

PDA Treatment Guideline for Extremely Preterm Infants

- If a clinically significant PDA is suspected and the respiratory severity score (RSS) is >2.4 consider obtaining an echo on day 7
- Routine medical treatment for PDA is not recommended
- Discuss PDA treatment and research options
 - Transcatheter PDA closure ($>700g$ and >7 days)
 - Responsive management (respiratory management, fluid restriction based on patients' clinical status, diuretics as needed)
 - Offer participation in PIVOTAL study
- Medical treatment might be considered in rare circumstances (eg. florid congestive heart failure)
 - Acetaminophen: 15 mg/kg NG q6h x 5 days
 - Ibuprofen: 10 mg/kg NG x 1, then 5 mg/kg q24h x 2 more doses NG (parents should be fully informed about the recent evidence of increased mortality with early treatment)

Messaging for PIVOTAL

- Medical treatment of PDA is either unsafe (NSAIDs) or ineffective (Acetaminophen)
- Both transcatheter PDA closure and responsive management are considered standard care treatment strategies for PDA management
- We don't know which strategy is the best
- PIVOTAL compares these two strategies
- Both strategies lead to closure of the PDA
- Both strategies have risks and benefits
- Participation in PIVOTAL is voluntary

Definitions

Hemodynamically significant PDA: large PDA ($>1.5mm$) with one of following features; dilated LA, dilated LV, diastolic flow reversal in the descending aorta

$RSS = \text{Mean airway pressure} \times FiO_2$

Revised 4/15/2025