plants to be decreased or increased through genetic engineering and plant breeding. Goodrich Tobacco and Heracles Pharma are business units for the Company's (i) premium cigarettes and potential modified risk tobacco products and (ii) smoking cessation product, respectively. The Company acquired the membership interests of NASCO on August 29, 2014. NASCO is a federally licensed tobacco products manufacturer, a participating member of the tobacco Master Settlement Agreement ("MSA") between the tobacco industry and the Settling States under the MSA, and operates the Company's cigarette manufacturing business in North Carolina. Botanical Genetics is a wholly-owned subsidiary of 22nd Century Group, and was incorporated to facilitate an equity investment more fully described in Note 8.

**Preferred stock authorized** - The Company is authorized to issue "blank check" preferred stock, which could be issued with voting, liquidation, dividend and other rights superior to our common stock.

**Accounts receivable** - The Company periodically reviews aged account balances for collectability. As of March 31, 2017 and December 31, 2016, the Company has established an allowance for doubtful accounts in the amount of \$0 and \$10,000, respectively.

**Inventory** - Inventories are valued at the lower of cost or market. Cost is determined using an average cost method for tobacco leaf inventory and raw materials inventory and standard cost is primarily used for finished goods inventory. Inventories are evaluated to determine whether any amounts are not recoverable based on slow moving or obsolete condition and are written off or reserved as appropriate. Inventories at March 31, 2017 and December 31, 2016 consisted of the following:

	March 31, 2017	December 31, 2016
Inventory - tobacco leaf	\$ 1,879,433	\$ 1,936,039
Inventory - finished goods		
Cigarettes and filtered cigars	370,911	340,523
Inventory - raw materials		
Cigarette and filtered cigar components	1,040,252	1,071,747
	<u>3,290,596</u>	<u>3,348,309</u>
Less: inventory reserve	<u>255,623</u>	<u>255,623</u>
	<u>\$ 3,034,973</u>	<u>\$ 3,092,686</u>

**Machinery and equipment** - Machinery and equipment are recorded at their acquisition cost and depreciated on a straight-line basis over their estimated useful lives ranging from 3 to 10 years. Depreciation commences when the asset is placed in service.

**Intangible Assets** - Intangible assets are recorded at cost and consist primarily of (1) expenditures incurred with third parties related to the processing of patent claims and trademarks with government authorities, as well as costs to acquire patent rights from third parties, (2) license fees paid for third-party intellectual property, (3) costs to become a signatory under the tobacco MSA, and (4) license fees paid to acquire a predicate cigarette brand. The amounts capitalized relate to intellectual property that the Company owns or to which it has exclusive rights. The Company's intellectual property capitalized costs are amortized using the straight-line method over the remaining statutory life of the primary patent in each of the Company's two primary groupings of patent families, which expire in 2019 and 2028 (the assets' estimated lives, respectively). Periodic maintenance or renewal fees are expensed as incurred. Annual minimum license fees are charged to expense. License fees paid for third-party intellectual property are amortized on a straight-line basis over the last to expire patents, which patent expiration dates range from 2028 through 2035. The Company believes costs associated with becoming a signatory to the MSA and acquiring the predicate cigarette brand have an indefinite life and as such, no amortization is taken. Total intangible assets at March 31, 2017 and December 31, 2016 consisted of the following:

	March 31, 2017	December 31, 2016
Intangible assets, net		
Patent and trademark costs	\$ 5,878,231	\$ 5,688,440
Less: accumulated amortization	<u>2,138,308</u>	<u>2,021,926</u>
Patent and trademark costs, net	<u>3,739,923</u>	<u>3,666,514</u>
License fees, net (see Note 12)	1,450,000	1,450,000
Less: accumulated amortization	<u>253,074</u>	<u>228,568</u>
License fees, net	<u>1,196,926</u>	<u>1,221,432</u>
MSA signatory costs	2,202,000	2,202,000
License fee for predicate cigarette brand	<u>300,000</u>	<u>300,000</u>
	<u>\$ 7,438,849</u>	<u>\$ 7,389,946</u>

Amortization expense relating to the above intangible assets for the three months ended March 31, 2017 and 2016 amounted to \$140,888 and \$124,841, respectively.

The estimated annual average amortization expense for the next five years is approximately \$382,000 for patent costs and \$98,000 for license fees.

**Impairment of Long-Lived Assets** - The Company reviews the carrying value of its amortizing long-lived assets whenever events or changes in circumstances indicate that the historical cost-carrying value of an asset may no longer be recoverable. The Company assesses recoverability of the asset by estimating the future undiscounted net cash flows expected to result from the asset, including eventual disposition. If the estimated future undiscounted net cash flows are less than the carrying value of the asset, an impairment loss is recorded equal to the difference between the asset's carrying value and its fair value. There was no impairment loss recorded during the three months ended March 31, 2017 or 2016.

**Income Taxes** - The Company recognizes deferred tax assets and liabilities for any basis differences in its assets and liabilities between tax and GAAP reporting, and for operating loss and credit carry-forwards.

Considering the Company's history of cumulative net operating losses and the uncertainty of their future utilization, the Company has established a valuation allowance to fully offset its net deferred tax assets as of March 31, 2017 and December 31, 2016.

The Company's federal and state tax returns for the years ended December 31, 2013 through December 31, 2015 are currently open to audit under the statutes of limitations. There were no pending audits as of March 31, 2017.

**Stock Based Compensation** - The Company uses a fair-value based method to determine compensation for all arrangements under which Company employees and others receive shares or options to purchase common shares of the Company. Stock based compensation expense is recorded over the requisite service period based on estimates of probability and time of achieving milestones and vesting. For accounting purposes, the shares will be considered issued and outstanding upon vesting.

**Revenue Recognition** - The Company recognizes revenue from product sales at the point the product is shipped to a customer and title has transferred. Revenue from the sale of the Company's products is recognized net of cash discounts, sales returns and allowances. Cigarette and filtered cigar federal excise taxes and other regulatory fees in the approximate amount of \$1,559,000 are included in net sales for the three months ended March 31, 2017 (approximately \$1,735,000 for the three months ended March 31, 2016), except on sales of *SPECTRUM* research cigarettes, exported cigarettes, exported filtered cigars and in-bond sales of filtered cigars to other federally licensed tobacco products manufacturers, to which such taxes do not apply. The Company recognizes revenue from the sale of its *MAGIC* brand cigarettes in Europe when the cigarettes are sold by the European distributors to the retailers and are sold net of cash discounts, sales returns and allowances, and all applicable taxes.

The Company was chosen to be a subcontractor for a 5-year government contract between RTI International ("RTI") and the National Institute on Drug Abuse ("NIDA") to supply NIDA with research cigarettes. The contract was renewed in 2015 for an additional 5 years. These government research cigarettes are distributed under the Company's mark *SPECTRUM*. Revenue generated from the sale of *SPECTRUM* research cigarettes amounted to \$0 and \$329,321 for the three months ended March 31, 2017 and 2016, respectively.

**Derivatives** - The Company does not use derivative instruments to hedge exposures to cash flow, market or foreign currency risks. The Company evaluates all our financial instruments to determine if such instruments are derivatives or contain features that qualify as embedded derivatives. For derivative financial instruments that are accounted for as liabilities, the derivative instrument is initially recorded at its fair market value and then is revalued at each reporting date, with changes in fair value reported in the Consolidated Statements of Operations. The methodology for valuing our outstanding warrants classified as derivative instruments utilizes a lattice model, which includes probability weighted estimates of future events, including volatility of our common stock. The classification of derivative instruments, including whether such instruments should be recorded as liabilities or equity, is evaluated at the end of each reporting period. Derivative instrument liabilities are classified on the balance sheet as current or non-current based on if the net-cash settlement of the derivative instrument could be required within twelve months of the balance sheet date.

**Research and Development** - Research and development costs are expensed as incurred.

**Advertising** - The Company expenses advertising costs as incurred. Advertising expense was approximately \$31,000 and \$208,000 for the three months ended March 31, 2017 and 2016, respectively.

**Loss Per Common Share** - Basic loss per common share is computed using the weighted-average number of common shares outstanding. Diluted loss per share is computed assuming conversion of all potentially dilutive securities. Potential common shares outstanding are excluded from the computation if their effect is anti-dilutive.

**Commitment and Contingency Accounting** - The Company evaluates each commitment and/or contingency in accordance with the accounting standards, which state that if the item is more likely than not to become a direct liability, then the Company will record the liability in the financial statements. If not, the Company will disclose any material commitments or contingencies that may arise.

**Use of Estimates** - The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

**Fair Value of Financial Instruments** - Financial instruments include cash, receivables, accounts payable, accrued expenses, accrued severance, note payable and warrant liability. Other than warrant liability, fair value is assumed to approximate carrying values for these financial instruments, since they are short term in nature, they are receivable or payable on demand, or have stated interest rates that approximate the interest rates available to the Company as of the reporting date. The determination of the fair value of the warrant liability includes unobservable inputs and is therefore categorized as a Level 3 measurement, as further discussed in Note 11.

**Equity Investments** - The Company accounts for investments in equity securities of other entities under the equity method of accounting if the Company's investment in the voting stock is greater than or equal to 20% and less than a majority, and the Company has the ability to have significant influence over the operating and financial policies of the investee. When the Company's investment in equity securities falls below 20% and the Company does not have the ability to have significant influence over the operating and financial policies of the investee, the Company carries the equity investment at its cost basis.

**Accounting Pronouncements** - In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU 2014-09, "Revenue from Contracts with Customers," which supersedes nearly all existing revenue recognition guidance under GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. ASU 2014-09 defines a five-step process to achieve this core principle and, in doing so, more judgment and estimates may be required within the revenue recognition process than are required under existing GAAP. The revised effective date for the ASU is for annual periods beginning after December 15, 2017, and interim periods therein, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients, or (ii) a retrospective approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption (which includes additional footnote disclosures). In August 2015, the FASB issued ASU 2015-14, "Revenue from Contracts with Customers (Topic 606) - Deferral of the Effective Date," which deferred the effective date of ASU 2014-09 to annual reporting periods beginning after December 15, 2017, with earlier application permitted as of annual reporting periods beginning after December 15, 2016. In March 2016, the FASB issued ASU No. 2016-08, "Revenue from Contracts with Customers (Topic 606) - Principal versus Agent Considerations," to clarify the implementation guidance on principal versus agent. In April 2016, the FASB issued ASU No. 2016-10, "Revenue from Contracts with Customers (Topic 606) - Identifying Performance Obligations and Licensing," which clarifies the identifying performance obligations and licensing implementation guidance. The Company will implement the applicable revenue recognition ASU's for annual reporting periods beginning after December 15, 2017. As a result of such implementation, the Company will exclude certain Federal excise taxes and other regulatory fees from revenue and the cost of goods sold.

In February 2016, the FASB issued ASU 2016-02, "Leases," which supersedes existing lease guidance under GAAP. Under the new guidance, lessees will be required to recognize leases as right of use assets and liabilities for leases with lease terms of more than twelve months. The guidance will apply for both finance and operating leases. The effective date for the ASU is for annual periods beginning after December 15, 2018 and interim periods therein. The Company is currently evaluating the impact of the ASU on its consolidated financial statements.

#### **NOTE 2. – OCTOBER 2016 REGISTERED DIRECT OFFERING**

On October 19, 2016, the Company closed a registered direct offering with two institutional investors of units consisting of 8,500,000 shares of the Company's common stock and warrants to purchase 4,250,000 shares of the Company's common stock at an exercise price of \$1.45 per share. The warrants are exercisable for a period of sixty-six (66) months after issuance, were not exercisable for a period of six months immediately following the issuance and had a fair value of approximately \$3,380,000 at issuance. The holders of the warrants will not have the right to exercise any portion of the warrants if the holders, together with its respective affiliates, would beneficially own in excess of 4.99% of the number of shares of the Company's common stock (including securities convertible into common stock) outstanding immediately after the exercise; provided, however, that the holder may increase or decrease this limitation at any time, although any increase shall not be effective until the 61st day following the notice of increase and the holder may not increase this limitation in excess of 9.99%. The common stock and warrants were sold for \$1.3425 per unit, resulting in net proceeds to the Company in the amount of \$10,707,823, after deducting expenses associated with the transaction.

#### **NOTE 3. – JULY 2016 REGISTERED DIRECT OFFERING**

On July 27, 2016, the Company closed a registered direct offering of common stock and warrants consisting of 6,172,840 shares of the Company's common stock and warrants to purchase 7,043,211 shares of the Company's common stock. The warrants provide for an exercise price of \$1.00 per share and 1,543,210 of the warrants were exercisable immediately and had a fair value of approximately \$858,000 at issuance and 5,500,001 of the warrants were exercisable six months from the date of issuance and had a fair value of approximately \$3,058,000 at issuance. All the warrants have a term of 5.5 years. The common stock and warrants were sold for \$0.81 per unit, resulting in net proceeds to the Company in the amount of \$4,682,764, after deducting expenses associated with the transaction. In addition, on July 27, 2016, the Company terminated an aggregate of 5.5 million warrants with exercise prices of \$1.21 and \$1.25 per share previously issued in conjunction with registered direct offerings in February of 2016 and June of 2015.

#### **NOTE 4. - FEBRUARY 2016 REGISTERED DIRECT OFFERING**

On February 5, 2016, the Company closed a registered direct offering of common stock and warrants consisting of 5,000,000 shares of the Company's common stock and warrants to purchase 2,500,000 shares of the Company's common stock at an exercise price of \$1.21 per share. The warrants were exercisable for a period of sixty-six (66) months after issuance, were not exercisable for a period of six months immediately following the issuance and had a fair value of approximately \$1,940,000 at issuance. The common stock and warrants were sold for \$1.10 per unit, resulting in net proceeds to the Company in the amount of \$5,091,791, after deducting expenses associated with the transaction. The warrants associated with this transaction were terminated on July 27, 2016.

#### **NOTE 5. - JOINT VENTURE, CONSULTING AGREEMENT AND ASSOCIATED WARRANTS**

On June 22, 2015, the Company terminated its joint venture arrangement with Crede CG III, Ltd. ("Crede") and a third-party due to non-performance and other breaches of the arrangement by Crede and its principals. The Company also notified Crede that the Company reserved and did not waive any rights that the Company may have to assert any and all claims that it may have against Crede, its employees, agents, representatives or affiliates thereof, which are allowable by law or in equity, including claims for breach of the warrant agreements entered into with Crede.

The six-month Consulting Agreement (the "Consulting Agreement"), entered into with Crede on September 29, 2014, expired on March 29, 2015. The value of the warrants issued in conjunction with the Consulting Agreement in the aggregate amount of \$4,070,000 and initially recorded as prepaid consulting fees have been fully amortized. The final amortization of the prepaid consulting fees amounted to \$1,978,785 for the three months ended March 31, 2015, and were included in General and administrative expenses in the Company's Consolidated Statements of Operations.

Four tranches of warrants were issued to Crede in conjunction with the Consulting Agreement as follows: Tranche 1A warrant to purchase 1,250,000 shares of Company common stock, Tranche 1B warrant to purchase 1,000,000 shares of Company common stock, Tranche 2 warrant to purchase 1,000,000 shares of Company common stock and Tranche 3 warrant to purchase 1,000,000 shares of Company common stock. The Tranche 1A warrant contained an exchange rights clause that required derivative liability treatment under FASB ASC 480 - "Distinguishing Liabilities from Equity." The Company valued the derivative liability associated with the Tranche 1A warrant at inception at \$2,810,000 and the liability was recorded on the Company's Consolidated Balance Sheets in Warrant liability. In March 2016, the Company provided notice to Crede that Crede repeatedly breached the activity restrictions contained in the warrants and because the terms of the Tranche 1A warrant provide that the availability of the exchange feature was subject to compliance with such activity restrictions, the exchange rights clause contained in the Tranche 1A warrant was no longer available and was thereafter void (although the remaining amount of shares underlying the warrant without the exchange feature remained fully exercisable at \$3.36 per share through the warrant expiration date of September 29, 2016). Accordingly, the Company reclassified the warrant liability associated with the Tranche 1A warrant to Capital in excess of par on its Consolidated Balance Sheets during March 2016. The Tranche 1A and Tranche 1B warrants all expired without exercise on September 29, 2016.

The Tranche 2 and Tranche 3 warrants were not exercisable unless and until certain revenue milestones were attained, as defined in the prior joint venture agreement between Crede and the Company. As stated above, the Company terminated the joint venture agreement on June 22, 2015. Accordingly, such revenue milestones will never be satisfied and the Tranche 2 and Tranche 3 warrants will never be exercisable.

#### NOTE 6. - MANUFACTURING FACILITY

The Company's manufacturing operations at its North Carolina factory were not at full production capacity during the three months ended March 31, 2017, but the Company continued manufacturing a third-party MSA cigarette brand, filtered cigars on a contract basis, and the Company's own proprietary cigarette brand, *RED SUN*. Raw material component costs, direct manufacturing costs, and an overhead allocation are included in the Cost of goods sold and finished goods inventory. General and administrative expenses of the factory amounted to \$118,750 and \$135,267 for the three months ended March 31, 2017 and 2016, respectively.

#### NOTE 7. - MACHINERY AND EQUIPMENT

Machinery and equipment at March 31, 2017 and December 31, 2016 consisted of the following:

	Useful Life	March 31, 2017	December 31, 2016
Cigarette manufacturing equipment	3 - 10 years	\$ 3,193,580	\$ 3,193,580
Office furniture, fixtures and equipment	5 years	104,538	103,945
Laboratory equipment	5 years	32,194	19,076
		3,330,312	3,316,601
Less: accumulated depreciation		970,059	881,938
Machinery and equipment, net		\$ 2,360,253	\$ 2,434,663

Depreciation expense was \$88,121 and \$80,597 for the three months ended March 31, 2017 and 2016, respectively.

#### NOTE 8. - INVESTMENT IN ANANDIA

The Company (through its wholly-owned subsidiary, Botanical Genetics) used the equity method of accounting to record its 24.4% ownership interest in Anandia Laboratories, Inc., a Canadian plant biotechnology company ("Anandia"). The Company's ownership was 25% prior to a dilutive event on September 8, 2016. On February 17, 2017, an additional dilutive event reduced the Company's ownership interest in Anandia to 19.4%, an ownership percentage below the 20% ownership threshold for use of the equity method of accounting. Accordingly, the Company has discontinued applying the equity method of accounting for its equity investment in Anandia, effective on the date of the dilutive event of February 17, 2017. The Company has recorded a gain on equity investment of \$16,872 and an equity loss of \$72,820 for the three months ended March 31, 2017 and 2016, respectively (the equity gain for the three months ended March 31, 2017, reflects the Company's proportionate gain through February 16, 2017). As of September 15, 2014, the carrying value of the Company's investment in Anandia was approximately \$1,199,000 in excess of the Company's share of the book value of the net assets of Anandia, with such difference being attributable to intangible assets. This intangible asset is being amortized over the expected benefit period and this amortization expense amounted to \$7,526 and \$14,412 for the three months ended March 31, 2017 and 2016, respectively. In addition, and as a result of the February 17, 2017 dilutive event, the Company recorded a gain in accordance with the derecognition provisions of Accounting Standards Codification 323 ("ASC 323"). ASC 323 states that an investor (the Company) shall account for an issuance by an investee (Anandia) as if the investor had sold a proportionate share if its investment in the investee and the investor will record a gain or loss resulting from the investee share issuance. As such, the Company recorded a gain of \$336,834 during the three months ended March 31, 2017, as a result of the dilutive event. The Company's gain (loss) on the equity investment when aggregating the Company's share of Anandia's gain (loss), the intangible asset amortization and the gain recorded under ASC 323 amounted to \$346,180 and (\$87,232) for the three months ended March 31, 2017 and 2016, respectively.

As of March 31, 2017 and December 31, 2016, the Company's investment balance in Anandia was \$1,366,493 and \$1,020,313, respectively, and is classified within Other assets on the accompanying Consolidated Balance Sheets. After the February 17, 2017 dilutive event, the Company will account for its investment in Anandia under the cost method and will discontinue amortizing the intangible asset described above.

## NOTE 9. - NOTES PAYABLE AND PATENT ACQUISITION

On December 22, 2014, the Company entered into a Purchase Agreement (the "Purchase Agreement") with the National Research Council of Canada ("NRC") to acquire certain patent rights that the Company had previously licensed from NRC under a license agreement between the parties. The Purchase Agreement provided for payment by the Company to NRC for the NRC patent rights a total amount of \$1,213,000, of which \$213,000 was paid in cash at the closing on December 23, 2014, and with the remaining \$1,000,000 balance to be paid in three equal installments of \$333,333 in December of 2015, 2016 and 2017, respectively, with no interest on the installment payments unless the Company defaults on any such installment payments. As such, the Company computed the present value of the note payable using the Company's incremental borrowing rate. The resulting present value of the note payable amounted to \$925,730 at December 31, 2014. After the scheduled installment payment of \$333,333 made by the Company to NRC on December 22, 2016 and 2015, and the accretion of interest, the remaining present value of the note payable amounts to \$314,226 and \$307,938 at March 31, 2017 and December 31, 2016, respectively, and are reported as Current portion of note payable on the Company's Consolidated Balance Sheets. The cost of the acquired patents in the amount of \$1,138,730 (cash of \$213,000 plus the original discounted notes payable in the amount of \$925,730) are included in Intangible assets, net on the Company's Consolidated Balance Sheets. All previous license agreements between NRC and the Company were terminated as a condition of the Purchase Agreement. NRC has a security interest in these patent rights acquired by the Company from NRC until the note payable has been satisfied.

## NOTE 10. - SEVERANCE LIABILITY

The Company recorded an accrual for severance during the fourth quarter of 2014 in the initial amount of \$624,320 in accordance with FASB ASC 712 - "Compensation - Nonretirement Postemployment Benefits." The severance accrual relates to the October 25, 2014 termination of Joseph Pandolfino, the Company's former Chairman of the Board and Chief Executive Officer. The prior Employment Agreement with Mr. Pandolfino provided that in certain circumstances Mr. Pandolfino would receive severance payments in the gross amount of \$18,750 per month, subject to customary withholdings, over a term of 36 months. Amounts owed to Mr. Pandolfino have been discounted using the Company's incremental borrowing rate. As a result of the severance benefit payments made through the first quarter of 2017, the discounted accrued severance current balance amounted to \$149,365 and \$199,657, at March 31, 2017 and December 31, 2016, respectively.

## NOTE 11. - WARRANTS FOR COMMON STOCK

On March 31, 2017, the Company had outstanding warrants to purchase 13,406,691 shares of common stock of the Company, of which warrants to purchase 94,721 shares contain an anti-dilution feature and excluding 2,000,000 Tranche 2 and 3 warrants that will never become exercisable, as discussed in Note 5.

During March of 2017, warrants to purchase 202,500 shares of common stock were exercised on a cashless basis resulting in the issuance of 100,928 shares of the Company's common stock. On February 8, 2017, warrants to purchase 172,730 shares of common stock expired without being exercised.

On January 25, 2016, warrants to purchase 67,042 shares of common stock were exercised, primarily on a cashless basis, resulting in the issuance of 2,618 shares of the Company's common stock. On January 25, 2016, warrants to purchase 6,831,115 shares of common stock expired without being exercised.

Pursuant to the registered direct offering that closed on October 19, 2016, and discussed in Note 2, the Company issued warrants to purchase 4,250,000 shares of common stock with an exercise price of \$1.45 per share. These warrants had a term of sixty-six (66) months, were not exercisable for six months immediately following the date of issuance, did not contain an anti-dilution feature, and had a fair value of approximately \$3,380,000 at issuance.

Pursuant to the registered direct offering that closed on July 27, 2016, and discussed in Note 3, the Company issued warrants to purchase 7,043,211 shares of common stock. The warrants provide for an exercise price of \$1.00 per share and 1,543,210 of the warrants were exercisable immediately and had a fair value of approximately \$858,000 at issuance and 5,500,001 of the warrants were exercisable six months from the date of issuance and had a fair value of approximately \$3,058,000 at issuance. All the warrants have a term of 5.5 years and do not contain an anti-dilution feature. In addition, on July 27, 2016, the Company terminated an aggregate of 5.5 million warrants with exercise prices of \$1.21 and \$1.25 per share previously issued in conjunction with registered direct offerings in February of 2016 and June of 2015.

Pursuant to the registered direct offering that closed on February 5, 2016, and discussed in Note 4, the Company issued warrants to purchase 2,500,000 shares of common stock with an exercise price of \$1.21 per share. These warrants had a term of sixty-six (66) months, were not exercisable for six months immediately following the date of issuance, did not contain an anti-dilution feature, and had a fair value of approximately \$1,940,000 at issuance. The warrants associated with this transaction were terminated on July 27, 2016 (see Note 3 – July 2016 Registered Direct Offering for additional information).

Pursuant to the registered direct offering that closed on June 2, 2015, the Company issued warrants to purchase 3,000,000 shares of common stock with an exercise price of \$1.25 per share. These warrants had a term of sixty-six (66) months, were not exercisable for six months immediately following the date of issuance, did not contain an anti-dilution feature, and had a fair value of approximately \$2,067,000 at issuance. The warrants associated with this transaction were terminated on July 27, 2016 (see Note 3 – July 2016 Registered Direct Offering for additional information).

Outstanding warrants at March 31, 2017 consisted of the following:

<u>Warrant Description</u>	<u>Number of Warrants</u>	<u>Exercise Price</u>	<u>Expiration</u>
December 2011 convertible NP warrants	802,215	\$ 1.3816	February 6, 2018
May 2012 PPO warrants	251,700	\$ 0.6000	May 15, 2017
November 2012 PPO warrants	872,600	\$ 0.6000	November 9, 2017
August 2012 convertible NP warrants <sup>(1)</sup>	94,721	\$ 0.9310	August 8, 2018
August 2012 convertible NP warrants	92,244	\$ 0.9060	August 8, 2018
July 2016 registered direct offering warrants	7,043,211	\$ 1.0000	January 27, 2021
October 2016 registered direct offering warrants	4,250,000	\$ 1.4500	April 19, 2022
Total warrants outstanding <sup>(2), (3), (4)</sup>	13,406,691		

(1) Includes anti-dilution features.

(2) Includes warrants to purchase 383,000 shares of common stock (2.9%) held by officers and directors that have had the anti-dilution feature removed.

- (3) Includes warrants to purchase 140,000 shares of common stock (1.0%) held by a former officer and director that have had the anti-dilution feature removed.
- (4) Excludes 2,000,000 Tranche 2 and 3 warrants that will never become exercisable, as discussed in Note 5.

The Company estimates the value of warrant liability upon issuance of the warrants and at each balance sheet date using the binomial lattice model to allocate total enterprise value to the warrants and other securities in the Company's capital structure. Volatility was estimated based on historical observed equity volatilities and implied (forward) or expected volatilities for a sample group of guideline companies and consideration of recent market trends.

As a result of the previously exercisable exchange rights contained in the Tranche 1A warrants, the financial instrument was previously considered a liability in accordance with FASB Accounting Standards Codification Topic 480 - "Distinguishing Liabilities from Equity" ("ASC 480"). More specifically, ASC 480 requires a financial instrument to be classified as a liability if such financial instrument contains a conditional obligation that the issuer must or may settle by issuing a variable number of its equity securities if, at inception, the monetary value of the obligation is based on a known fixed monetary amount. As a result of the actions by Crede that caused the exchange rights feature to be voided (see Note 5 - Joint Venture, Consulting Agreement and Associated Warrants for additional information), the Company reclassified the Tranche 1A warrant liability to Capital in excess of par.

The following table is a roll-forward summary of the warrant liability:

<b>Fair value at December 31, 2014</b>	\$ 3,042,846
Gain as a result of change in fair value	(144,550)
<b>Fair value at December 31, 2015</b>	<u>2,898,296</u>
Reclassification of warrant liability to capital in excess of par	(2,810,000)
Gain as a result of change in fair value	<u>(29,615)</u>
<b>Fair value at December 31, 2016</b>	58,681
Loss as a result of change in fair value	5,344
<b>Fair value at March 31, 2017</b>	<u><u>\$ 64,025</u></u>

The aggregate net (loss) gain as a result of the Company's warrant liability for the three months ended March 31, 2017 and 2016 amounted to (\$5,344) and \$71,065, respectively, and are included in Other income (expense) under Warrant liability (loss) gain - net in the accompanying Consolidated Statements of Operations.

FASB ASC 820 - "Fair Value Measurements and Disclosures" establishes a valuation hierarchy for disclosure of the inputs to valuation used to measure fair value. This hierarchy prioritizes the inputs into three broad levels as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;
- Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument; and
- Level 3 inputs are unobservable inputs based on the Company's own assumptions used to measure assets and liabilities at fair value.

A financial asset's or a financial liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement. The warrant liability is measured at fair value using certain estimated factors such as volatility and probability which are classified within Level 3 of the valuation hierarchy. Significant unobservable inputs that are used in the fair value measurement of the Company's derivative warrant liabilities include volatility. Significant increases (decreases) in the volatility input would result in a significantly higher (lower) fair value measurement.

The following table summarizes the Company's warrant activity since December 31, 2014:

	Number of Warrants
<b>Warrants outstanding at December 31, 2014</b>	13,674,409
Warrants issued in conjunction with registered direct offering	3,000,000
Warrants exercised during 2015	(40,000)
Additional warrants due to anti-dilution provisions	369
<b>Warrants outstanding at December 31, 2015</b>	16,634,778
Warrants issued in conjunction with registered direct offering	2,500,000
Unexercisable warrants <sup>(1)</sup>	(2,000,000)
Warrants exercised during January 2016	(67,042)
Warrants expired during January 2016	(6,831,115)
June 2015 registered direct offering warrants cancelled	(3,000,000)
February 2016 registered direct offering warrants cancelled	(2,500,000)
Warrants issued in conjunction with July 2016 registered direct offering	7,043,211
Additional warrants due to anti-dilution provisions	2,089
Warrants expired during September 2016 <sup>(2)</sup>	(2,250,000)
Warrants issued in conjunction with October 2016 registered direct offering	4,250,000
<b>Warrants outstanding at December 31, 2016</b>	13,781,921
Warrants expired during February 2017	(172,730)
Warrants exercised during March 2017	(202,500)
<b>Warrants outstanding at March 31, 2017</b>	<u>13,406,691</u>
<b>Composition of outstanding warrants:</b>	
Warrants containing anti-dilution feature	94,721
Warrants without anti-dilution feature	13,311,970
	<u>13,406,691</u>

(1) Crede Tranche 2 Warrants and Tranche 3 Warrants are not exercisable (see Note 5 for additional information).

(2) Crede Tranche 1A Warrants and Tranche 1B Warrants expired unexercised on September 29, 2016.

#### NOTE 12. - COMMITMENTS AND CONTINGENCIES

**License Agreements** - Under its exclusive worldwide license agreement with North Carolina State University ("NCSU"), the Company is required to pay minimum annual royalty payments, which are credited against running royalties on sales of licensed products. The minimum annual royalty beginning in 2016 is \$225,000. The license agreement continues through the life of the last-to-expire patent, which is expected to be 2022. The license agreement also requires a milestone payment of \$150,000 upon FDA approval or clearance of a product that uses the NCSU licensed technology. The Company is also responsible for reimbursing NCSU for actual third-party patent costs incurred. These costs vary from year to year and the Company has certain rights to direct the activities that result in these costs. During the three months ended March 31, 2017 and 2016, the aggregate costs incurred related to capitalized patent costs and patent maintenance expense amounted to \$26,843 and \$3,980, respectively.

On December 8, 2015, the Company entered into an additional license agreement (the "License") with NCSU. Under the terms of the License, the Company paid NCSU a non-refundable, non-creditable lump sum license fee of \$150,000. Additionally, the License calls for the Company to pay NCSU a non-refundable, non-creditable minimum annual royalties beginning on December 31, 2018 in the amount of \$10,000. The minimum annual royalty payment increases to \$15,000 in 2019, \$25,000 in 2020 and 2021, and \$50,000 per year thereafter for the remaining term of the License. The Company is also responsible for reimbursing NCSU for actual third-party patent costs incurred. During the three months ended March 31, 2017 and 2016, the aggregate costs incurred related to capitalized patent costs and patent maintenance expense amounted to \$29,667 and \$6,075, respectively. This License continues through the life of the last-to-expire patent, expected to be in 2036.

On February 10, 2014, the Company entered into a sponsored research and development agreement (the "Agreement") with NCSU. Under the terms of the Agreement, the Company paid NCSU \$162,408 over the two-year term of the Agreement, which grants certain licensed rights to the Company. The Company had extended the Agreement through January 31, 2017 at an additional cost of \$85,681. The Company is currently negotiating an additional extension to this Agreement.

All payments made under the above referenced license agreement and the sponsored research and development agreement are initially recorded as a Prepaid expense on the Company's Consolidated Balance Sheets and subsequently expensed on a straight-line basis over the applicable period and included in Research and development costs on the Company's Consolidated Statements of Operations. The amounts expensed during the three months ended March 31, 2017 and 2016 were \$63,390 and \$114,797, respectively.

On August 22, 2014, the Company entered into a Commercial License Agreement with Precision PlantSciences, Inc. (the "Precision License"). The Precision License grants the Company a non-exclusive, but fully paid up right and license to use technology and materials owned by Precision PlantSciences, Inc. for a license fee of \$1,250,000. The Precision License continues through the life of the last-to-expire patent, which is expected to be in 2028.



On August 27, 2014, the Company entered into an additional exclusive License Agreement (the “License Agreement”) with NCSU. Under the License Agreement, the Company paid NCSU a non-refundable, non-creditable lump sum license fee of \$125,000, and the Company must pay to NCSU an additional non-refundable, non-creditable lump sum fee of \$75,000 upon issuance of a U.S. utility patent included in the patent rights. A patent was issued during the first quarter of 2017 under this clause, and accordingly, the \$75,000 was due and payable to NCSU. The \$75,000 cost was included in Research and development costs on the Company’s Consolidated Statements of Operations for the three months ended March 31, 2017. Additionally, the License Agreement calls for the Company to pay NCSU three non-refundable, non-creditable license maintenance fees in the amount of \$15,000 per annum in each of December 2015, 2016 and 2017. Beginning in calendar year 2018, the Company is obligated to pay to NCSU an annual minimum royalty fee of \$20,000 in 2018, \$30,000 in 2019, and \$50,000 per year thereafter for the remaining term of the License Agreement. The Company is also responsible for reimbursing NCSU for actual third-party patent costs incurred. During the three months ended March 31, 2017 and 2016, the aggregated costs incurred related to capitalized patent costs and patent maintenance expense amounted to \$19,069 and \$27,956, respectively. The License Agreement continues through the life of the last-to-expire patent, which is expected to be in 2034.

On September 15, 2014, the Company entered into a Sublicense Agreement with Anandia Laboratories, Inc. (the “Anandia Sublicense”). Under the terms of the Anandia Sublicense, the Company was granted an exclusive sublicense in the United States and a co-exclusive sublicense in the remainder of the world, excluding Canada, to the licensed intellectual property. The Anandia Sublicense calls for an up-front fee of \$75,000, an annual license fee of \$10,000, the payment of patent filing and maintenance costs, and a running royalty on future net sales. The Anandia Sublicense continues through the life of the last-to-expire patent, which is expected to be in 2035.

The Precision License, the License Agreement with NCSU and the Anandia Sublicense are included in Intangible assets, net in the Company’s Consolidated Balance Sheets and the applicable license fees will be amortized over the term of the agreements based on their last-to-expire patent date. Amortization amounted to \$24,506 in each of the three months ended March 31, 2017 and 2016, respectively, and was included in Amortization expense on the Company’s Consolidated Statements of Operations.

On September 28, 2015, the Company’s wholly-owned subsidiary, Botanical Genetics, entered into a Sponsored Research Agreement (the “Agreement”) with Anandia Laboratories Inc. (“Anandia”). Pursuant to the Agreement, Anandia is conducting research on behalf of the Company relating to the cannabis/hemp plant. The Agreement has an initial term of twelve (12) months from the date of the Agreement and can be extended at the sole option of the Company for two (2) additional periods of twelve (12) months each. The Company paid Anandia \$379,800 over the initial term of the Agreement. On March 13, 2017, the Company entered into Amendment No. 1 to the Agreement (the “Amendment”). The Amendment has a term of twelve (12) months and calls for the Company to pay Anandia a total of \$785,100 in equal monthly installments of \$65,425. During the three months ended March 31, 2017 and 2016, expenses related to the Agreement amounted to \$65,425 and \$95,000, respectively, and are included in Research and development costs on the Company’s Consolidated Statements of Operations. Under the terms of the Agreement, the Company will have co-exclusive worldwide rights with Anandia to all the intellectual property resulting from the sponsored research between the Company and Anandia. The party that commercializes such intellectual property in the future will pay royalties in varying amounts to the other party, with the amount of such royalties being dependent upon the type of products that are commercialized in the future. If either party sublicenses such intellectual property to a third-party, then the Company and Anandia will share equally in such sublicensing consideration.

The Company had an R&D agreement with the University of Virginia (“UVA”) relating to nicotine biosynthesis in tobacco plants. The extended term of the R&D agreement with UVA expired on October 31, 2016. In December 2016, the Company entered into a new sponsored research agreement with UVA and an exclusive license agreement with the University of Virginia Patent Foundation d/b/a University of Virginia Licensing & Ventures Group (“UVA LVG”) pursuant to which the Company will invest approximately \$1,000,000 over a three-year period with UVA to create unique industrial hemp plants with guaranteed levels of THC below the legal limits and optimize other desirable hemp plant characteristics to improve the plant’s suitability for growing in Virginia and other legacy tobacco regions. This work with UVA will also involve the development and study of medically important cannabinoids to be extracted by UVA from the Company’s hemp plants. UVA and the Company will conduct all activities in this scientific collaboration within the parameters of state and federal licenses and permits held by UVA for such work. The new agreements with UVA and UVA LVG grant the Company exclusive rights to commercialize all results of the collaboration in consideration of royalty payments by the Company to UVA LVG. During the three months ended March 31, 2017 and 2016, expenses related to the Agreements amounted to \$40,845 and \$64,629, respectively, and are included in Research and development costs on the Company’s Consolidated Statements of Operations.

**Lease Agreements** - The Company leases a manufacturing facility and warehouse located in North Carolina on a triple net lease basis. The lease commenced on January 14, 2014, and had an initial term of twelve (12) months. The lease contains four (4) additional extensions; with one lease extension for an additional one (1) year and with the other three (3) lease extensions each being for an additional two (2) years in duration, exercisable at the option of the Company. The Company is currently in the first two-year lease extension term that will expire on October 31, 2017. The lease expense for the three months ended March 31, 2017 and 2016 amounted to \$38,438 and \$36,131, respectively. The future minimum lease payments if the Company exercises each of the additional extensions are approximately as follows:

Year ended December 31, 2017 -	\$	118,000
Year ended December 31, 2018 -	\$	169,000
Year ended December 31, 2019 -	\$	169,000
Year ended December 31, 2020 -	\$	169,000
Year ended December 31, 2021 -	\$	141,000

The Company has a lease for its office space in Clarence, New York and extended the lease for an additional one-year renewal period expiring on August 31, 2017. Future minimum lease payments for the year ended December 31, 2017 are approximately \$19,000.

On November 1, 2015, the Company entered into a one-year lease for 25,000 square feet of warehouse space in North Carolina to store the Company's proprietary tobacco leaf. The lease calls for a monthly lease payment of \$3,750 and contains a three-year renewal option after the initial one-year term. Future minimum lease payments for the years ended December 31, 2017, 2018 and 2019 will be \$33,750, \$45,000 and \$37,500, respectively. In October of 2016, the Company exercised the three-year renewal option after the one-year initial term.

On May 1, 2016, the Company entered into a sublease for laboratory space in Buffalo, New York. The sublease calls for a monthly payment of \$1,471 through April 30, 2018. Additionally, on February 1, 2017, the Company entered into an amendment to the initial sublease calling for the sublease of additional lab space at a cost of \$1,219 per month, bringing the total monthly lease obligation to \$2,690. On April 26, 2017, the Company entered into an amendment to the sublease to extend the term of the sublease for an additional twelve (12) months, commencing on May 1, 2017 at a total cost of \$2,770 per month for the total lease obligation. Future minimum lease payments for the years ended December 31, 2017 and 2018 will be approximately \$25,000 and \$11,000, respectively.

On September 1, 2016, the Company entered into a sublease for warehouse space in North Carolina to store and operate tobacco leaf processing equipment. The sublease calls for a monthly payment of \$1,200, expires on August 31, 2017 and contains twelve-month renewal options as long as the sublessor continues to sublease the warehouse. Future minimum sublease payments for the year ended December 31, 2017 are \$10,800 and \$14,400 per year for each subsequent year the warehouse space is sublet by the Company.

**Litigation** - In accordance with applicable accounting guidance, the Company establishes an accrued liability for litigation and regulatory matters when those matters present loss contingencies that are both probable and estimable. In such cases, there may be an exposure to loss in excess of any amounts accrued. When a loss contingency is not both probable and estimable, the Company does not establish an accrued liability. As a litigation or regulatory matter develops, the Company, in conjunction with any outside counsel handling the matter, evaluates on an ongoing basis whether such matter presents a loss contingency that is probable and estimable. If, at the time of evaluation, the loss contingency related to a litigation or regulatory matter is not both probable and estimable, the matter will continue to be monitored for further developments that would make such loss contingency both probable and estimable. When a loss contingency related to a litigation or regulatory matter is deemed to be both probable and estimable, the Company will establish an accrued liability with respect to such loss contingency and record a corresponding amount of litigation-related expense. The Company will then continue to monitor the matter for further developments that could affect the amount of any such accrued liability.

On April 26, 2016, Crede CG III, LTD. ("Crede") filed a complaint against the Company in the United States District Court for the Southern District of New York (the "SDNY Court") entitled Crede CG III, LTD. v. 22nd Century Group, Inc. On May 19, 2016, Crede filed an Amended Complaint that included seven counts, alleging among other things, that the Company allegedly breached and/or interfered with certain agreements entered into with Crede, including the joint venture agreement relating to efforts to sell the Company's proprietary tobacco into China, the Tranche 1A warrant and the prior securities purchase agreement with Crede. The Amended Complaint seeks money damages, to rescind the securities purchase agreement, to obtain declaratory and injunctive relief to require the Company to issue to Crede 2,077,555 shares of the Company's common stock under the exchange provision of the Tranche 1A warrant, and entry of an injunction prohibiting the Company from selling tobacco into China without the joint venture's involvement. The Amended Complaint also seeks attorney's fees and such other relief as the Court may deem just and proper. We believe that the claims are frivolous, meritless and that the Company has substantial legal and factual defenses to the claims.

On May 19, 2016, Crede filed a motion for preliminary injunction, asking the SDNY Court to require the Company to issue 2,077,555 shares of its common stock to Crede under the exchange provision of the Tranche 1A warrant. After conducting an evidentiary hearing on this motion on June 14, 2016, the SDNY Court denied Crede's motion and held, among other things, that Crede did not prove the potential for irreparable harm or a likelihood of success on its claim for such 2,077,555 shares under the Tranche 1A warrant, and that there was a likelihood that Crede had violated the activity restrictions of the Tranche 1A warrant, which would bar Crede's claim for such shares from the Company.

Following such ruling, on July 11, 2016, the Company filed a motion to sever the Crede lawsuit into two separate cases, requesting all claims relating to the Tranche 1A warrant and the securities purchase agreement to stay in the SDNY Court and all claims relating to the China joint venture agreement to be transferred to the United States District Court for the Western District of New York (the "WDNY Court"), where the Company's headquarters are located. On January 20, 2017, the SDNY Court granted the Company's motion.

On February 14, 2017, Crede voluntarily dismissed its lawsuit against the Company in the WDNY Court.

On February 21, 2017, the SDNY Court granted the Company's request to file a motion for summary judgment for the claims remaining in the SDNY Court, with all discovery in the case being deferred until after the SDNY Court issues its decision on the summary judgment motion of the Company.

On March 20, 2017, the Company filed its motion for summary judgment for the claims remaining in the SDNY Court. The response by Crede to the Company's summary judgment motion was filed by Crede on May 1, 2017. The Company has the right to file by May 15, 2017, a response to Crede's filing. Thereafter, the SDNY Court will issue its decision on such summary judgment motion.

We believe that the claims are frivolous, meritless and that the Company has substantial legal and factual defenses to the claims. The Company has defended and intends to continue to defend against these claims vigorously.



**NOTE 13. - EARNINGS PER COMMON SHARE**

The following table sets forth the computation of basic and diluted earnings per common share for the three-month periods ended March 31, 2017 and 2016:

	March 31, 2017	March 31, 2016
Net loss attributed to common shareholders	<u>\$ (2,621,277)</u>	<u>\$ (3,252,452)</u>
Denominator for basic earnings per share-weighted average shares outstanding	90,699,874	74,031,148
Effect of dilutive securities:		
Warrants, restricted stock and options outstanding	<u>-</u>	<u>-</u>
Denominator for diluted earnings per common share-weighted average shares adjusted for dilutive securities	<u>90,699,874</u>	<u>74,031,148</u>
Loss per common share - basic and diluted	<u>\$ (0.03)</u>	<u>\$ (0.04)</u>

Securities outstanding that were excluded from the computation because they would have been anti-dilutive are as follows:

	March 31, 2017	March 31, 2016
Warrants	<u>13,406,691</u>	<u>10,236,621</u>
Options	<u>5,650,679</u>	<u>4,795,679</u>
	<u>19,057,370</u>	<u>15,032,300</u>

## NOTE 14. - EQUITY BASED COMPENSATION

On April 12, 2014, the stockholders of the Company approved the 22nd Century Group, Inc. 2014 Omnibus Incentive Plan (the "OIP") and on April 29, 2017, the shareholders approved an amendment to the OIP to increase the number of shares available for issuance by 5,000,000 shares. The OIP allows for the granting of equity and cash incentive awards to eligible individuals over the life of the OIP, including the issuance of up to 10,000,000 shares of the Company's common stock pursuant to awards under the OIP. The OIP has a term of ten years and is administered by the Compensation Committee of the Company's Board of Directors to determine the various types of incentive awards that may be granted to recipients under this plan and the number of shares of common stock to underlie each such award under the OIP. As of March 31, 2017, we had available 321,765 shares remaining for future awards under the OIP (excluding the additional 5,000,000 shares added in April 2017).

During the three months ended March 31, 2017, the Company did not issue any equity based compensation awards from the OIP. During the three months ended March 31, 2016, the Company issued stock option awards from the OIP for 1,634,037 shares to eligible individuals having vesting periods ranging from one to three years from the date of the award. All stock option awards were valued using the Black-Scholes option-pricing model on the date of the award.

For the three months ended March 31, 2017 and 2016, the Company recorded compensation expense related to restricted stock and stock option awards granted under the OIP of \$168,979 and \$259,994, respectively. During the three months ended March 31, 2017 and 2016, the Company issued stock to third-party service providers in the amount of 0 and 5,811 shares, respectively. The Company recorded equity based compensation expense related to the third-party providers for the three months ended March 31, 2017 and 2016 in the amount of \$0 and \$22,873, respectively.

As of March 31, 2017, unrecognized compensation expense related to non-vested restricted shares and stock options amounted to approximately \$1,214,000 which is expected to be recognized approximately as follows: \$278,000, \$357,000 and \$112,000 during 2017, 2018 and 2019, respectively. Approximately \$467,000 of the unrecognized compensation expense relates to previously issued stock options, with the vesting of such stock options being based on the achievement of a certain milestone, and the attainment of such milestone cannot be determined at this time.

The fair value of each option grant is estimated on the date of grant using the Black-Scholes option-pricing model. The following assumptions were used for the three months ended March 31, 2017 and 2016:

	2017	2016
Risk-free interest rate (weighted average)	n/a	1.52%
Expected dividend yield	n/a	0%
Expected stock price volatility	n/a	90%
Expected life of options (weighted average)	n/a	5.17 years

The Company estimated the expected volatility based on data used by a peer group of public companies. The expected term was estimated using the contract life of the option. The risk-free interest rate assumption was determined using yield of the equivalent U.S. Treasury bonds over the expected term. The Company has never paid any cash dividends and does not anticipate paying any cash dividends in the foreseeable future. Therefore, the Company assumed an expected dividend yield of zero.

A summary of all stock option activity since December 31, 2013 is as follows:

	<u>Number of Options</u>	<u>Weighted Average Exercise Price</u>	<u>Weighted Average Remaining Contractual Term</u>	<u>Aggregate Intrinsic Value</u>
Outstanding at December 31, 2013	660,000	\$ 0.74		
Granted in 2014	300,000	\$ 2.61		
Exercised in 2014	<u>(70,000)</u>	\$ 0.69		
Outstanding at December 31, 2014	890,000	\$ 1.38		
Reinstated in 2015	50,000	\$ 0.69		
Granted in 2015	<u>2,221,642</u>	\$ 1.00		
Outstanding at December 31, 2015	3,161,642	\$ 1.10		
Granted in 2016	<u>2,489,037</u>	\$ 0.97		
Outstanding at March 31, 2017 and December 31, 2016	<u><u>5,650,679</u></u>	\$ 1.04	7.2 years	\$ 1,312,708
Exercisable at March 31, 2017	<u><u>3,640,325</u></u>	\$ 1.08	4.9 years	\$ 825,627

There were no new stock options granted during the three months ended March 31, 2017. In the three months ended March 31, 2016, stock options were issued to purchase a total of 1,634,037 shares. The weighted average grant date fair value of options issued during the three months ended March 31, 2017 and 2016 was \$0 and \$0.65, respectively. The total fair value of options that vested during the three months ended March 31, 2017 and 2016 was \$562,715 and \$909,319, respectively.

## Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

### Forward-Looking Statements

*This Quarterly Report on Form 10-Q contains "forward-looking statements" that reflect, when made, the Company's expectations or beliefs concerning future events that involve risks and uncertainties. Forward-looking statements frequently are identified by the words "believe," "anticipate," "expect," "estimate," "intend," "project," "will be," "will continue," "will likely result," or other similar words and phrases. Similarly, statements herein that describe the Company's objectives, plans or goals also are forward-looking statements. Actual results could differ materially from those projected, implied or anticipated by the Company's forward-looking statements. Some of the factors that could cause actual results to differ include: our ability to continue to monetize the licensing of our technology and products; our ability to raise capital; our ability to achieve profitability; our ability to manage our growth effectively; our ability to have a Modified Risk Tobacco Product approved by the FDA; our ability to obtain FDA clearance for our Modified Risk Cigarettes; our ability to obtain FDA approval for our X-22 smoking cessation product; our ability to gain market acceptance for our products, our ability to prevail in litigation and our ability to maintain our rights to our intellectual property licenses. For a discussion of these and all other known risks and uncertainties that could cause actual results to differ from those contained in the forward-looking statements, see "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2016, which is available on the SEC's website at [www.sec.gov](http://www.sec.gov). All forward-looking statements are qualified in their entirety by this cautionary statement, and the Company undertakes no obligation to revise or update this Quarterly Report on Form 10-Q to reflect events or circumstances after the date hereof.*

*For purposes of this Management's Discussion and Analysis of Financial Condition and Results of Operations, references to the "Company," "we," "us" or "our" refer to the operations of 22nd Century Group, Inc. and its direct and indirect subsidiaries for the periods described herein.*

### Overview

We are a plant biotechnology company focused on (i) smoking cessation products and potentially reduced risk tobacco cigarettes produced from modifying the nicotine content in tobacco plants through genetic engineering and plant breeding, and (ii) research and development of unique cannabis/hemp plants through genetic engineering and plant breeding to alter levels of cannabinoids for new medicines and improved agricultural uses. We have an extensive intellectual property portfolio of issued patents and patent applications relating to the tobacco and cannabis plants. Our management team is focused on monetizing our intellectual property portfolio, obtaining regulatory approval to market both our reduced exposure cigarettes and our smoking cessation product in development, and developing and commercializing high value products derived from our unique cannabis/hemp plants. Additional information about our business and operations is contained in our Annual Report on Form 10-K for the year ended December 31, 2016.

### Strategic Objectives

Our strategic objectives include the following:

- Pursuit of authorization from the U.S. Food and Drug Administration ("FDA") and regulatory agencies in other countries to introduce our X-22 smoking cessation aid in development into commerce as a prescription-based smoking cessation medical product. As a part of these efforts, we are also working to establish a strategic joint venture to conduct a Phase III smoking cessation clinical trial for X-22;
- Pursuit of reduced exposure authorization from the FDA for our *BRAND A* Very Low Nicotine cigarettes in development that have 95% less nicotine than conventional tobacco cigarettes, and therefore drastically reduce smokers' exposure to nicotine. In response to the FDA's requests, and in conjunction with additional clarifying guidance, the Company intends to bifurcate its combined Modified Risk Tobacco Product application ("MRTPA") into a separate Premarket Tobacco Product application ("PMTA") and a separate MRTPA for *BRAND A* to enjoy the benefit of the FDA's shorter review timing for PMTAs as compared to MRTPAs;
- Pursuit of FDA reduced exposure authorization for our low tar-to-nicotine *BRAND B* modified risk cigarette in development;
- Research and development of industrial hemp plants with: (i) guaranteed levels of THC below the legal limits and (ii) improved suitability for optimized growing in various regions of North America, which the Company has already commenced in Virginia with the University of Virginia ("UVA"). This alliance with UVA will also involve the development and study of medically important cannabinoids to be extracted by UVA from the Company's unique hemp plants;
- Establishment of substantial multi-year sales contracts around the world for our proprietary high nicotine tobacco leaf and Very Low Nicotine tobacco leaf;
- Commercialization of our proprietary super-premium cigarette brands; and
- Expansion of our growing base of contract manufacturing business at our manufacturing facility in Mocksville, North Carolina.

**For the first quarter of 2017, our accomplishments and notable events include:**

In the first round of the Crede lawsuit, the Company prevailed when the United States District Court for the Southern District of New York (the “SDNY Court”) denied Crede’s request for a preliminary injunction to require the Company to issue shares of its common stock to Crede under the now void exchange feature of the Tranche 1-A warrant previously issued to Crede. The SDNY Court held that Crede did not prove the potential for irreparable harm or a likelihood of success on its claims, and that there was likelihood that Crede had violated the activity restrictions of the Tranche 1-A warrant, which should bar Crede’s claim for such shares from the Company.

The Company then filed motions requesting the SDNY Court to sever the Crede lawsuit into two separate cases and transfer the claims relating to the now terminated China joint venture to the United States District Court for the Western District of New York (the “WDNY Court”), where 22nd Century’s headquarters office is located. On January 20, 2017, the SDNY Court granted such motions by the Company to sever the Crede lawsuit into two separate cases. On February 14, 2017, Crede dismissed its lawsuit against the Company in the WDNY Court, determining not to pursue its claims against the Company related to the failed China joint venture; thus dismissing claims alleging damages in excess of \$500 million.

On February 21, 2017, the SDNY Court granted the Company’s request to file a motion for summary judgment for the claims remaining in the SDNY Court, with all discovery in the case being deferred until after the SDNY Court issues its decision on the summary judgment motion of the Company. On March 20, 2017, the Company filed its motion for summary judgment for the claims remaining in the SDNY Court. The response by Crede to the Company’s summary judgment motion was filed by Crede in the SDNY Court on May 1, 2017. The Company has the right to file May 15, 2017, a response to Crede’s filing. Thereafter, the SDNY Court will issue its decision on the summary judgment motion. The Company plans to continue its efforts to conduct business in China without Crede and Peizer.

On February 28, 2017, we announced that the Company received written feedback from the Center for Tobacco Products (CTP) of the U.S. Food and Drug Administration (FDA) on the Company’s “*BRAND A*” Modified Risk Tobacco Product (MRTP) application. Based on this feedback, 22nd Century will resubmit an even more expansive and robust MRTP application that will include additional scientific data and information from already completed clinical studies on the Company’s Very Low Nicotine (VLN) tobacco cigarettes. In response to the CTP’s clarifying guidance, the Company intends to divide its combined MRTP application into a separate Premarket Tobacco Product (PMT) application and a separate MRTP application for *BRAND A* to enjoy the benefit of the CTP/FDA’s shorter review period for PMT applications as compared to MRTP applications. We requested, and have subsequently been granted, a guidance meeting with the CTP/FDA to discuss the Company’s new MRTP application for *BRAND A*. This meeting will take place in June 2017.

On March 2, 2017, we announced that the Company was granted a guidance meeting with the Center for Drug Evaluation and Research (CDER) of the FDA to discuss “*X-22*,” the Company’s signature prescription-based smoking cessation aid in development. At the meeting, which will take place this June, the Company will seek agreement from CDER/FDA on an appropriate path for *X-22* to become a prescription-based cessation aid for smokers in the United States. Pending FDA authorization, 22nd Century intends to conduct a Phase III clinical trial in 2018. The Company also plans to seek “fast track” designation by the FDA for *X-22*.

On March 23, 2017, the Company announced that its research collaboration with strategic partner Anandia Laboratories, Inc. in Vancouver, Canada, resulted in new industrial hemp plants that have zero amounts of tetrahydrocannabinol (THC), the principal psychoactive constituent in cannabis. Cannabis (marijuana) that is commonly used for medical and recreational purposes contains high levels of THC and is defined as a Schedule 1 narcotic by the U.S. Drug Enforcement Agency (DEA). Accordingly, the presence of THC in industrial hemp is one of the biggest challenges facing the industrial hemp industry. Hemp crops containing above 0.3% THC are required to be destroyed – a risk born by the grower. The Company’s zero-THC hemp plants represent a conclusive solution to this problem. In order to build on the Company’s success with its THC-free hemp, the Company’s wholly-owned subsidiary, Botanical Genetics LLC, has approved an additional investment of approximately \$800,000 in further cannabis research with Anandia. The Company’s new investment in Anandia will be product-oriented and will focus on developing a range of next generation industrial hemp plants that contain optimized levels of important cannabinoids, such as CBD, CBC and CBG.

**Subsequent to the close of the first quarter of 2017, we also announced:**

On April 4, 2017, the Company announced that the *Nicotine and Tobacco Research* journal published a new study showing how the Company’s VLN cigarettes can be part of an effective tobacco control strategy for forward-looking countries like New Zealand. The study concluded that reducing the price of VLN cigarettes compared to regular cigarettes will reduce nicotine dependence and improve health and financial outcomes for smokers. Despite the difficulty of adjusting to a new cigarette, participants reported they would convert to smoking VLN cigarettes as the price of regular cigarettes increases. Accordingly, the study suggests that VLN cigarettes have a real potential to reduce tobacco consumption and increase quit rates. The study confirmed that imposing a modest price differential between conventional cigarettes and VLN cigarettes will result in smokers buying more non-addictive VLN cigarettes.

On May 1, 2017, the Company announced that the FDA granted the Company authorization to conduct a clinical trial studying the Company’s *BRAND B*, low tar-to-nicotine ratio cigarettes. This trial is designed to confirm that as smokers make the adjustment to a higher nicotine cigarette, they take in less smoke because the nicotine is more readily available. The Company has engaged a Contract Research Organization with extensive experience in combustible cigarette exposure studies to conduct the *BRAND B* clinical trial this summer.

### Three Months Ended March 31, 2017 Compared to Three Months Ended March 31, 2016

#### *Revenue - Sale of products*

In the three months ended March 31, 2017, we realized net sales revenue from the sale of products in the amount of \$2,231,517, a decrease of \$787,539, or 26.1%, from sales of \$3,019,056 for the three months ended March 31, 2016. The decrease in net sales revenue for the first quarter of 2017 was primarily the result of (i) decreased net sales revenue from our contract manufacturing business and (ii) a decrease in the net sales revenue from *SPECTRUM* research cigarettes in the amount of \$329,321, when compared to net sales revenue for the first quarter of 2016.

#### *Cost of goods sold - Products*

During the three months ended March 31, 2017, cost of goods sold were \$2,505,414, or 112.3%, of net sales revenue. Excise taxes and certain regulatory fees in the approximate amount of \$1,559,000 are included in the cost of goods sold for the three months ended March 31, 2017. We were not operating our factory at full production capacity during the first quarter of 2017. As a result, the cost of goods sold relating to product sales, which included the cost of raw material components, direct manufacturing costs and an overhead allocation, exceeded net sales revenue.

During the three months ended March 31, 2016, cost of goods sold were \$2,895,410, or 95.9% of net sales revenue. Cost of goods sold relating to the sales of *SPECTRUM* research cigarettes were \$55,019, or 16.7%, of related net sales revenue, and the remaining cost of goods sold was \$2,840,391, or 105.6%, of related net sales revenue. Excise taxes and certain regulatory fees in the approximate amount of \$1,735,000 are included in the cost of goods sold for the three months ended March 31, 2016. We were not operating the factory at full production capacity during the first quarter of 2016. As a result, the cost of goods sold relating to product sales (exclusive of *SPECTRUM* research cigarettes), which included the cost of raw material components, direct manufacturing costs and an overhead allocation, was in excess of net sales revenue.

#### *Research and development expense*

Research and development (“R&D”) expense was \$550,851 in the three months ended March 31, 2017, a decrease of \$46,540, or 7.8%, from \$597,391 in the three months ended March 31, 2016. This decrease was primarily a result of a decrease in R&D sponsored research costs in the approximate amount of \$71,000, a decrease in travel related expenses of approximately \$50,000, a decrease in equity based compensation of approximately \$31,000 and a decrease in modified risk tobacco products related expenses of approximately \$10,000, partially offset by an increase in license and royalty fees of approximately \$38,000, increases in payroll and related benefit costs of approximately \$20,000, an increase in product testing costs of approximately \$20,000, an increase in consulting fees of approximately \$20,000 and an increase in laboratory related expenses of approximately \$15,000.

#### *General and administrative expense*

General and administrative expense was \$1,620,479 in the three months ended March 31, 2017, a decrease of \$226,128, or 12.3%, from \$1,846,607 in the three months ended March 31, 2016. The decrease was mainly due to a decrease in investor relations expenses of approximately \$154,000, a decrease in related equity based compensation of approximately \$81,000, a net decrease in legal and accounting expenses of approximately \$23,000, a decrease in costs related to the issuance of press releases of approximately \$19,000, a decrease in consulting expenses of approximately \$29,000, a decrease in SEC related costs of approximately \$8,000 and a net decrease in other general and administrative expenses of approximately \$29,000, partially offset by an increase in payroll and related benefits of approximately \$75,000 and an increase in annual meeting costs of approximately \$42,000.

#### *Sales and marketing expense*

During the three months ended March 31, 2017, we incurred sales and marketing expenses of \$295,713, a decrease of \$406,901, or 57.9%, from \$702,614 in the three months ended March 31, 2016. The decrease in sales and marketing expenses are primarily the result of a reduction in advertising and promotion costs, primarily related to our proprietary cigarette brand, *RED SUN*, in the approximate amount of \$417,000 and a decrease in travel related expenses of approximately \$16,000, partially offset by an increase in payroll and related benefits in the approximate amount of \$16,000 and an increase in equity based compensation of approximately \$15,000.

#### *Depreciation expense*

Depreciation expense for the three months ended March 31, 2017 amounted to \$88,121, an increase of \$7,524, or 9.3%, from \$80,597 for the three months ended March 31, 2016. The increase is due to additions to machinery and equipment over the last year in the approximate amount of \$217,000, primarily consisting of equipment additions in our NASCO operations in North Carolina and our laboratory in Buffalo, New York.

### *Amortization expense*

Amortization expense for the three months ended March 31, 2017 amounted to \$140,888, an increase of \$16,047, or 12.9%, from \$124,841 for the three months ended March 31, 2016. The amortization expense relates to amortization taken on capitalized patent costs and license fees. The increase is primarily due to amortization on additional patent costs incurred during the three months ended March 31, 2017 and the year ended December 31, 2016 in the amounts of \$168,074 and \$541,882, respectively.

### *Warrant liability (loss) gain - net*

The warrant liability loss of \$5,344 for the first quarter of 2017 was due to an increase in the estimated fair value of the warrants during the period. The increase in the estimated fair value of the warrants was primarily attributable to an increase in our underlying stock price from \$1.09 per share at December 31, 2016, as compared to \$1.18 per share at March 31, 2017.

The warrant liability gain of \$71,065 for the first quarter of 2016 was due to the decrease in the estimated fair value of the warrants during the period. The decrease in the estimated fair value of the warrants was primarily attributable to a decrease in our underlying stock price from \$1.40 per share at December 31, 2015, as compared to \$0.78 per share at March 31, 2016, and as a result of certain warrants aging closer to their expiration dates with the passage of time.

### *Gain (loss) on equity investment*

On February 17, 2017, a dilutive event reduced our ownership in Anandia to 19.4%, an ownership percentage below the 20% ownership threshold for the use of the equity method of accounting. Accordingly, we discontinued applying the equity method of accounting for our equity investment in Anandia, effective on the date of the dilutive event. We recorded a gain on equity investment of \$16,872 for three months ended March 31, 2017 (the equity gain for the three months ended March 31, 2017, reflects our proportionate gain through February 16, 2017). In addition, and as a result of the February 17, 2017 dilutive event, we recorded a gain in accordance with the derecognition provisions of Accounting Standards Codification 323 ("ASC 323") in the amount of \$336,834. We recorded a total gain on the equity investment in the amount of \$346,180 for the three months ended March 31, 2017 by aggregating the Company's share of Anandia's gain (loss), the gain recorded under ASC 323 and the amortization of the intangible asset represented by the difference between our equity investment in Anandia and our portion of the net assets of Anandia in the amount of \$7,526.

The loss on equity investment of \$87,232 for the three months ended March 31, 2016, consists of (i) our 25% share of Anandia's net loss for the three-month period ending March 31, 2016 in the amount of \$72,820, plus (ii) amortization of the intangible asset represented by the difference between our equity investment in Anandia and our portion of the net assets of Anandia in the amount of \$14,412.

### *Interest income*

Interest income for the three months ended March 31, 2017 was \$15,755, an increase of \$13,262, or 532.0%, from interest income of \$2,493 for the three months ended March 31, 2016. The interest income earned in the three months ended March 31, 2017 and 2016 was generated from excess cash invested in a money market account, with the average cash balance being greater during the first quarter of 2017 as compared to the first quarter of 2016.

### *Interest expense*

Interest expense decreased by \$2,455, or 23.7%, in the three months ended March 31, 2017 to \$7,919 from \$10,374 in the three months ended March 31, 2016 and is derived from the interest component of severance payments made on accrued severance that had previously been recorded on a discounted basis using our incremental borrowing rate and the accretion of interest on the NRC note payable.

### *Net loss*

We had a net loss in the three months ended March 31, 2017 of \$2,621,277 as compared to a net loss of \$3,252,452 in the three months ended March 31, 2016. The decrease in the net loss of \$631,175, or 19.4%, was primarily the result of a decrease in operating expenses of approximately \$656,000 and an increase in other income (expense) in the approximate amount of \$373,000, partially offset by a decrease in gross (loss) profit of approximately \$398,000.

## **Liquidity and Capital Resources**

### *Working Capital*

As of March 31, 2017, we had positive working capital of approximately \$10.8 million compared to positive working capital of approximately \$13.5 million at December 31, 2016, a decrease of approximately \$2.7 million, the amount of cash used in our operating activities during the first quarter of 2017.

We must successfully execute our business plan to increase revenue in order to achieve positive cash flows from operations to sustain adequate liquidity without requiring additional funds from capital raises and other external sources to meet minimum operating requirements. On December 30, 2016, we filed a Form S-3, universal shelf registration statement, with the U.S. Securities and Exchange Commission (“SEC”) that was declared effective by the SEC on January 17, 2017. The universal shelf registration statement will allow, but not compel, the Company to raise up to \$100 million of capital over a three-year period ending on January 17, 2020 through a wide array of securities at times and in amounts to be determined by the Company. We will likely need to raise additional capital to fund (i) our operations and (ii) FDA approval of our products. There can be no assurance that additional capital will be available on acceptable terms or at all.

#### *Cash demands on operations*

During the first quarter of 2017, we experienced an operating loss of approximately \$2,970,000 and used cash in operations of approximately \$2,695,000. Excluding discretionary expenses related to R&D, patent and trademark costs, contract growing of our proprietary tobacco, and certain nonrecurring expenses relating to factory capital expenses, investor relations, and marketing costs, our monthly cash expenditures are approximately \$800,000. Including cash on hand at March 31, 2017 of \$10,729,022 and revenues from ongoing product sales, but not including potential milestone payments of up to \$7,000,000 from British American Tobacco (“BAT”), we believe resulting cash balances will be adequate to sustain operations and meet all current obligations as they come due through at least April of 2018.

#### *Net Cash used in operating activities*

In the first three months of 2017, \$2,695,359 of cash was used in operating activities as compared to \$2,799,171 of cash used in operating activities in the first three months of 2016; a decrease of \$103,812. The decrease in use of cash in operations was primarily due to the decrease in the cash portion of the net loss in the amount of \$171,400 and an increase in the use of cash used for working capital components related to operations in the amount of \$67,588, for the first three months of 2017 as compared to the first three months of 2016.

#### *Net Cash used in investing activities*

In the first three months of 2017, net cash used in investing activities was \$43,807, as compared to \$1,520 of cash used in investing activities during the first three months of 2016, primarily as a result of an increase in cash used for the acquisition of patents and trademarks and machinery and equipment.

#### *Net Cash provided by financing activities*

During the first three months of 2017, no cash was provided by financing activities, as compared to \$5,091,987 of cash provided by financing activities during the first three months of 2016, primarily as a result of net cash proceeds received from a February 2016 registered direct offering.

### **Critical Accounting Policies and Estimates**

Accounting principles generally accepted in the United States of America, or GAAP, require estimates and assumptions to be made that affect the reported amounts in our consolidated financial statements and accompanying notes. Some of these estimates require difficult, subjective and/or complex judgments about matters that are inherently uncertain and, as a result, actual results could differ from those estimates. Due to the estimation processes involved, the following summarized accounting policies and their application are considered to be critical to understanding our business operations, financial condition and results of operations.

#### *Inventory*

Inventories are valued at the lower of cost or net realizable value. Cost is determined using an average cost method for tobacco leaf inventory and raw materials inventory and standard cost is primarily used for finished goods inventory. Inventories are evaluated to determine whether any amounts are not recoverable based on slow moving or obsolete condition and are written off or reserved as appropriate.

#### *Revenue Recognition*

We recognize revenue at the point the product is shipped to a customer and title has transferred. Revenue from the sale of our products is recognized net of cash discounts, sales returns and allowances. Federal cigarette and filtered cigar excise taxes are included in net sales, except on sales of *SPECTRUM* research cigarettes, exported cigarettes, exported filtered cigars and in-bond sales of filtered cigars to other federally licensed tobacco products manufacturers as to which such taxes do not apply. We recognize revenue from the sale of our *MAGIC* brand cigarettes in Europe when the cigarettes are sold by the European distributors to the retailers and are sold net of cash discounts, sales returns and allowances and all applicable taxes.

We were chosen to be a subcontractor for a 5-year government contract between RTI International (“RTI”) and the National Institute on Drug Abuse (“NIDA”) to supply NIDA with research cigarettes. The contract was renewed in 2015 for an additional 5 years. These government research cigarettes are distributed under the Company’s mark *SPECTRUM*. Revenue generated from the sales of *SPECTRUM* research cigarettes amounted to \$0 and \$329,321 for the three months ended March 31, 2017 and 2016, respectively.

#### *Impairment of Long-Lived Assets*

We review the carrying value of amortizing long-lived assets whenever events or changes in circumstances indicate that the historical cost-carrying value of an asset may no longer be appropriate. We also assess recoverability of the asset by estimating the future undiscounted net cash flows expected to result from the asset, including eventual disposition. If the estimated future undiscounted net cash flows are less than the carrying value of the asset, an impairment loss is recorded equal to the difference between the asset’s carrying value and its fair value. Non-amortizing intangibles (e.g., patents and trademarks) are reviewed annually for impairment. We have not recognized any impairment losses during the three months ended March 31, 2017 or 2016.

#### *Amortization Estimates of Intangible Assets*

We generally determine amortization based on the estimated useful lives of the assets and record amortization expense on a straight-line method over such lives. The remaining life of the patent is generally used to determine the estimated useful life of the related patent costs.

#### *Valuation of our Equity Securities*

We use a fair-value based method to determine compensation for all arrangements under which Company employees and others receive shares, options or warrants to purchase shares of our common stock. Stock based compensation expense is recorded over the requisite service period based on estimates of probability and time of achieving milestones and vesting. For accounting purposes, the shares will be considered issued and outstanding upon vesting.

#### *Income taxes*

We recognize deferred tax assets and liabilities for any basis differences in our assets and liabilities between tax and GAAP reporting, and for operating loss and credit carry-forwards. In light of the Company’s history of cumulative net operating losses and the uncertainty of their future utilization, the Company has established a valuation allowance to fully offset its net deferred tax assets as of March 31, 2017 and December 31, 2016.

#### *Derivative Financial Instruments*

We do not use derivative instruments to hedge exposures to cash flow, market or foreign currency risks. We evaluate all of our financial instruments to determine if such instruments are derivatives or contain features that qualify as embedded derivatives. For derivative financial instruments that are accounted for as liabilities, the derivative instrument is initially recorded at its fair market value and then is revalued at each reporting date, with changes in fair value reported in the Consolidated Statement of Operations. The methodology for valuing our outstanding warrants classified as derivative instruments utilizes a lattice model approach which includes probability weighted estimates of future events including volatility of our common stock. A financial asset or liability’s classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement. The warrant liability is measured at fair value using certain estimated factors such as volatility and probability which are classified within Level 3 of the valuation hierarchy. Significant unobservable inputs are used in the fair value measurement of the Company’s derivative warrant liabilities include volatility. Significant increases (decreases) in the volatility input would result in a significantly higher (lower) fair value measurement. A 10% increase or decrease in the volatility factor used as of March 31, 2017 would have the impact of increasing or decreasing the liability by approximately \$3,600.

The classification of derivative instruments, including whether such instruments should be recorded as liabilities or equity, is evaluated at the end of each reporting period. Derivative instrument liabilities are classified in the balance sheet as current or non-current based on if the net-cash settlement of the derivative instrument could be required within twelve months of the balance sheet date.

#### **Inflation**

Inflation did not have a material effect on our operating results for the three months ended March 31, 2017 and 2016.

## Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements as defined by Item 303(a)(4) of Regulation S-K.

## Item 3. Quantitative and Qualitative Disclosures About Market Risk

There have been no material changes to the information set forth in our Annual Report on Form 10-K for the year ended December 31, 2016.

## Item 4. Controls and Procedures

### (a) Evaluation of Disclosure Controls and Procedures:

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in its Securities Exchange Act of 1934 (“Exchange Act”) reports are recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to the Company’s management, including the Company’s chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Our chief executive officer and chief financial officer, after evaluating the effectiveness of the Company’s “disclosure controls and procedures” (as defined in the Exchange Act Rules 13a-15(e) or 15d-15(e)) as of the end of the period covered by this quarterly report, have concluded that our disclosure controls and procedures were effective as of the end of the period covered by this Form 10-Q to ensure information required to be disclosed is recorded, processed, summarized and reported within the time period specified by SEC rules, based on their evaluation of these controls and procedures as required by paragraph (b) of Exchange Act Rules 13a-15 or 15d-15.

### (b) Changes in Internal Control over Financial Reporting:

There were no changes in the Company’s internal controls over financial reporting during the first quarter of 2017 that have materially affected, or are reasonably likely to materially affect, the Company’s internal controls over financial reporting.

## Part II. OTHER INFORMATION

### Item 1. Legal Proceedings

We are subject to various claims and legal proceedings arising in the ordinary course of business. As of the date hereof, we are unable to currently assess whether the final resolution of any of such claims or legal proceedings may have a material adverse effect on us.

On April 26, 2016, Crede CG III, LTD. (“Crede”) filed a complaint against the Company in the United States District Court for the Southern District of New York (the “SDNY Court”) entitled Crede CG III, LTD. v. 22nd Century Group, Inc. On May 19, 2016, Crede filed an Amended Complaint that included seven counts, alleging among other things, that the Company allegedly breached and/or interfered with certain agreements entered into with Crede, including the joint venture agreement relating to efforts to sell the Company’s proprietary tobacco into China, the Tranche 1A warrant and the prior securities purchase agreement with Crede. The Amended Complaint seeks money damages, to rescind the securities purchase agreement, to obtain declaratory and injunctive relief to require the Company to issue to Crede 2,077,555 shares of the Company’s common stock under the exchange provision of the Tranche 1A warrant, and entry of an injunction prohibiting the Company from selling tobacco into China without the joint venture’s involvement. The Amended Complaint also seeks attorney’s fees and such other relief as the Court may deem just and proper. We believe that the claims are frivolous, meritless and that the Company has substantial legal and factual defenses to the claims.

On May 19, 2016, Crede filed a motion for preliminary injunction, asking the SDNY Court to require the Company to issue 2,077,555 shares of its common stock to Crede under the exchange provision of the Tranche 1A warrant. After conducting an evidentiary hearing on this motion on June 14, 2016, the SDNY Court denied Crede’s motion and held, among other things, that Crede did not prove the potential for irreparable harm or a likelihood of success on its claim for such 2,077,555 shares under the Tranche 1A warrant, and that there was a likelihood that Crede had violated the activity restrictions of the Tranche 1A warrant, which would bar Crede’s claim for such shares from the Company.

Following such ruling, on July 11, 2016, the Company filed a motion to sever the Crede lawsuit into two separate cases, requesting all claims relating to the Tranche 1A warrant and the securities purchase agreement to stay in the SDNY Court and all claims relating to the China joint venture agreement to be transferred to the United States District Court for the Western District of New York (the “WDNY Court”), where the Company’s headquarters are located. On January 20, 2017, the SDNY Court granted the Company’s motion.

On February 14, 2017, Crede voluntarily dismissed its lawsuit against the Company in the WDNY Court.

On February 21, 2017, the SDNY Court granted the Company’s request to file a motion for summary judgment for the claims remaining in the SDNY Court, with all discovery in the case being deferred until after the SDNY Court issues its decision on the summary judgment motion of the Company.

On March 20, 2017, the Company filed its motion for summary judgment for the claims remaining in the SDNY Court. The response by Crede to the Company’s summary judgment motion was filed by Crede on May 1, 2017. The Company has the right to file by May 15, 2017, a response to Crede’s filing. Thereafter, the SDNY Court will issue its decision on such summary judgment motion.

We believe that the claims are frivolous, meritless and that the Company has substantial legal and factual defenses to the claims. The Company has defended and intends to continue to defend against these claims vigorously.

**Item 1A. Risk Factors**

Our risk factors have not changed materially from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016, as filed with the SEC on March 8, 2017.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.**

None

**Item 3. Default Upon Senior Securities.**

None

**Item 4. Mine Safety Disclosures**

None

**Item 5. Other Information**

None

**Item 6. Exhibits**

Exhibit 31.1 Section 302 Certification - Chief Executive Officer

Exhibit 31.2 Section 302 Certification - Chief Financial Officer

Exhibit 32.1 Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002.

101 Interactive data files formatted in XBRL (eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Cash Flows, and (iv) the Notes to the Consolidated Financial Statements.

101.INS XBRL Instance Document

101.SCH XBRL Taxonomy Extension Schema Document

101.CAL XBRL Taxonomy Extension Calculation Linkbase Document

101.DEF XBRL Taxonomy Extension Definition Linkbase Document

101.LAB XBRL Taxonomy Extension Label Linkbase Document

101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized:

22nd CENTURY GROUP, INC.

Date: May 8, 2017

/s/ Henry Sicignano III

Henry Sicignano III  
President, Chief Executive Officer and  
Director  
(Principal Executive Officer)

Date: May 8, 2017

/s/ John T. Brodfuehrer

John T. Brodfuehrer  
Chief Financial Officer  
(Principal Accounting and Financial  
Officer)

## CERTIFICATIONS

I, Henry Sicignano III, Chief Executive Officer of 22nd CENTURY GROUP, INC., certify that:

1. I have reviewed this quarterly report on Form 10-Q of 22nd CENTURY GROUP, INC.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2017

/s/ Henry Sicignano III

Henry Sicignano III

President, Chief Executive Officer and Director  
(Principal Executive Officer)

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## CERTIFICATIONS

I, John T. Brodfuehrer, Chief Financial Officer of 22nd CENTURY GROUP, INC., certify that:

1. I have reviewed this quarterly report on Form 10-Q of 22nd CENTURY GROUP, INC.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2017

/s/ John T. Brodfuehrer  
John T. Brodfuehrer  
Chief Financial Officer  
(Principal Financial Officer)

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**Written Statement of the Chief Executive Officer and Chief Financial Officer  
Pursuant to 18 U.S.C. §1350**

Solely for the purposes of complying with 18 U.S.C. §1350, I, the undersigned Chief Executive Officer of 22nd CENTURY GROUP, INC. (the "Company"), and I, the undersigned Chief Financial Officer of the Company, hereby certify, to the best of my knowledge, that the quarterly report on Form 10-Q of the Company for the quarter ended March 31, 2017 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

This certification is being furnished solely to accompany this Report pursuant to 18 U.S.C. 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934 and is not to be incorporated by reference into any filing of the registrant, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Date: May 8, 2017

/s/ Henry Sicignano III  
Henry Sicignano III  
President and Chief Executive Officer

Date: May 8, 2017

/s/ John T. Brodfuehrer  
John T. Brodfuehrer  
Chief Financial Officer

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