

Preterm Survival Ever Younger

February 2020

- Babies are surviving and thriving at ever younger pre-term ages, especially when given appropriate care and treatment. Survival of extremely pre-term infants has increased significantly as doctors realize the advantages of active care for such young patients. The ages of survival have dropped from 28 weeks to 24 weeks and now less than 22 weeks.
- British Association of Perinatal Medicine, “Perinatal Management of Extreme Preterm Birth before 27 weeks of gestation A Framework for Practice,” October 2019; accessed via announcement: <https://www.bapm.org/posts/109-new-bapm-framework-on-extreme-preterm-birth-published>
The British Association of Perinatal Medicine (BAPM) now recommends that babies born as early as 22 weeks’ gestation be given active care and resuscitation.
- The BMJ, Consider active management for premature babies born at 22 weeks, says new guidance, *BMJ* 367, 16151, 2019
The British Medical Journal comments that the charge is for doctors to routinely consider lifesaving stabilization and resuscitation for “all babies born from 22 weeks’ gestation.”
- Backes CH *et al.*, Outcomes following a comprehensive versus a selective approach for infants born at 22 weeks of gestation, *Journal of Perinatology* 39, 39–47, 2019
Study found that if extremely preterm babies were routinely given care, as many as 53% of those born at 22 weeks’ gestation survived, compared to only 8% if active care was not given.
- Welty S, Challenging the gestational age for the limit of viability: proactive care, *Journal of Perinatology* 39, 1–3, 2019
Survival of more than half of 22-week preterm infants, when given active care, challenges physician attitudes as well as thoughts about age limit of viability.
- Norman M *et al.*, Association Between Year of Birth and 1-Year Survival Among Extremely Preterm Infants in Sweden During 2004-2007 and 2014-2016, *JAMA* 321, 1188-1199, 2019
Survival of babies born at 22 weeks’ gestation in Sweden increased from 29 percent during 2004-07 to 58 percent during 2014-16, if the preterm babies were given intensive care.
- Rysavy MA and Ehret DEY, Extremely Preterm Birth Outcomes in Sweden, *JAMA* 321, 1163-1164, 2019
Editorial comment on Swedish study showing survival of extremely preterm babies, noting that the results “demonstrate what is possible” and encouraging physicians “to improve care for extremely preterm infants and achieve better health for these children and their families.”
- A. Pawlowski, 'Miracle baby': Born at 21 weeks, she may be the most premature surviving infant, *Today*, updated Nov 21, 2018
Lyla Stensrud was born at 21 weeks 4 days, has grown into a healthy little girl.

- Ahmad KA *et al.*, Two-Year Neurodevelopmental Outcome of an Infant Born at 21 Weeks' 4 Days' Gestation, *Pediatrics* 2017;140(6):e20170103
Published case study of Lyla's birth
- Rysavy MA *et al.*, Between-Hospital Variation in Treatment and Outcomes in Extremely Preterm Infants, *N Engl J Med* 372, 1801, May 7, 2015
Groundbreaking *New England Journal of Medicine* study demonstrated that babies delivered as young as 22 weeks can survive, and active intervention for treatment greatly improves their survival.
- "Survival Rate May Be Improving for Extremely Preterm Infants," National Institutes of Health, last modified February 15, 2017
NIH press release for paper describing increased survival, with lower neurological concerns, for preterm babies delivered at 22-24 weeks who received active care.
- Younge N *et al.*, Survival and Neurodevelopmental Outcomes among Periviable Infants. *N Engl J Med* 376, 617, 2017
Paper describing survival without neurological impairment for extremely pre-term babies delivered at 22-24 weeks.
- Shah PS, Neonatal Intensive Care—The Only Constant is Change, *N Engl J Med* 376, 694, 2017
Editorial in *New England Journal of Medicine* describing the survival of ever younger pre-term babies, when given active treatment.
- Mehler K *et al.*, Survival Among Infants Born at 22 or 23 Weeks' Gestation Following Active Prenatal and Postnatal Care. *JAMA Pediatr.* 170, 671, 2016
Paper studies increasing survival rates of pre-term infants, and finds that 60% of infants born at 22 weeks who receive active hospital treatment will survive.