Bacterial vesicles to transform gut health through precise and effective delivery.



Problem

Supplements have become one of the most widely used strategies to improve gut health. But their actual impact falls far short of their potential. Why? Because many of their active compounds are degraded or inactivated before reaching the intestine, or fail to enter the intestinal cells, where they are meant to act. Current solutions rely on enteric capsules, delayed-release coatings, and more complex systems like liposomes or nanoparticles, but they do not achieve precise or efficient delivery. The result: lower efficacy, higher dose requirements, limited scalability, and enormous untapped potential. These limitations demand next-generation solutions capable of overcoming current delivery barriers and unlocking the full potential of bioactive compounds.

Value proposition

At BioClé we offer a platform based on bacterial extracellular vesicles (bEVs) that radically improves the stability, absorption, and targeted delivery of bioactive compounds into intestinal cells, where they are meant to act.

Our first development focuses on butyrate, one of the most promising supplements for gut health, and also one of the most difficult to deliver in a targeted and effective way.

In an animal model, the use of our vesicles improved butyrate's efficacy by **+2x** in reducing fat accumulation caused by a dysfunctional gut, compared to conventional delivery.

Benchmark

EVerZom LDS Biotech

Tesseract PL+

Team

- Daniela Albanesi, Bacterial Physiology and Genetics, PhD
- · Albertina Scattolini, Microbiota, PhD
- Juan Cassini, Business

The vision of the team

We will revolutionize gut health by redefining how active compounds act in the intestine. Our technology enables precise interaction with the microbiota and intestinal cells, achieving targeted and effective delivery where it truly matters, unlocking a new generation of effective solutions.

Market

USD 57 billion

The global gut health market is projected to reach **USD 92.82 billion** by 2031, growing at a CAGR of 8.10%.



