

MelanoThera Biosciences

Overview

MelanoThera Biosciences is a San Francisco-based biotech developing next-generation immunotherapies for metastatic melanoma. Our proprietary ImmunoFuse™ platform combines bispecific antibodies with immune checkpoint modulation to enhance T-cell activation and tumor clearance. This approach addresses resistance to current immunotherapies and aims to deliver durable responses in patients with advanced melanoma. The platform's modular design enables rapid adaptation to other solid tumors, creating a pipeline of high-value assets.

Problem

Metastatic melanoma remains a leading cause of cancer mortality despite advances in immunotherapy. While checkpoint inhibitors have improved outcomes, up to 60% of patients fail to respond or develop resistance. Current treatments do not adequately address immune escape mechanisms, leaving a significant unmet need for innovative solutions.

Solution

ImmunoFuse™ integrates bispecific antibodies that simultaneously engage tumor antigens and activate T-cells, combined with checkpoint modulation to overcome immune suppression. This dual-action approach enhances tumor killing and reduces resistance, offering a novel therapeutic strategy for melanoma and beyond.

Market

Metastatic melanoma affects approximately 100,000 patients annually in the United States and over 500,000 worldwide. The global melanoma therapeutics market is projected to exceed \$8 billion annually, with expansion opportunities into other solid tumors pushing the total addressable market beyond \$20 billion. Immuno-oncology remains one of the fastest-growing segments, with a CAGR of 14%.

Clinical Need

Despite the success of checkpoint inhibitors, many patients experience relapse or resistance. ImmunoFuse™ addresses this gap by introducing a synergistic mechanism that enhances immune activation and tumor clearance.

Competition

Current competitors include Merck (Keytruda) and Bristol Myers Squibb (Opdivo), which dominate the checkpoint inhibitor space. Emerging bispecific antibody programs are in early development but lack integrated checkpoint modulation. MelanoThera's unique approach positions it as a first-in-class solution for resistant melanoma.

Team

CEO: Dr. Sophia Nguyen, PhD (immunology, ex-BMS). CTO: Dr. Daniel Brooks, PhD (antibody engineering, UCSF). Advisors include Dr. Karen Lee (Memorial Sloan Kettering) and Dr. Omar Hassan (MD Anderson), providing expertise in immunotherapy and clinical development.

Capital Raised & Seeking

Raised: \$1.1M (founders + SBIR grant). Seeking: \$5.5M Seed Round to advance ImmunoFuse™ through IND-enabling studies and initiate Phase I trials.

Use of Funds

Funds will be used to optimize ImmunoFuse™ design, conduct GLP toxicology studies, and prepare IND submission for melanoma clinical trials. Additional resources will support regulatory strategy and partnership development.

Timeline

16 months to IND submission.