

USPTO Grants Patent for Novel Therapeutics for Antibody-Cannabinoid Conjugates

Diverse Biotech Emerging as Leader in Cannabinoid Drug Conjugate Space With Landmark Patent

MIAMI, FL, UNITED STATES, July 28, 2025 /EINPresswire.com/ -- Diverse Biotech Inc., an innovative developer in novel drug technology, today announced a pivotal advancement with its fully granted U.S. Patent No. 11,877,988 B2, which specifically covers innovative Antibody-Cannabinoid Conjugate Molecules. This landmark patent serves as a powerful complement to our initial groundbreaking patent, [US 20230173079 A1](#), further solidifying our intellectual property foundation in dual-action therapeutics. This strategic patent fortifies a revolutionary class of drugs set to significantly disrupt the multi-billion dollar antibody market by enhancing therapeutic efficacy, addressing unmet medical needs, and potentially extending the commercial lifespan of existing antibody treatments.

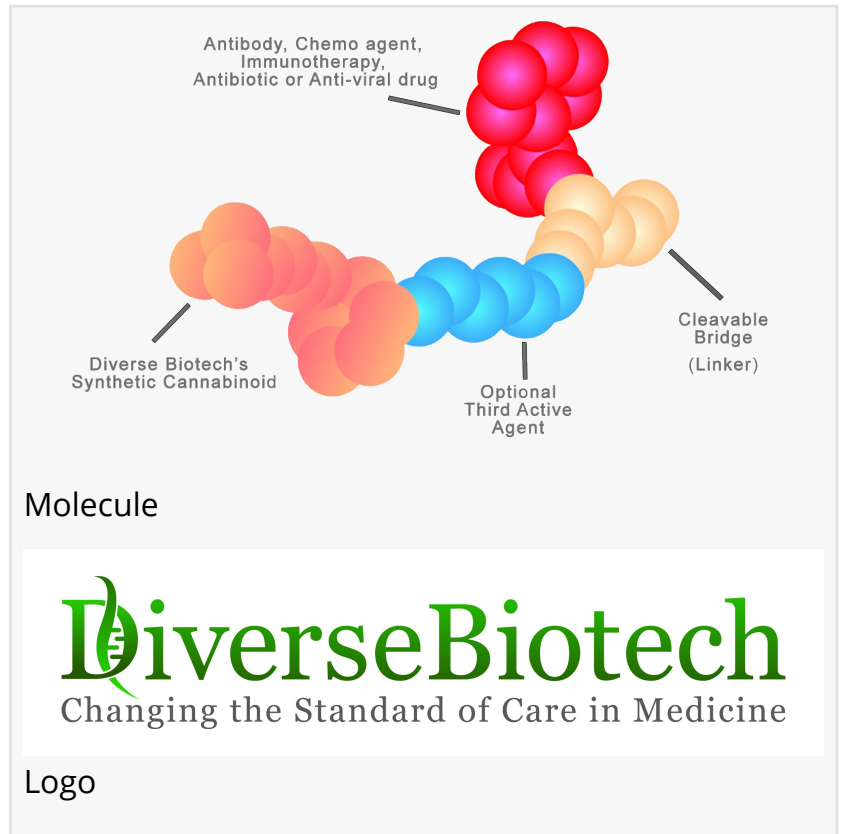
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Diverse Biotech Inc. is not just participating in the antibody market; we are redefining it”

William Fisher

The global antibody market is a cornerstone of modern medicine, particularly in oncology and autoimmune diseases. Valued at approximately \$245 billion to \$267 billion USD in 2024, this market is projected to grow substantially, reaching an estimated \$412 billion to over \$970 billion USD by 2030-2034. Despite its immense size and targeted precision, existing antibody therapies often face limitations in specific disease contexts or require

enhanced mechanisms to overcome complex biological barriers. Diverse Biotech's patented technology directly addresses these challenges through a novel dual-action approach.



How Patent [US 11,877,988 B2](#) Works: A Dual-Mechanism Disruption

Diverse Biotech's patented invention describes multifunctional conjugate molecules that ingeniously covalently attach a therapeutic antibody component to a cannabinoid component via a specialized linker. This is far more than a traditional prodrug; it's a sophisticated design engineered for dual therapeutic benefit through distinct mechanisms of action:

1. **Targeted Delivery:** The antibody component precisely delivers the conjugate to specific disease sites or cells (e.g., cancer cells, inflammatory sites), leveraging the antibody's inherent targeting capabilities.
2. **Localized Cannabinoid Release & Second Therapeutic Effect:** Crucially, upon the antibody's binding to its target, the specialized linker enables the controlled and localized release of the cannabinoid (e.g., Cannabidiol (CBD), Cannabigerol (CBG)) directly at or near the site of action. This localized release allows the cannabinoid to exert a powerful second therapeutic benefit.

For example, our research indicates that cannabinoids like CBD and CBG can promote the generation of Reactive Oxygen Species (ROS) within cells. While ROS are naturally occurring, their controlled increase at disease sites can trigger apoptosis (programmed cell death) in undesirable cells, such as cancer cells. This mechanism provides a potent, targeted cytotoxic effect that complements the primary action of the antibody. By inducing ROS and influencing the inflammatory microenvironment, these conjugates offer a synergistic attack on disease.

Market Disruption and Unmet Need:

Diverse Biotech's technology is poised to fundamentally disrupt the antibody market in several profound ways:

- **Enhanced Efficacy:** By combining the precise targeting of antibodies with the localized, potent therapeutic effects of cannabinoids, these conjugates can significantly outperform existing single-mechanism antibody drugs, particularly in challenging indications like certain cancers where current treatments may fall short.
- **Novel Therapeutic Avenues:** This invention opens entirely new therapeutic pathways, allowing for the development of next-generation antibody-drug conjugates (ADCs) that leverage cannabinoids as novel payloads.
- **Extended Drug Lifespan:** For antibodies nearing patent expiration, conjugating them with cannabinoids via this patented technology offers a pathway to create novel, patent-protected compounds, effectively extending the commercial lifespan and market exclusivity of valuable existing drugs.
- **In-House Innovation:** All of Diverse Biotech's groundbreaking technology, from conception to patent approval, is developed in-house, ensuring proprietary control and maximizing value capture.

"Diverse Biotech Inc. is not just participating in the antibody market; we are redefining it," stated William Fisher, Director and Board Chairman of Diverse Biotech Inc. "Our fully granted patent US 11,877,988 B2, building upon our initial foundational patent US 20230173079 A1, is a testament to our position as world leaders in cannabinoid drug technology. This dual patent protection allows us to introduce novel drug technology that can significantly outperform existing drugs and extend the lifespan of critical therapies. We are set to capture a substantial share of the multi-billion dollar antibody market in cancer and other disease treatments with a highly unmet need by leveraging the power of targeted antibodies with the unique therapeutic benefits of cannabinoids. This is a game-changer for patients and a significant value driver for our shareholders."

Diverse Biotech Inc. is actively pursuing partnerships and further development of these antibody-cannabinoid conjugates, aiming to bring these transformative therapies to patients worldwide and capture a substantial share of the multi-billion dollar antibody market.

About Diverse Biotech Inc.: Diverse Biotech Inc. is a pioneering biopharmaceutical company at the forefront of cannabinoid drug research and development. With a robust portfolio of USPTO-approved patents, the Company is dedicated to introducing novel drug technologies that disrupt markets, address significant unmet medical needs, and create superior therapeutic solutions for cancer and other debilitating diseases.

Forward-Looking Statement: This press release contains forward-looking statements that are subject to risks and uncertainties. Such forward-looking statements are based on the beliefs of Diverse Biotech's management as well as assumptions made by and information currently available to Diverse Biotech. When used in this press release, the words "expect," "anticipate," "estimate," "believe," "intend," "should," "seek," "aim," "plan," "predict," "could," "will," "may," "target," and similar expressions or the negative forms of these words are intended to identify such forward-looking statements. The forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from the results predicted or implied by such statements. Factors that could cause or contribute to such differences include, but are not limited to, the Company's ability to develop and commercialize products, the effectiveness of the Company's patent protection, the effect of changes in regulations and laws, and the Company's ability to retain and attract skilled personnel. Diverse Biotech undertakes no obligation to update these forward-looking statements or information, except as required by law.

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