

New Genotype Risk Assessment Test Identifies More People Who Should Be Screened for Lung Cancer

Highlights

- ✓ New lung cancer risk assessment test combines genetic and clinical risk factors, developed using health data from around 500,000 people in the UK Biobank study
- ✓ The new model demonstrated greater predictive accuracy in identifying at-risk adults than current Australian screening guidelines
- ✓ Genotype test identifies more people who would benefit from being screened, including some light smokers who fall outside today's age and smoking-history cut-offs
- ✓ Findings support the case for including genetic risk information in national lung cancer screening programs in both the US and Australia based on unpublished data
- ✓ Research to be submitted for independent peer review

Melbourne, Australia, 21st July 2026: Rhythm Biosciences Ltd ('RHY', the 'Company' or the 'Group') (ASX: RHY), a transformative, predictive cancer diagnostics technology company, is pleased to announce the development of a Genotype lung cancer risk prediction test.

Lung cancer is the world's leading cause of cancer deaths, killing around 1.8 million people every year. How early it is caught makes a big difference to survival, and low-dose CT (LDCT) screening has been shown to cut lung cancer deaths by up to 24% in high-risk groups.

Current US and Australian screening guidelines are based mainly on age and smoking history. This leaves many at-risk people outside the screening net — a significant number of lung cancers occur in people who don't meet these criteria.

How the New Model Works

Rhythm has developed a new lung cancer risk test, built and tested using data from the UK Biobank — one of the world's largest health studies, with detailed health, lifestyle and genetic information from around 500,000 people.

The Genotype test algorithm combines well-established clinical risk factors — including age, smoking history, weight, and family history of lung cancer — with a polygenic risk score (PRS). A PRS adds up the small effects of many genetic variations to estimate a person's inherited risk of developing a disease. This genetic information adds insight that clinical factors alone don't capture, giving a fuller picture of a person's overall risk.

When tested against current Australian screening eligibility rules, the new test showed:

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- Greater predictive ability in identifying at-risk adults than age and smoking-history criteria alone, improving discrimination (Area Under the Curve) from 0.70 to 0.86.
- In testing, the model identified 42% more lung cancer cases as eligible for screening than current Australian criteria.

What This Means for Patients and Screening Programs

These findings support a shift toward more personalised, genetics-informed lung cancer screening — moving beyond broad age and smoking criteria toward individual risk assessment. Widening screening eligibility could help with earlier identification of individuals at elevated risk and therefore has the potential to improve opportunities for earlier diagnosis.

One often-overlooked barrier to screening is stigma. Because current guidelines are based explicitly on smoking history, some smokers and former smokers feel shame or self-blame that puts them off taking part — even though screening could save their lives. By showing that genetics also plays a significant role in lung cancer risk, the test may help reduce this stigma and encourage more eligible people to come forward for screening.

Because the Genetype test works across both US and Australian healthcare settings, it may have future application in jurisdictions that currently operate LDCT screening programs, subject to further validation and regulatory considerations.

"This model represents a meaningful advance in how we identify individuals who stand to benefit most from lung cancer screening. By combining genetic risk information with clinical data, we can look beyond traditional smoking thresholds and reach the people at highest risk who are currently falling through the cracks of existing programs. Furthermore, this complements the work we are doing on blood-based biomarkers designed to ultimately be a screen for lung cancer. The goal is to achieve the same longitudinal approach to disease for lung cancer as we have for bowel cancer - Genetype working in conjunction with ColoSTAT[®]," said Dr Erika Spaeth, Director of Clinical Affairs at Rhythm.

Plans for Commercialisation

Rhythm intends to transfer this novel clinical test to production over the next quarter to support future commercialisation as part of the Company's existing portfolio of Genetype risk assessment tests.

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This announcement was authorised by the Board of Directors of Rhythm Biosciences Limited.

For further information contact us via investors@rhythmbio.com.

About Rhythm Biosciences

Rhythm Biosciences Ltd (ASX: RHY) is an Australian innovative, medical diagnostics company aimed at delivering simple, affordable blood tests for accurate and early detection of cancers. Rhythm is focused on improving patient outcomes through detection at the earliest possible stage, reducing the global burden of cancer, and saving lives. Rhythm Biosciences is committed to working with like-minded global partners to achieve commercialisation and distribution of these simple solutions. The company was founded in 2017 and is headquartered in Melbourne, Australia. For more information, visit rhythmbio.com and follow the company on LinkedIn and X.

About ColoSTAT®

Colorectal cancer (CRC), also referred to as bowel cancer, is the second leading cause of cancer deaths globally. If diagnosed early, colorectal cancer can be curable. The ColoSTAT® Test is Rhythm Biosciences' simple blood-based test for the detection of CRC. It measures five specific protein biomarkers that indicate the likelihood of CRC. It is intended for individuals with symptoms associated with Colorectal Cancer (CRC). The ColoSTAT® Test is based on research from Australia's CSIRO and is patent protected internationally. It has the potential to play a key role in reducing the mortality rate and healthcare costs associated with colorectal cancer.

About geneType™

geneType™ is a sophisticated genetic risk assessment testing platform that combines clinical, family history and genetic data to provide comprehensive risk assessments for various diseases. The platform leverages polygenic risk scores and clinical risk factors to generate personalised health insights, helping individuals and healthcare providers make more informed medical decisions. The technology allows for risk assessment across multiple conditions including breast cancer, cardiovascular disease, diabetes, colorectal cancer, prostate cancer, and melanoma. The tests are delivered through healthcare providers and genetic counsellors, ensuring appropriate clinical oversight and support for patients receiving their results. The platform's multi-disease assessment capabilities and clinical utility position it well to capture growing demand in the preventative healthcare and precision medicine markets. For more information, please visit www.genetype.com.

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