April 7, 2020
Company Name: AnGes Inc.
Presentative: Ei Yamada, President & CEO
(Code Number 4563, Mothers of the TSE)

Joint development between AnGes and Osaka university for DNA vaccine targeting novel Coronavirus (COVID-19)
- Participation of EPS Group to support the clinical trials-

Regarding joint development between Osaka University and AnGes for DNA vaccine targeting novel coronavirus announced on March 5, EPS Group joins this project as CRO (Contract Research Organization) to proceed the clinical trials with their administrative expertise. It is expected that the participation of EPS Group enables us of rapid promotion of our clinical trials.

【EPS Group (EPS Holdings, Shinjuku, Tokyo)】

- Since its establishment in 1991 as one of pioneering CROs, EPS has been a Healthcare Solution Provider to Pharmaceutical companies, Medical device manufacturers, Hospitals and Clinics, and Academia with various solutions from development to Marketing, Sales, Consultation and new values created in big data & AI, regenerative medicine, etc.

【Overview of the development of preventive DNA vaccines against the novel coronavirus, using plasmid DNA manufacturing technology-Reference information from the press release after March 5】

- Joint development of DNA vaccine against novel coronavirus between AnGes and Osaka University (Department of Clinical Gene Therapy; Department of Health Development and Medicine) based on the previous achievement of plasmid DNA product.
- The manufacturing process can be established in a shorter period of time with the manufacture of DNA vaccines, compared with the vaccine with using inactivated viruses (attenuated vaccines) or the vaccine with using genetically modified virus protein.
- The manufacturing operations will be undertaken by Takara Bio Inc. that possesses manufacturing technology and facilities of plasmid DNA.
- Daicel is developing an intradermal gene transfer method, using this new administration device, and promote research with Osaka University (Impulse Science for Medicine; Department of Health Development and Medicine), aiming at its clinical application.
- Use of this new administration device is expected to increase the efficiency of intradermal genetic expression and antibody production capability, enabling the development of more efficient DNA vaccines.

<About DNA vaccine>
DNA vaccines are safe and can be produced in a short time period without using any dangerous pathogens. By inoculating a circular DNA (plasmid) encoding the protein of the target pathogen, the pathogen protein is produced in the body and immunized against the pathogen. Unlike attenuated vaccines, DNA vaccines are safe as they have no pathogenicity.

The impact this will have on the full-year consolidated results for this fiscal year is currently being examined.

AnGes, Inc.
Public Relations & Investor Relations Group
Contact: https://www.anges.co.jp/en/contact/