

AVANTI
THERAPEUTICS




Innovative Platform for Superior Products



Aayush: The Product Pipeline Platform for Life Sciences

What is Aayush?



The Aayush platform aims to provide a unique venue for product pipeline development for life science products. Developing broadly applicable, “domain agnostic” solutions by addressing technology-specific problems is the goal. Understanding gained in research will be embedded in end-to-end product development capabilities that include personalized molecular diagnostics (in vitro & in vivo), targeted therapeutics, non-invasive biomarker monitoring, reliability, and drug efficacy monitoring. The Aayush platform aims to become an **integrated product pipeline engine** for life science products development that connects islands of excellence, engages a variety of disciplines in industry and universities, and promotes discussion, collaboration, dissemination, and technology transfer for next generation of life science product development.

The opportunity

Aayush Drug development and commercialization platform has great potential for contributing to significantly expanding the product pipelines of life science companies



Looking for a
great business opportunity?

without adding significant costs to drug development and commercialization. The NanoBindi-multifunctional nanoparticle, based technology platform provides innovative approach to develop and commercialize products for personalized medicine that can integrate molecular diagnostics, targeted and tunable therapeutics and disease (biomarker) monitoring for better clinical outcomes. The approach promises to develop product pipelines that are cost effective, time saving

and consistent validated quality for sustainable long term patient and investor friendly business models for life science companies.

Challenges

Life Science R&D and manufacturing is fragmented according to technology (e.g. diagnostics-in Vitro and in-Vivo, therapeutics development - small molecules, biologics, disease monitoring – biomarkers, biopsy, etc.) and domain (e.g. Oncology, cardiovascular, nervous system, infectious diseases etc.). Common problems are not recognized and the critical mass needed for effective solutions is hard to achieve. Innovative approaches are needed for sustainable product development and commercialization.

The Aayush Approach

Avanti Therapeutics relies on its rich research heritage with extensive multifunctional bio nanotechnology capabilities, seasoned clinical development and regulatory experts to accelerate clinical proofs-of-principle leading to next-generation of product engines utilizing its proprietary NanoBindi technology.

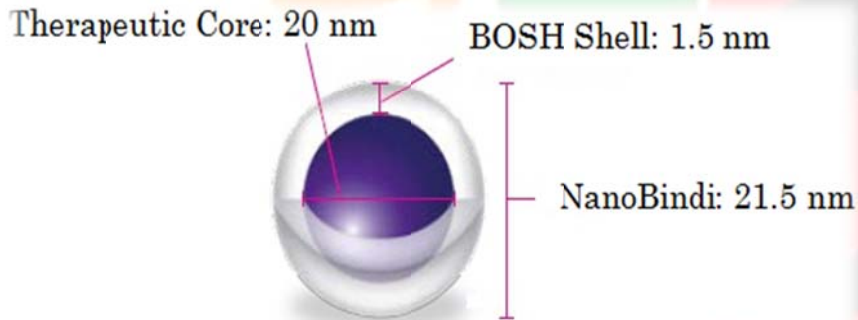
- A unique center-scale integration of technologies that connects islands of excellence to address drug development and commercialization technology broadly.
- A domain independent platform for development that helps to define common unmet needs and integrating all aspects of drug development and commercialization.
- Exceptional experience for patients, employees and investors
- An innovative platform that ties it all together.
- Leverage existing discovery and development research that complements the industrially-funded core.
- Domain independent open platform for generating sustainable product pipelines.
- Open platform for optimum efficiency in terms of timelines, cost and regulatory requirements.

TECHNOLOGY

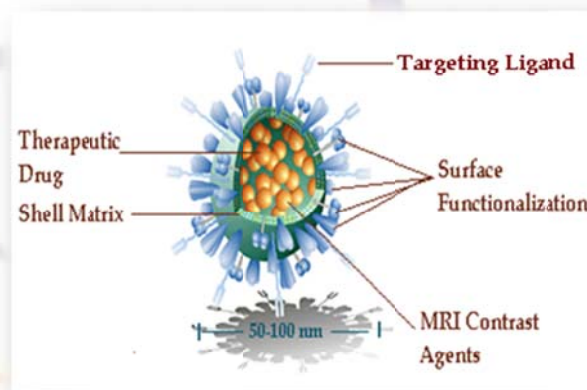
NANO BINDI

NanoBindi®: An innovative multifunctional Nanoparticle Technology

Avanti Therapeutics has developed a revolutionary new technology of creating multifunctional nanoparticles that are suitable for in vivo delivery of a potentially broad range of imaging agents, biomarkers and therapeutic drugs. Called NanoBindi, this technology offers the ability to convert insoluble or poorly soluble drugs into delivery



vehicles allowing them to become soluble and easier to deliver. Insoluble or poorly soluble drugs and magnetized imaging contrast agents are packaged in a multivalent biocompatible Shell to make them soluble, avoiding the need for toxic chemicals often used as solvents. Removing the chemicals eliminates solvent-related toxicities and other dose-limiting complications to improve safety and efficacy. NanoBindi provides a broad variety of routes of administration including intravenous, intra-arterial, inhalational, topical, and oral. The multifunctional NanoBindis are ideal for detection, monitoring of tumors and delivering drugs to the target site. The additional capability of MRI imaging of the target site provides not only the ultra-sensitive detection capability, but also a critical tool to assess the therapeutic efficacy of the delivered drug.



Product Engines

- **Aayush-O- : Oncology:** Product engine for commercializing detection, monitoring and targeted therapy products- innovative personalized medicines for cancer treatment
- **Aayush-CV: Cardiovascular:** Product engine for commercializing detection, monitoring and targeted therapy products for cardiovascular diseases.
- **Aayush-CNS: CNS:** Product engine for commercializing detection, monitoring and targeted therapy products for central nervous system diseases
- **Aayush-RM: Regenerative Medicine:** Product engine for commercializing detection, monitoring and targeted therapy products regenerative medicine
- **Aayush- SP: Specialty Pharma:** Innovative products for development of biopharmaceutical products
- **Aayush-V: Vaccines:** Development of innovative vaccines
- **Aayush-MD: Molecular Diagnostics:** Personalized diagnostic tools to protect against life-threatening diseases

Avanti Therapeutics has completed at least one Proof of Concept study for each of these key areas.

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