Hypoxic Respiratory Failure in Term and Near-Term Neonates

Disclosure Information: This program is sponsored by Ikaria, manufacturer of INOMAX® (nitric oxide) for inhalation

Objectives:
- Define and describe Hypoxic Respiratory Failure (HRF) in Term and Near-Term Neonates
- Describe the common disease states associated with HRF
- Describe the physiology and pathophysiology of HRF to include V/Q mismatch, intrapulmonary & extrapulmonary shunting
- Describe the alterations in lung mechanics involved in HRF
- Describe the impact of lung volume on pulmonary vascular resistance
- Describe the role of inhaled nitric oxide in the treatment of HRF
- Describe the pharmacology of inhaled nitric oxide
- Describe the pivotal trials of inhaled nitric oxide for HRF
- Describe three post-approval studies of inhaled nitric oxide for HRF
- Describe the indication, contraindication, safety, precautions, and warnings of INOMAX

1. Introduction

2. HRF in the Newborn: A Persistent Challenge
   - Definition
   - Epidemiology
   - Mortality
   - Morbidities

3. Epidemiology of Neonatal HRF

4. HRF in Newborns: Some Commonly Occurring Diseases

5. Pathophysiology of HRF

6. The Cardiopulmonary Triad
   - Lung disease
   - Cardiac disease
   - Pulmonary vascular disease

7. HRF in Newborns: Pathophysiology
   - Intrapulmonary Shunt and V/Q Mismatch
   - Extrapulmonary Right-to-Left Shunt

8. Cardiopulmonary Interactions in Neonatal HRF

9. Treatment of Neonatal HRF
10. Adequately Recruiting the Lung: Optimizing Lung Volume Is the First Step

11. Optimal Oxygenation Requires Matching Ventilation and Perfusion (V/Q)

12. PVR Can Increase at Low and High Lung Volumes

13. Role of INOMAX® (nitric oxide) for Inhalation in the Treatment of Neonatal HRF

14. Inhaled Nitric Oxide Selectively Dilates the Pulmonary Vasculature

15. INOMAX Phase III Studies for Neonatal HRF

16. Safety Outcomes From Phase III Studies

17. Additional Studies to Address Earlier INOMAX® Use In Infants With HRF

18. INOMAX Dosage and Administration

19. Important Safety Information When Using INOMAX
   a. Contraindication
   b. Precautions

20. Summary