October 3, 2005 AnGes MG, Inc.

<u>Hosokawa Powder Technology Research Institute</u> <u>Succeeds in Encapsulating Nucleic Acid Drug Developed by AnGes MG</u> <u>within Drug Delivery System (DDS) Nanoparticles</u> <u>– Evaluation of "Nucleic Acid DDS Preparation" Technology</u> <u>for Inflammatory Dermatoses Begins –</u>

Hosokawa Powder Technology Research Institute has recently succeeded at developing a new composite nanoparticle for AnGes MG. The Hosokawa Institute achieved this success by encapsulating NFkB decoy oligo within biocompatible and bioabsorbable nanoparticles.

NFkB decoy oligo is a oligonucleotides medicine developed by AnGes MG that is expected to be an effective external medicine with its application to the treatment of dermatoses such as atopic dermatitis and psoriasis.

AnGes MG targeted the DDS technology of the Hosokawa Institute with the intention of using it to enhance the therapeutic effect of NFkB decoy oligo against atopic dermatitis and other diseases by delivering it directly into the skin. The recent success in the encapsulation of the drug within nanoparticles prompted AnGes MG to initiate the evaluation of its pharmacological effect against dermatoses.

In the past it has traditionally been difficult to encapsulate water-soluble oligonucleotides medicine like NFκB decoy oligo within polylactic-co-glycolic acid (PLGA) nanoparticles, but the surface-modified PLGA nanoparticle technology independently developed by Hosokawa Powder Technology Research Institute has made it possible not only to encapsulate the medicine within nanoparticles but also to bind it to their surfaces, leading to expectations of improvement in DDS efficiency.

In this research toward the commercialization of percutaneously administered DDS preparation of oligonucleotides medicine for the treatment of inflammatory dermatoses, new possibilities are being opened up in the realm of nanobiotechnology. In the future, this area is expected to yield advances in state-of-the-art medical technologies such as protein medicine, gene medicine and nucleic acid medicine.