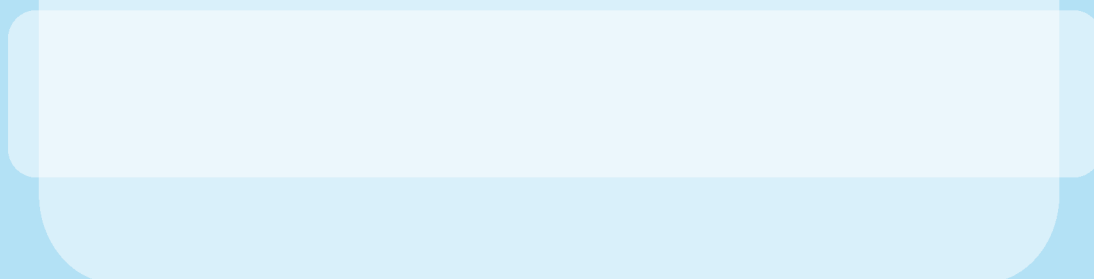


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# **SISTEM PENGHANTARAN OBAT MELEWATI BARRIER DARAH OTAK**

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## **ABSTRACT**

Brain barrier is effective barrier in drug delivery to brain. For effectiveness drug delivery need be desaigned a delivery with nanoparticle technology. Nanoparticles are solid colloidal particles ranging in size from 1 to 1000 nm that are utilized as drug delivery agents. The primary advantages of nanoparticle carrier technology is that nanoparticles mask the blood – brain barrier limiting characteristics of the therapeutic drug molecule. Furthermore, this system may slow drug release in the brain, decreasing peripheral toxicity. The method which elaboration in manufacture nanoparticles are emulsion polimerization, interfacial polimerization, desolvation evaporation and solvent deposition. Currently, report evaluating nanoparticles for brain delivery have studied anesthetic and chemoterapeutic agent. These studies are reviewed for efficacy and mechanisms of transport. Physiological factors such as phagocytic activity of the reticuloendothelial system and protein opsonization may limit the amount of brain delivered drug. Nanoparticle technology appears to have significant promise in delivering therapeutic molecules across the blood-brain barrier.

Key Word : Drug Delivery System, Nanoparticle, Blood-Brain Barrier