A Medical Use Patent Granted in Europe for Angiogenesis Targeting a New Gene, Endothelial Nitric Oxide Synthase (eNOS)

AnGes MG Inc. announces that a patent for medicinal use was granted in Europe, targeting angiogenesis by eNOS gene, and that the Patent Gazette (EP1391514B1) was issued.

Endothelial nitric oxide synthase, or eNOS, is mainly present in the vascular endothelial cells, and is known to have a variety of actions, including vascular dilation (hypotensive activity) and the suppression of platelet coagulation.

This invention discovered anew that the intramuscular administration of eNOS gene caused angiogenic activity to appear, similar to that of the hepatocyte growth factor (HGF) gene. Examples of the target diseases for which therapeutic effects may be expected from this angiogenic activity include bedsores, skin ulcers and other wounds; inflammatory diseases; severe ischemia of the extremities; ischemic heart diseases such as myocardial infarction, angina pectoris and heart failure; cerebral infarction; diabetic neuropathy; and spinal canal stenosis. Another possibility is to use the eNOS gene in combination with the HGF gene to try to achieve therapeutic benefits based on even more powerful angiogenic activity.

Corresponding patent applications for this patent were also filed in Japan, the USA and other countries. However, Europe became the first to register the patent. AnGes MG will continue to promote the establishment of patent rights for other angiogenic genes, in parallel with projects for developing treatment drugs using HGF gene.