Detects apneas and auto-stimulates the foot to restart breathing

Almost all preterm infants under 34 weeks experience apneas. It poses a serious threat to their survival and neurological development. Apnea requires continuous monitoring & rapid intervention to prevent any damage. However in India, due to lack of vital sign monitors and skilled staff, attention to apnea is absent or delayed. Early discharge and lack of parent education and awareness puts these babies at risk of apneas even at home.

Using pulse oximetry and an auto-stimulation mechanism, ApneBoot is a foot worn device to prevent apneas. It “flicks” and vibrates the foot sole of the newborn stimulating the nervous system to restart breathing in the event of an apnea. The device also creates an audio-visual alarm to get caretakers attention. It empowers nurses and mothers to rapidly intervene before any injury can occur.

Clinical validation is underway at 3 hospitals