

Bracco and Aenitis Join Forces to Develop “Acoustic Beads” for Advanced Rare and Complex Cell Sorting in Flow Processes

- **Pioneering industry collaboration:** Bracco and Aenitis join forces to combine expertise in acoustophoresis and functionalised microsystems to revolutionise the sorting of rare and complex cells, driving innovation in biomanufacturing and advanced therapies
- **Transformative alternative for sorting rare and complex cells:** Acoustic microspheres offer a new alternative to magnetic beads, enabling safer, more efficient and scalable solutions
- **This pioneering technology ensures biocompatibility, improved cell viability and cost-effective processing, making large-scale sorting of rare and complex cells faster and more accessible**

Paris, France, January 8, 2025 – Aenitis Technologies, a leader in acoustofluidic innovations, has entered a Memorandum of Understanding (MOU) with Bracco Imaging, a global pharmaceutical company leader that develops, manufactures and markets contrast agents and associated solutions for medical innovative healthcare solutions. This strategic partnership is set to explore the development of next-generation acoustic microspheres, a groundbreaking alternative to conventional magnetic beads for rare and complex cell sorting and separation in flow-based applications.

This collaboration brings together Aenitis' proprietary acoustophoresis technology and Bracco's expertise in functionalised microsystems to focus on rare and complex cell sorting, a critical step in advancing cell therapy and biomanufacturing. Current methods, such as magnetic bead-based separation, are hindered by high costs, cell handling and washing issues, and scalability challenges. Acoustic microspheres offer a game-changing solution that combines precision with safety, efficiency, and cost-effectiveness.

Some of the benefits of acoustic microspheres:

- **Unparalleled biocompatibility:** Minimising residual material and preserving the integrity of sensitive cell populations.
- **Scalability and speed:** Continuous flow sorting accelerates processes and enables large-scale manufacturing.
- **Cost-effective selection:** Acoustic microspheres support a simplified positive selection process by targeting only desired cells. Easy to remove without multi-washing steps, it minimises operational costs.
- **Regulatory potential:** Acoustic microspheres are designed with biocompatibility in mind, using naturally occurring acoustic processes already used in certain medical applications. Their development is focused on meeting high regulatory standards for clinical use, supporting safe and efficient bioprocessing solutions.

“Acoustic microspheres are more than an innovation - they represent a paradigm shift for the cell therapy and biomanufacturing industries,” said **Emmanuel Vincent, CEO of Aenitis**



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Technologies. “By combining our acoustophoresis platform with Bracco’s deep expertise, we aim to address key industry challenges in a sector with high demand for technological innovations in bioprocesses.”

This partnership underscores Aenitis' mission to provide cutting-edge solutions for cell sorting and separation, contributing to the broader goal of making advanced therapies more accessible worldwide.

“Bracco is thrilled to support this pioneering application of acoustic microspheres in cell manufacturing. With over 30 years of expertise in ultrasound contrast agents, Bracco is well-positioned to apply this knowledge combined with the Aenitis’ expertise to transform cell sorting technology” said **Thierry Bettinger, Bracco Research Center Geneva Director**. “It paves the way for new opportunities in both clinical and industrial applications, providing significant benefits to researchers, manufacturers, and patients globally”

Meet our teams at JPM 2025

Both Bracco and Aenitis will participate at the JP Morgan Healthcare Conference 2025, in San Francisco, from 13 to 16 January 2025. This premier industry event will provide an opportunity to discuss this collaboration and explore its potential applications in biomanufacturing and advanced therapies. Stay tuned for updates and announcements from both companies during the conference.

About AENITIS

Aenitis designs, develops, and markets sole-in-class acoustofluidic technology that makes cell and gene therapy manufacturing better, safer, and less expensive. By precisely controlling levitated cells with sound waves, our systems handle cells in full sterile conditions, radically increasing productivity while preserving the native state of cells at every step of the engineering process.

Today, we have achieved proof-of-concept for our contact-free & label-free proprietary technology across multiple cell types and processes. Mitis™, our flagship product, is already used for a wide range of applications, including cell sorting, isolation, concentration, and washing, from research to clinical and industrial scale.

Co-founded by pioneers of acoustic levitation and fluid mechanics, along with a biotech entrepreneur, the company benefits from the support of the European Commission and the French Government, as well as the commitment of leading investors, notably the European Investment Bank and Seventure Partners.

www.aenitis.fr

About BRACCO

Bracco is an international Group active in the healthcare sector and a leader in diagnostic imaging. It has 3,700 employees and annual total consolidated revenues of around 1,7 billion euros, 88% of which from international sales. In the Research and Development area, the company invests approximately 10% of reference turnover in the imaging diagnostics and medical devices sectors and has a portfolio comprising over 2,000 patents.



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<https://www.bracco.com>



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Press contacts:

Aenitis Technologies

Emmanuel Vincent, CEO

press@aenitis.fr

ATCG Partners

Marie Puvieux

+33 6 10 54 36 72

aenitis@atcg-partners.com

Bracco Imaging

Carolina Bargoni, Communication Director

carolina.bargoni@bracco.com