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SK bioscience Joins Korea's National Initiative to Develop Avian Influenza Vaccine Amid Rising Pandemic Threats

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Company aims to develop a bird flu vaccine with rapid mass production and variant responsiveness.Â SK bioscience, a global innovative vaccine and biotech company committed to promoting human health from prevention to cure, today announced that it has been selected for the Korea Disease Control and Prevention Agency (KDCA)'sÂ Priority Infectious Disease Pandemic Preparedness Rapid R&D Support Program.

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Â SK bioscience, a global innovative vaccine and biotech company committed to promoting human health from prevention to cure, today announced that it has been selected for the Korea Disease Control and Prevention Agency (KDCA)'sÂ*Priority Infectious Disease Pandemic Preparedness Rapid R&D Support Program*.

This government-led initiative aims to develop vaccines against avian influenza â?? identified as a high-risk candidate for the next pandemic. SK bioscience was chosen for its proven technological capabilities as the only domestic company to have commercialized cell-culture-based vaccines for both influenza and COVID-19.

Under the program, SK bioscience and KDCA will co-invest approximately KRW 5.25 billion (USD 3.7 million) in early-stage development. The company will initiate development of a cell-culture-based avian influenza vaccine, aiming to enter Phase 1/2 clinical trials in the second half of next year. Furthermore, the company plans to foster international collaboration alongside its vaccine development to enhance global public health as the threat of avian influenza is not confined to a single region or country.

Unlike traditional egg-based vaccines, cell-culture-based vaccines offer greater effectiveness in pandemic response. Egg-based vaccines can face significant challenges during avian influenza outbreaks, as mass culling of poultry may limit access

to uninfected fertilized eggs, making timely and large-scale vaccine production difficult and less responsive to emerging viral mutations.

In contrast, cell-culture-based vaccines are produced using animal cells in advanced aseptic facilities, minimizing the risk of contamination or infection. This method enables rapid, large-scale manufacturing and allows for quicker adaptation to evolving virus strains.

SK bioscience has already utilized its cell-culture platform to develop vaccines against a range of viral diseases. During the COVID-19 pandemic, the company played a pivotal role by manufacturing vaccines for global partners and successfully launching its own COVID-19 vaccine. These achievements highlight the company's strong capabilities in both development and production, reinforcing its preparedness for future pandemic.

While human-to-human transmission of avian influenza remains low, highly pathogenic strains such as H5N1 and H7N9 continue to pose serious global threats. According to the World Health Organization (WHO), more than 950 human cases of avian influenza infection have been reported worldwide between 1997 and January 2025, with approximately half resulting in death. Experts warn that if H5N1 mutates to enable human-to-human transmission, it could trigger a deadly pandemic.

SK bioscience is also developing mRNA vaccines as part of its pandemic preparedness strategy. The mRNA technology, which demonstrated effectiveness during the COVID-19 pandemic, is well-suited for responding to highly transmissible diseases thanks to its rapid development timeline and scalability for mass production.

The company is currently conducting global Phase 1/2 clinical trials of its mRNA Japanese encephalitis vaccine candidate, *GBP560*, in collaboration with the Coalition for Epidemic Preparedness Innovations (CEPI). Interim results are expected next year.

Jaeyong Ahn, CEO of SK bioscience, said, "Our partnership with the Korean government and global organizations in pandemic response underscores our world-class technological and production capabilities. We are committed to strengthen our readiness for the next pandemic and fulfilling our mission to promote global health, laying the foundation to become a global vaccine and biotech leader."