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Phase III Clinical Trial with 22nd Century's Very Low Nicotine Cigarettes Names Ten Major Research Institutions as Study Locations

CLARENCE, N.Y.--(BUSINESS WIRE)-- 22nd Century Group, Inc. (NYSE MKT: [XXII](#)), a plant biotechnology company that is a leader in tobacco harm reduction, announced today that an update has been issued on the pivotal [Phase III study](#) entitled "Strategies for Reducing Nicotine Content in Cigarettes." Funded by the National Institutes of Health (NIH) and led by Eric C. Donny, Ph.D. of the University of Pittsburgh, this highly significant clinical trial will determine whether the harm caused by smoking is most effectively addressed by either 22nd Century's proprietary Very Low Nicotine Content tobacco cigarettes (95% less nicotine than conventional cigarettes), or 22nd Century's proprietary SPECTRUM tobacco cigarettes that contain progressively lower nicotine content. The clinical trial update names 10 nationally recognized research centers, including the Mayo Clinic, the MD Anderson Cancer Center, Duke University, Johns Hopkins University, the Moffitt Cancer Center, and the University of California San Francisco. With an estimated enrollment of 1,250 patients, the on-going study is expected to be completed in March 2017. The Company expects the results of this study to accelerate the governmental approval process of the Company's "X-22" smoking cessation product so that millions of lives and billions in healthcare costs can be saved each year.

"By evaluating 22nd Century's Very Low Nicotine cigarettes against 22nd Century's gradually reduced nicotine cigarettes, the Donny trial recognizes that reducing smokers' exposure to nicotine is a vital public health goal. Contrary to false and misleading information recently disseminated by short-sellers of 22nd Century stock, we are confident that our patented technologies will produce multi-billion dollar products in both the tobacco and the pharmaceutical industries," explained Henry Sicignano, III, President and CEO of 22nd Century Group. "Our Company is recognized by the National Institute of Health, the World Health Organization, and public health advocates around the world as absolutely key to reducing smokers' exposure to nicotine; independent clinical studies continue to show that our Very Low Nicotine cigarettes have the potential to greatly impact public health."

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.xxiicentury.com and www.heraclespharma.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, 2015, filed on February 18, 2016, 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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