

## Amyris Discovers Major Breakthrough in CBD Delivery

EMERYVILLE, Calif., March 6, 2020 /[PRNewswire](#)/ -- Amyris, Inc. (Nasdaq: AMRS), a global science and technology leader of pure, sustainable ingredients for the Health & Wellness, Clean Beauty and Flavors & Fragrances markets, today presented clinical data showcasing the superiority of its natural sugarcane squalane (marketed and sold as Neossance Squalane) as a carrier of CBD versus other oils. In order for CBD to be effective in topical applications, skin penetration is a key factor. Amyris sugarcane squalane improves the efficacy of CBD by 10-40X as the carrier oil chassis for the skin care market based on new data.

The [Cosmos Technical Center](#)\* recently conducted a [study](#) to explore the skin penetration rate of CBD in Neossance Squalane versus jojoba oil, sunflower oil, MCT (medium-chain triglycerides), and hemp seed oil into human skin. The study measured the amount of CBD penetrated in a human epidermal skin model and found that Neossance Squalane delivered between 10-40 times more CBD to the epidermis than other carrier oils. The results also illustrated that CBD when used with Neossance Squalane penetrated skin faster, an important aspect for quicker and impactful skin relief.

The other oils tend to rest on the surface of the skin along with some of the CBD being carried, or clog skin pores without delivering a sufficient quantity of CBD as desired to the epidermis of the skin where it matters. Brands should prioritize effective delivery of CBD to where receptors are in the skin and can now use Neossance Squalane as a chassis to deliver the best penetration performance to significantly improve the efficacy of CBD for topical applications. Neossance Squalane can also improve consumer experience as it provides to the skin benefits like moisturizing, brightening, and reducing the appearance of fine lines and wrinkles. This is a transformational opportunity for the cannabinoid industry to deliver high performance products and lower the risk of poor quality and/or non-compliant applications for consumers.

In addition to significantly improving the delivery of CBD, according to a review of top claims of CBD launched in 2019 from Mintel's GNPD (Global New Products Database), Neossance Squalane helps brands meet 13 top claims consumers look for in CBD products such as moisturization, ethical sourcing, anti-aging, natural, and sustainable.

Amyris is developing CBD through fermentation technology and believes it will be the first company to provide highly pure and efficacious CBD from this technology at commercial scale. The ability to provide both high quality CBD and the best performing carrier chassis will provide consumers with greater choice and product effectiveness. The company has filed a patent application covering the use of squalane to deliver cannabinoids, including CBD, to the skin to protect its distinctive advantage.

"We are very pleased with the breakthrough results from our clinical studies," said Caroline Hadfield, President of Aprinova. "This is a great example of how clean ingredients made from our science platform and naturally sourced from sugarcane combined with our scientific approach to formulations can lead to disruption in key markets. We are very excited to deliver what consumers are seeking and support the brands that are committed to delivering high efficacy and sustainability at an accessible value for consumers."

### **About Amyris**

Amyris, Inc. (Nasdaq:AMRS) is a science and technology leader in the research, development and production of sustainable ingredients for the Health & Wellness, Clean Beauty and Flavors & Fragrances markets. Amyris applies its exclusive, advanced technology, including state-of-the-art machine learning, robotics and artificial intelligence to engineer yeast, that when combined with sugarcane syrup through fermentation, is converted to highly pure molecules for specialty ingredients. Amyris manufactures sustainably-sourced ingredients at industrial scale for B2B partners and further distribution to more than 3,000 of the world's top brands, reaching more than 200 million consumers. Amyris stands by its No

Compromise® promise that everything it makes is sustainably sourced, performs better, costs less, has higher purity and is better for people and the planet than products made less sustainably. Amyris is proud to own three consumer brands - all built around clean ingredients with No Compromise®. They are Biossance™ clean beauty skincare, Pipette™ clean baby skincare and Purecane™, a zero-calorie sweetener that is naturally derived from sugarcane. More information about the company is available at [www.amyris.com](http://www.amyris.com)

### **Forward-Looking Statements**

*This release contains forward-looking statements, and any statements other than statements of historical fact could be deemed to be forward-looking statements. These forward-looking statements include, among other things, statements regarding future events, such as the expected patent grant covering the use of squalane to deliver cannabinoids, the production of high-quality CBD products using such technology at commercial scale, and the anticipated commercialization and consumer adoption of such products. These statements are based on management's current expectations and actual results and future events may differ materially due to risks and uncertainties, including risks related to Amyris's liquidity and ability to fund operating and capital expenses, risks related to potential delays or failures in development, production and commercialization of products, risks related to Amyris's reliance on third parties, and other risks detailed from time to time in filings Amyris makes with the Securities and Exchange Commission, including Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. Amyris disclaims any obligation to update information contained in these forward-looking statements, whether as a result of new information, future events, or otherwise.*


*\* (Nikkol is a joint venture partner with Amyris in [Aprinnova](#), LLC, the leading provider of sugarcane-based squalane)*

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For further information: Peter DeNardo, Senior Director, Investor Relations and Corporate Communications, Amyris, Inc., +1 (510) 740-7481, [investor@amyris.com](mailto:investor@amyris.com)

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