

NEONATAL JAUNDICE INITIATIVE

CHALLENGE

Sever jaundice, which affects millions of babies each year, can lead to brain damage or even death

How does it work: As part of its Neonatal Jaundice Initiative, D-Rev has developed *Brilliance*—a phototherapy device that uses strategically-located, high-intensity blue LEDs to break down bilirubin, a bile pigment that is formed when red blood cells breakdown, into non-toxic, soluble components that the neonatal liver can process and eliminate. *Brilliance* has been shown to outperform leading Western devices at less than one tenth of the cost.

Our Story: 13.4 million babies need treatment for jaundice every year; 9.3 million of them are born in developing countries. Jaundice has a simple solution—blue light—yet most jaundiced newborns in developing countries do not have access to effective treatment. Our field survey of the Indian market found that only six percent of phototherapy devices met American Academy of Pediatric (AAP) standards. A dire need exists to provide effective treatment in a low-cost, efficient, and environment-appropriate manner. Whereas devices that meet AAP standards often cost more than \$3000 (USD), D-Rev has developed superior treatment for less than \$300 retail.

D-Rev is moving quickly to address the global jaundice burden, launching *Brilliance* in India by February 2011 before expanding worldwide through strategic partnerships. As part of D-Rev's Neonatal Jaundice Initiative, D-Rev is also developing *Comet*, a compact phototherapy device adapted to electricity-scarce environments, and *Insight*, a point-of-care transcutaneous bilirubin screening device.

Recognizing the need to leverage local capacity and the open market, D-Rev is licensing the technology to a well-respected and established Indian medical device company to manufacture, sell, and service the devices. By 2015, D-Rev's goal is to have treated 2 million babies in resource-limited settings.

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Manufacturers: Various

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Sector: Health

When: February 2011

Where: India

Cost: \$325 USD

Status: Licensing and Technology transfer in progress with Indian partner

FYI: www.d-rev.org

