



Because **OUTCOMES** matter
BEYOND the NICU.



**Count on the neonatal expertise of the fabian[™]
family of ventilators from Vyaire**

Designed specifically for patients who have just arrived, fabian meets the rapidly-changing needs and nuances of the NICU.

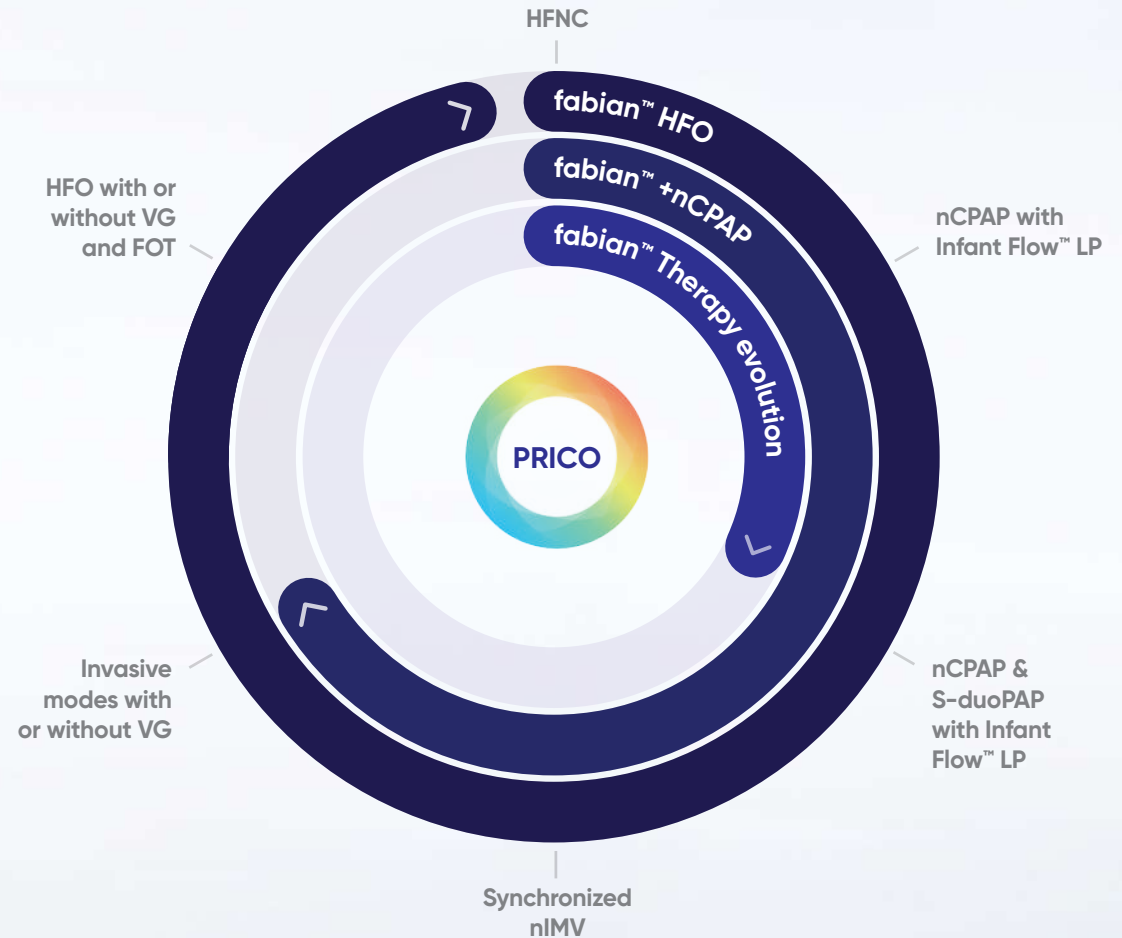
For every baby under your care

There is a fabian™ device that meets their specialized respiratory needs.

fabian™ ventilation devices deliver vital care across the entire neonatal acuity spectrum—from the newborn who needs help after a complicated delivery to the most fragile premature baby in the NICU.

Designed for improving your workflow and budget, the fabian™ ventilator empowers the clinician to maintain the highest level of care as the infant's condition and needs change.

Evolution of therapy as required to meet the infant's condition



HFNC: O₂ therapy-High flow nasal cannula; nCPAP: Nasal continuous positive airway pressure; S-duoPAP: Synchronized duo positive airway pressure; nIMV: Nasal intermittent mandatory ventilation; VG: Volume Guarantee; HFO: High frequency oscillation; FOT: Forced Oscillation Technique; PRICO: Predictive Intelligent Control of Oxygenation

The fabian™ family of ventilators

Our total commitment to respiratory care is reflected in the comprehensive solutions we offer, ensuring appropriate care is readily available.



fabian™ Therapy evolution 2-in-1 device

The fabian™ Therapy evolution offers all non-invasive modes including HFNC, nCPAP, duoPAP, and triggered duoPAP. Optionally, predictive intelligent control of oxygenation (PRICO) is available.



fabian™ +nCPAP evolution 3-in-1 device

The fabian™ +nCPAP evolution has the full scope of the fabian™ Therapy evolution with all modern invasive ventilation capabilities.



fabian™ HFO 4-in-1 device

The fabian™ HFO with a 10.4" touch screen is our most comprehensive ventilator. This model has true single membrane high frequency oscillation with active inspiration and expiration. Other enhancements include Forced Oscillation Technique (FOT), a precise and intelligent lung recruitment tool.



Finding your device

To optimize outcomes in the NICU, you need ventilation devices that help both vulnerable newborns and overburdened care teams breathe easier. No matter which product you choose, you're getting a device that features the latest technology and is ready to ventilate across the continuum of care.

	fabian Therapy evolution	fabian +nCPAP evolution	fabian HFO
Main Features			
O ₂ Monitor (FiO ₂)	●	●	●
Electronic Gas Blender	●	●	●
Inspiratory and Expiratory Flow (Bias)	-	●	●
Leak Compensation	●	●	●
Integrated Battery	●	●	●
Color TFT Display	●	●	●
Touch-screen Display	●	●	●
Volume Trigger/Flow Trigger/ Pressure Trigger	○	●	●
Curves: Pressure	●	-	-
Loops: V/F, P/V	○	●	●
Advanced Monitoring			
CO ₂ Module (Side or Main-stream)	-	-	○
SpO ₂ Module (Masimo)	○	○	○
PRICO	○	○	○
PDMS	○	○	○
FOT	-	-	○

	fabian Therapy evolution	fabian +nCPAP evolution	fabian HFO
Ventilation Modes			
CPAP	-	●	●
IPPV-IMV	-	●	●
SIPPV (A/C)	-	●	●
SIMV	-	●	●
SIMV + PSV	-	●	●
NIV (nCPAP, duoPAP)	●	●	●
NIV Trigger	○	○	○
HFO	-	-	●
Volume Limit	-	○	○
Volume Guarantee	-	●	●
O ₂ High Flow Therapy	●	●	●
O ₂ Flush	●	●	●
Manual Breath	●	●	●

● = standard ○ = optional

Even the smallest details make the biggest impact



Precision is built into every one of our devices, to protect newborns from ventilator induced lung injury and ensure each child receives respiratory support that fits their exact needs

Pressure precision

fabian™ is equipped with fast acting flow controllers, automatic leak compensation and an electromagnetic exhalation valve to reliably and accurately deliver set pressures

Flow and volume precision

The neonatal flow sensor features:

- 0.9 mL deadspace
- Single and reusable flow probes
- High precision and accuracy for optimal volume guarantee ventilation¹
- Low sensitivity to gas composition
- Sensitive and adjustable flow trigger ideal for extremely low birth weight infants

Predictive Intelligent Control of Oxygenation (PRICO)

The next generation of closed-loop oxygenation

85%

Studies show that when manual fraction of inspired oxygen (FiO₂) adjustments are used, babies can be outside the prescribed SpO₂ target range **as much as 85% of the time**²

How PRICO works

PRICO performs FiO₂ adjustments automatically, quickly, and reliably. PRICO not only supports caregivers in their daily goal for the best possible patient comfort and safety, but also helps clinicians save time, reduce cost, and improve their workflow.



Up to **60%** reduction in manual adjustments of FiO₂³⁻⁶



Available in all fabian™ models for invasive and non-invasive ventilation



Improves time in clinically prescribed SpO₂ target range by **24%**^{3,4}



Integrated Masimo SET™ pulse oximetry technology provides accurate and reliable SpO₂ measurements under challenging clinical conditions such as motion and low perfusion

Forced Oscillation Technique (FOT)

Intelligent non-invasive lung recruitment



The challenge of optimal lung recruitment during ventilation

Protection and preservation of lung architecture and strategies for optimizing lung volume are critical - especially in preterm newborns. Usually, CPAP, positive end-expiratory pressure (PEEP) and mean airway pressure (MAP) are adjusted according to oxygenation, both in conventional ventilation modes and during HFO. However, oxygen saturation (SpO_2 or paO_2) may be an imperfect guide for MAP or PEEP titration: there remains a risk that PEEP-induced over-distension and intra-tidal recruitment/derecruitment go unnoticed.⁷⁻⁹

The patented FOT is a non-invasive, protective and easy method that allows the clinician to assess an optimally recruited lung. FOT determines the optimal reactance (Xrs) and measures the flow response of the respiratory system. By setting the optimal CPAP, PEEP and MAP level for the individual patient, FOT greatly reduces mechanical stress to the lungs.⁷⁻⁹

Measurement without interruption

FOT measures Xrs accurately during HFO and conventional modes, without the need to disconnect the patient from the ventilator or connect expensive additional devices.

An exclusive, patented option for the Vyaire fabian™

FOT was developed by Professor Raffaele Dellacà and his team at Politecnico Milano, one of the most prestigious international medical engineering universities. The groundbreaking new technology has been validated in cooperation with top clinical NICU/ICU departments over a 10-year period.

Reducing care team stress is just as important as reducing a baby's stress

Our fabian™ devices are designed as innovative, easy-to-use systems that help enhance the personalized care NICU clinicians provide to the baby.



Featuring an intuitive, one-touch, user interface **allowing clinicians to quickly adjust ventilator settings**



Intuitive commands **make it easy to adjust functionality as needed**



Babies remain undisturbed at the bedside **with less need to change devices**



Color-coded display readouts **facilitate quick and accurate interpretation** of ventilation status and data



Built to run as silently as possible, creating a calm environment, **allowing babies to receive undisturbed care**



Less inventory, maintenance, and training **saves time and money**



Exceptional flexibility in one compact device

Lightweight and mobile, fabian™ ventilators may follow babies anywhere in the hospital—from the delivery room to the NICU—maintaining respiratory support through the entire course of their care.

- ✓ Compact design for safe, practical intra-hospital transport
- ✓ Integrated electronic gas blender and built-in battery
- ✓ Up to 2.5 hours of battery life
- ✓ Easy access to the baby from the bedside at all times



Our expertise helps them quickly get home

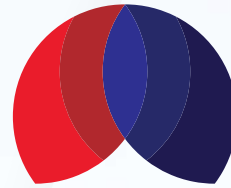
We are the world's only integrated breathing company, pioneers in respiratory innovation.

Established from legacy brands, Bird[®], Bear Cub[™], 3100A[™], Avea[™], SiPAP[™], and Infant Flow[™] LP, Vyaire represents a 65-year history of pioneering breathing technology for the NICU and continues to lead with dedicated neonatal product and consumables available today.



Our commitment: To help preserve the lives of your smallest, most vulnerable patients





GLOBAL HEADQUARTERS

Vyair Medical, Inc.
26125 N. Riverwoods Blvd.
Mettawa, IL 60045 USA

AUSTRALIAN HEADQUARTERS

Vyair Medical Pty Ltd
Suite 5.03, Building C
11 Talavera Road
Macquarie Park, NSW 2113 Australia

ACUTRONIC MEDICAL SYSTEMS AG

Fabrik im Schiffli
8816 Hirzel Switzerland

TEL +41 44 729 70 80

FAX +41 44 729 70 81



REFERENCE: **1.** Thomas Jaecklin, Denis R. Morel, Peter C. Rimensberger. Volume-targeted modes of modern neonatal ventilators: how stable is the delivered tidal volume? *Intensive Care Med* (2007) 33:326–335. **2.** Sink DW, Hope SA, Hagadorn JL. Nurse:patient ratio and achievement of oxygen saturation goals in premature infants. *Arch Dis Child Fetal Neonatal Ed.* 2011;96(2):F93-8. **3.** Dijkman K, Mohns T, Dieleman J, et al. Predictive Intelligent Control of Oxygenation (PRICO) in preterm infants on high flow nasal cannula support: a randomised cross-over study **4.** Dani C, Pratesi S, Luzzati M, et al. Cerebral and splanchnic oxygenation during automated control of inspired oxygen (FiO₂) in preterm infants. *Pediatric Pulmonology.* 2021;1–6. **5.** Waitz M, Schmid MB, Fuchs H, et al. Effects of automated adjustment of the inspired oxygen on fluctuations of arterial and regional cerebral tissue oxygenation in preterm infants with frequent desaturations. *J Pediatr.* 2015;166:240-244. **6.** Gajdos M, Waitz M, Mendler MR, et al. Effects of a new device for automated closed loop control of inspired oxygen concentration on fluctuations of arterial and different regional organ tissue oxygen saturations in preterm infants. *Arch Dis Child Fetal Neonatal Ed.* 2019;104:F360-F365. **7.** Dellaca R, Rotger M, Aliverti* A, et al. Noninvasive detection of expiratory flow limitation in COPD patients during nasal CPAP. *Eur Respir J* 2006; 27: 983–991. **8.** Dellaca R, Veneroni C, Vendettuoli V. Relationship between respiratory impedance and positive end-expiratory pressure in mechanically ventilated neonates. *Intensive Care Med* (2013) 39:511–519. **9.** Zannin, E., Neumann, R.P., Dellacà, R. et al. Forced oscillation measurements in the first week of life and pulmonary outcome in very preterm infants on noninvasive respiratory support. *Pediatr Res* 86, 382–388 (2019).

For Australia, Asia, Europe, Canada, Latin America and Middle East distribution. Availability is dependent on registration with the local authority. Please contact a Vyair sales representative for country availability.

© 2021 Vyair. Vyair, the Vyair logo and all other trademarks or registered trademarks are property of Vyair Medical, Inc., or one of its affiliates.

Medical devices class IIb according to Medical Devices Directive 93/42/EEC. Please read the complete Instructions for Use that come with the devices or follow the instructions on the product labelling.