May 24, 2011
AnGes MG, Inc.

Substance Patent for NF-κB/E2F Chimera Decoy-Oligonucleotide Granted in Europe
- Covering new type decoy oligodeoxynucleotides which can inhibit multiple transcription factors -

AnGes MG, Inc. announces that a substance patent for its NF-κB/E2F chimera decoy-oligonucleotide has been granted in Europe and the Patent Gazette (Europe Patent No. 1803811) was issued on May 11.

Conventional decoy oligonucleotides only bind to one particular kind of transcription factor. These decoy oligonucleotides inhibit the binding of such transcription factor to the binding site of the genomic gene, thereby suppressing the downstream gene expression, and finally inhibiting the synthesis of proteins controlled by the genes and exerting a pharmacologic action.

Based on this concept, decoy oligonucleotides have been developed against many transcription factors, such as NF-κB, E2F, Ets-1, AP-1, STAT3, STAT-6 and GATA-3.

However, in an actual pathological condition, it is rare that only a single transcription factor is involved, and generally multiple transcription factors are simultaneously involved. Consequently, there have been cases where a conventional decoy oligonucleotide against a single transcription factor does not produce sufficient effects to achieve rapid and secure suppression of the transcription factor.

In order to improve such problems, AnGes MG has been conducting research on new-type decoyoligonucleotides which can simultaneously inhibit multiple transcription factors. As a result of their research, AnGes MG has successfully developed the chimera decoy oligonucleotide which can bind to two transcription factors - the transcription factor NF-κB, which is involved in inflammation, and the transcription factor E2F, which is involved in cell proliferation. AnGes MG has filed patent applications for the present invention, with Europe being the first place for the patent to be registered.

The use of this chimera decoy will enable, for example, simultaneous suppression of inflammation and cell proliferation in a well-balanced manner, and therefore greater drug efficacy and safety can be expected against vascular lesions such as angiostenosis after PTCA and stenosis of the vascular anastomosis site after organ transplantation.

In addition to Europe, AnGes MG has filed patent applications for the present invention in Japan and the US and is establishing a patent network for its worldwide development.

This patent will be valid until October 2025, and will strongly support AnGes MG's nucleic acid medicine development project.

AnGes MG has been filing additional patent applications for new type decoys suitable for various kinds of diseases, focusing on NF-κB. AnGes MG will continue to make efforts to expand the scope of clinical applications of nucleic acid medicine.

Meanwhile, this trend will have no effect on AnGes MG's business performance for the current fiscal year.