Success in Developing Improved Decoys Suitable for Intravenous Infusion
- Publication in Medical Journal -

AnGes MG, Inc. is pleased to announce that Osaka University has succeeded in their development of second-generation decoys that can be administered systemically by intravenous infusion. The Osaka University research team confirmed the efficacy of second-generation ribbon-type NF-κB/ets chimera decoy oligos on abdominal aortic aneurysm in their research, and published the results in the academic journal "Molecular Therapy (on-line version)."

Ribbon-type decoy has a structure which is changed by modifying the terminal domains in a circle form for the purpose of increasing its stability in blood (They are also called "dumbbell-type"). And NF- $\kappa$ B/ets chimera decoys are double-stranded decoys that have inhibitory actions against the two transcription factors: NF- $\kappa$ B and ets.

In this research, when conventional structure unmodified-type and ribbon-type NF- $\kappa$ B/ets chimera decoys were each continuously administered to the rat abdominal aortic aneurysm model, the unmodified-type showed no efficacy, whereas the size of aortic aneurysm was statistically and significantly suppressed by the ribbon-type. This suggested that the stability in blood was markedly improved by changing the structure from the conventional unmodified-type to the ribbon-type.

Aortic aneurysm is a disease which occurs and grows asymptomatically, and when it finally ruptures, it can become a life-threatening condition. Surgery is the current therapy for aortic aneurysms and is mainly performed to remove the bulge in the arterial wall and replace it with an artificial blood vessel or stent graft in order to prevent ruptures. Recently, with advances in examination/diagnosis methods, it has become possible to detect aortic aneurysms when they are small. But unfortunately, there are no effective drugs that can be expected to suppress or regress the pathology of aneurysms, and consequently, it is considered desirable to establish therapies using drugs that take advantage of the merits of early detection.

With this research outcome, the ribbon-type chimera decoys with markedly improved stability in blood are expected to lead to the development of therapeutic drugs for intravenous infusion (systemic administration) for abdominal aortic aneurysm in the future.

The results of this research are available at <a href="http://www.nature.com/mt/journal/vaop/ncurrent/full/mt2010208a.html">http://www.nature.com/mt/journal/vaop/ncurrent/full/mt2010208a.html</a>.

Meanwhile, there will be no effect from this publication on AnGes MG's business performance for the term ending in December 2010.