6TH jENS
Congress of joint
European Neonatal Societies

jENS 2025 Highlights Report

Chiesi

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The **joint European Neonatal Societies Conference (jENS) Congress** was held in **Belgrade, Serbia, from October 21–25 2025**. Chiesi achieved strong visibility at the event through both the Chiesi Symposium and its engaging exhibition booth.

The **Chiesi Symposium**, titled "**Respiratory Management Across Various Preterm Infants' Profiles and Geographies,**" addressed hot topics in neonatology, including the limitations of BPD definition and the **long-term outcomes of BPD survivors**, the **management of late preterm infants**, and the **evolving landscape of RDS management in China**.

The **Chiesi Global Health workshop**, titled "**Improving care in Sub-Saharan Africa**" showcased best practices in Ethiopia, Tanzania and Uganda.

At the **Chiesi booth**, visitors experienced a diverse range of interactive activities across dedicated experience zones. Highlights included:

- **Medical and marketing information**
- **LISA training** led by **Prof. Anna Lavizzari using the AURA augmented reality tool**
- **A Virtual reality visit to a Sub-Saharan** hospital hosted at the **Paolo Chiesi Foundation** corner
- **Global Health information and engagement**.

The **growing adoption of LISA in Europe** was reflected in numerous studies sharing first years implementation results. These studies reported the **near-exclusive use of Curosurf®** and underscored **LISA's role within an "aggressive" non-invasive ventilation strategies, integrating quasi-prophylactic surfactant administration** to minimize exposure of preterm infants to mechanical ventilation.

Another noteworthy presentation from a **Karolinska** Institute (Sweden) researcher described the **feasibility study of an i-gel supraglottic airway device designed for preterm neonates weighing 750–1,500g**, conducted in Vietnam.

THE CHIESI SYMPOSIUM
Respiratory management across various preterm infants' profiles and geographies

The **Chiesi Symposium** was a great success, featuring top speakers and an audience that filled the room, with around **500 participants** in attendance.

Speakers

Bronchopulmonary dysplasia: Burden, long-term outcomes and quality of life

Steven Abman,
University of Colorado Anschutz, USA

Late preterm infants: Optimizing approach of RDS management

Elaine Boyle,
University of Leicester, UK

nRDS Management: Insights from a National Survey in China

Yuan Shi,
Children's Hospital, Chongqing Medical University, China

BRONCHOPULMONARY DYSPLASIA:
Burden, long-term outcomes and quality of life

Steven Abman, University of Colorado Anschutz, USA

Redefining BPD

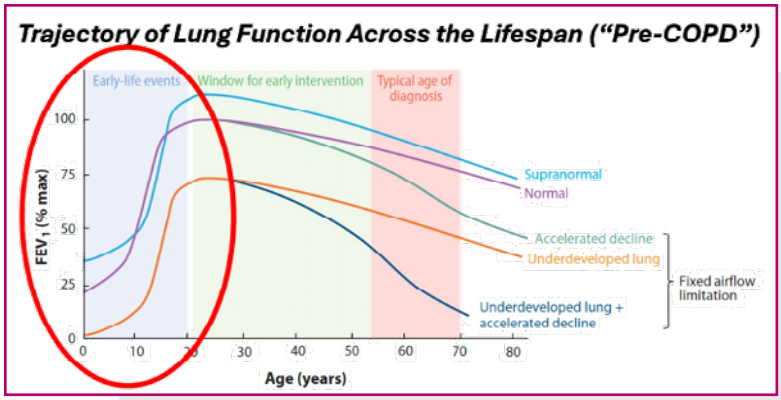
- BPD is a **heterogeneous disorder** influenced by **antenatal**, **perinatal**, and **postnatal** factors.
- Despite improved neonatal survival, **BPD incidence remains unchanged** over decades.
- The term **"BPD"** is historically rooted and now seen as overly simplistic. However, BPD definitions must evolve to include **long-term outcomes**, **lung function**, and **quality-of-life metrics**, not only oxygen dependence at 36 weeks.

Pathophysiology & Evolution

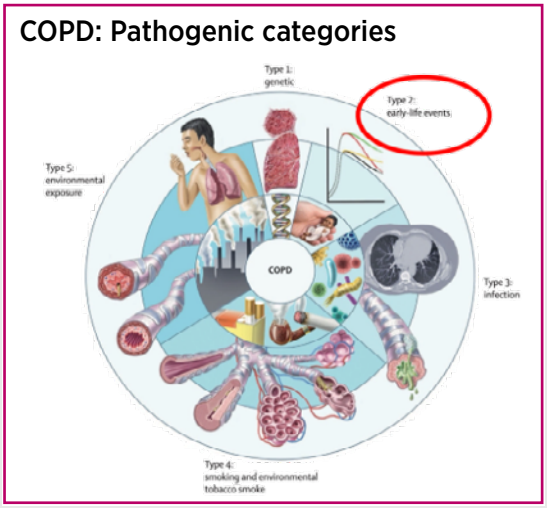
- BPD reflects **abnormal lung development**, **vascular dysmorphia**, and **variable regional lung injury**.
- Nevertheless, BPD goes beyond the lungs as preterm birth affects the **heart (smaller ventricles, hypertension risk)**, **growth**, **metabolism**, and **neurodevelopment**.
- A Canadian study showed that **lifetime health system costs for patients with severe BPD are 69% higher ($4,600 CAD) compared to those without BPD** or with mild BPD.

Overall, **BPD survivors are at high risk of developing morbidities** during childhood and into adulthood.

Adults born preterm may develop **COPD-like symptoms** — now recognized as **Type 2 COPD (developmental origins)**.



Polverino F, Sin DD. Ann Rev Physiol, 2025



Stolz D et al. Lancet Commission, 2022

Unmet Needs in BPD

Clinical & Research Implications

- Abman highlighted the need for **multi-center**, **multidisciplinary networks** and **inclusive family participation**.
- Future BPD definitions and trials should integrate:
  - **Longitudinal lung imaging and function**
  - **Biomarkers and genetic phenotyping**
  - **Patient and parental perspectives**

Societal & Global Context

- Economic and emotional burdens associated to BPD remain high.
- Therefore, advocacy for better healthcare coverage is needed.
- The **Global Foundation for the Care of Newborn Infants (GFCNI)** is leading the global BronQ Family survey study on **BPD's long-term family and patient impact**.

BPD care must evolve from **NICU survival** to **lifelong wellness**.

It takes a **village** (neonatologists, adult pulmonologists, developmental scientists, and families) to ensure **continuity of care** and improved **quality of life** for those born premature.

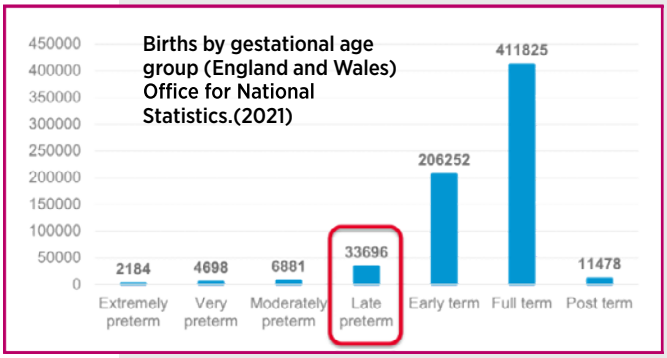
LATE PRETERM INFANTS: Optimizing approach of RDS management

Elaine Boyle, University of Leicester, UK

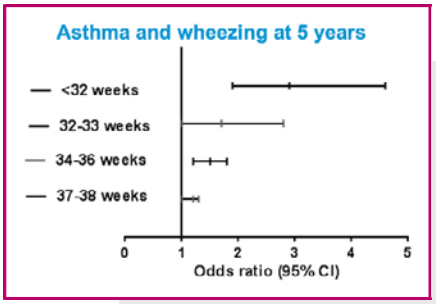
Respiratory Morbidity in Late Preterm Infants

Prof. Boyle highlighted the need to better understand **late preterm infants** (born between **34–36 weeks of gestation**), a group often overlooked between full-term and very preterm babies.

- Historically, research and neonatal care focused mainly on extremely preterm infants, but **late preterm births now account for 70–75% of all preterm births** and **3–6% of all births** globally.
- Late preterm infants are not as critically ill as very preterm babies, but they face **higher risks of respiratory and developmental problems** than full-term infants.
- Increased incidence of **transient tachypnea**, **respiratory distress syndrome (RDS)**, **pneumothorax**, and need for **respiratory support**.
- Elevated risk of **hospital readmissions** during childhood.
- Greater prevalence of **long-term illnesses** that affect daily activities, and a higher rate of **childhood asthma and wheezing**.



- These issues, though often moderate individually, have a **large population-level impact** due to the high number of late preterm births.



Boyle EM et al. BMJ. 2012

Research Needs in Late Preterm Infants

Research on RDS management in late preterm infants remains **limited and inconsistent**:

- **Antenatal steroids:** Evidence is mixed. While some studies show benefits in reducing respiratory complications, they also increase the risk of **neonatal hypoglycaemia**.
- **CPAP use** is rising across all gestational groups, but practice varies widely.

> Arch Dis Child Fetal Neonatal Ed. 2021 Oct 22:fetalneonatal-2021-322890.
doi: 10.1136/archdischild-2021-322890. Online ahead of print.

Surfactant therapy in late preterm and term neonates with respiratory distress syndrome: a systematic review and meta-analysis

Viraraghavan Vadakkencherry Ramaswamy [1], Thangaraj Abiramalatha [2], Tapas Bandyopadhyay [3], Elaine Boyle [4], Charles Christoph Roehr [5 6 7]

SurfON
Surfactant Or Not

This study is funded by the National Institute for Health Research (NIHR) [Health Technology Assessment (HTA) (project reference 17/89/07)].

Surfactant therapy: A meta-analysis of 17 studies (16 observational studies, 1 randomised controlled trial), indicates a **potentially decreased risk of mortality, air leak, pulmonary hypertension and duration of respiratory support after surfactant** therapy **(evidence level – low)**.

Prof. Boyle emphasized the need for **more randomized controlled trials** to understand the **long-term outcomes**, optimal use of **CPAP vs. high-flow oxygen**, and the **effectiveness and cost-effectiveness** of **surfactant therapy**.

- She concluded the presentation with a reference to the **SurfON trial** (**Surf**actant **O**r **N**ot), a large UK multicenter pragmatic trial comparing early surfactant use with expectant management in late preterm infants.
- SurfON has completed recruitment of **over 1,500 infants** in **35 neonatal units**, with results to be presented at the **Hot Topics in Neonatology** conference (Washington DC, 8-10 December 2025).

NRDS MANAGEMENT:
Insights from a National Survey in China

Yuan Shi, Children's Hospital, Chongqing Medical University, China

Neonatal Care in China

Yuan Shi presented an overview of **national neonatal care practices in China**, focusing on the management of **RDS** and the challenges faced in a rapidly developing but uneven healthcare system.

The talk emphasized differences between **China and Europe** in terms of resources, hospital structures, and clinical practice.

China's healthcare landscape is **highly diverse**, with major differences between **urban and rural areas**.

- The country has a **three-tier hospital system:**
  - **Level 3 hospitals:** large, well-equipped centers in major cities (e.g., Beijing, Shanghai, Chongqing).
  - **Level 2 hospitals:** mid-sized regional hospitals.
  - **Level 1 hospitals:** smaller or rural facilities with limited neonatal capacity.
- Neonatal survival rates have improved sharply in recent years due to economic growth and medical advances, but **regional disparities** in access to care remain significant.

Even with the growing government commitment to premature infant care, RDS management may vary significantly across regions given China's huge population and land scale.

nRDS Management in China: The MUNICH Survey

The MUNICH survey (**M**edical s**U**rvey for **NIC**U Insight in **CH**ina) was initiated with the aim of assessing perinatal and neonatal conditions, non-invasive ventilation (NIV) practices, and surfactant use across Chinese hospitals.

*Chen, Long et al. "A nationwide survey on the management of neonatal respiratory distress syndrome: insights from the MUNICH survey in 394 Chinese hospitals." **Italian journal of pediatrics** vol. 50,1 168. 7 Sep. 2024.

Survey outcomes (N=378 hospitals)

Ventilation

- **Non-invasive ventilation (NIV)** is widely used, similar to Europe. However, **mechanical ventilation** practices vary widely due to resource differences, with some hospitals relying on outdated ventilators.

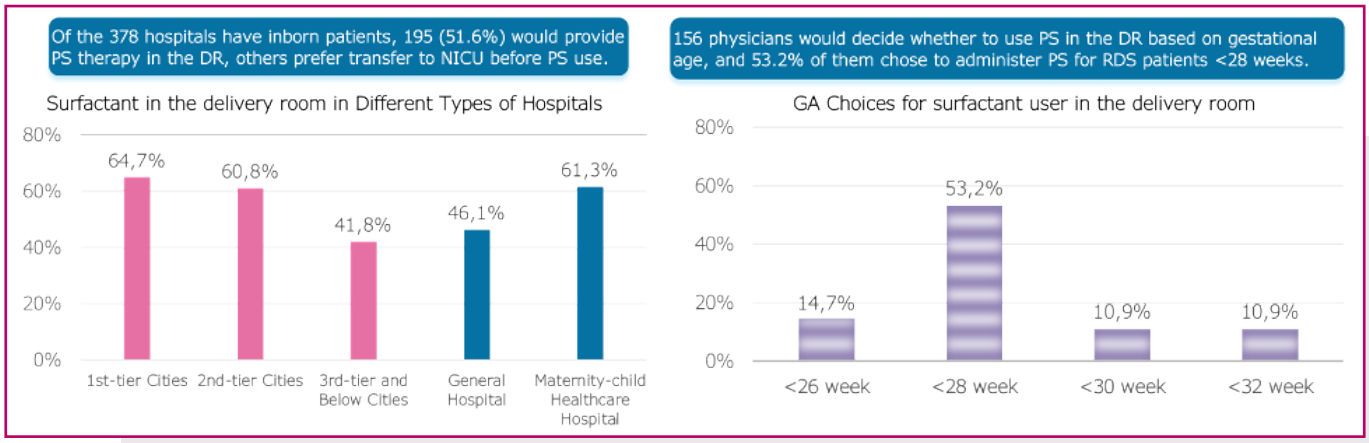
Surfactant Use

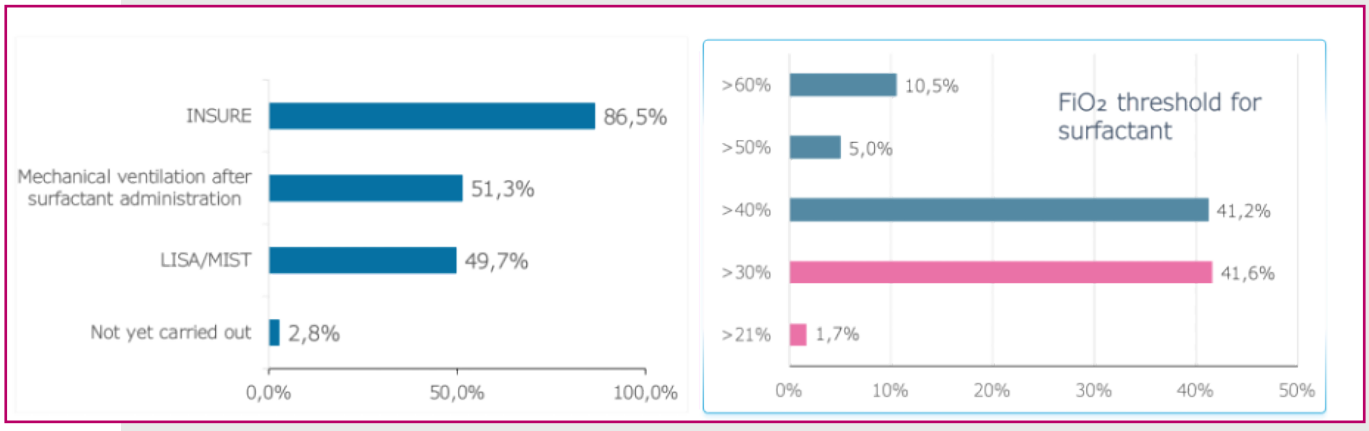
- **Surfactant therapy** is common but unevenly applied.
- In **top-tier hospitals**, surfactant may be given **in the delivery room**, particularly for infants under 28 weeks.
- In **smaller or rural hospitals**, administration is delayed or limited by cost and equipment shortages.
- Chinese clinicians often decide to give surfactant based on **FiO_2 (oxygen fraction) thresholds**
  - Most still use **>40% FiO_2**, though international guidelines recommend **>30%**.
  - A large **ongoing national trial** is evaluating whether earlier use (FiO_2 ≥25%) within 3 hours of birth improves outcomes.
- LISA is **less commonly used** in China due to equipment and training gaps, though awareness is increasing.

Key Challenges in the management of nRDS in China

1. Unequal distribution of healthcare resources.
2. High costs of advanced respiratory therapies for developing regions.
3. Shortage of neonatal specialists and need for better training.
4. Limited transport capacity for critically ill neonates.
5. Inconsistent implementation of evidence-based guidelines.

Overview of Surfactant Replacement Therapy in China





THE CHIESI BOOTH
a true hub for 360º engagement

The Chiesi booth featured a range of engaging activities across differentiated experience areas

The medical area was jointly served by Global teams and Chiesi affiliates, ensuring expert support and collaboration.

The medical area offered LISA training sessions, conducted by Prof. Anna Lavizzari through the AURA system during the lunch breaks

The marketing area actively engaged with healthcare professionals, addressing their questions and feedback.

The Paolo Chiesi Foundation area featured a virtual tour showcasing a sub-Saharan hospital providing care for preterm infants.

The Global Health team actively engages with healthcare professionals who were interested in learning more about the company's commitment to improving access to medicine for underserved patient communities in Sub-Saharan Africa.


Chiesi