TECHNEGAS 🥼

BY CYCLOMEDICA

Redefining pulmonary imaging



Unveil a transformative advance in diagnostic lung imaging. Technegas® Plus System seamlessly combines innovation with clarity, heralding a new benchmark in lung function and airflow assessment.



Radiopharmaceutical

Technegas®: carbon-labelled



Precision enhanced

Clinically proven superior accuracy and sensitivity.



Rapid procedure

Administration in just 2-5 breaths



Gentle approach

Minimally invasive with zero contraindications



ALARA

Drastically reduced radiation burden for patients & personnel.



Easy to administer

Developed for effortless preparation and application.



3D insight

Superior SPECT with hybrid CT imaging for refined clarity.



Healthcare economics

Empowering binary outcomes beyond probabilistic reporting.

A welcome message from Cyclomedica

As a trusted provider in nuclear medicine, Cyclomedica is fuelled by innovation and an unwavering commitment to enhancing pulmonary diagnostics around the world. Our drive for excellence is anchored in our dedication to improving outcomes for millions of patients suffering from lung-related conditions. Through fostering collaborative partnerships globally, we're on a mission to transform diagnostic imaging standards for the world.







Introducing the Technegas® System

The Technegas® System epitomises the pinnacle of diagnostic lung imaging, meticulously engineered to evaluate lung function.

Indication and usage

Technegas®, when used with sodium pertechnetate Tc 99m in the Technegas® Plus System, provides technetium Tc 99m labeled carbon inhalation aerosol (Technegas® Aerosol), a radioactive diagnostic agent for use in adults and pediatric patients aged 6 years and older for:

- visualization of pulmonary ventilation
- evaluation of pulmonary embolism when paired with perfusion imaging

The Technegas® System manufactures and delivers our carbon-labelled Technetium 99m ventilation agent, it is primed for optimal physiological assessments of alveolar spaces, facilitated by SPECT or SPECT/CT imaging. Technegas® is developed to address a wide spectrum of conditions and applications, such as:

01	Pulmonary embolism (PE)
02	Chronic thromboembolic pulmonary hypertension (CTEPH)
03	Chronic Obstructive Pulmonary Disease (COPD) / Emphysema
04	Asthma
05	Pre-operative quantification
06	Radiotherapy treatment planning
07	Identification of common COVID-19 complications, notably exacerbated dyspnoea

Referenced in both the European and Canadian associations of nuclear medicine, the **EANM** and **CANM**'s guidelines, Technegas® solidifies its stance as the go-to choice for ventilation-perfusion (V/Q) functional lung ventilation imaging studies.



Technegas® with SPECT Data-driven excellence: Patients' choice



Superior diagnostic¹

Sensitivity: **93.0**% Specificity: **93.3**% NPV: **96.1**%



Prioritising safety

27-36 times² lower radiation exposure than alternative products



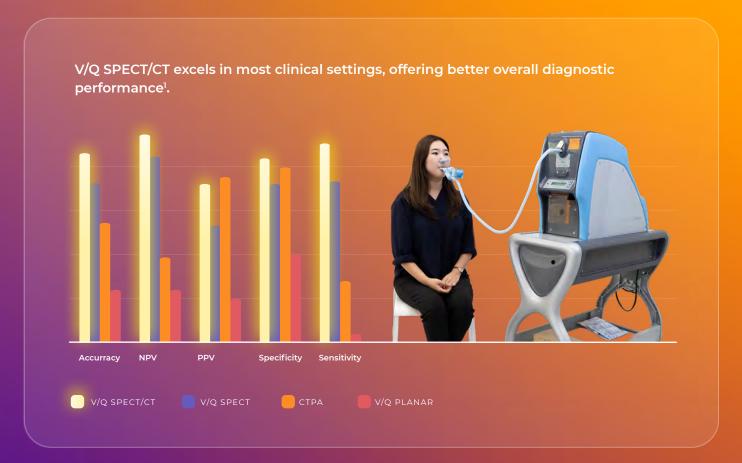
Highly efficient

Only 2-5 breaths versus extended sessions up to 15 minutes with alternative products³.



Guideline referenced

Both **European**⁴ and **Canadian⁵** nuclear medicine association guidelines recommend Technegas[®] for its improved clinical outcomes.



¹Hess S, et al. Semin Thromb Hemost 2016; 42(8): 833-845 ²Roach PJ, et al. J Nucl Med 2013; 54: 1588-1596. ³Isidoro J. et al. Phys Med 2017; 41: 93-96. *Bajc M, et al. Eur J Nucl Med Mol Imaging (2019) 46:2429-2451.

Sleblanc M. et al. CANM Guidelines for V/P SPECT in PF. CANM Nov 2018.



Why clinicians trust Technegas® System

At Cyclomedica, we pride ourselves on being more than just a provider – we're your partner. Our aspirations transcend mere product offerings. We aim to cultivate a landscape where innovation prospers, talent excels, and tangible contributions to global health are realised. By nurturing robust, lasting relationships with our clientele and partners, we recognise our interconnected paths to success.



Intuitive process

Effortless preparation and application.



Versatile solutions

One product, myriad applications, enabling clinics to diversify their offerings.



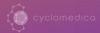
Guided training

Tailored sessions by our expert training team.



End to end support

We prioritise post-sales support, ensuring prompt service resolution, optimal customer experience and





Technegas® System features

- Technegas® System can be administered in both prone and supine positions
- Remote Technegas® System delivery switch
- Automatic high intensity LED for ease of loading
- Lead glass safety viewing barrier
- Argon gas hose with flow restrictor and quick release fitting
- LCD display
- Light weight and mobile
- Ergonomic base with four locking casters
- Integrated PAS shelf

TECHNEGAS® SYSTEM APPARATUS SPECIFICATIONS

Power

- Mains Current
- Steady state < 0.2 ampere rms
- Installation Requirements
- Mains power line*: 200-240 +/-5% VAC
- Supply frequency: 50–60 Hz

Dimensions

Unboxed machine:

- Length: 89 cm / 35 in
 Width: 50 cm / 19.6 in
- Height: 137 cm / 53.9 in
- Weight: 130 kg / 286.6 pounds

Shipping box:

- Length: 110 cm / 43.3 in
- Width: 63 cm / 24.8 inHeight: 119 cm / 46.8 in
- Weight: 157 kg / 346.1 pounds

Environmental

- Ambient Temperature
- 10-40 degrees C(50-104 degrees Fahrenheit)
- Ambient Air Pressure: 70–106 kPa/700–1060 mBar
- Ambient Humidity: 15-90% non-condensing

Easy Breather

- For adults only
- Use regular paediatric version for children

Argon & High-Pressure Regulator

- Argon purity: High purity greater than 99.997% argon, or grade 4.7 or higher
- Cylinder size: G or greater

Regulator output:

- Maximum outlet: 150 kpa / 1500 mBar
- Maximum Flow output: 45 litres/min

Regulator Connections:

- Gas bottle connection as per your local requirements
- Regulator output: 5/8"UNF RH

*20 Amps or single dedicated line region specific



TECHNEGAS® SYSTEM PATIENT ADMINISTRATION SET SPECIFICATIONS

The Patient Administration Set (PAS) kit includes the following consumable products and can be purchased separately.

- 50x patient administration sets (PAS)
- Single-use breathing accessories with HEPA filter
- 50x nose clips to improve patient compliance to breathe in Technegas® System
- 2x Technegas® System contacts for an excellent conductivity to reach every time burn temperature
- 50x Technegas® System crucibles
- Single use carbon crucibles available in 135ul

The Technegas® System crucible

- 135µl
- 5x10 135µl

Radioactive Concentration Technegas® crucible

Technegas® crucible 135µL 1480 - 6670 MBq/mL
 40 – 180 mCi/mL



Dedicated sales & support services

As a premier molecular imaging provider, Cyclomedica is more than a supplier; we're your envisioned strategic partner. Passionate about advancing pulmonary diagnostics, we offer a bespoke, consultative sales and service approach, tailored to your unique adoption of Technegas® into your practice not only aligns with but surpasses your aspirations. From your initial engagement with us to the nuanced facets of side, ensuring a seamless and supportive journey.

potential of Technegas® for your offerings, please reach out to our local distribution affiliates or directly to

United States of America















