The anticipated birth of a neonate at the threshold of viability (25 or fewer completed weeks of gestation) presents a variety of complex medical, social, and ethical concerns. The American Academy of Pediatrics and American College of Obstetricians and Gynecologists recommend that obstetric and neonatal health care providers discuss the approach to such a delivery, and then counsel the parents consistently and compassionately.

Neonatology counseling in anticipation of extreme preterm birth should include the following information:

- A range of the current possible survival rates
- An overview of potential medical problems and their treatment and complications
- The possibility of long-term disabilities, including developmental delay, cerebral palsy, blindness, deafness, and learning disabilities
- The possibility that expectations may change after delivery, based on a more accurate assessment of the gestational age and condition of the newborn
- Care should be taken not to include interventions of unproven benefit as “doing everything possible” for the neonate.

The neonatologist counseling the expectant mother of an extremely immature infant should document the discussion in the mother’s chart. Documentation should include:

- All individuals present during discussion
- Detailed description of the particular case and conversation with amily
- The conclusion reached regarding the desires of the family with specific details on any limits to resuscitation

Complications due to prematurity include:

- Lung immaturity and chronic lung disease
- PDA
- Infection
- NEC
- Brain injury
- Inadequate nutrition and growth
- Retinal injury

The chart below represents short-term outcome of Vanderbilt inborn infants discharged in 2017 who received interventional care in the delivery room. Those infants who received comfort measures at delivery are not included.

All infants were still hospitalized and on oxygen at 36 weeks, however, not all were discharged home on oxygen.

Gestation (n)	Survival	ROP requiring surgery	NEC	BPD	IVH grade III-IV
22 (7 patients)	43%	100%	0	100%	33%
23 (9)	44%	50%	0	100%	75%
24 (32)	63%	9%	0	100%	20%
25 (22)	95%	24%	4.7%	100%	0

At 22 and 23 weeks' gestation, counseling is similar. Resuscitation is not recommended but may be offered after lengthy discussion on the poor prognosis with the family. This decision for resuscitation should not be made solely on the gestational age as many other factors can affect the outcome. At 24 weeks' gestation or more, resuscitation is recommended based on improvement in survival and morbidity at this gestational age, provided the fetus is not in extremis. There are certainly fetal and/or maternal conditions where routine resuscitation at ≥ 24 weeks is not indicated.

Both physicians and parents alike should be cautioned that gestational ages and weights determined by fetal ultrasonography are only estimates, and 2 weeks and 200g can make a substantial difference in an extremely preterm infant's prognosis. Therefore, a neonatologist should be present to assess all infants delivered at the limits of viability to confirm estimated gestational age. Parents should be counseled before delivery that a resuscitation plan may need to be reconsidered in light of new information once the infant is born.

Please see references below.

http://www.nejm.org/doi/pdf/10.1056/NEJMoa1410689
http://pediatrics.aappublications.org/content/136/3/588

https://www.acog.org/-/media/Obstetric-Care-Consensus-Series/occ006.pdf?dmc=1&ts=20180129T0128313960