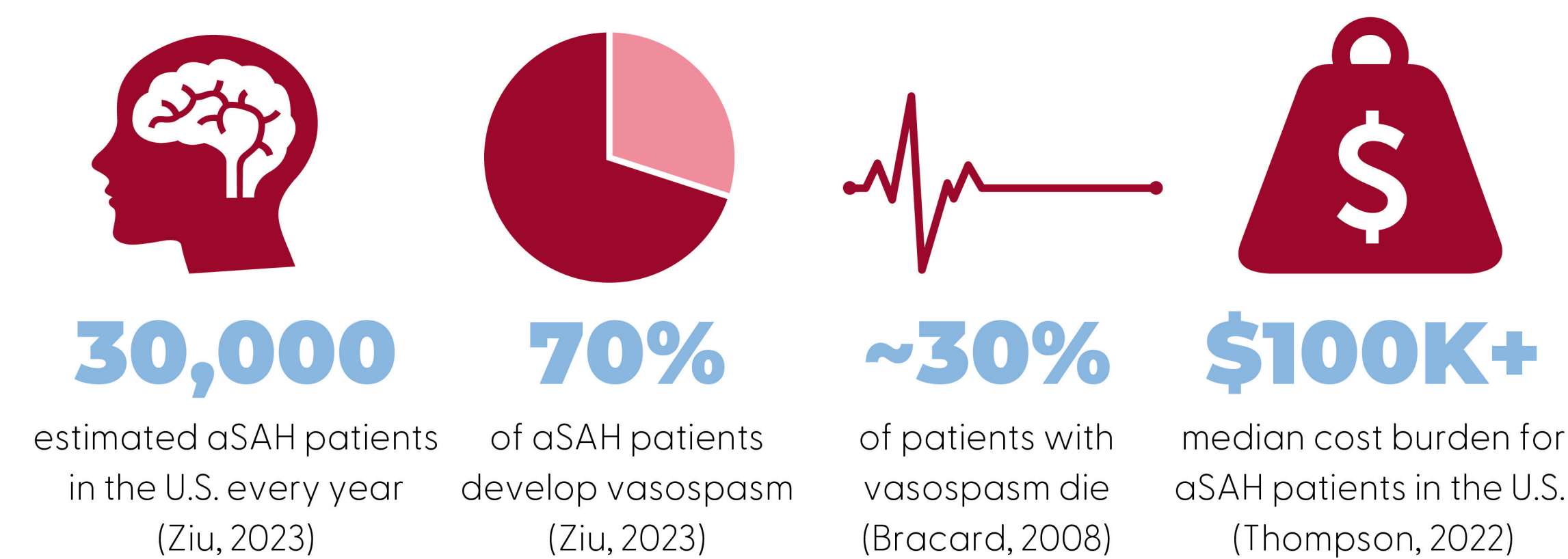


WHAT IS VASOSPASM?

When an aneurysm ruptures, blood begins to build up in the space between the brain and the skull. After surgeons operate to stop the bleeding, patients face 2–3 weeks of recovery in the ICU. During this period, patients risk developing vasospasm—the spontaneous narrowing of cerebral blood vessels caused by inflammation and tissue damage—which can cut off blood flow to the brain (Mascia, 2009). The resulting damage can lead to long-term disability or even death (Shah, 2023).



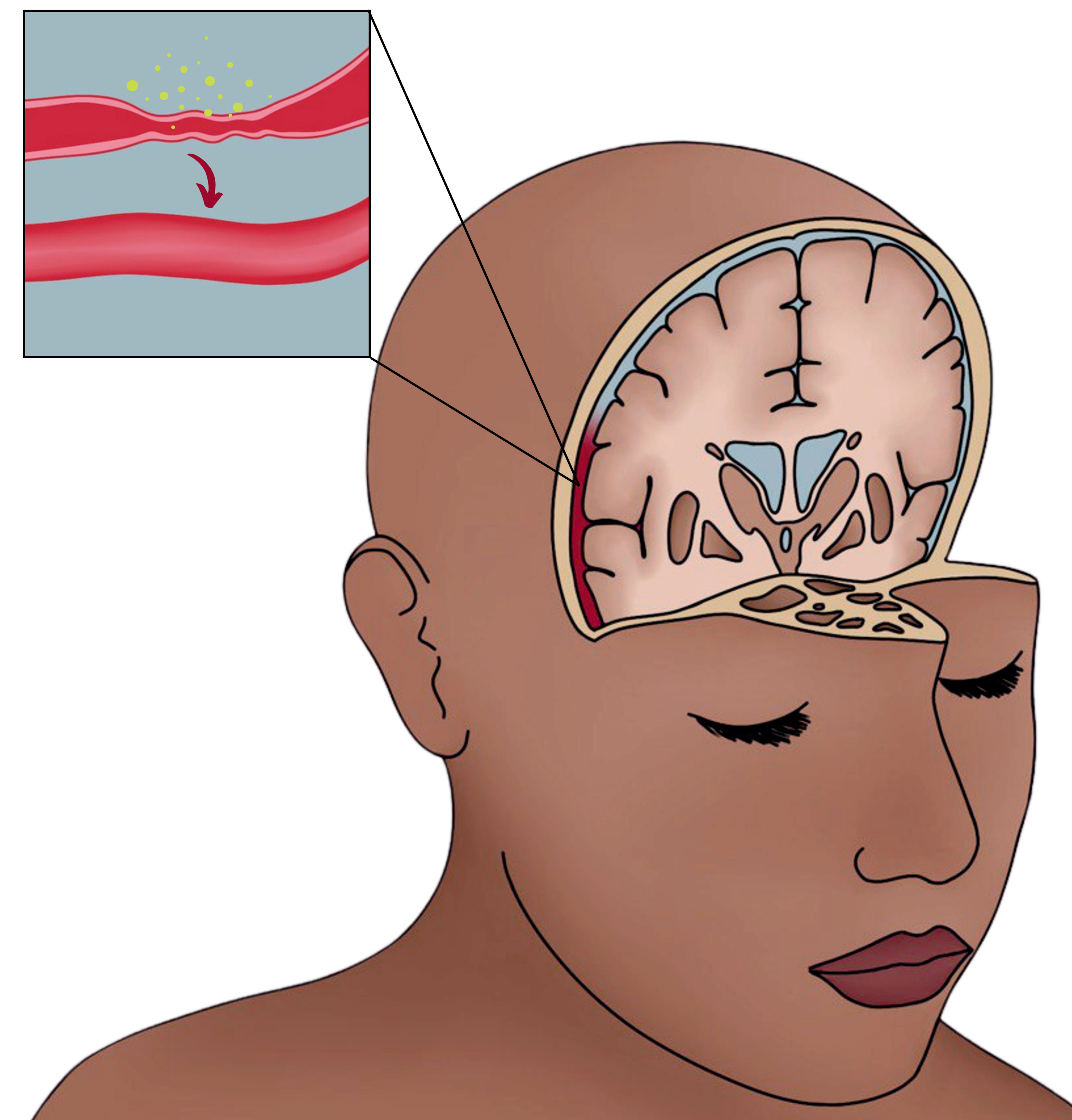
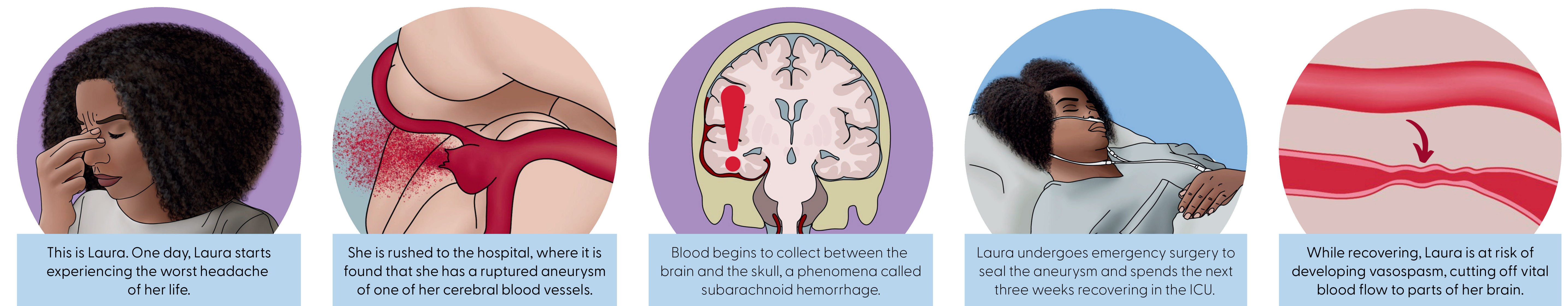
THE NEED

Neurocritical care providers need a method of minimizing ischemic damage from vasospasm in subarachnoid hemorrhage patients in order to improve survival rates and prevent long-term decline in quality of life.

USER NEEDS

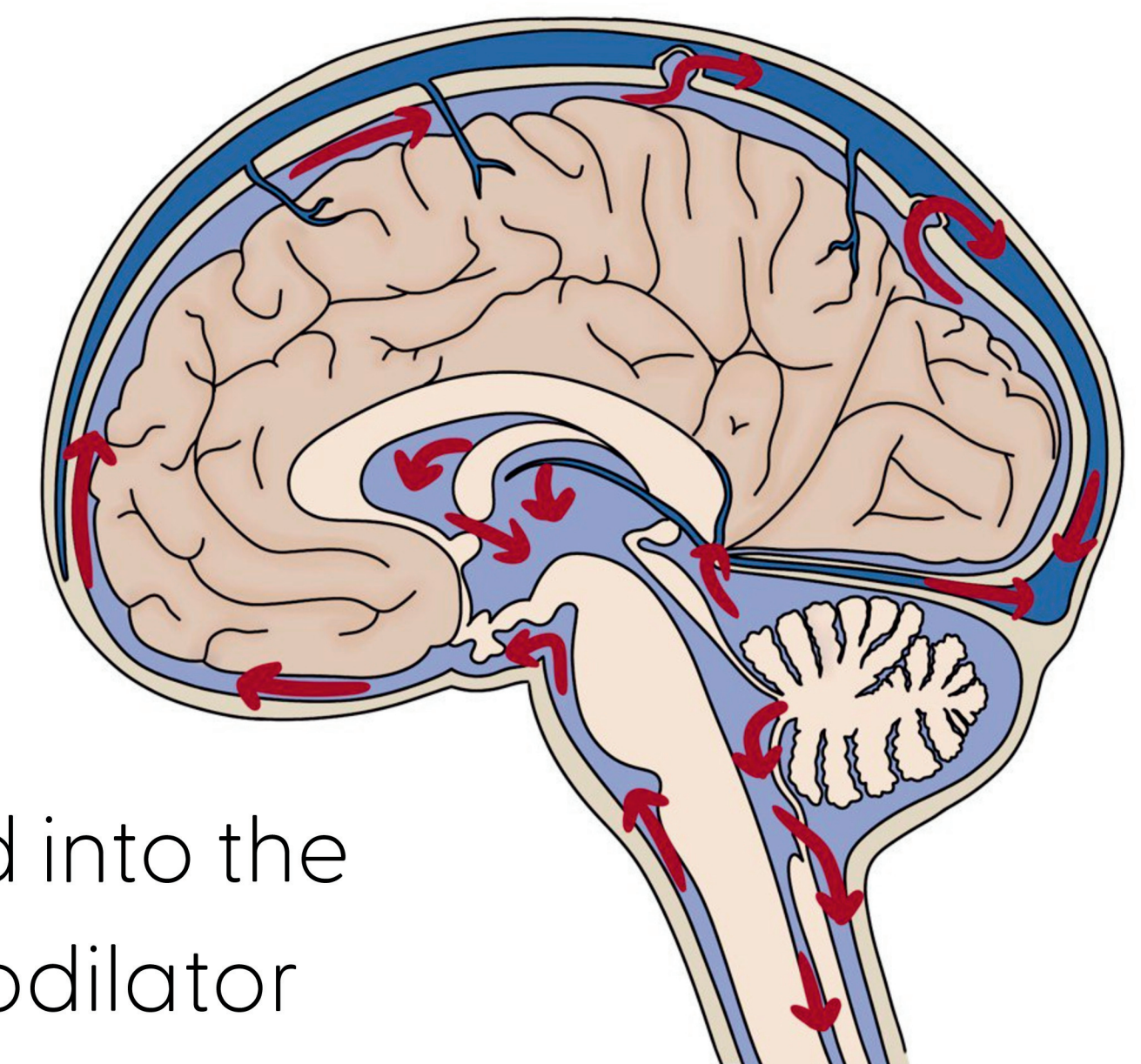
- adequate dilation of cerebral blood vessels
- easily implementation into clinical workflow
- no required transport out of the neuro-ICU

PATIENT JOURNEY



OUR APPROACH

VasculaSure is a drug delivery system that continuously releases a vasodilating agent directly into the ventricles of the brain over the course of three weeks. Once released into the cerebrospinal fluid, the vasodilator circulates around the brain and exerts therapeutic effects on blood vessels in spasm, restoring healthy blood flow to brain tissue.



UNLIKE OTHER OPTIONS...

- VasculaSure** acts locally, bypassing the systemic side effects seen in other routes of drug delivery.
- The **VasculaSure** system can be implemented through an existing step of patient treatment.
- VasculaSure** acts continuously and does not require multiple administrations.

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