

# FILLING A BIG NEED AMONG SMALLEST OF US

When Irie Felkner and her twin brother Judah were born prematurely at 27 weeks, their parents knew the first few months wouldn't be easy.

While the twins were fighting for their lives in the neonatal intensive care unit (NICU), hooked up on ventilators, an echocardiogram showed an opening in Irie's heart had grown too large.

Irie was suffering from a life-threatening congenital defect called a patent ductus arteriosus, or PDA, which is an opening between two blood vessels leading from the heart that is also present in normally developing fetuses. For most babies, that opening seals itself shortly after birth.

But in some cases — primarily in premature babies such as Irie — it fails to close, making it difficult for babies to breathe normally due to an increased flow of blood to the lungs.

“One of the nurses mentioned that she heard a heart murmur and said that Irie had a PDA. I said, ‘Wait. What are you talking about? What's a PDA?’ ” said Crissa, Irie's mother.

Irie was one of the nearly 12,000 premature babies each year in the U.S. with a PDA requiring urgent treatment to survive.<sup>1 2</sup>

“We saw that Irie's heart was enlarging in size and more and more fluid was collecting in her lungs,” said Aimee Armstrong, MD, director of Cardiac Catheterization and Interventional Therapies at Nationwide Children's Hospital, and Irie's cardiologist.

Dr. Armstrong suggested Irie may be a candidate for a clinical trial for the world's first minimally invasive closure device specifically designed for preemies and newborns to correct PDA without the need for open-heart surgery. Nationwide Children's Hospital was one of eight centers participating in the trial.

With Abbott's Amplatzer Piccolo™ Occluder, Irie's procedure successfully closed her PDA.

After the procedure, Irie was able to breathe on her own within three days and was taken off the ventilator. And after spending 90 days at Nationwide Children's Hospital, Irie went home, where she is growing and thriving.

"You have to live it to fully appreciate what that device did for our daughter," said Matt, Irie's dad. "Three days after the procedure, she was making great progress."

Today, Irie is a typical toddler, always on the move alongside her twin brother. She enjoys her toys and nature walks with her family to get up close with animals. Irie loves to dance and being held upside down. Her parents predict that she might be a future gymnast.

"Irie's heart disease is gone. Her PDA is gone. She has no narrowings or any issues in the heart, and she will not need to be followed long term because of the PDA," said Dr. Armstrong. "Her prognosis is outstanding."

"I would definitely consider Abbott's Piccolo device to be Irie's lifesaver," Crissa said. "If it wasn't for the procedure, we might still be in the hospital."

For U.S. Important Safety Information about the Amplatzer Piccolo Occluder, visit <https://www.structuralheartsolutions.com/us/piccolo-ISI>.

This testimonial relates an account of an individual's response to the treatment. This patient's account is genuine, typical and documented. However, it does not provide any indication, guide, warranty or guarantee as to the response other persons may have to the treatment. Responses to the treatment discussed can and do vary and are specific to the individual patient.

## References

<sup>1</sup>Tashiro, Jun, Bo Wang, Juan E. Sola, Anthony R. Hogan, Holly L. Neville, and Eduardo A. Perez. "Patent ductus arteriosus ligation in premature infants in the United States." *Journal of surgical research* 190, no. 2 (2014): 613-622. <sup>2</sup>Bonamy, Anna-Karin Edstedt, Anna Gudmundsdottir, Rolf F. Maier, Liis Toome, Jennifer Zeitlin, Mercedes Bonet, Alan Fenton et al. "Patent ductus arteriosus treatment in very preterm infants: a European population-based cohort study (EPICE) on variation and outcomes." *Neonatology* 111, no. 4 (2017): 367-375.