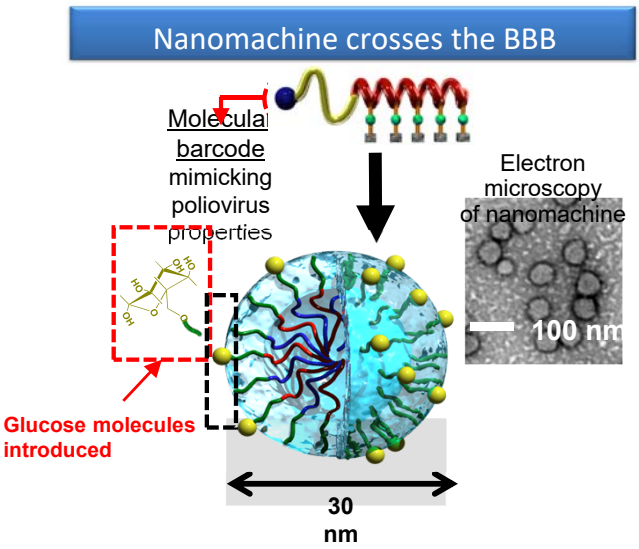
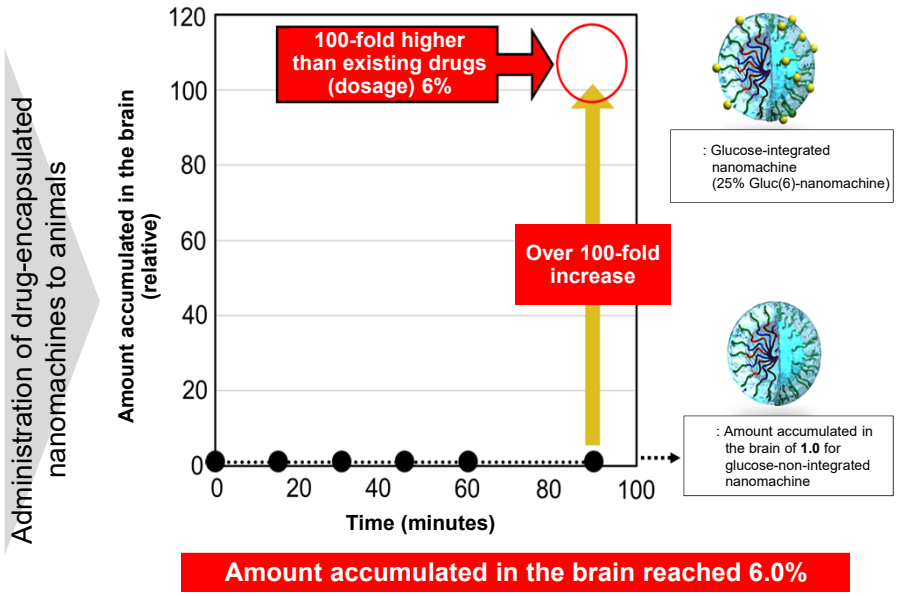
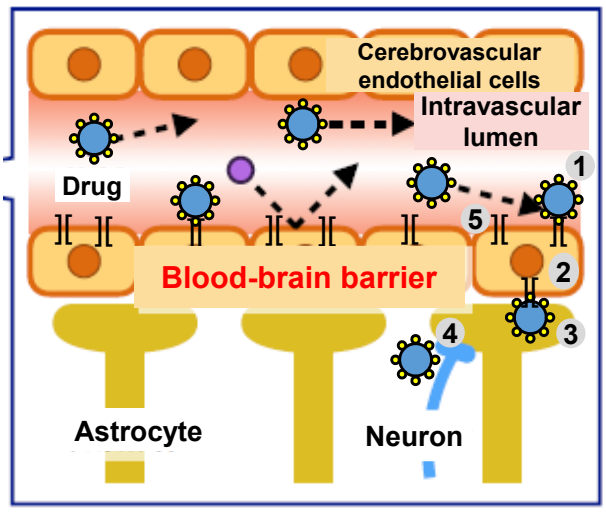
- We focus on glucose transport across the BBB and the highly expressed molecules involved in brain glucose uptake (glucose transporter) on the cerebrovascular endothelial cell surface.
- The nanomachines, modified with ligand molecules that are able to recognize the glucose transporter, were administered to animals under hypoglycemic conditions. After allowing the blood glucose level to rise, the efficient delivery of the particles was detected.
- Significant contribution to the options available for treating a range of cerebral nervous system diseases not confined to brain tumors and Alzheimer's disease but also depression and schizophrenia





Braizon's BBB-crossing Drug Delivery Technology Obtained Patent of Concept (Japan)



: Glucose ligands

: Glucose ligand-modified polymeric micelles

: GLUT1

1. Glucose-modified polymeric micelles interact with GLUT1 and are taken into cerebrovascular endothelial cells.
2. The micelles move inside the cerebrovascular endothelial cells.
3. The micelles move away from GLUT1 on the brain parenchyma side and migrate to the brain parenchyma.
4. The micelles reach the neurons.
5. GLUT1 is reused.