

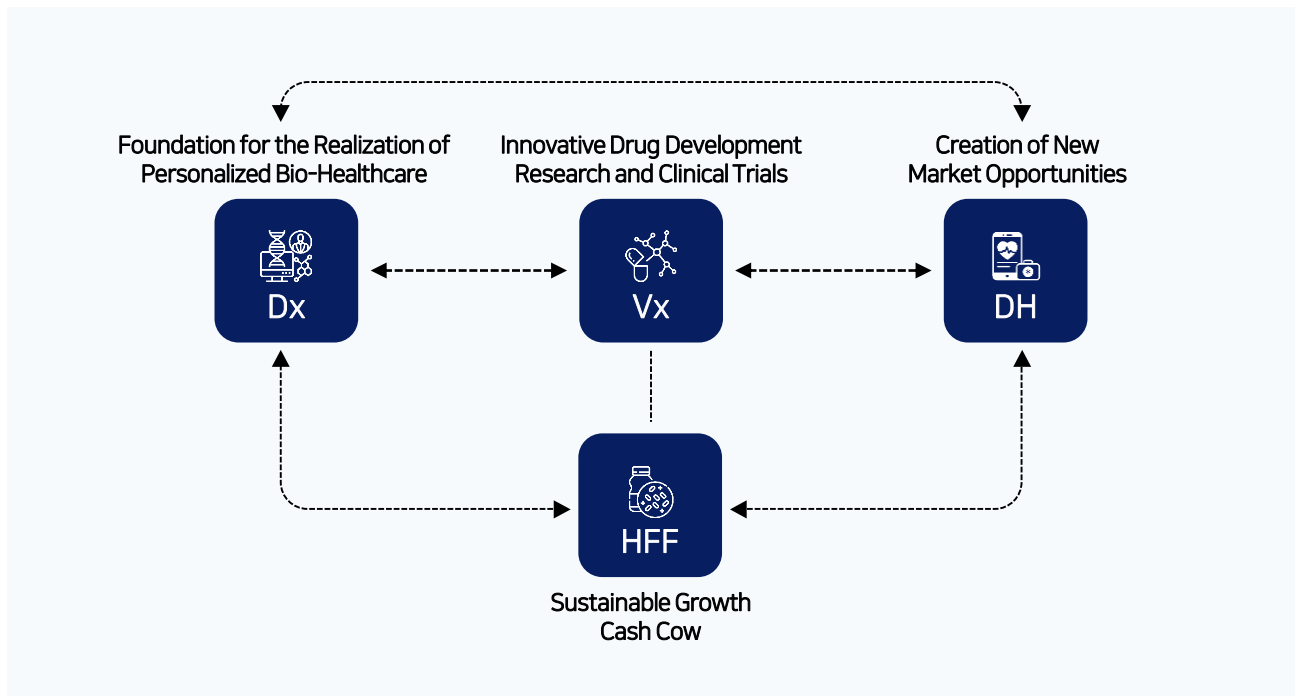
Dx&Vx

IR Letter

(Feb. 2025)



Dx&Vx Business Roadmap



Medical Diagnostics

Dx&Vx's genomic diagnostics and in vitro diagnostics contribute to reducing healthcare costs and improving treatment outcomes. Genomic diagnostic technologies enable more precise and personalized treatments, combined with new drug developments, driving innovation in the medical field. Our companion diagnostic services enhance the efficacy of both our own and third-party drug developments, minimizing side effects and facilitating the development of personalized treatment options for patients.

Genomic Diagnostics
In Vitro Diagnostics and CDMO
Genomics CRO
Companion Diagnostic Services (CliDex)



Consumer Healthcare

Using our diagnostic technologies, we provide integrated consumer healthcare solutions based on the microbiome for disease prevention, treatment, and management. Our services include health functional foods for prevention, general pharmaceuticals and prescription drugs for treatment, and products for lifestyle and hygiene management. We target the global market and continue to achieve high sales growth.

Microbiome-based Therapeutic Adjuncts
Nutrition Products
Domestic and International CSO
Functional Skincare/Personal Hygiene Products



Drug Development

We have established a comprehensive drug development pipeline, including OVM-200, an immuno-oncology agent, mRNA cancer vaccines, small-molecule compounds (oral obesity treatments), infectious disease vaccines and therapeutics, and other groundbreaking biotech projects. From 2026 onward, the outcomes of our R&D efforts and the commercialization of these initiatives are expected to materialize, enabling us to establish a virtuous cycle of revenue generation and reinvestment in clinical development.

Microbiome-based Drug Development
ROP and mRNA Cancer Vaccines
Cancer Antibody Drugs, Synthetic Organic Drugs
Ophthalmic Disease Treatment Drugs








Digital Healthcare

Dx&Vx is on the verge of launching K-hub, a bio-pharmaceutical portal, combined with our genomic analysis platform and telemedicine services. We aim to shift from a treatment-centric to a prevention and management-focused approach in healthcare services, ultimately aiming to develop a Clinical Decision Support System (CDSS) to assist medical professionals in their decision-making.

K-hub
Telemedicine Services
AI-based Drug Development Platform
Smart Diagnostic Devices

Performance Summary for February 2025

-  Multiple Awards for Our Consumer Healthcare Brand
-  Completion of Vaccine and Therapeutics Lineup for Infectious Disease Response
-  Patent Filing of New Drug Candidates (Anti-Obesity Peptide Injection, mRNA Cancer Vaccine)
-  Research Results Presentation and Partnership Discussions at JP Morgan Healthcare and Biotech Showcase
-  Participation in 'Arab Health 2025'

Consumer Healthcare

Multiple Awards for Our Consumer Healthcare Brand

Our company has recently won multiple awards at various prestigious ceremonies, reaffirming both consumer trust and our competitive edge in the market. First, Ofmom received awards in the China and Vietnam probiotics categories at the 2025 Korea First Brand Awards. This event, the largest brand ceremony in the country, is hosted by the Korea Consumer Brand Committee and co-organized by the Korea Economic Daily and Korea Consumer Forum, with winners selected directly by consumers based on anticipated future brand success. The awards demonstrate the high brand value that Ofmom has achieved in international markets. Additionally, our health supplement brand DXVX received the Blood Sugar Probiotic Award at the same ceremony, signifying that our products in the health supplement sector are recognized for both innovation and reliability.

Our achievements also extend to the digital consumer healthcare sector. Our personalized health supplement subscription service, Helsner, won the Health Category Grand Prize in the Mobile Web Services segment at the 2024 Web Awards Korea. This is the country's most authoritative website evaluation ceremony, where Helsner was recognized for its excellence in areas such as visual design, content originality, and technological differentiation. Helsner is an innovative service that provides customized health supplements tailored to individual health conditions and preferences, offering an efficient and cost-effective approach to health management. We plan to achieve over KRW 30 billion in revenue through this service this year and aim to reach 100,000 paid subscribers and KRW 100 billion in annual revenue within five years.

These multiple awards demonstrate our ongoing innovation and achievements in both the health supplement and digital healthcare sectors. We anticipate that the competitiveness of these brands will lead to stable and sustainable revenue growth moving forward.





Drug Development

Completion of Vaccine and Therapeutics Lineup for Infectious Disease Response

Our company is building a comprehensive lineup of vaccines and therapeutics to combat infectious diseases, focusing on securing vaccine sovereignty in preparation for future pandemics. In particular, to address the potential “twindemic” of simultaneous outbreaks of influenza and COVID-19 in winter, we have recently adopted various technologies and expanded our development pipeline. Key projects include a universal COVID-19 vaccine, an in-house developed circular mRNA vaccine, and a microbiome-based respiratory disease vaccine. Additionally, we have secured commercialization rights for long-term ambient storage of mRNA vaccines and identified antiviral drug candidates, optimizing both storage and distribution efficiency.

Our universal COVID-19 vaccine overcomes the limitations of existing mRNA vaccines and offers cross-protective immunity against multiple variants. It can be administered via oral or intranasal routes, inducing both mucosal and systemic immune responses. By targeting multiple viral regions, it addresses the limitations of conventional vaccines that rely solely on spike proteins, thereby providing long-term protection without the need for frequent updates against new variants. Unlike conventional mRNA vaccines, whose neutralizing antibody efficacy wanes within approximately six months, this vaccine has demonstrated sustained neutralizing antibody levels with just one booster dose per year. The vaccine has already shown positive results in Phase 1 clinical trials in the United States and South Africa, and preparations for Phase 2 are underway.

The vaccine employs the Ferritin-based virus-like particle (VLP) platform technology, utilizing self-assembling nanoparticles that encapsulate multiple antigens. This design prompts the immune system to recognize and respond as if encountering an actual virus, resulting in a robust immune response. Through the activation of cytotoxic T cells, this approach is expected to deliver stronger and more sustained protection compared to conventional injectable vaccines.

We are maximizing technological synergies and creating commercialization opportunities through collaborations with global pharmaceutical companies and academic research institutes. Learning from the challenges faced during previous pandemics when vaccine supplies were dependent on foreign sources, our company is committed to securing vaccine sovereignty. By leveraging global partnerships and technological innovation, we aim to establish a safe and sustainable healthcare system that can proactively address future pandemics.

Patent Filing of New Drug Candidates (Anti-Obesity Peptide Injection, mRNA Cancer Vaccine)

Our company continues to make progress in innovative drug development through ongoing patent filings, with recent advancements in the fields of metabolic disorders and cancer treatment. Specifically, we have filed patents for a GLP-1 receptor agonist peptide injection candidate for obesity and circular and linear mRNA-based cancer vaccines, thereby expanding our comprehensive therapeutic portfolio targeting metabolic disorders and intractable cancers.

In the field of obesity treatment, we have completed the patent filing for a peptide injection that utilizes the dual action of GLP-1 and glucagon. This injection simultaneously activates GLP-1 and glucagon receptors to maximize energy metabolism and weight loss while minimizing muscle loss, a common limitation of existing treatments. This patent represents a differentiated approach, with an emphasis on maintaining muscle mass, and is expected to open new possibilities for the treatment of metabolic disorders. Following the patent filing, we plan to conduct preclinical studies, including animal testing and toxicity studies, with the goal of entering clinical trials as quickly as possible. Additionally, we aim to develop a long-acting formulation to improve patient convenience.

Meanwhile, significant progress has also been made in the field of mRNA-based cancer vaccines. We have completed the domestic patent filing for circular and linear mRNA-based cancer vaccine candidates targeting non-small cell lung cancer (NSCLC) and triple-negative breast cancer (TNBC), both of which are known for their high unmet medical needs. This patent technology is linked to a national project in collaboration with POSTECH, focusing on the development of mRNA vaccines with long-term ambient storage and scalable mass production processes. This technology enhances the genomic stability of mRNA vaccines, thereby maximizing their commercial potential and ensuring stable vaccine supply even during pandemic situations.

Our focus is on addressing the significant unmet needs associated with NSCLC and TNBC. NSCLC accounts for approximately 85% of all lung cancer cases globally, highlighting the urgent need for more diverse treatment options. TNBC, which affects around 16% of breast cancer patients, lacks effective therapeutic targets, making the development of new treatment options critical. The newly developed mRNA cancer vaccines are expected to provide vital therapeutic solutions for these challenging cancer types.

The completion of these two patent filings in January 2025 marks a significant milestone in strengthening our competitive position in the fields of metabolic disorders and cancer treatment.

 **Drug Development****Research Results Presentation and Partnership Discussions at JP Morgan Healthcare and Biotech Showcase**

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**Participation in 'Arab Health 2025'**

Our company successfully concluded business meetings with global companies, major Middle Eastern hospital chains, and state-owned enterprises at the region's largest healthcare exhibition, Arab Health 2025. During the event, we introduced key technologies, including our long-term ambient storage mRNA platform and the prenatal and postnatal genetic testing service GenomeCheck, demonstrating strong potential for market expansion. In particular, we held discussions with Dubai's largest state-owned enterprise regarding the export and collaboration opportunities for our mRNA platform technology, which has been recognized for aligning with the vaccine self-sufficiency strategies of Middle Eastern countries. Our competitive advantage was also highlighted during meetings with major hospital chains in Saudi Arabia, leading to follow-up discussions.

Building on the collaboration opportunities secured through this exhibition, our company plans to further expand its presence in the Middle Eastern market and accelerate growth in the global healthcare industry.

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