## Medical-Use Patent on NF-κB Decoy Oligonucleotide Granted in Japan - Covering Psoriasis -

We, AnGes MG, are pleased to announce that our medical use patent on NF- $\kappa$ B decoy oligonucleotide, for use in the treatment of psoriasis was granted and the patent (Patent No. 4305857) was published today.

This patent covers "the pharmacological composition for the treatment of psoriasis vulgaris, i.e., the composition containing at least one NF- $\kappa$ B decoy and pharmacologically acceptable carriers, with the decoy consisting of double-stranded oligonucleotide or its S-oligo." This patent is expected to provide strong support for the new indications of NF- $\kappa$ B decoy oligonucleotide over long periods of time.

Psoriasis is a common dermatological disease with high occurrence rate in Western countries. In Japan, the number of patients suffering from this disease is estimated to be about 100,000. It is a chronic inflammatory skin disease characterized by slightly elevated red eczema covered with silver-white dry scales, resembling dandruff, and by its very prominent appearance due to the lesions' distinctive borders with unaffected skin. It is sometimes accompanied by itching sensation.

Although the etiology of psoriasis remains unknown, there is demand for effective drugs that can be safely used in the treatment of this disease for prolonged periods. In view of its action mechanism, NF- $\kappa$ B decoy oligonucleotide is expected to be effective in the treatment of this disease.

The company has filed patent applications for this invention also in the US, Europe and other countries, and the company's strategy covers global development of this pharmaceutical product.

The company has entered into a licensing agreement with Avontec GmbH (Germany) concerning the right to use NF- $\kappa$ B decoy nucleotide for psoriasis and the authority to develop and distribute the product in Europe.

The company also holds various rights other than this patent, pertaining to the use of NF- $\kappa$ B decoy oligonucleotide for dermatological diseases.

- 1) Patent No. 3474879 (covering inflammatory diseases caused by NF-κB)
- 2) Patent No. 3778357 (covering atopic dermatitis)
- 3) Patent No. 4159836 (covering double-stranded NF-κB oligonucleotide related substances)

The company has now completed the Phase II clinical trial for NF- $\kappa$ B decoy oligonucleotide used for the treatment of atopic dermatitis and is now preparing a detailed plan for a Phase III clinical trial.