

Nanomedicine: unleashing the true potential of nanotechnologies for patients

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Nanomedicine, which involves applying nanotechnologies across healthcare domains, is undergoing rapid expansion and evolution. Its applications, spanning diagnostics, imaging, innovative therapies, and personalized medicine, have yielded over 50 market-ready formulations, with 400+ undergoing clinical trials. While oncology remains a central application area, innovative nanomedicines are providing solutions for a variety of medical conditions. An illustrative example is the efficient nucleic acid delivery in COVID mRNA vaccines.

Europe is at the frontline of this transformation, at least partly due to the concerted endeavors of the European Technology Platform on Nanomedicine (ETPN). Comprising 100+ institutions across academia, industry, and healthcare in 25+ countries, ETPN actively shapes the European nanomedicine community. It identifies foremost advancements, streamlines clinical integration, and addresses hurdles like GMP manufacturing and regulatory issues. Guided by ETPN, Europe has emerged as a fertile ground for nanomedicine's growth, fostering unique academia-SME-industry collaborations. The organization propels R&D funding and serves as a vital nexus, expediting clinical development of Europe-originated concepts. [Learn more: www.etp-nanomedicine.eu].

This presentation will delve into:

- Diverse Medical Applications of Nanomaterials: Encompassing diagnostics, imaging, targeted therapies, and more.
- European Nanomedicine's Recent Industrial Success Stories: Unveiling how collaboration and innovation translate to patient care.
- Europe's Nanomedicine Strengths and Challenges & ETPN's Role in Shaping the Optimal Development Environment for It.
- The Upcoming Frontier in Nanomedicine: A preview of emerging innovations that are shaping the future of healthcare in both Europe and across the globe.

Whether actively involved in nanomedicine or not, attendees will gain insight into how European synergy propels innovation, offering avenues to tackle healthcare challenges. Nanotechnology and healthtech developers, spanning academia to industry, can enrich this dynamic and innovative landscape.