# Pharmaceutical Technology

## Pharmaceutical Technology Excellence Awards 2024: Botanical Solution Inc.

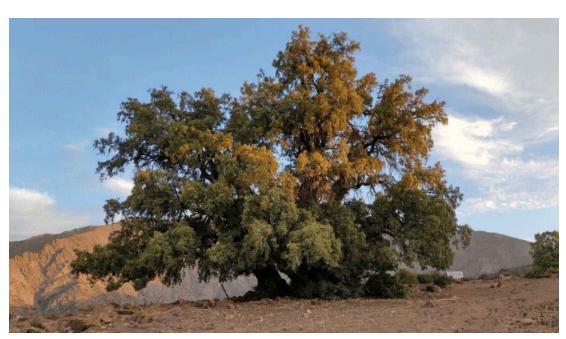
Botanical Solution Inc. is a producer of advanced botanical materials and a Dual Category Award Winner in the 2024 Pharmaceutical Technology Excellence Awards

Botanical Solution, a leading producer of advanced botanical materials, won two awards in the 2024 Pharmaceutical Technology Excellence Awards in the Innovation and Business Expansion categories for advancing healthcare through eco-conscious practices and pioneering research and development (R&D).

The <u>Pharmaceutical Technology Excellence Awards</u> celebrate the greatest achievements and innovations in the pharmaceuticals industry. Powered by GlobalData's business intelligence, the Awards recognize the people and companies that are driving change in the industry.

Botanical Solution won the Innovation award for its innovative in-lab cultivation and extraction process that sustainably produces the vital vaccine adjuvant QS-21, significantly reducing costs and environmental impact. It won the business expansion award for strategic scaling of production capabilities, R&D advancements, and successful market partnerships, which have positioned it as a leader in the rapidly growing botanical ingredients market and a key player in global vaccine development.

### Innovating sustainable QS-21 adjuvant production for vaccine developers



Botanical Solution has revolutionized the production of QS-21, an adjuvant that plays a critical role in enhancing the immune response in vaccines such as those for Shingles, RSV, COVID-19, and Malaria. The traditional method of extracting QS-21 from the *Quillaja saponaria* tree is not only cost-prohibitive but also poses environmental concerns due to the tree's limited habitat in Chile and the restrictions on deforestation.



Addressing these challenges, Botanical Solution has developed an in-lab cultivation and extraction process that allows for the growth of *Quillaja saponaria* trees within their own facilities. This innovative method has led to a more sustainable and reliable supply of pharmaceutical-grade QS-21, significantly reducing the cost and environmental impact associated with its production.

The strategic expansion of Botanical Solution's operations is marked by the establishment of two dedicated laboratories in Davis, California, which are at the forefront of this advanced botanical material production. The recent influx of \$7 million, completing BSI's Series A funding of over \$23 million, underscores the confidence investors have in Botanical Solution's scalable production capabilities and its potential to disrupt the vaccine adjuvant market.

Through the expansion of its in-lab technology platform, Botanical Solution is not only ensuring the long-term stability and quality of the QS-21 supply, but also enabling broader vaccine applications, which could have a profound impact on

global health, particularly in developing countries where cost and supply limitations are barriers to vaccine access.

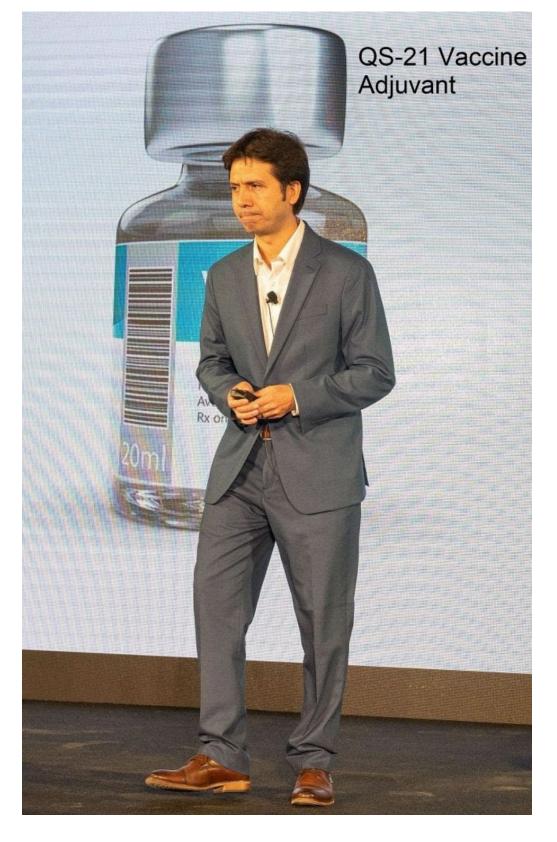
#### Enhancing RSV vaccine efficacy with proprietary QS-21 production



The affordability and accessibility of QS-21 are critical, especially for vaccines that target diseases prevalent in low-income countries. Botanical Solution's approach could significantly lower the cost of vaccine production, making life-saving vaccines more accessible to populations that need them the most.

With the extended Series A funding, Botanical Solution is set to accelerate the production of GMP-grade QS-21, furthering the reach of this essential adjuvant in the vaccine industry. The company's efforts to expand lab facilities and R&D capabilities are indicative of a long-term vision to support the quality and supply of QS-21, ultimately fostering innovation in vaccine development on a global scale.

Botanical Solution's awards in Business Expansion and Innovation, thus, underscore its pivotal role in driving sustainable pharmaceutical production. The company's commitment to environmentally friendly practices and its influence on enhancing global health through improved vaccine development are paving the way for a healthier and more equitable world.



"It is a great honor to receive this industry recognition. The team at Botanical Solution is very proud of our determination to develop a robust supply chain for QS-21. We are making the supply of this Gold Standard vaccine adjuvant much more plentiful and affordable so that it can be used in many more vaccines, including those for underprivileged countries." – Gaston Salinas, CEO, Botanical Solution

#### **Company Profile**



Botanical Solution Inc. (BSI) is the world's leading producer of Advanced Botanical Materials (ABM) that sustainably enable the production of gold-standard solutions for human and plant health.

BSI's ABMs are produced without sourcing raw materials from nature or conventional plantations, thanks to its proprietary plant tissue culture platform. *Quillaja saponaria* is the first ABM in large-scale production and is used to create both the gold standard vaccine adjuvant QS-21, a critical component in FDA-approved vaccines such as shingles, malaria, RSV, COVID, and the powerful biofungicide Quillibrium<sup>®</sup>.

BSI operates labs and offices in Davis, California and Santiago, Chile. BSI's Science Advisory Board is comprised of world-class R&D leaders from the pharma industry. BSI supplies products directly and through ad-hoc distribution agreements with industry leaders such as <u>Croda International</u> and <u>Syngenta</u>.

#### **Contact Details**

E-mail: info@botanicalsolutions.cl

#### Links

Website: <a href="https://botanical-solution.com/">https://botanical-solution.com/</a>