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# 2025 Annual General Meeting

30 May 2025

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# SAFE HARBOUR STATEMENT

Certain views expressed here contain information derived from publicly available sources that have not been independently verified.

The presentation includes certain statements, estimates and projections with respect to the anticipated future financial performance of Cyclopharm Limited and as to the markets for the company's products. Such statements, estimates and projections reflect various assumptions made by the directors concerning anticipated results, which assumptions may or may not prove to be correct. Cyclopharm Limited has not sought independent verification of information in this presentation.

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All references to dollars unless otherwise specified are to Australian dollars.

This presentation was approved and authorised for release by James McBrayer, Managing Director, CEO and Company Secretary.

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# WELCOME

Mr David Heaney

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# CHAIRMAN'S ADDRESS

Mr David Heaney

# Technegas around the world

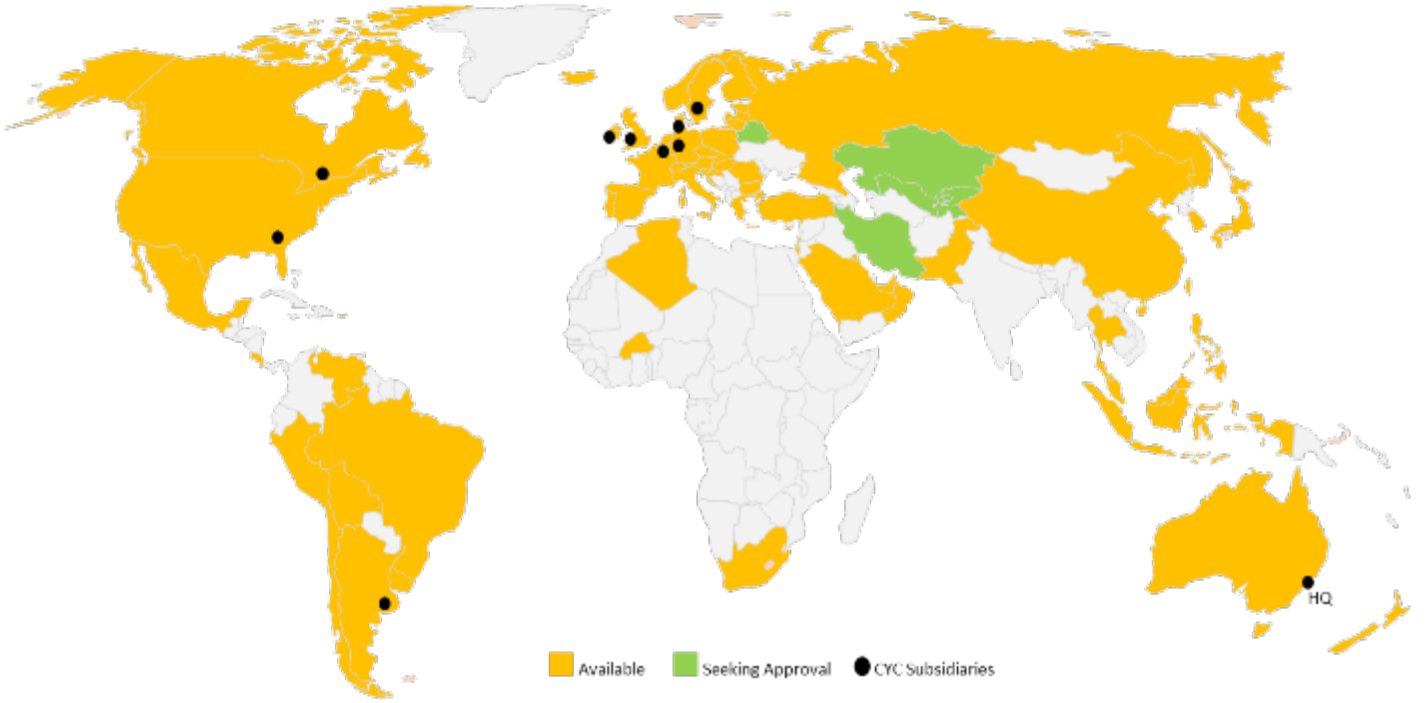
Australian innovation entering a new era of Nuclear Pulmonolgy driven by **AI**

Technegas is now available in **66 countries.** Direct distribution in **17 countries.**

Over **5.0 million** patient procedures to date

**Recently approved in the US**

Leveraging global infrastructure with **Business Partner Product** distribution



# A World Leading Diagnostic Imaging Company

1. Technegas™ in 66 countries with a **strong second half** of 2024 supporting **record global sales up 5%** on the prior corresponding period (pcp)
2. Technegas™ installed at **33 US sites** at 30 May 2025 with conservative growth estimates of **250 – 300** total installations by **second half 2026.**
3. US contracts covering **close to 300 Nuclear Medicine Departments** drive second half 2024 **revenue up 131%** compared to the first half, underpinned by **full reimbursement** through Medicare and Medicaid.
4. Continued **growth in Third-Party distribution sales,** including an **increase of 57%** in the second half, to deliver a 4% increase in revenues on the pcp.
5. Cyclopharm's **Beyond PE strategy** to expand the use of Technegas™ validated by ongoing clinical trials, including a **new French trial** into residual pulmonary vascular obstruction.
6. Successful **$20 million Capital Raising** followed by over-subscribed **$4 million Share Purchase Plan** in 2024 underscores shareholder support for Cyclopharm's growth strategy.
7. **Balance sheet** with $20.6 million of net cash at 2024-year end to support **accelerating US growth**.

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# MANAGING DIRECTOR'S ADDRESS

Mr James McBrayer

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# 2024 Full Year Financial Results

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# 2024 Financial Overview

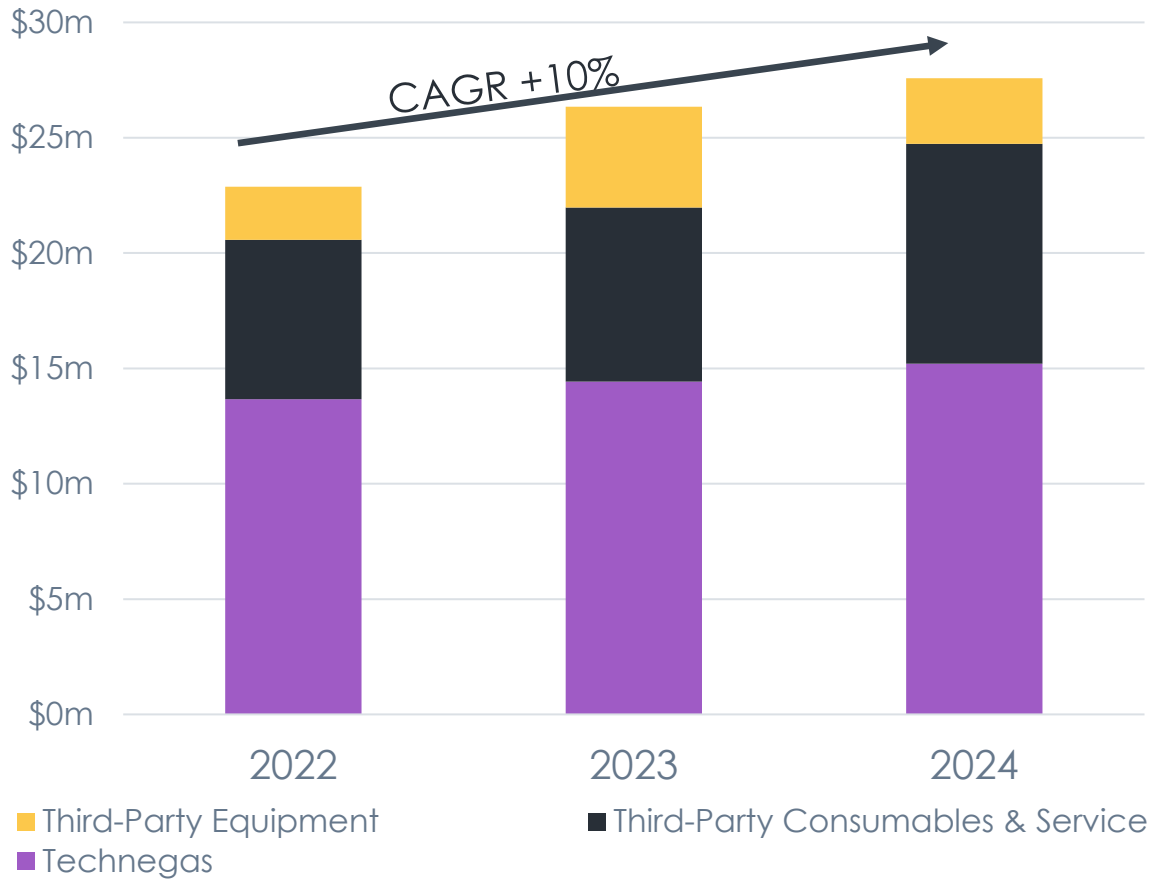
| | |
|---|---|
| **Record Sales Revenue** | • $27.6m up 5% from $26.3m in the pcp |
| **Technegas** | • Global sales revenue up 5% from the pcp to $15.2 million, with a strong second half up 14%, driven by initial US sales. |
| **3rd Party Distribution** | • Global revenue up 4% from the pcp to $12.4 million |
| **Technegas US** | • Initial US Technegas sales drive 5% increase in group revenue<br>• Total US sales of $827k includes 131% growth in 2nd half sales<br>• 2nd half driven by early adoption by Key Opinion Leaders |
| **Net Loss After Tax** | • $13.2m loss up 181% on $4.7m loss in the PCP, which benefited from $4.5 million of positive adjustments |
| **Balance Sheet** | • $20.6 m of cash reserves as @ 31 December 2024 to drive our growth strategies |

# 2024 Trading Overview and Underlying Business

## 2024 Trading Highlights

| | |
|---|---|
| **Technegas** | • Underpinned by PAS[1] sales delivering 72.6% of revenue compared to 70.7% in the pcp<br>• 55 system sales compared to 58 in the pcp (excluding USA) |
| **Third Party Distribution** | • Capital projects revenue up 83% in the 2nd half but overall was down 35% on the pcp<br>• Consumables and service revenue was up 26% overall, including a strong 2nd half, up 54% on the pcp |
| **Regulatory Renewals** | • All regulatory renewals in existing 66 country markets maintained |
| **Indication Expansion** | • Existing 'Beyond PE' clinical trials progressing.<br>• French trial use of Technegas™ to improve detection of residual pulmonary vascular obstruction initiated |

## Group Revenue Trend by Category (last 3 years)




[1] Patient Administration Set (PAS) box equals 50 patient Technegas™ procedures.

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# Understanding Technegas

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# Technegas – Proven Technology

## Unique Drug + Device + Service combination = regulatory barrier to entry

Technegas comprises the following components

### SYSTEM

**TECHNEGAS PLUS SYSTEM**

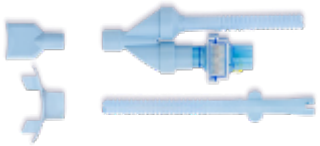
### PER PATIENT CONSUMABLES

**TECHNEGAS® SYSTEM PACK**

Technegas (Crucible)

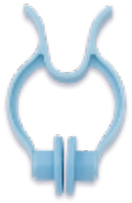
Technegas® Contacts

Technegas Patient Administration Set (PAS)



IN ADDITION TO THE SYSTEM PACK

Nose Clips

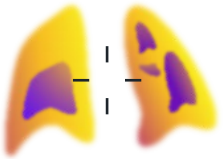


### SUPPORT

Training

Engineering Support & Service

Image Analysis



- **USFDA Drug-Device Combination product**
- **Razor - Razorblade business model**
- **Per-patient consumables drive an annuity-like revenue stream**
- **All Technegas components are manufactured / assembled by Cyclopharm**

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# Understanding Third Party Products

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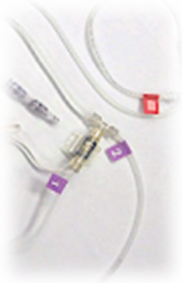
# Overview of Third-Party Products

## Leveraging our Sales, Service & Regulatory Footprint in our Direct Markets

Third-Party Products comprise the following components

### Consumables and Radiopharmaceuticals




### Equipment Sales

Hotcells for Radiopharmaceutical Manufacturing

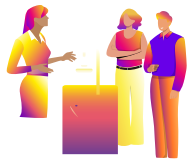
Pharmaceutical Delivery systems

Patient Injectors

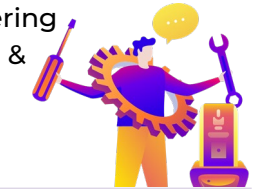
Radiation Monitors

### SUPPORT

Training



Engineering Support & Service



Regulatory Registration

- Direct sales and Service in 17 out of 66 approved markets
- Equipment sales – tender / project driven (non-linear)
- Razor - Razorblade business model with consumables linked to equipment sales
- Pharmaceutical wholesale licenses required

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# Technegas USA Expansion

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# USA Implementation Update

## Establishing a Network of Key Opinion Leader Locations


**Rollout Update as of 30 May 2025:**

- **33** US installations to date
- Sales Generated since approval:
  **$US1million (A$1.6million) @ 31 March 2025**
  **$US1.35 million (A$2.16 million) @ 30 May 2025**
- CMS Pass Through **reimbursement granted**
- Contracts secured in January & March 2025 with the **largest Government and Private** Healthcare Groups in the USA
- **Strong pipeline** – expanding installation within existing customer buying groups and leveraging off regional KOL's

# Broad Indication for use approved by USFDA

## Potential applications across the entire field of respiratory medicine

Technegas (kit for the preparation of technetium Tc99m labeled carbon inhalation aerosol) for oral inhalation use – NDA 022335

**----------USFDA APPROVED INDICATIONS 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 paediatric patients aged 6 years and older for:

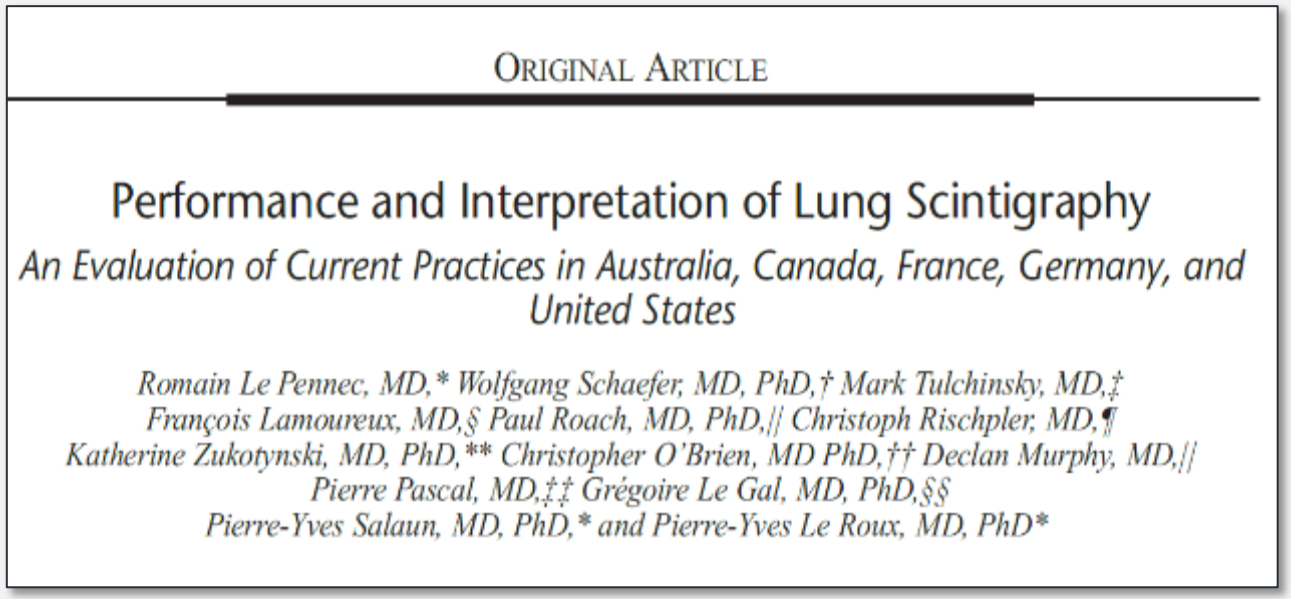
- visualization of pulmonary ventilation
- evaluation of pulmonary embolism when paired with perfusion imaging



https://www.accessdata.fda.gov/drugsatfda_docs/label/2023/022335s000lbl.pdf

# Nuclear medicine published Survey

## Technegas - the ventilation imaging agent of choice in established markets



ORIGINAL ARTICLE

Performance and Interpretation of Lung Scintigraphy

*An Evaluation of Current Practices in Australia, Canada, France, Germany, and United States*

*Romain Le Pennec, MD,* Wolfgang Schaefer, MD, PhD,† Mark Tulchinsky, MD,‡ François Lamoureux, MD,§ Paul Roach, MD, PhD,|| Christoph Rischpler, MD,¶ Katherine Zukotynski, MD, PhD,** Christopher O'Brien, MD PhD,†† Declan Murphy, MD,|| Pierre Pascal, MD,‡‡ Grégoire Le Gal, MD, PhD,§§ Pierre-Yves Salaun, MD, PhD,* and Pierre-Yves Le Roux, MD, PhD**

- *"The most striking result of this survey is the discrepancy in practices in the United States compared with other countries……*
- *"The different physical physiological properties of ventilation agents may explain the differences in the choice of acquisition protocols (in the USA)……*
- *"The recent FDA approval of $^{99m}$Tc-Technegas may change practices….."*

Survey conducted before Technegas USA launch highlights that:

- **85%** of nuclear medicine ventilation studies ex-USA are performed using Technegas
- **Xenon-133 has been displaced** in all markets where Technegas is available
- SPECT imaging used in **>95%** outside the USA **vs 32%** in the USA
- Some USA nuclear medicine departments have not resumed ventilation imaging since **COVID**
- **Beyond PE applications gaining traction** in CTEPH, Interventional Respiratory medicine, radiation therapy planning, lung transplant & PE follow-up



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# US Economic Model

## Placement Model to Expedite Consumable Demand

- **US$7k** one-off installation and training fee
- **US$7k p.a.** technology fee, includes servicing
- **Annuity Revenue** Per patient fee for consumables (sold in 50 patient units)
- **US$70k** revenue per system per annum expected from larger sites[1]
- **>15 yrs** average life per system

- **Targeting 2,000** of the 8,000 US nuclear medicine departments. 250-300 total installations achieved during the second half 2026.
- **System Placement model** supports rapid uptake by US customers by removing the initial capital outlay to drive implementation of the technology
- Initial focus on **clinical trial** and **high-volume sites** for the greatest clinical impact and greater repeat demand for consumables
- **Modest cost base** for US roll-out - ~US$6.5m operating costs per annum in 2025
- High consumable annuity gross **margins** expected at **greater than 80%**
- **$180m USD** market for diagnosing PE. Beyond PE applications to significantly grow the global market

1. Calculation based on expected demand and market price for competing products (e.g. Xe133).

# Technegas – Proven Technology – De-risked Opportunity

1. **Best-in-Class Global Technology** - Technegas® is widely regarded as the world's leading nuclear medicine functional ventilation imaging agent, with more than **5 million patient procedures performed globally**.

2. **Broad FDA Indication** - US FDA approval includes a **wide-ranging indication** for use in lung imaging—eliminating the need for additional regulatory approvals and supporting the Company's **Beyond Pulmonary Embolism (Beyond PE)** strategy (expanding Technegas® into significantly larger clinical indications such as **COPD and asthma**).

3. **Major US Government and Private Sector Contracts Secured** - In the past three months, Cyclopharm has signed its **largest customer agreements globally,** including with US federal and private healthcare networks—opening pathways for accelerated adoption across these systems.

4. **Inventory Onshore in the US** - A **substantial volume of Technegas® inventory is already onshore in the US**, ensuring near-term supply continuity and reducing exposure to global trade risks.

5. **Reimbursement in Place** - Established reimbursement pathways ensure **predictable and ongoing revenue streams** for both Cyclopharm and its US healthcare provider customers.

6. **Long-Term Local Manufacturing Plans** - Cyclopharm plans to replicate its manufacturing expertise by establishing a **secondary manufacturing facility in the United States within the next five years**, enhancing supply chain resilience and preserving long-term growth and supply chain stability

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# Beyond PE: Blue Sky

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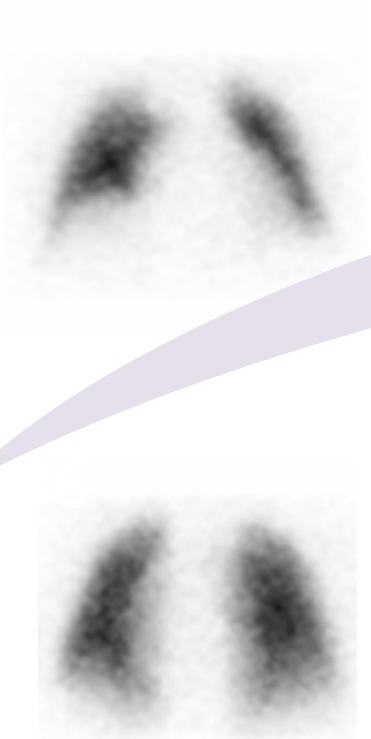
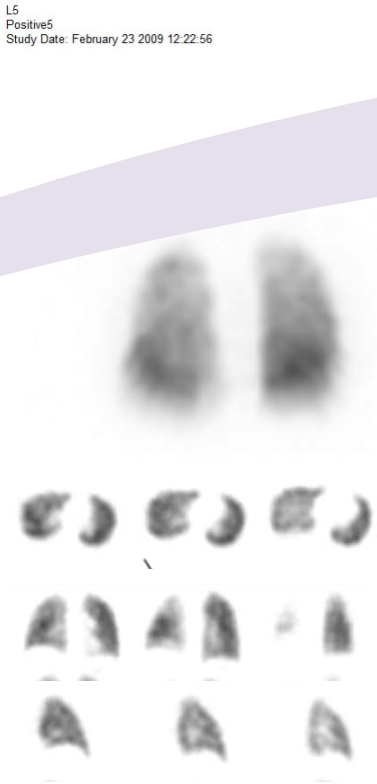
# Evolution of Ventilation Imaging

## PLANAR



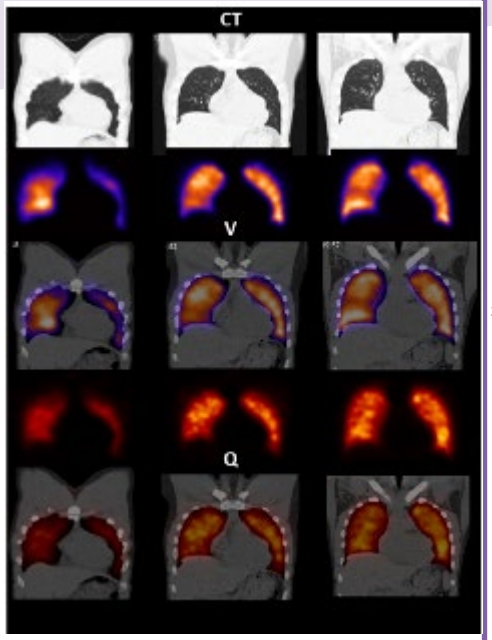
**2-D Basic Function**

## SPECT



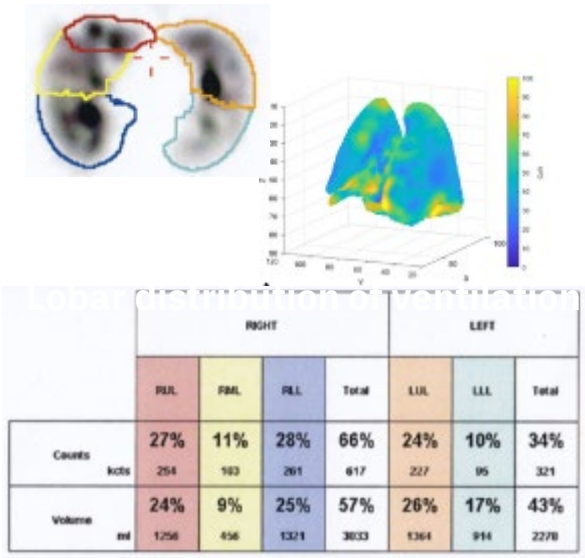

**3-D Function**

## SPECT/CT



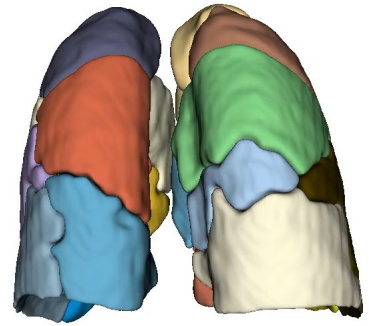

**Fusing Function with Anatomy**

## SPECT/CT Quantification




**Function + Anatomy with Analytical Analysis**

## Future A.I. Applications



AI reaching to segmental and subsegmental level analysis leading to chronic condition management and Treatable Trait identification

**Function + Anatomy + Analytical Analysis with Deep Learning**

1. Bailey DL, Roach PJ. j.semnuclmed. 2020; Jan;50(1):75-86
2. King GG, et al. Semin Nucl Med 2010; 40(6): 467-473
3. Provost K, et al J Nucl Med Technol 2017; 45(3): 185-192
4. Gibson P, et al J Allergy Clin Immunol Pract ,. 2024 Apr;12(4):929-935.e4

# Beyond PE applications

## Clinical trials already underway


*Including PE applications. On a long-term basis.


1. Roach PJ, et al. J Nucl Med 2013; 54: 1588-1596
2. Ohira H, et al. J Nucl Cardiol 2015;22(1): 141-157
3. Hsu K, et al. J Bronchology Interv Pulmonol 2018; 25(1): 48-53
4. Mortensen J, Berg RMG. Semin Nucl Med 2019; 49(1): 16-21
5. Wechalekar K, et al. Semin Nucl Med 2019; 49(1): 22-30
6. Elojeimy S, et al. AJR Am J Roentgenol 2016; 207(6): 1307-1315
7. Eslick EM, et al. Semin Nucl Med 2019; 49(1): 31-36
8. Farrow C, King GG. Semin Nucl Med 2019; 49(1): 11-15
9. Jögi J, et al. Int J Chron Obstruct Pulmon Dis 2014; 10: 25-30
10. Bajc M, et al.. Int J Chron Obstruct Pulm Dis 2017; 12: 1579-1587
11. Verger A, et al. Eur J Nucl Med Mol Imaging 2020; 47(11): 2709-2710
12. Baloul A, et el, Eur J Nuc Med Mol Imaging 2021; 48(8):2525-2530
13. Bajc M, et al, Clin Med Insights 2021; Vol 14 1-4
14. Blanc-Beguin F, et al, Mol Img Bio 2021, 23:62-69
15. Currie G, J Nuc Med Tech 2021; 49:313-319
16. Ozguven, S, et al; Mol Imag Rad Therapy; 2021: 30:28-33
17. Tee, et al; Intrevent Pulmonology; 2021, DOI 10.1159/000515336
18. Le Roux, et al, J Nuc Med July 2022, 63 (7) 1070-1074
19. Berhouse, et al, Respiratory Research 2022; 23: 296
20. Ridiadia, et al, ATS Abstract; doi.org/10.1164/ajrccm-conference.2022.205.1_MeetingAbstracts.A2554
21. Venegas C, et al, ATS Abstract; doi.org/10.1164/ajrccm-conference.2022.205.1
22. Le Roux, et al; Clinical Nuclear Medicine, 27 Oct 2022; doi: 10.1097/RLU.0000000000004426

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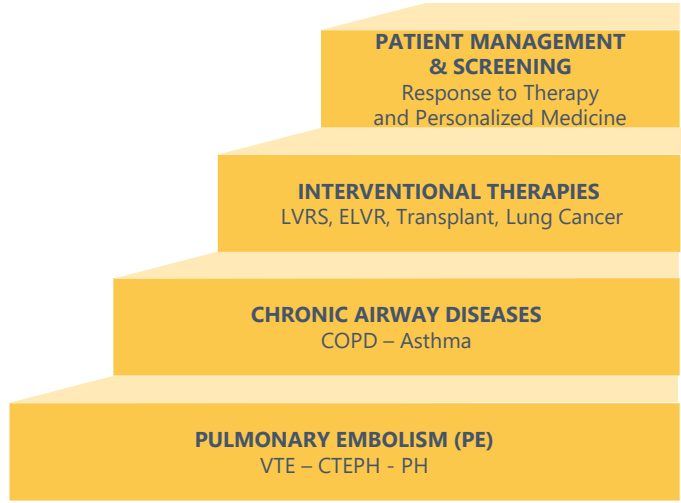
# Beyond Pulmonary Embolism Initiatives Underway

7 Cyclopharm sponsored Beyond PE clinical trials

1. **Hunter Medical Research Institute (Newcastle, AU):** Diagnosis and response to therapy in severe asthma and COPD[1]
   100 Patient Study * 100% Recruited * **Study Published**[6],
2. **Woolcock Institute (Sydney, AU):** Diagnosis and response therapy in mild to moderate COPD[3]
   25 Patient / 75 Scan Protocol * 88% Completed
3. **CHUM (Montreal, CA):** Early detection of COPD in asymptomatic smokers[4]
   30 Patient Study * 100% Recruited * Analysis complete * Paper submitted for publication
4. **Dalhousie (Halifax, CA):** Post-lung transplant patients
   30 Patient Study * 30% Recruited
5. **McMaster University Firestone Institute (Hamilton, CA):** Ventilation in lung cancer patients pre and post lung resection [2]; 100% Recruited * Study Published bridging research initiatives with clinical applications using Technegas .
6. **McMaster University Firestone Institute (Hamilton, CA):** COVID-19 Related Lung Ventilation and Perfusion Injury[5]
   100% Recruited * Abstract presented at the American Thoracic Society May 2023 with paper to follow.
7. **PRONOSPECT (France):** 665 Patient multicenter trial designed to Predict the Risk of Venous Thromboembolism (VTE) Recurrence in Patients With Pulmonary Embolism (PE). Patients will be imaged with nuclear medicine regardless if initially diagnosed with CTPA or nuclear medicine[8]





1. ACTRN12617001275358 - Can functional lung ventilation imaging identify treatable traits in obstructive airway disease?
2. https://clinicaltrials.gov/ct2/show/NCT04191174?term=technegas&draw=2&rank=3
3. http://investor.cyclopharm.com/site/PDF/1561_0/BetterDefiningAirwaysDiseasewithTechnegas
4. https://ichgcp.net/clinical-trials-registry/NCT03728712
5. https://clinicaltrials.gov/ct2/show/NCT04549636
6. https://pubmed.ncbi.nlm.nih.gov/38151119/
7. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10206636/
8. https://classic.clinicaltrials.gov/ct2/show/NCT06372730

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# Cyclopharm Outlook

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# Upcoming Milestones and Growth Catalysts

- ✓ **250–300 US installations during the second half of 2026**.
- ✓ **Sales Force** expansion to meet demand.
- ✓ Targeting clinical initiatives to expand the use of Technegas **Beyond PE**
- ✓ N**ew third-party opportunities** to further broaden our reach

Leveraging an established global commercial footprint



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# CYCLOPHARM INVESTMENT CASE

## Outlook: 250 - 300 Technegas USA Total Installations achieved during Second Half 2026

**Profitable and Growing MedTech**

Underlying business (ex-USA) is cash positive


**First in Class**

Established Gold Standard

Proprietary product sales to 66 countries with over 5 million patient procedures to date

Clinical Agent of Choice referenced by name in multiple nuclear medicine **clinical guidelines**

Technegas **IP Expansion** Program Underway

**USFDA Approval Granted**

Set to quadruple the size of the existing PE business, based on significant existing demand

Further leverage penetration into the CTPA market

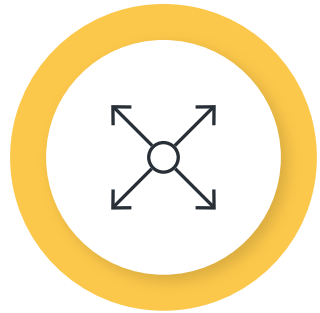
**Full Reimbursement** Granted from 1 July 2024


**Recurring Revenue**

From single patient consumables

Similar to an **annuity model**

Generating **Recurring Revenues** from all USA installations



**Technegas Product expansion**

Indications Beyond PE leveraging **AI** into chronic respiratory disease management in large uses such as asthma, COPD and lung cancer could deliver exponential growth

Market Development already underway



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# FORMAL BUSINESS

Mr David Heaney

# 2025 AGM – Formal Business

## Resolutions

1. **Financial Statements and Reports – (b) Remuneration Report**
2. **Re-election of Ms Dianne Angus as Director**
3. **Approval of grant of performance rights**
4. **Approval of grant of performance rights to the Managing Director for FY25 STI**
5. **Approval of grant of performance rights to the Managing Director for FY25 LTI**
6. **Approval of non-executive director remuneration**
7. **Approval of prior issue of Placement Shares**



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# CYC AGM 2025 Resolutions

**1b** **“That the Remuneration Report as set out in the Annual Report of the Company for the financial year ended 31 December 2024 be adopted.”**

| Resolution | For | Against | Discretionary | Exclusions | Abstain |
|---|---|---|---|---|---|
| Remuneration Report | 59,178,529 | 283,084 | 54,267 | 3,051,770 | 4,182 |

## Questions?

# CYC AGM 2025 Resolutions

2 “That, for the purposes of ASX Listing Rule 14.4 and for all other purposes, Ms Dianne Angus, who retires at the close of this Annual General Meeting and, being eligible, and having consented to act, be re-elected as a Director of the Company.”

| Resolution | For | Against | Discretionary | Exclusions | Abstain |
|---|---|---|---|---|---|
| Re-election of Ms Dianne Angus as Director | 62,476,956 | 27,700 | 55,143 | - | 12,500 |

## Questions?

# CYC AGM 2025 Resolutions

3 “That, for the purposes of ASX Listing Rule 7.2 (exception 13(b)) and for all other purposes, approval is given for the grant of up to 4 million performance rights in the Company under the Plan within 3 years from the date of this resolution, on the terms and conditions set out in the Explanatory Statement accompanying this Notice of Meeting.”

| Resolution | For | Against | Discretionary | Exclusions | Abstain |
|---|---|---|---|---|---|
| Approval of grant of performance rights | 59,314,524 | 460,862 | 50,143 | - | 2,746,770 |

## Questions?

# CYC AGM 2025 Resolutions

4 “That, for the purposes of ASX Listing Rule 10.14, section 200E of the Corporation Act 2001 (Cth) and for all other purposes, approval be and is hereby given to the grant to the Managing Director (or his nominee) of performance rights over Shares having a value of up to $252,305.60, comprising the deferred portion of his FY25 STI award, on the terms and conditions set out in the Plan and as set out in the Explanatory Statement accompanying this Notice of Meeting.”

| Resolution | For | Against | Discretionary | Exclusions | Abstain |
|---|---|---|---|---|---|
| Approval of grant of performance rights to the Managing Director for FY25 STI | 59,465,632 | 461,556 | 49,449 | - | 2,595,662 |

## Questions?

# CYC AGM 2025 Resolutions

5 “That, for the purposes of ASX Listing Rule 10.14, section 200E of the Corporation Act 2001 (Cth) and for all other purposes, approval be and is hereby given to the grant to the Managing Director (or his nominee) of performance rights over Shares having a value of up to $240,291, comprising the FY25 LTI award, on the terms and conditions set out in the Plan and as set out in the Explanatory Statement accompanying this Notice of Meeting.”

| Resolution | For | Against | Discretionary | Exclusions | Abstain |
|---|---|---|---|---|---|
| Approval of grant of performance rights to the Managing Director for FY25 LTI | 54,564,667 | 5,362,703 | 49,267 | - | 2,595,662 |

## Questions?

# CYC AGM 2025 Resolutions

6 “That for the purposes of Listing Rule 10.17 and for all other purposes, the shareholders of the Company approve the increase of the maximum aggregate amount payable to non-executive directors by way of directors' fees from $450,000 to $600,000.”

| Resolution | For | Against | Discretionary | Exclusions | Abstain |
|---|---|---|---|---|---|
| Approval of Non-executive director remuneration | 62,104,206 | 73,177 | 54,449 | - | 340,000 |

## Questions?

# CYC AGM 2025 Resolutions

7 “That for the purposes of Listing Rule 7.4 and for all other purposes, shareholders ratify the issue of 14,084,508 fully paid ordinary shares at an issue price of A$1.42 (Placement Shares) issued by a way of a placement to sophisticated and professional investors and other persons to whom no disclosure was required on the terms and conditions set out in the Explanatory Statement.”

| Resolution | For | Against | Discretionary | Exclusions | Abstain |
|---|---|---|---|---|---|
| Approval of prior issue of Placement Shares | 62,456,748 | 81,960 | 33,591 | - | - |

## Questions?

# 2025 AGM – Proxy Summary

| Resolution | For | Against | Discretionary | Exclusions | Abstain |
|---|---|---|---|---|---|
| 1(b). Remuneration Report | 59,178,529 | 283,084 | 54,267 | 3,051,770 | 4,182 |
| 2. Re-election of Director | 62,476,956 | 27,700 | 55,143 | - | 12,500 |
| 3. Approval of grant of performance rights | 59,314,524 | 460,862 | 50,143 | - | 2,746,770 |
| 4. Approval of grant of performance rights to the Managing Director for FY25 STI | 59,465,632 | 461,556 | 49,449 | - | 2,595,662 |
| 5. Approval of grant of performance rights to the Managing Director for FY25 LTI | 54,564,667 | 5,362,703 | 49,267 | - | 2,595,662 |
| 6. Non-executive director remuneration | 62,104,206 | 73,177 | 54,449 | - | 340,000 |
| 7. Approval of prior issue of Placement Shares | 62,456,748 | 81,960 | 33,591 | - | - |

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# THANK YOU

ASPIRE. INSPIRE. ILLUMINATE.

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# Questions

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# Attachment Section

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# Technegas Supplemental Information

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# Technegas Aerosol for Inhalation

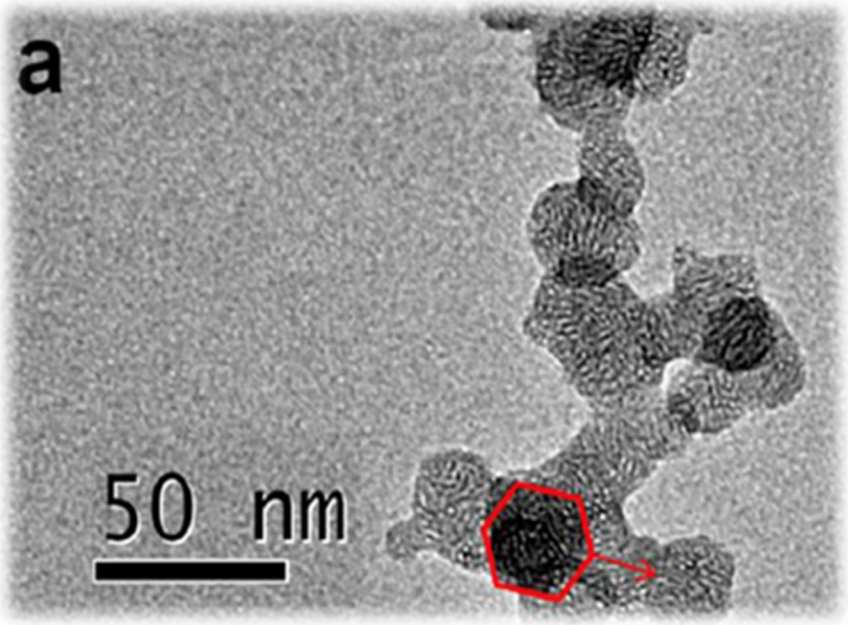
## Functional Imaging showing where Oxygen is distributed within the lung

Image source:
Blanc-Béguin et al, 2020

Technegas is composed of 99mTc cores encapsulated within layers of graphite to form individual hexagonal plate-like particles.[1-2]

Technegas is manufactured by heating Technetium-99m in a carbon crucible within an argon environment for a few seconds at 2,750 degrees Celsius.[3]

Its very small particle size (>80 less than 1 micron or 1,000 nm[4]) allows distribution into the lungs like a gas and deposited in alveoli by diffusion, providing for Planar, SPECT and SPECT/CT ventilation imaging.




**How big is a nanometre?**

- 100,000 nm = Sheet of paper thickness
- 75,000 nm = Human hair thickness
- 7,000 nm = Red Blood Cell diameter
- 2.5 nm = DNA strand diameter


1. Wiebe LI, et al. Current Radiopharmaceuticals 2010; 3(1): 49-59
2. Blanc-Béguin F, et al. Mol Imaging Biol 2020;
3. Lemb M, et al. Eur J Nucl Med 1993; 20(576-579)
4. *Pharmaceutics* **2023**, *15*(4), 1108; https://doi.org/10.3390/pharmaceutics15041108

# WHAT THE GUIDELINES SAY

## Technegas is the nuclear medicine agent of choice in established markets

Endorsed by the guidelines from the European[1-2] and the Canadian[3] Associations of Nuclear Medicine (EANM & CANM)

" Using 99m-Tc-Technegas® is according to clinical experience **better than the best aerosols** "

" Technegas® **facilitates interpretation, particularly** in COPD"

" **For ventilation, 99m-Tc Technegas® is the best-aerosol particularly in** patients with COPD "

" **Liquid aerosols are inferior for SPECT and should** not be used unless Technegas® is not available "

" The **best widely available agent for ventilation** is 99m-Tc-Technegas "

" Because of the very small particle size, this agent is distributed in the lungs almost like a gas and deposited in alveoli by diffusion, where they remain stable, thus **providing the best possible images for ventilation** SPECT "

" Another advantage is that only a few breaths are sufficient to achieve an adequate amount of activity in the lungs, **reducing time and personnel exposure to radiation** "

" Technegas® is considered the **agent of choice** in the COPD population as there is less central airway deposition, better peripheral penetration, and it does not wash out as quickly as traditional aerosols "




1. Bajc M, et al. Eur J Nucl Med Mol Imaging 2019; [Epub ahead of print]: https://link.springer.com/content/pdf/10.1007%2Fs00259-019-04450-0.pdf
2. Bajc M, et al. Eur J Nucl Med Mol Imaging 2009; 36(8): 1356-70; https://eanm.org/publications/guidelines/gl_pulm_embolism_part1.pdf
3. Leblanc M, et al. CANM 2018; https://canm-acmn.ca/resources/Documents/Guidelines_Resources/MasterDocument_Final_Nov_21_incl-Exec-Sum_ver3_Dec.%2012_.pdf 2.a

# Recent USA Nuclear Medicine Technegas Publications

## Recent Research and Articles Driven by Clinicians and End Users:

**Technegas** -*Technegas at Last! Implementing Technegas into Clinical Practice in the United States: Considerations, Challenges, and Recommendations*

*Delynn Silvestros and Tina M. Buehner; Journal of Nuclear Medicine Technology March 2025, 53 (1) 7-10; DOI: https://doi.org/10.2967/jnmt.124.269231*

*Comparability of Quantifying Relative Lung Ventilation with Inhaled 99mTc-Technegas and 133Xe in Patients Undergoing Evaluation for Lung Transplantation*

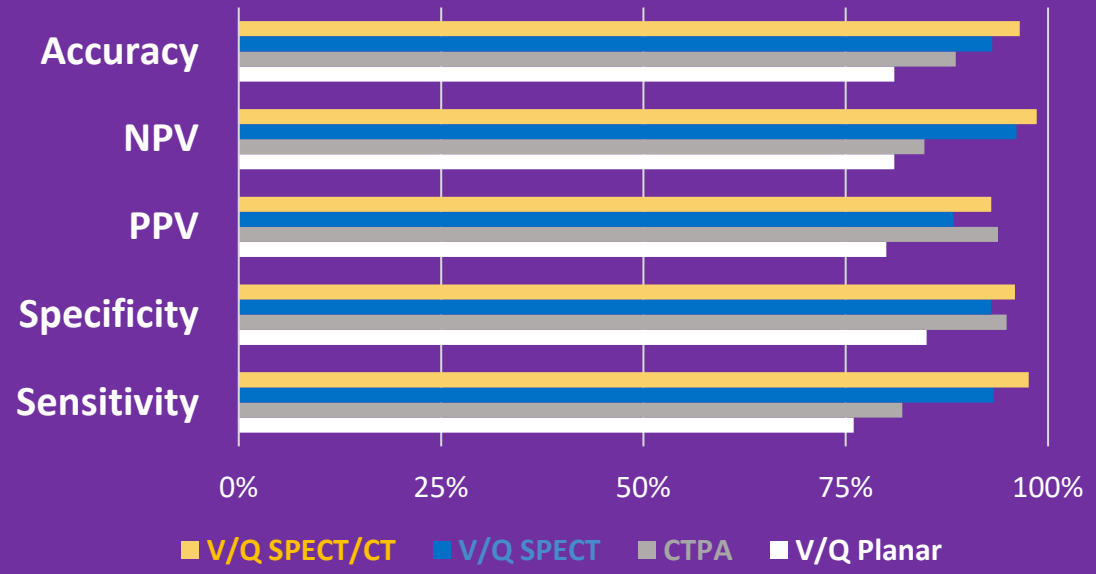
*Ashwin Singh Parihar, Joyce C. Mhlanga, Henry D. Royal and Barry A. Siegel*

*Journal of Nuclear Medicine December 2024, jnumed.124.268801; DOI: https://doi.org/10.2967/jnumed.124.268801*

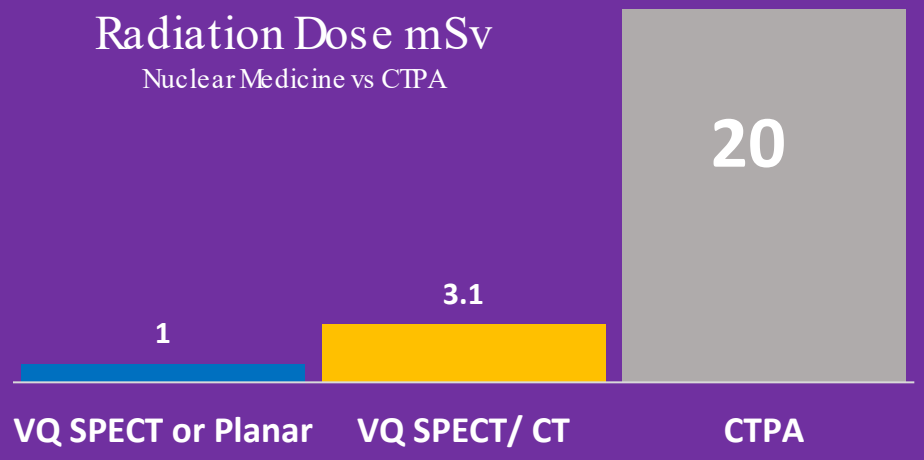
*Ventilation Lung Imaging: Technegas*

*Mary Beth Farrell, Kathy S. Thomas, Eleanor S. Mantel and Jessica Settle; Journal of Nuclear Medicine Technology February 2025, jnmt.125.269536; DOI: https://doi.org/10.2967/jnmt.125.269536*

# Diagnosing Pulmonary Embolism: V/Q SPECT +/- CT vs CTPA




Diagnostic ability of V/Q SPECT/CT[1], V/Q SPECT[1], CTPA[1] and V/Q Planar[2] to detect PE (adapted from Hess and al, 2016[1] and from Reinartz et al, 2004[2])




**Peer Reviewed clinical studies** have shown that V/Q SPECT/CT is **superior** compared to CTPA across most clinical measures with better overall diagnostic performance[1].

Nuclear Medicine VQ radiation dose, even combined with low dose non-contrast CT, is **exponentially lower** than CTPA



1. Hess S, et al. Semin Thromb Hemost 2016; 42(8): 833-845
2. Reinartz P, et al. J Nucl Med 2004; 45: 1501-1508
3. Leblanc M, et al. CANM guidelines; Nov 2018: www.canm-acmn.ca/guidelines

# Nuclear Ventilation Imaging Agent Comparison

## Technegas®

- Easy
- 3 to 4 breaths
- 3D images
- No contraindications
- Covid-19

## Xenon - 133

- **True radioactive gas** inhaled with **full face mask**
- **Constant inhale -exhale breathing for 15 mins increasing the risk of COVID-19 exposure**
- **No 3D images limited to planar imaging** resulting in lower sensitivity & specificity
- **Requires special rooms** to contain radioactive gas in the event of a release

## DTPA Tc99m

- **Wet Aerosol**
  **impacts efficacy, bronchospasm, COVID-19 concerns**
- **Creates hotspots** in presence of small airways lung diseases, a frequent comorbidity in PE, & impacts clinical interpretations



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**Clinical**

- ✓ Key Opinion Leaders engaged
- ✓ Medical Affairs Director Recruited
- ✓ Clinical Affairs Director Recruited
- ➢ Recruit Chief Medical Officer 2026.
- ✓ R&D Programs Beyond PE Underway

**Commercial**

- ✓ Customer Success Roles Filled
- ✓ Scaling up to match inflow opportunities to include BDM roles

**Operations**

- ✓ Outsourced back office provider Contracted
- ✓ Adjacent Kingsgrove NSW facility secured
- ➢ Future plans for secondary manufacturing site in the USA.

**Education**

- ✓ Application Specialists hired
- ✓ Utilising Coverage from established markets
- ✓ Suite of educational materials Developed

**Regulatory**

- ✓ Australian Site Manufacturing Approved
- ✓ USFDA Approval Granted
- ✓ Majority of State Pharmaceutical Wholesale Licenses being Granted
- ✓ US Regulatory support in place

**3PL**

- ✓ 3PL Service Under Contract

**Inventory Build**

- ✓ Stock is building in the USA

**Service**

- ✓ National network service provider Contracted
- ✓ Service Engineers Recruited



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# Indication Expansion

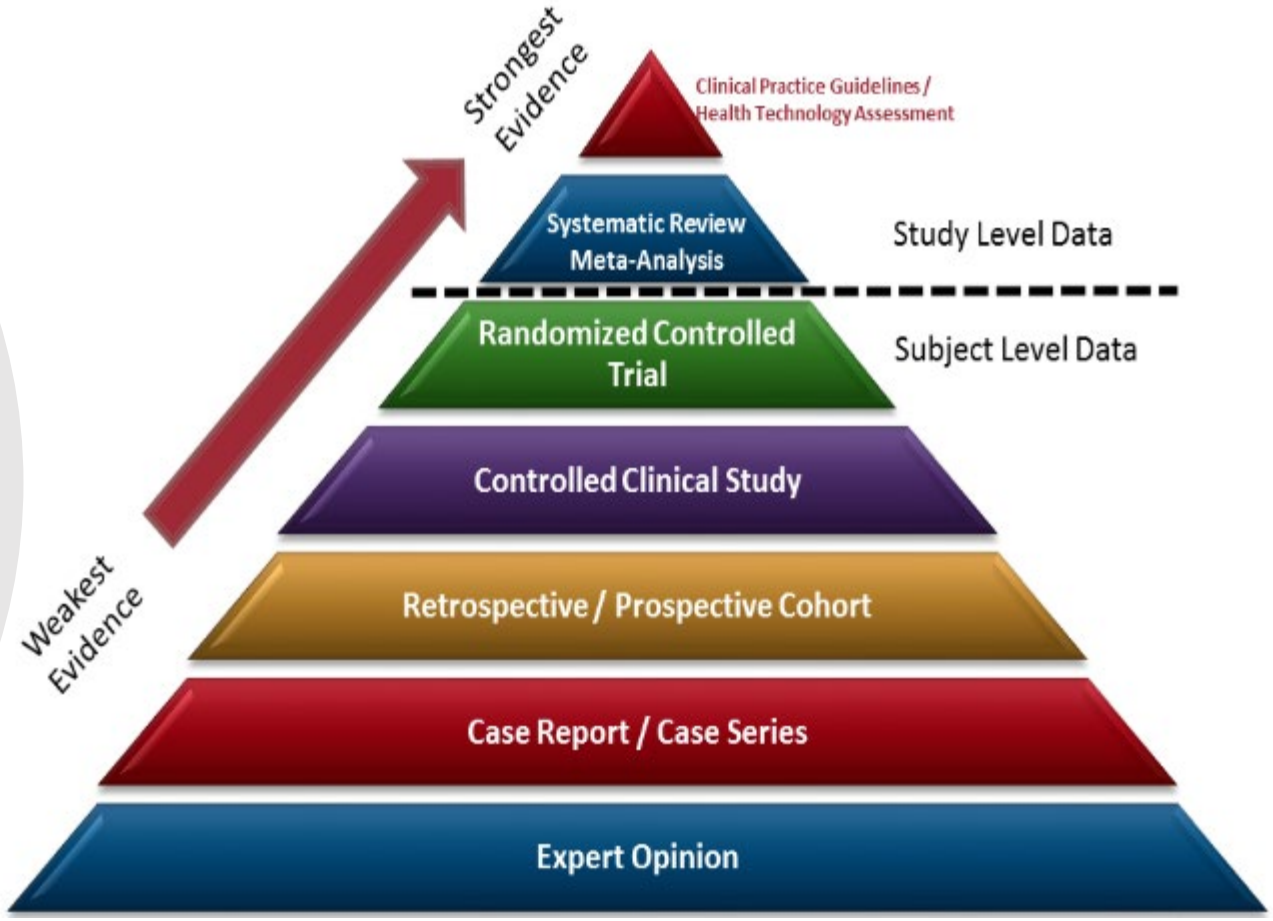
## The importance, urgency and opportunity 'Beyond PE" underway

1. Lung Disease in 2019 accounted for **6 million deaths** worldwide (**12%** of all deaths)
2. COPD and Lower Respiratory Infections and Lung Cancer will be the **3rd, 4th and 6th largest causes of death** by 2030.
3. "Over and underdiagnosis of Lung Disease has a **huge economic impact**. COPD misdiagnosis revealed that the under or over diagnosis and prevalence of this disease was 56.7–81.4% and 29.0–65.0%, respectively leading to **55.4% squandering of treatment costs**[2]"
4. Misdiagnosis can be **fatal**
5. **Exponential Growth** Potential for Technegas


1. World Health Organisation - The top 10 causes of death 2019 (who.int)
2. Munir, M., Setiawan, H., Awaludin, R. *et al.* Aerosolised micro and nanoparticle: formulation and delivery method for lung imaging. *Clin Transl Imaging* (2022). https://doi.org/10.1007/s40336-022-00527-3

Technegas has A **High Standard** of Clinical Evidence to **Drive Adoption** in Traditional & Beyond PE Applications

# Hierarchy of Evidence



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