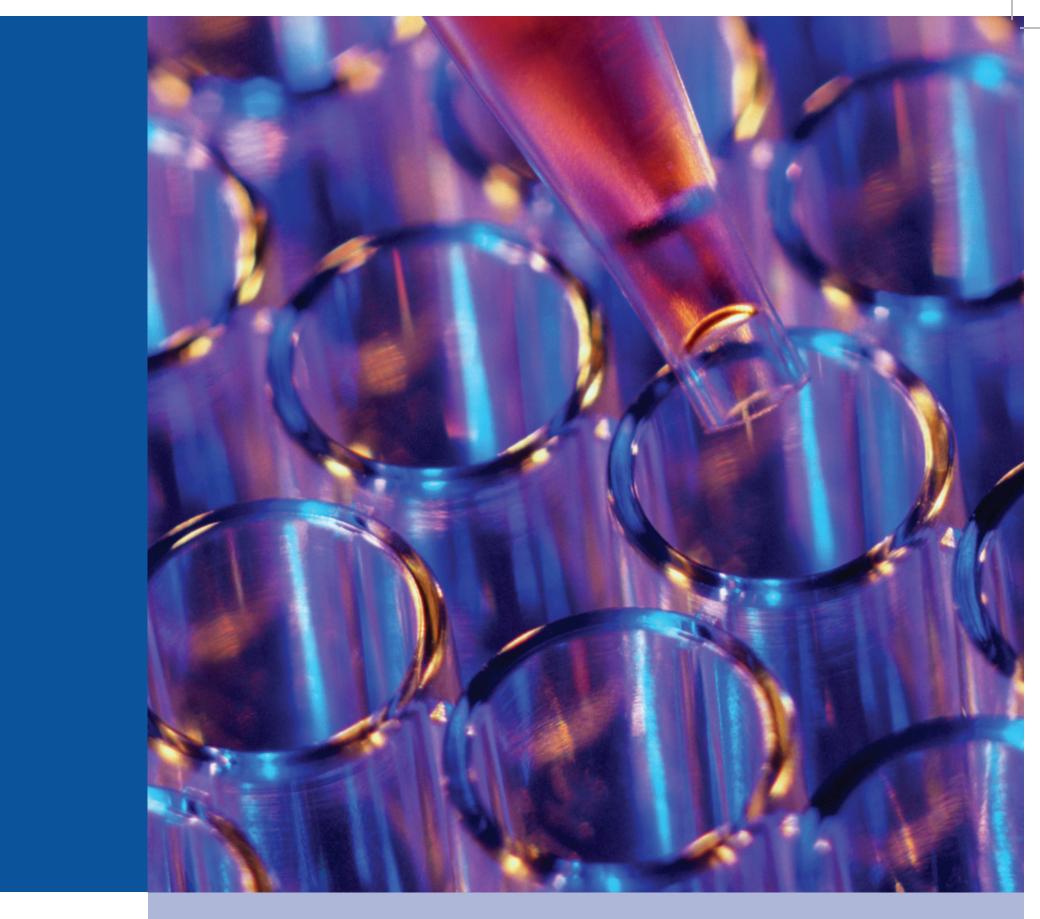
# Sildenafil Exposure in the Neonatal Intensive Care Unit

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## Disclosures

Krystle Perez has documented that her presentation involves comments or discussion of unapproved or off-label, experimental, or investigational use of sildenafil. The authors have no financial relationships to disclose or conflicts of interest to resolve.

## Introduction

- Pulmonary hypertension is associated with high morbidity and mortality in term and preterm infants.
- Sildenafil is FDA approved for adults with pulmonary arterial hypertension as it promotes pulmonary vasodilation.
- Despite anecdotal use, there is no conclusive evidence to support sildenafil use in the neonatal intensive care unit (NICU).

## Objective

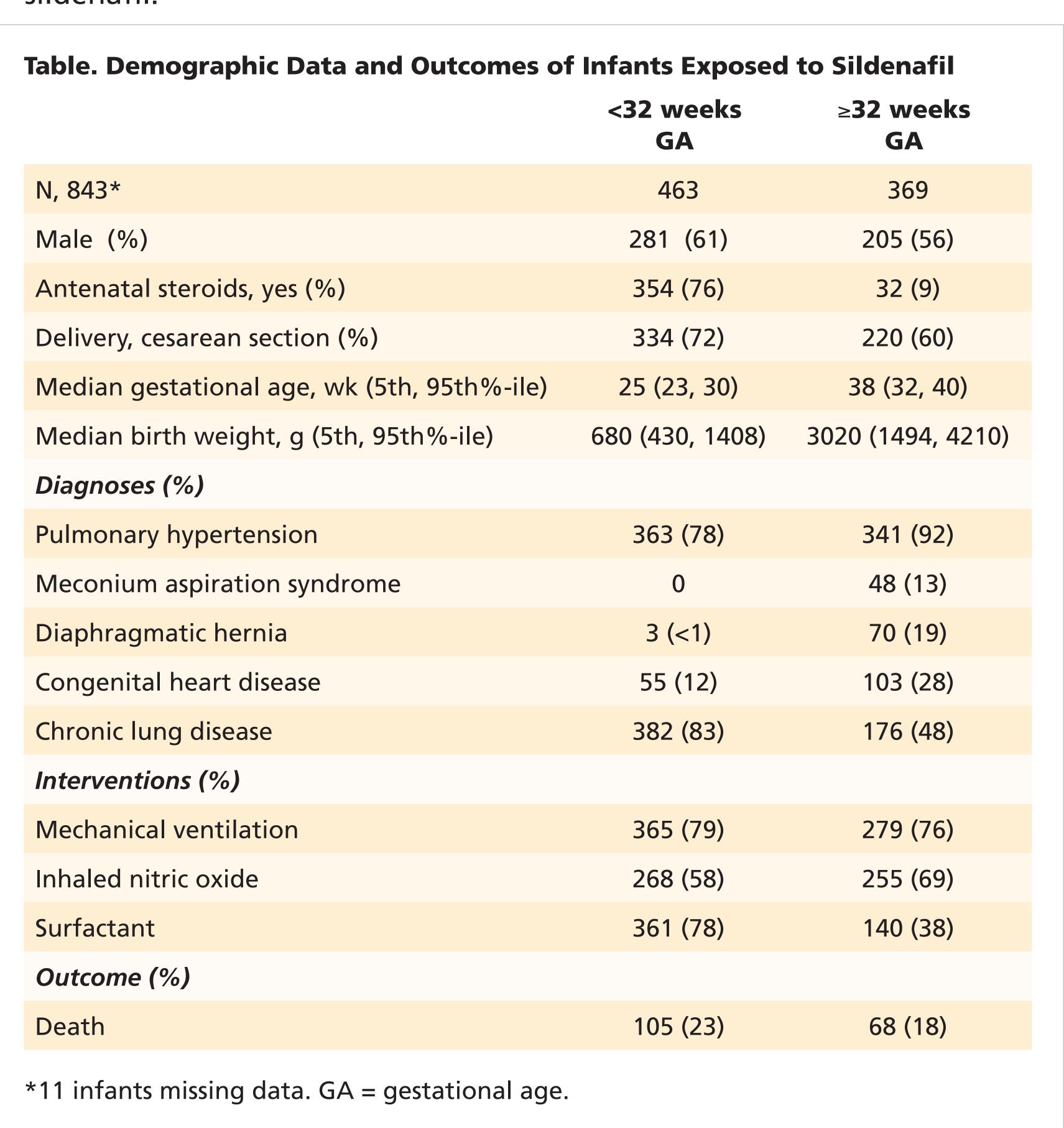
 To determine the epidemiology and clinical outcomes of term and preterm infants exposed to sildenafil.

#### Methods

- A retrospective cohort of infants born between 2001 and 2011 at ≥23 weeks gestational age was assembled using the Pediatrix Data Warehouse.
- Data were obtained from admission, discharge, and daily progress notes.
- Contingency table analysis was performed to examine the association between characteristics of the infants and categorized gestational age.

## Results

• Of 677,995 infants admitted to the NICU, 843 (<0.1%) were exposed to sildenafil.





- Sildenafil use has increased in NICUs nationwide.
- Pulmonary hypertension and chronic lung disease were the most common diagnoses in exposed infants <32 weeks and ≥32 weeks gestational age.
- Despite sildenafil use, exposed infants often die.
- More research is needed to determine the efficacy and safety profile of sildenafil in infants.

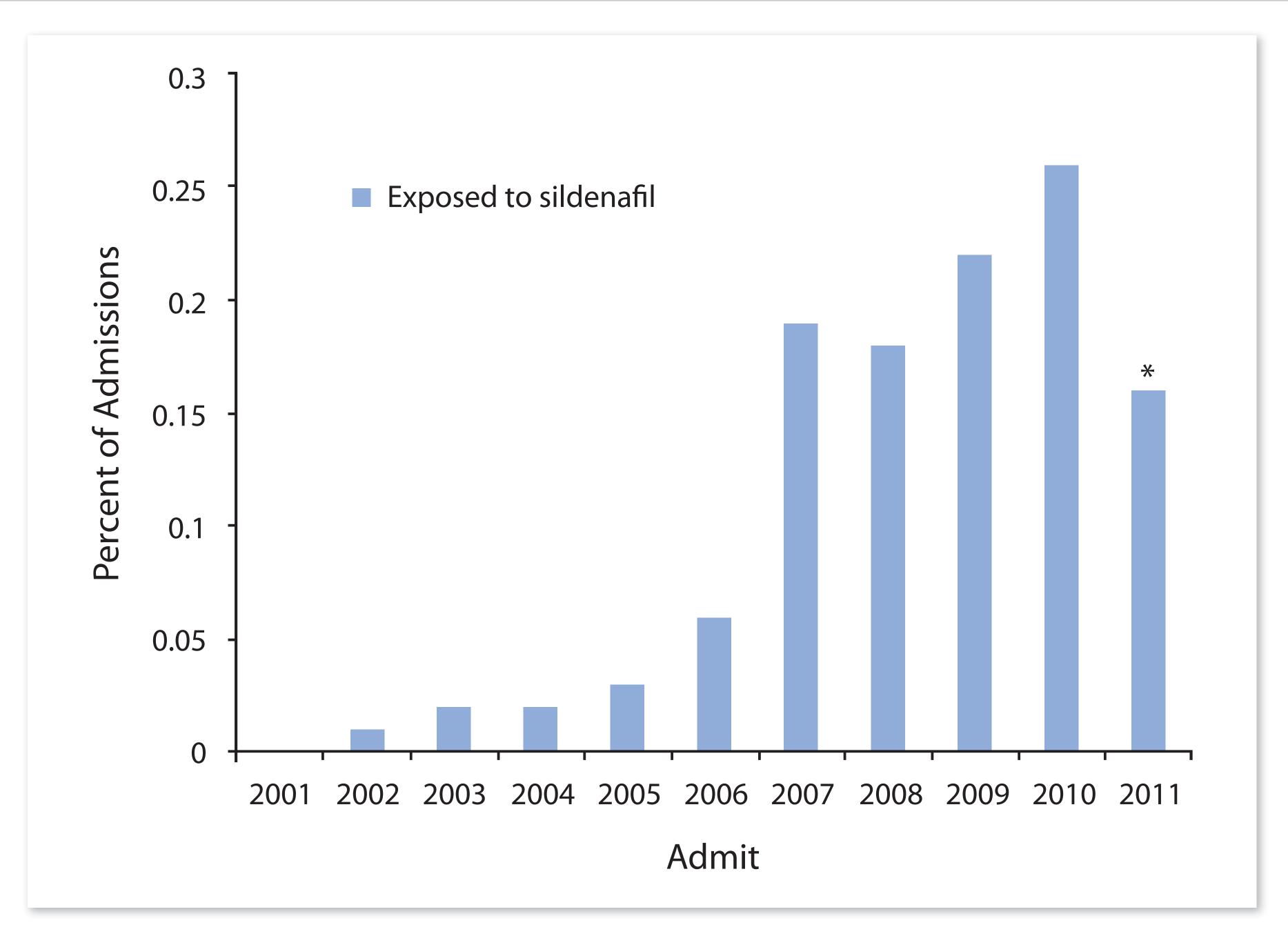


Figure 1. Sildenafil Exposure by Admit Year



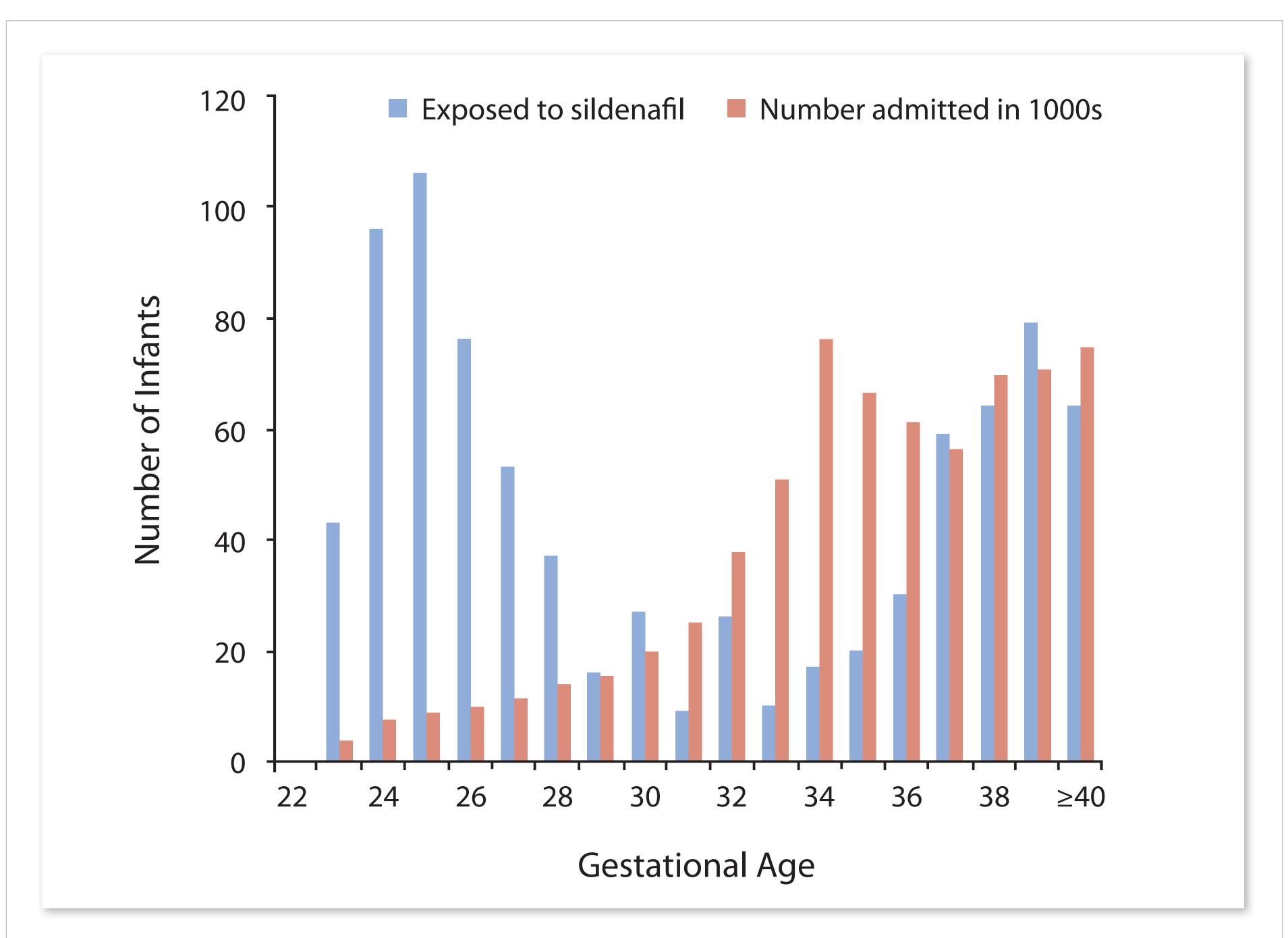


Figure 2. Sildenafil Exposure by Gestational Age

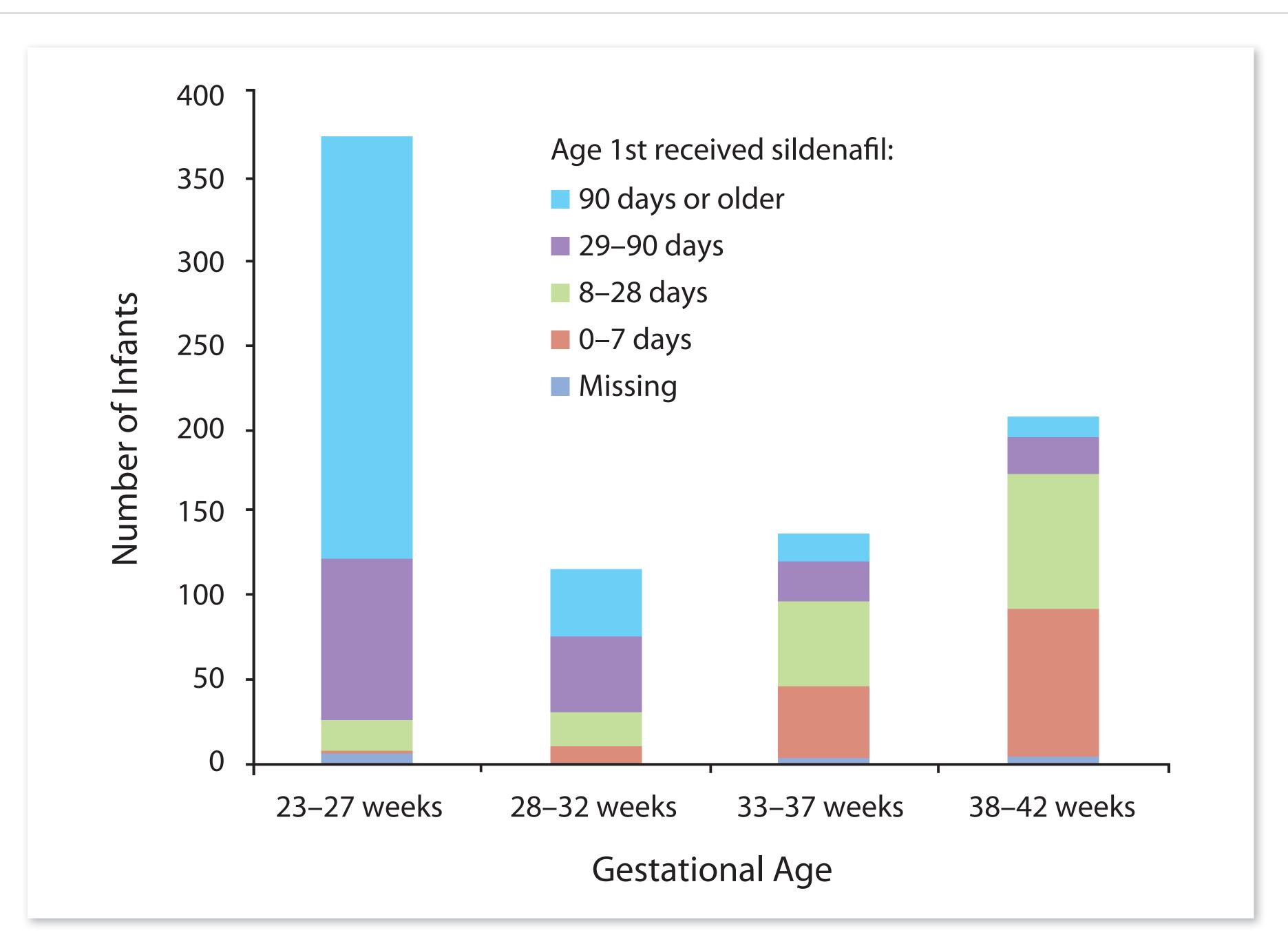


Figure 3. Age at First Sildenafil Exposure

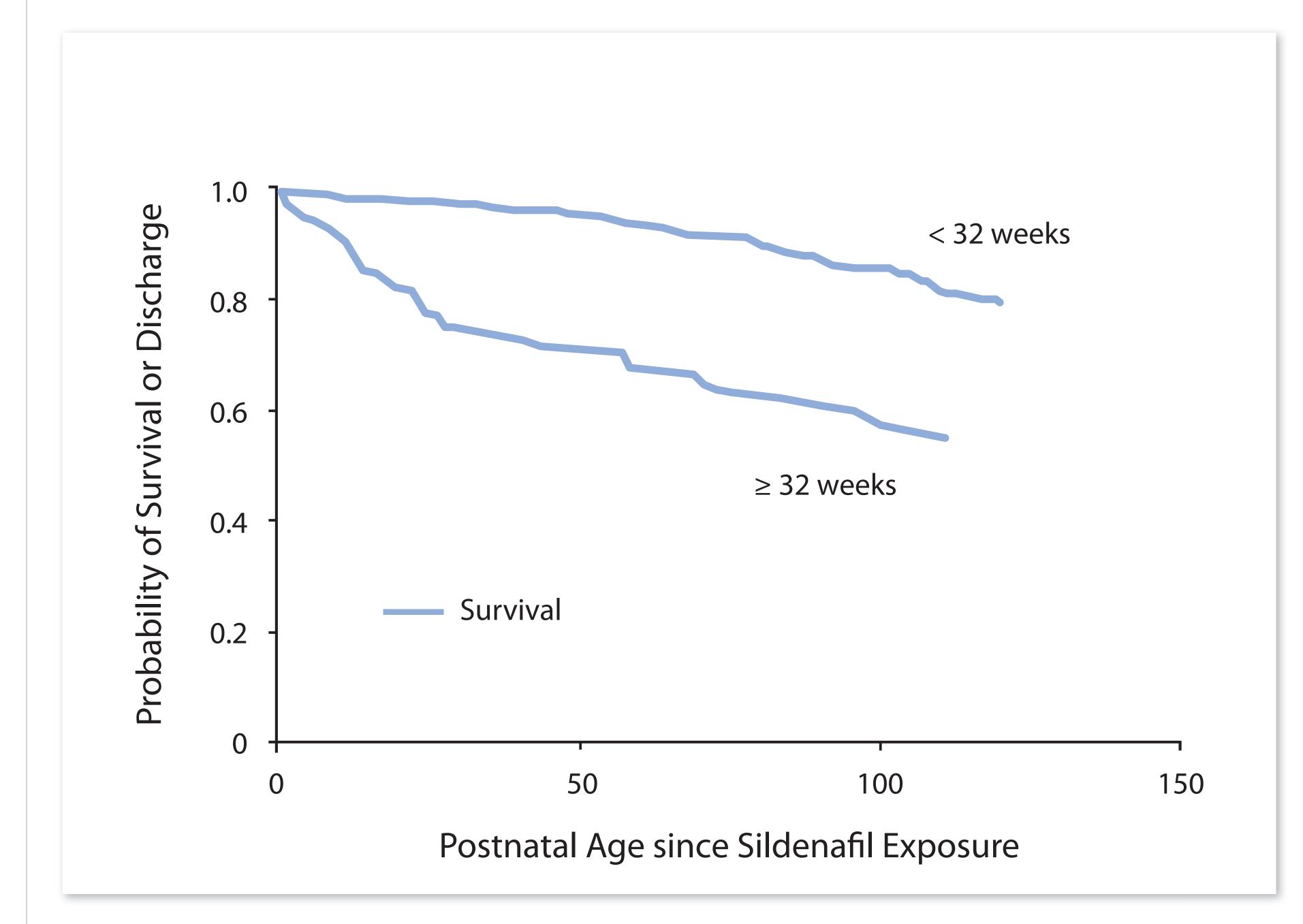


Figure 4. Survival Curves for Infants Exposed to Sildenafil