## GenomIdea Launches Service with Mitsubishi Space Software - Drug Design Service for Next-Generation Nucleic Acid Medicine "siRNA" -

GenomIdea, Inc., a subsidiary of AnGes MG, Inc., jointly launched service with Mitsubishi Space Software Co., Ltd. (MSS) for accepting drug design orders for siRNA, a highly anticipated next-generation nucleic acid medicine.

As announced in AnGes' July 26, 2004 News Release, MSS and GenomIdea had been developing a drug design system for siRNA. Subsequently, the accuracy of this drug design system was enhanced through the use of an HVJ envelope vector high-throughput functional analysis system. This system had been completed, and in April, a service was launched for accepting siRNA drug design orders from pharmaceutical companies, reagent companies and research institutions.

siRNA is a short double-stranded RNA that has the same sequence as part of the target gene (mRNA), and is able to repress the action of the gene effectively. Genomic analyses have revealed that a wide range of diseases are triggered by overexpressing genes susceptible to certain pathogens. Consequently, the development of therapeutic agents being capable of effectively repressing such abnormal actions of genes is coveted, and siRNA's ability to do so has attracted attention as a candidate for a new molecular target drug to supplement antibody drugs. However, the degree of activity and adverse reactions developed by siRNA greatly differ according to the sequence to be designed. In humans, many genes act and are regulated in a complex manner, which has made designing a sequence which is safe and highly effective as a drug into a critical issue. The drug design system developed by MSS and GenomIdea was intended for solving this problem.

For conventional drugs composed of relatively simple chemical compounds, the major technique used to be high-throughput screening, in which substances appropriate for medical use were randomly narrowed down from more than one million types of new candidate drug substances. Recently though, a new procedure has appeared in which reasonable drug design can be performed on the basis of higher-order structures within the genes or proteins triggering diseases, used as target molecules for narrowing down new drug candidates. The drug design system co-developed by Genomldea and MSS allows

the design of siRNA capable of effectively regulating the activity of disease-causing gene targets based on such functional analysis. The system can search a target gene for an siRNA sequence suitable for clinical use. The system can be used not only for the development of siRNA-based nucleic acid medicines directly, but also for the discovery of target molecules in the development of conventional drugs. Thus, it is expected that the new development will accelerate and reduce costs for a wide range of drug development activities.

In addition to launching the service for accepting siRNA drug design orders from pharmaceutical companies, reagent companies and research institutions, GenomIdea and MSS plan to promote the licensing and sale of the system and related software in the future.

The siRNA drug design system was developed as part of the 2003 and 2004 Regional Regeneration Consortium's Research and Development Projects led by the Kansai Bureau of Economy, Trade and Industry.