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The new way of measuring brain oxygen levels of preterm infants – Status quo within the Wyss Zurich OxyPrem project

One in 15 preterm-born children die due to their prematurity before they turn five, making prematurity the leading cause of death in this age group. In this respect, oxygen undersupply to the brain is extremely dangerous. OxyPrem is the first medical device that reliably monitors the oxygen levels of preterm brains in real time. Using harmless, noninvasive light, OxyPrem precisely and continuously monitors oxygenation, notifying clinicians when oxygen levels might need to be adjusted. OxyPrem is reusable and cost-efficient, and it is a feasible solution even for difficult environments. It will also be compatible with frequently-used standard hospital monitors in the near future.

At Wyss Zurich, the next steps are being taken so that OxyPrem can be used in clinical care. CE certification for the first batch of devices has been obtained and the systems are currently introduced to hospitals throughout Europe in a large-scale, pan-European study running from 2019 to 2021. At the same time, efforts are being made to gain CE mark certification under the new MDR regime. Market entry is envisioned for 2022.