MINISTRY OF HEALTH

COMPANY FOR VACCINE & BIOLOGICAL PRODUCTION No. 1 (VABIOTECH)

- - - - - - - + + + - - - - - - -

Enhancing Cooperation in Technology Transfer & Application to Develop of Strategic Biomedical/Pharmaceutical/Clean Energy Advance Products for the Healthcare Sector: Current, Implementation Results & Challenges



Present by
Ass Prof. Pham Van Hung MD.,PhD.
VABIOTECH, MOH, Vietnam

CONTENTS

I. Government Policies 2025-2035/2045

II. Contents to implementing strategic technologies & Products in Healthcare sector

III. Implementation Results

IV. Issues/Challenges

Government Directives/Policies Period 2026-2036/2045

- Resolution No. 72/2025/NQ-TW: Breakthrough in healthcare and the improvement of public health
- Resolution No. 57/2024/NQ-TW: Breakthrough in the development of science and technology, innovation & digital transformation
- Resolution No. 36/2023/NQ-TW: Breakthrough in the Application of biotechnologies

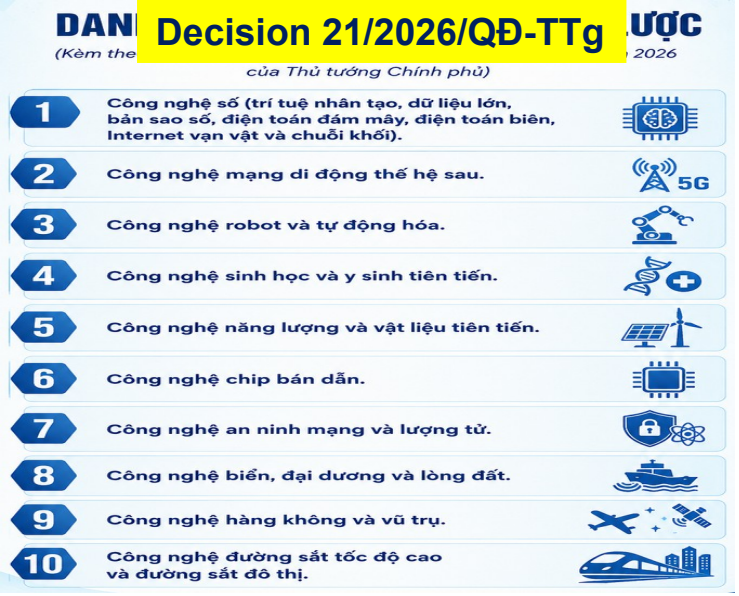
Vietnam's Laws:

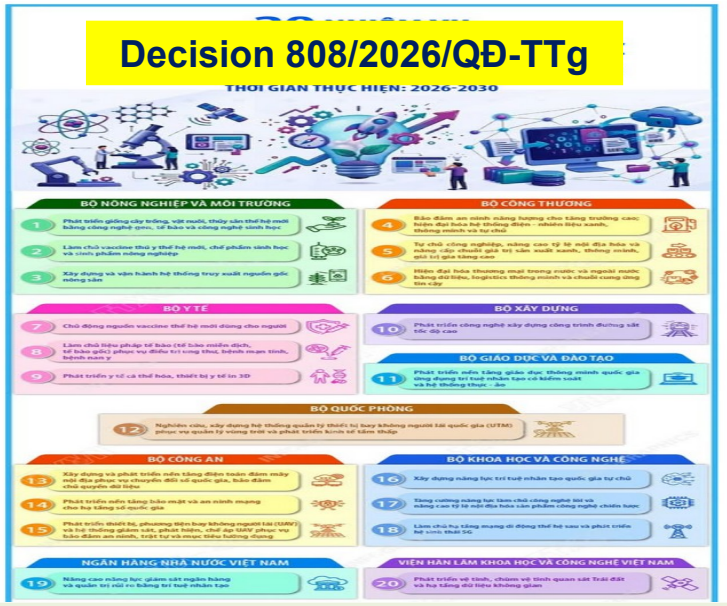
- Law on High Technologies (133/2025/QH15)
- Law on Technologies Transfer (115/2025/QH15)
- Law on Intellectual Property (131/2025/QH15)
- Law on Science, Technology & Innovation (93/2025/QH15)



Government & Ministries's Decisions/Decree/Circulars

- Decree No. 260/2026/NĐ-CP: Regulations/guidelines to implementing of Law on High Technologies
- Decision No. 21/2026/QĐ-TTg: Issued a list of strategic technologies
- Decision No. 808/2026/QĐ-TTg: Issued strategic technologies tasks
- Decision No. 1493/2026/QĐ-TTg: Approve the National Science, Technologies & Innovation Program, specifically on strategic technologies (2026–2030/2045).
- Circular No. 42/48/49/2026/TT-BKHCN: Guidelines for the proposal/evaluate/approval/financial support of strategic science & technologies Research projects
- National's Policies ensures fairness for both Public Unit & Private Companies.





Government's Policies incentives (organizations and individuals) for cooperation/technology transfer/R&D in strategic Technologies.

1. Preferential Policies & financial support.
2. Tax support & Import tax exemption
3. Income tax support and Staff training
4. Government provides support for Infrastructure
5. Bank loan interest rate offers
6. Simplified disbursement procedures
7. Support for Intellectual Property & Commercialization.



Ministry of Health: Developing Strategic Technologies in Biomedicine/Pharmaceuticals & Clean Energy

Decision No. 1710/2026/QĐ-BYT: Implementation Plan of Decision No. 21 & 808/QD-TTg

STRATEGIC TECHNOLOGIES (Healthcare Sector)	STRATEGIC TECHNOLOGY PRODUCTS (Healthcare Sector)
Advanced Biotechnologies & Biomedicine	Next-Generation Human vaccines
	Cell-based Therapies (Stem cells & Immune Cells) for Human use
	Production systems for personalized medical products utilizing 3D printing technologies

STRATEGIC TECH TASKS	OBJECTIVES 2026-2030/2045
1. Securing a supply of next-generation vaccines. 2. Technological Autonomy: Cell-Based Therapies. 3. Develop medical devices 3D Printing.	*Receiving technologies transfers and achieving technological autonomy, moving toward domestic production*
	Autonomy in Technologies Production & Products that meet quality standards. Applications in medical therapy.
	Creating personalized medical products (such as grafts and 3D-printed medical devices) that achieve high levels of precision and specificity (for diagnosis, treatment, and individualized healthcare).

MINISSTRY OF HEALTH'S ACTIVITIES IN DIRECTING THE DEVELOPMENT OF STRATEGIC TECHNOLOGIES





Decision No. 21/2026/QĐ-TTg Issued list of strategic technologies

Decision No. 808/QĐ-TTg Issued strategic technologies tasks

MOH's Revolution No. 46-NQ/ĐU Issued in tasks to develop strategic technologies & products

Decision No. 1710/QĐ-BYT Issued MOH's Plan to implementing Decision No. 808/QĐ-TTg

Decision No. 2513/2026/QĐ-BYT Establishment of Steering Committee and a Working Group for the implementation of Strategic Technologies & Products

Decision No. 2591/2026/QĐ-BYT Issuance of the Operational Regulations for the Steering Committee and the Working Group

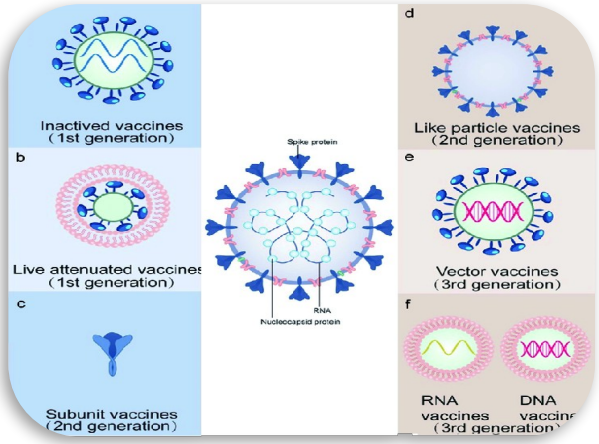
Decision No, 2692/2026/QĐ-BYT Establish a Scientific Council to evaluate Proposals Research Project of Strategic Technologies & Products.

The "Triple Unit" Collaboration Model: Government-Research Institutes/Universities- Domestic & International Companies

Cooperation in the Transfer of Strategic Technologies & Advanced products in the fields of Biomedical, Pharmaceutical & Clean energy in Healthcare sector.

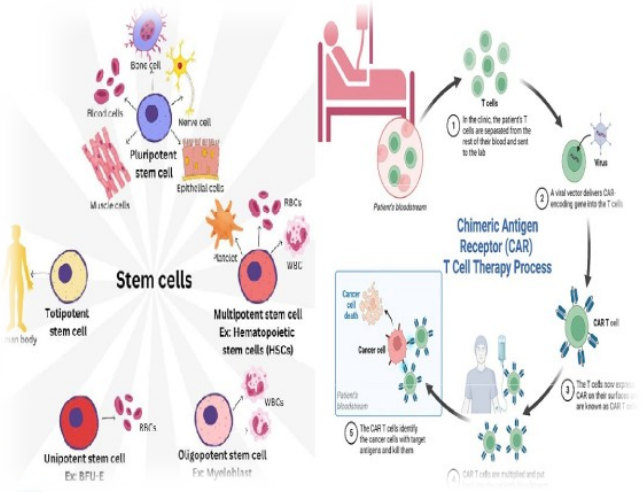
Next-generation Human Vaccines

+ mRNAs
+ Vectors
+ Multi Protein conjugate
+ VLP, etc.



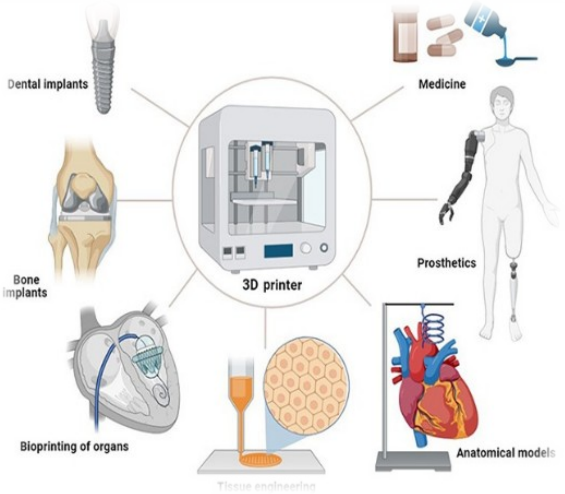
Cell-based Therapies

+ Stem Cell
+ Immune Cell



Medical devices 3D Printing

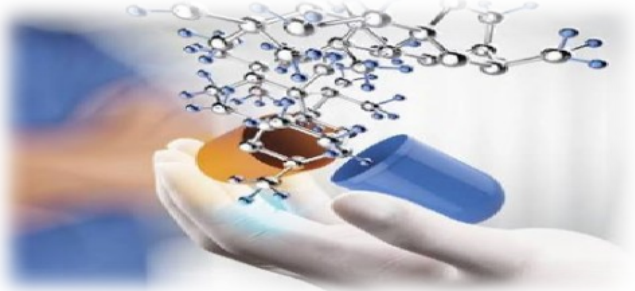
+ Biomaterials
+ Physical materials



VABIOTECH®
For a Healthier life

Pharmaceutical Chemistry Technologies

+ Chemical Drugs
+ Biosimilar Drugs





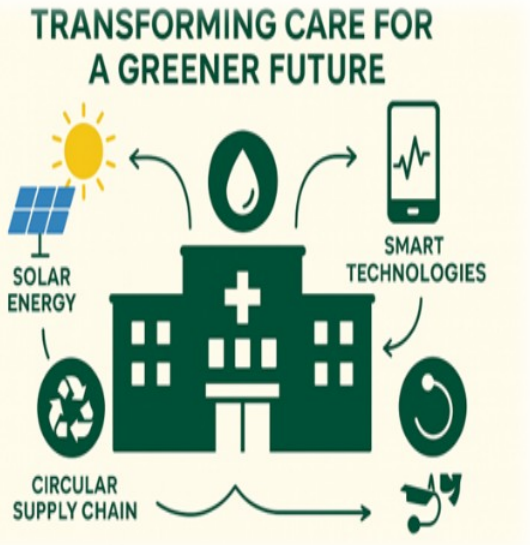
Advanced Biotechnologies

+ Gene Technologies
+ Protein Technologies



Clean Energy

+ Renewable Energy
+ Green Technology
+ In Healthcare facilities/Hospital



Implementation Results

CURRENT BIOMEDICAL TECHNOLOGY TRANSFER COOPERATION IN VIETNAM

1. Expanding in the Public-Private & Interdisciplinary Cooperation:

+ Formation of new research networks (based on an ecosystem model involving Research Institutes/universities & Hospitals).

+ Collaborative models integrating the Government/Regulatory Authorities -Rresearch Institutes/Universities and both Domestic and International in Public and Private enterprises.

2. Strengthening International Cooperation with Partners's Technology Transfer:

+ Signing of MOUs to facilitate technology transfer and the development of Biomedicine Products.

+ Initial engagement with global trends in Technologies Transfer: Next-generation Human vaccines; Cell-based technologies (stem cell and immunotherapy); AI and Big Data; & Development of personalized medical products using 3D printing.

3. Assessment of the Current Situation:

+ Vietnam is transitioning from a passive recipient of technologies toward co-development and autonomous production of certain strategic technological products, with localization rates reaching 50–70%.

+ There is a significant disparity in the scale of implementation and collaboration between the central and local levels.

Outcomes in technology cooperation and transfer from 2025

1. Biomedicine and Vaccines:

- MOH has approved several Projects/tasks including the adoption and localization of Strategic Tech Products (Vectors/Multi Antigen Protein Conjugate/VLP/ Sub unit.ect..) & mRNA vaccine for cancer treatment.
- Projects involving the Cooperative Tech Transfer in Hunam vaccines & biotechnological products with (EU Countries/USA/Cuba/Japan/Korea/Indial/Russia.ect..) follow a defined roadmap to transition from contract manufacturing/technology adoption to Co-development.

2. Cell Technologies & Cell Therapies

- Approval granted Projects focused on the cooperation & transfer technologies: Cell culture/clinical trials/therapeutic applications for chronic diseases with partnership from Japan/Taiwan/EU/U.S.
- Also development of TCVN for human stem cell-based products aligned with FDA/EMA standards.

3. Personalized Therapeutic Products/3D Printing Technology:

- Cooperation and technologies transfer to developed physical materials 3D printing.
- Cooperation and technologies transfer to developed biomedicine materials 3D printing.

4. Pharmaceutical & Drug Chemistry Sector:

- MOH/DAV Promote & support domestic pharmaceutical research/ manufacturing collaborating with partnerships leading global pharmaceutical companies to establish manufacturing facilities that meet WHO/EU-GMP/FDA standards, enabling the production of proprietary drugs, generic, biosimilar & biological products.
- The Vietnamese medicinal chemistry industry aims to meet approximately 20% of the domestic demand for pharmaceutical raw materials by 2030, with 100% of facilities producing active pharmaceutical ingredients (APIs) and excipients expected to achieve WHO-GMP certification by that time.

5. Clean Energy and Green Healthcare Infrastructure:

- Government agencies & local authorities are accelerating the transition toward "green" operations.
- Application the new energy technologies, energy storage systems, and solutions for energy efficiency and conservation within healthcare facilities as well as pharmaceutical manufacturing plants





Issues/Challenges

Key Challenges & Systemic Bottlenecks

Despite these achievements, deep-rooted structural constraints impact the speed of Technologies Transfer & commercialization:

1. **Regulatory Complexity & Administrative Delays:**
2. **Strict Technology Transfer Controls:**
3. **Infrastructure and Compliance Gaps:**
4. **Data Integration and Interoperability Hurdles:**
5. **Barriers related to financial mechanisms & Cninical trial:**
6. **Shortage of high-quality human resources :**



VABIOTECH®
Vì một cuộc sống khỏe mạnh hơn



Thank You !

