

Development of a lead compound for CT contrast agents in the quantitative diagnosis of acute cerebral infarction and establishment of personalized diagnostic and therapeutic strategies for stroke patients

Seoul National University R&DB Foundation



| NEUROLOGY | Lead |
|--------------------------|--|
| Product Type | Small molecules |
| Indication | Quantitative CT diagnosis of ischemic stroke |
| Target | Ischemic stroke patient |
| MoA(Mechanism of Action) | CT contrast agent targeting fibrin within the thrombus. After thrombus imaging, biodegradation occurs through water-soluble degradation products generated by reactive oxygen species due to hypoxia. The high water solubility results in a short half-life and easy excretion from the body, enabling repeated administration. |
| Competitiveness | Unlike conventional vascular CT contrast agents, developing agent targets thrombosis, providing quantitative information of cerebral thrombosis with similar efficacy to MRI, using only CT imaging. Since it only targets thrombus, there is no need for excessive contrast agent as in the case of conventional vascular imaging. This reduces the side effects caused by osmotic pressure. Being based on biodegradable organic materials, it is easily excreted from the body, making it suitable for repeated administration without kidney burden. |
| Development Stage | Lead |
| Route of Administration | Intravenous administration. Up to 3 times a day at a dose of 25 mg/kg |

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