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22nd Century's "Non- or Minimally-Addictive" Cigarettes Gaining Support of Leading Tobacco Scientists around the World

Many Scientists at the 23rd Annual Meeting of the *Society for Research on Nicotine & Tobacco* Support Aggressive Nicotine Reduction Policies

CLARENCE, N.Y.--(BUSINESS WIRE)-- 22nd Century Group, Inc. (NYSE MKT:[XXII](#)), a plant biotechnology company that is focused on tobacco harm reduction and cannabis research, announced today that leading scientists published more than 12 new studies involving 22nd Century's Very Low Nicotine (VLN) cigarettes at the 23rd Annual Meeting of the *Society for Research on Nicotine & Tobacco* (SRNT) held earlier this month in Florence, Italy. The event was attended by leading tobacco scientists and public health officials from around the world, including acclaimed university scientists, representatives from the FDA and other regulatory agencies, and tobacco industry executives.

Increasingly, scientists are seeking to guide public policy makers in the formation of laws that would mandate the adoption of *non-addictive* levels of nicotine in cigarettes. In analyzing the available science surrounding 22nd Century's VLN tobacco, the World Health Organization (WHO) Study Group on Tobacco Product Regulation recommends limiting the nicotine in cigarettes to just 0.4mg/g "...a nicotine content that is not sufficient to lead to the development and/or maintenance of addiction." 22nd Century is the only company in the world capable of producing combustible tobacco cigarettes at this very low level of nicotine – without any artificial extraction or chemical processes.

Scientists contributing at the SRNT conference substantially expanded the understanding of 22nd Century's VLN tobacco and its importance to smokers. This [link](#) from the SRNT.org website is to the summaries of the initial results of all the scientific studies that were presented at the SRNT Annual Meeting, including the studies on the Company's reduced nicotine tobacco (see abstract numbers: SYM9, SYM10A, SYM10B, SYM10C, SYM10D, SYM32, SYM32A, SYM32B, SYM32C, SYN32D, SYM28B, POS2-70, POS2-160, POS2-168).

Many of the presentations provided evidence in support of a nicotine reduction policy in the United States and elsewhere. Echoing the thinking of many of the scientists and regulators at the conference, a U.S. team led by Dr. Neal Benowitz at The University of California San Francisco (SYM10B) boldly concluded that **"Our data support the feasibility and safety of a nation-wide policy to reduce the nicotine content of cigarettes to non- or minimally-addictive levels."**

In researching the attitudes of current smokers, a team led by Dr. Rachel Denlinger-Apte at Brown University (SYM32D) presented data that "provide further evidence that smokers, especially those interested in quitting, would support a NIC reduction policy."

A multi-university team led by Dr. Tracey Smith at The University of Pittsburgh (POS2-70) expanded on this nicotine reduction policy theme and concluded that: "smokers who score higher on measures of nicotine dependence are likely to experience the greatest reductions in nicotine dependence as a result of a reduction in the nicotine content of cigarettes."

Several other studies using Very Low Nicotine cigarettes also provided data in favor of a nicotine reduction policy, including a study headed by Dr. Joseph Koopmeiners at The University of Minnesota (SYM10C) that concluded that if smokers were compelled to smoke very low nicotine cigarettes, after just six weeks the average smoker "would smoke 5.13 fewer cigarettes per day."

"As evidenced by this newest slate of impressive scientific studies that were presented at the SRNT Annual Meeting in Florence, 22nd Century's proprietary VLN cigarettes are a highly effective tool in reducing smokers' exposure to nicotine," explained Henry Sicignano III, President and Chief Executive Officer of 22nd Century Group. "Called the '*ultimate harm reduction strategy*' by former FDA Commissioner Dr. David Kessler, cigarettes

with non- or minimally-addictive levels of nicotine are a tremendously important product... whose time has come.”

About 22nd Century Group, Inc.

22nd Century is a plant biotechnology company focused on technology which allows it to increase or decrease the level of nicotine in tobacco plants and the level of cannabinoids in cannabis plants through genetic engineering and plant breeding. The Company’s primary mission is to reduce the harm caused by smoking. 22nd Century currently owns or exclusively controls more than 200 issued patents and more than 50 pending patent applications around the world. Visit www.xxiiicentury.com for more information.

Cautionary Note Regarding Forward-Looking Statements: This press release contains forward-looking information, including all statements that are not statements of historical fact regarding the intent, belief or current expectations of 22nd Century Group, Inc., its directors or its officers with respect to the contents of this press release, including but not limited to our future revenue expectations. The words “may,” “would,” “will,” “expect,” “estimate,” “anticipate,” “believe,” “intend” and similar expressions and variations thereof are intended to identify forward-looking statements. We cannot guarantee future results, levels of activity or performance. You should not place undue reliance on these forward-looking statements, which speak only as of the date that they were made. These cautionary statements should be considered with any written or oral forward-looking statements that we may issue in the future. Except as required by applicable law, including the securities laws of the United States, we do not intend to update any of the forward-looking statements to conform these statements to reflect actual results, later events or circumstances, or to reflect the occurrence of unanticipated events. You should carefully review and consider the various disclosures made by us in our annual report on Form 10-K for the fiscal year ended December 31, 2016, filed on March 8, 2017, including the section entitled “Risk Factors,” and our other reports filed with the U.S Securities and Exchange Commission which attempt to advise interested parties of the risks and factors that may affect our business, financial condition, results of operation and cash flows. If one or more of these risks or uncertainties materialize, or if the underlying assumptions prove incorrect, our actual results may vary materially from those expected or projected.

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