

South Korea lays focus on novel mRNA therapeutics

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NuclixBio announces a collaborative research agreement with PharmAbcine



NuclixBio Inc., a South Korean biotech company that focuses on research and development of mRNA therapeutics, has signed a collaborative research agreement with PharmAbcine Inc. a clinical-stage biotech company focusing on the development of next-generation antibody therapeutics.

Under the agreement, both companies will conduct collaborative research utilizing NuclixBio's proprietary circular mRNA platform named 'ringRNA^{TM'} to develop novel mRNA therapeutics that can generate PharmAbcine's antibodies. These novel therapeutics will express antibodies intracellularly to target human TIE2 receptors present on epithelial cells.

The newly developed drugs based on circular mRNA can have a better therapeutic effect compared to conventional linear mRNA-based therapies due to the proven prolonged half-life of circular mRNA.

The circular form of mRNA also allows ribosomes, the particles that function to synthesize proteins, to continuously circulate around the loop of mRNA to produce a greater quantity of polypeptides, including therapeutic antibodies. Thus, the elongated half-life and therapeutic efficiency can improve patient convenience in terms of drug administration routes and intervals.