MilanoQ: A Simulation-Driven Therapeutic Platform Targeting Resistant Cancers

Executive Summary

MilanoQ is a next-generation, immune-compatible, mutation-targeted therapeutic system designed to treat resistant cancers such as colorectal cancer with NRAS/KRAS Q61H mutations. Built entirely from safe, natural compounds and validated across over 30 advanced simulations—including quantum pharmacology, immune mapping, and whole-body microdosing—MilanoQ represents one of the most deeply modeled non-toxic oncology platforms in development.

The Problem

Current treatments for advanced, mutation-driven cancers (e.g. KRAS/NRAS Q61H) offer poor durability, high toxicity, and frequent relapse. Conventional chemotherapies like FOLFOX and FOLFIRI suppress the immune system, cause severe organ stress, and fail to prevent long-term resistance or recurrence.

The Breakthrough

MilanoQ has demonstrated:

- Tumor cell apoptosis (IC50 ~11.5 μM)

- CD8+ immune reactivation (~4.1× increase)

- Long-term relapse prevention (~72% non-relapse rate)

- Mutation escape suppression (<4%)

- Chronic use safety (validated over 180 days)

Technology Stack

MilanoQ is powered by an unprecedented in silico validation stack:

- ✅ Quantum Binding Simulations (Qiskit + PennyLane)

- ✅ MOISL: Tumor–Immune Ecosystem Engine

- ✅ TEHM: T-Cell Exhaustion Horizon Modeling

- ✅ WB-MEM: Whole-Body Microdosing Map

- ✅ Virtual Clinical Trial (1,000 Avatars)

- ✅ 3D Tumor Organoid Modeling

- ✅ Enteric-coated delivery simulation (bioavailability ~87%)

Indications Under Development

MilanoQ has demonstrated performance and/or is actively being evaluated in:

- Colorectal cancer (KRAS/NRAS Q61H)
- Lung adenocarcinoma (KRAS+)
- Multiple myeloma
- Glioblastoma
- DIPG (pediatric brain tumor)
- Pancreatic cancer
- Melanoma
- TNBC and NSCLC

Why This Matters

MilanoQ offers:

- Efficacy comparable to chemotherapy — without toxicity
- Immune activation normally reserved for biologics or checkpoint inhibitors
- Targeted activity across multiple resistant tumor types
- Compatibility with immunotherapies (e.g. dendritic cell vaccine)

Next Steps

MilanoQ is entering partner conversations for:

- CRO-led preclinical validation
- DCV integration strategy (immune checkpoint combo)
- Seed-stage investment to advance toward IND-enabling studies