



NICU

Partner For Life

Helping you deliver neonatal proactive care
with confidence

Partners in care

Supporting you to nurture with nuance

Babies' first hours and days can be challenging. As health care providers dedicated to neonates in need, you confront this truth more than most. We're grateful for your expertise and your commitment to improving patient outcomes.

At Radiometer, our goal is to support you with the critical information you need in acute care diagnostics to put #LifeFirst.

Since 1954, we've collaborated with customers and partners to focus on improving patient care. We are a diverse team of more than 4,400 associates located in more than 120 countries. Together, we support your peers around the world.

If you're striving to improve patient outcomes and neonates' quality of life, we've got your back.

Feel empowered to deliver proactive care with confidence, with Radiometer as your #PartnerForLife.

Save blood and support life

When every drop of blood counts

Little things can make a big difference.

A preterm baby born weighing just 500 grams has an estimated total blood volume of **less than 50 ml**.

Why preserve patient blood?

Patient Blood Management is integral to neonatal care. Blood sampling is a significant contributor to neonatal anemia in preterm infants and can **deplete 30-60% of the total neonatal blood volume** in the first weeks of life.

Research shows a direct association between the number of neonatal blood draws to the need of blood transfusions which bring their own inherent risks.

Why reduce dependency on blood draws?

Preterm babies endure an average of **50 painful procedures during their first four weeks of life**. Multiple studies have demonstrated that a higher number of painful procedures in neonates is linked to impaired brain growth.

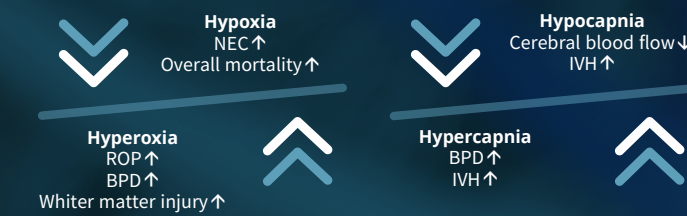
We've integrated clinical insights with experts' experience, to create a unique point-of-care testing (POCT) solution that supports you in making clinical decisions: trusted blood gas results as well as real-time transcutaneous oxygen ($tcpO_2$) and carbon dioxide ($tcpCO_2$) monitoring, reducing any unnecessary handling of fragile patients.

Together, we can revolutionize neonatal care, creating a future where every infant has the opportunity to flourish.

How the Radiometer NICU Solution fits your workflow

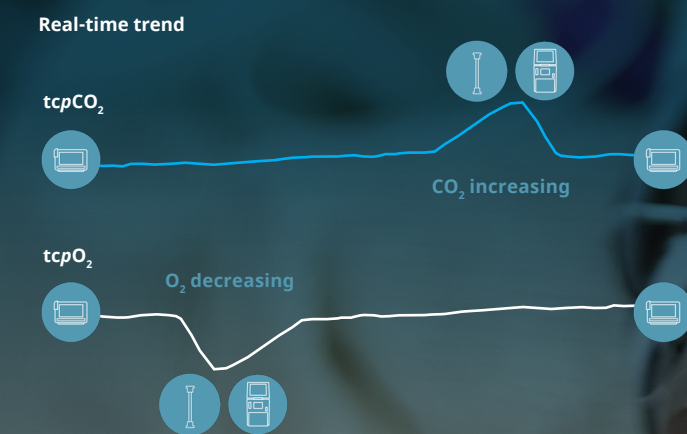
Balancing ventilation and oxygenation

Monitoring babies' oxygen and carbon dioxide levels is an intricate art.



NEC: Necrotizing enterocolitis
ROP: Retinopathy of Prematurity
BPD: Bronchopulmonary Dysplasia
IVH: Intraventricular hemorrhage

While regular blood gas analyses can provide us with the most precise measures of O_2 and CO_2 , the process is invasive and can cause pain to the neonate. Naturally, a blood gas only reflects oxygenation and ventilation at a single point in time, and not the intermittent changes in between.



When change is inevitable, we're proud to be a trusted Partner For Life.

Comprehensive oxygen monitoring supports optimal ventilation

Complementing blood gases with continuous $tcpO_2$ and $tcpCO_2$ monitoring can further conserve patient blood and minimize invasive blood draws, allowing for proactive patient care.

Transcutaneous monitoring of carbon dioxide ($tcpCO_2$) has been shown to exhibit a strong correlation with arterial values. This holds true for babies with a low birth weight (<1000 grams) as well as those born extremely premature (gestational age <28 weeks).

Our NICU Solution includes the ABL90 FLEX PLUS blood gas analyzer, *safeCLINITUBES* capillary tubes, and the TCM5 FLEX monitor which cohesively instill confidence, trust, and security in making life-altering clinical care decisions within high-pressure environments.

Safe, Simple, Silent

Limiting invasive procedures helps reduce potential stress, pain, and risk of infection, without compromising standards of care.

Continuous, non-invasive monitoring

Real-time data provides full transparency on patients' status **between blood draws**. Equipped with these insights, you can make clinical decisions without having to wait for results from the central laboratory.

Easy to learn how to use

A plug and play solution that monitors your patients' **every minute** safely and silently. With built-in tutorials, the color touchscreen offers a clear view of measured parameters.

$tcpO_2$ | $tcpCO_2$

Special NICU mode

Predefined combinations of time and temperature and system defined limits help to preserve patients' skin integrity.

Seamless connectivity and integrated into your workflow

Radiometer's TCM5 FLEX connects to a wide range of patient monitoring systems, data management systems, as well as ventilators. It can be effectively utilized across **different modes of ventilation** in the NICU, including mechanical ventilation, high-frequency oscillatory ventilation (HFOV), high-flow nasal cannula (HFNC), and CPAP. This would allow to titrate ventilator settings without unnecessary blood sampling.



TCM5 FLEX



SENSOR 84
 $tcpCO_2$ | $tcpO_2$

Gentle sensor promote patient comfort

The TCM5 FLEX operates by way of gentle sensor with a variety of fixation options designed for sensitive skin, helping you improve patient comfort.

And with automatic sensor calibration, your sensor is always ready for use.



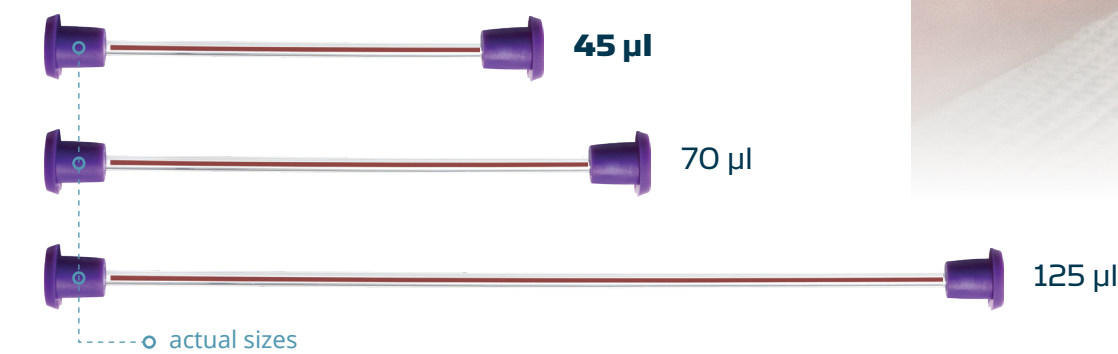
Reliable results from less than two drops of blood

Capillary tubes designed for neonatal blood gas testing

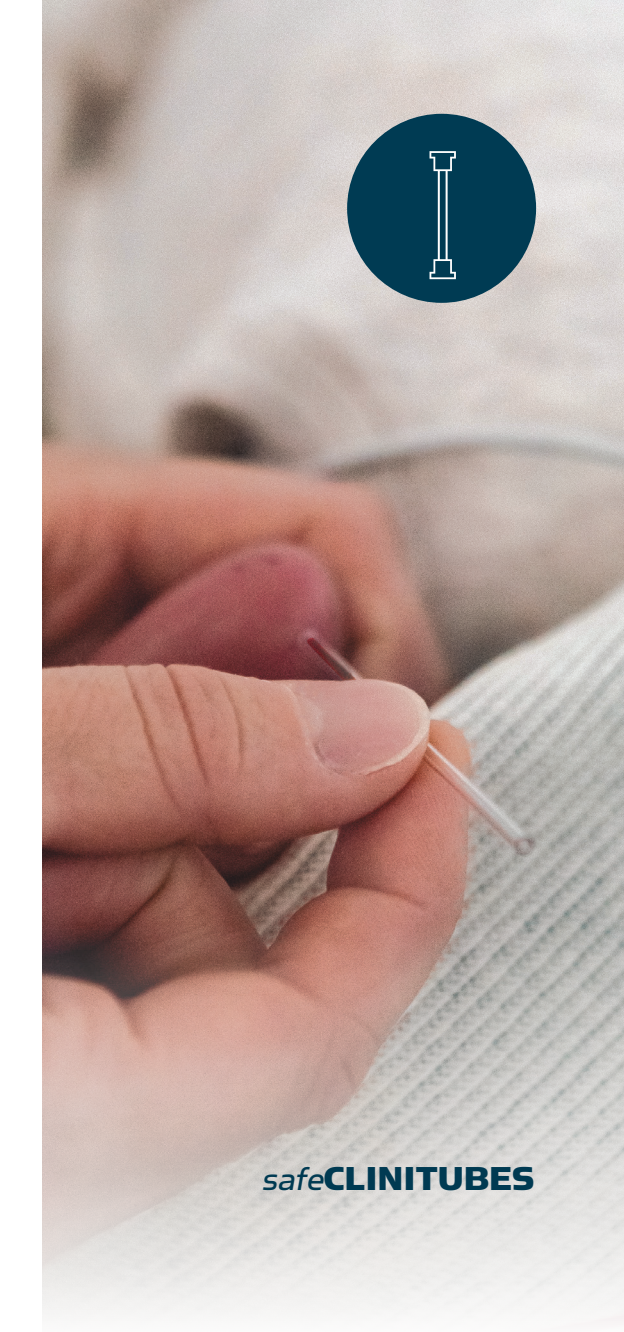
safeCLINITUBES capillary tubes are made of **plastic, not glass**. Compared to other methods of blood sampling that require higher volume, capillary blood sampling reduces the risk of anemia in NICU patients and avoids the effects of blood volume reduction.

Why use *safeCLINITUBES*?

- Less invasive than venipuncture
- Require smaller blood volumes than venipuncture
- Reduce risks of contact with patient blood
- Minimize the risk of preanalytical errors such as clot formation



actual sizes



safeCLINITUBES

Keep your setup running smoothly with Connect & Care

Customize an integrated POC IT and services solution to **connect your people, medical devices, and data**. Connect & Care offers you sustainable support from certified specialists, as well as a range of services for the lifetime of your solution. Practically, this means you'll be able to receive the support you need, when you need it, placing you a step ahead to put life first.

We offer training and technical support whenever you need a helping hand. We go beyond practical support, offering you peace of mind, and positive experiences for patients and their loved ones.

Lab-quality results at the point-of-care

Because speed and efficiency matter
Fast, compact, and intelligent, the ABL90 FLEX PLUS blood gas analyzer delivers comprehensive insights from just 45 μ L, supporting you to act quickly and confidently in demanding situations.

MicroMode designed for neonates

Results in:

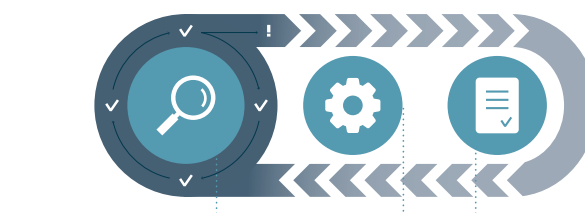
- 60 seconds on just 45 μ L for 17 parameters
- 35 seconds on 65 μ L for 19 parameters incl. Crea/Urea

Monitor neonatal Jaundice

ctBil helps identify and monitor the development of hyperbilirubinemia.

Automatic quality management (AQM)

Real time quality assurance helps ensure reliable results.



Detection • Correction • Reporting

Advanced clot detection

Micro and macro clots are detected and removed so as not to affect results.

Reliable test results
Make informed decisions with comprehensive data on **up to 19 critical parameters**.

Parameters measured

pH | pCO_2 | pO_2 | cGlu | cLac | cCrea | cUrea
cCa²⁺ | cCl⁻ | cK⁺ | cNa⁺ | FCOHb | ctBil | ctHb
FHbF | FHbH | FMetHb | sO_2 | FO_2Hb

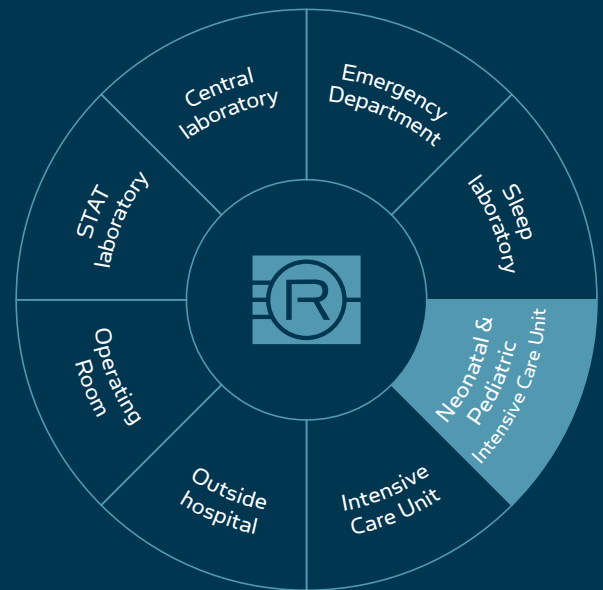


ABL90 FLEX PLUS

Pioneering neonatal care by saving blood and reducing pain with real time $tcpO_2$ and $tcpCO_2$ monitoring.

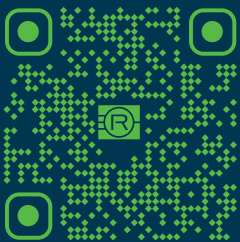
Whatever comes next, we make sure life comes first.

Radiometer solutions are used in hospitals, clinics, and laboratories in over 120 countries, providing information on critical parameters in acute care diagnostics. Through connected solutions, expert knowledge, and trusted partnership, we help health care professionals make diagnostic decisions to improve patient care.



I'm very happy to use Radiometer solutions, I'm inclined to the Radiometer Solution because it's reliable and overall, very accurate. Here at A. Béclère, the devices are close to the patients' beds, so it's a POC solution that's ready at a moment's notice."

Daniele De Luca, Full Professor of Neonatology and Division Chief,
Antoine Béclère Hospital, Paris, France



www.radiometer.com/NICU

Data subject to change without notice.

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