THE STORY OF EVA VAN RIKXOORT

AI's revolutionary impact on lung cancer

In the rapidly evolving world of health and high tech, not a day goes by without an innovation that promises to revolutionise patient care and treatment. One of these innovations is Eva van Rikxoort's. The CEO of Thirona successfully made the leap from a scientist to a business leader, all while sticking to her roots in Artificial Intelligence (AI). Eva takes us along on her unique journey and tells us everything about the transformative role of AI in the treatment of lung diseases , and her vision for the future.

You've had quite the journey from being a scientist to becoming a CEO. What triggered this transition?
"Well, the move from scientist to CEO is not a transition I ever expected to make. As long as I can remember, I have been interested in technology. This led me to study AI. After completing my MSc, I studied for a PhD in medical image analysis and found myself fascinated by lung imaging. I began to notice a distressing trend: we have incredible scientific advantages, but these advantages are not available to the patients . That's how an idea started to grow: science should benefit all people. I knew I had to step out of my 'lab coat', into the business world to make a difference."

So, what happened next?
"In 2014, I had a solid scientific career in both the US and the Netherlands, specialising in AI-based pulmonary image analysis. Logically, at scientific conferences, I frequently ran into physicians and people from the clinical industry, asking if they could use the automatic analysis that we developed. Unfortunately, my answer usually had to be a 'no'. It wasn't just that the solution wasn't market-ready yet. As scientists, it just wasn't our role to commercialise it. This constant need to bridge the gap between scientific progress and its applications eventually drove me to found Thirona. My goal is simple: to bring the benefits of scientific breakthroughs to patients, who should benefit from the knowledge too."

"Lungs are very complex and difficult to examine. You can't just take out a lung to investigate. That's where AI comes into the picture. Lung imaging is in fact the only accessible tool. But its full potential is still to be uncovered. I realised that AI gave way to new possibilities. Solutions that hadn't yet reached either patients or the medical industry."

Eva van Rikxoort
Founder & CEO Thirona

You started Thirona rather than joining another company. What made you choose this path?
"I actually get this question quite a lot. The answer is simple. It just happened. In the US, I worked with an academic group collaborating in a clinical research organisation (CRO) on amazing innovations in our field. The turning point was when I received a request for analysis from a prospective customer, which was in fact one of the largest US research studies on COPD. That was the beginning of Thirona."

"Ever since, the journey has been filled with learning, growth, and immense satisfaction. I started with just a parttime help and now are with a group of 60 employees. Everything we achieved is because of our belief in what we do, hard work and learning on the go."

Thirona specializes in a treatment approach rather than diagnostics. Can you explain why?
"We primarily focus on analysing chest images in the context of lung diseases, using AI technology. While our software enables diagnosis and treatment planning for a wide range of diseases, we focus on working together with pharmaceutical and MedTech companies on development of innovative treatment and interventional solutions for both common and rare diseases. Most of our technology ends up in hospitals, powering clinical tools used by physicians, helping them in personalising patient treatment and precisely monitor results.

What does the future of AI look like in your eyes?
"I'm a firm believer in the benefits of AI for the humanity, especially in the field of precision medicine. Thirona combines the 'magic' of technology with the most recent research in medical imaging to make a positive impact on society. In the coming years, I reckon we'll see healthcare transform in ways we can't even imagine. Actually,our technology is already being used in hospitals in USA, Europe and around the world for virtual bronchoscopies, treatment of cystic fibrosis or lung surgeries with virtual reality-based applications, and it is just a beginning what AI can do in imaging."

"I had to step out of my lab coat and into the business world to make a difference."

Recent developments at Thirona have attracted a lot of attention, including significant investment. Can you shed some light on this?
"In September 2023, we celebrated a major milestone when Thirona secured an investment of €7.5 million, including contributions from HERAN Partners, the Borski Fund and a significant grant from the European Innovation Council (EIC). This investment not only demonstrates confidence in Thirona's innovative approach to precision medicine, but also paves the way for us to continue redefining the possibilities of AI-based medical imaging. We're ready to accelerate our progress and ensure that personalised treatments become a tangible reality for lung patients worldwide.

Finally, what are your goals for the future?
"At Thirona, we're all about our mission and working together. Our passion, and our ongoing quest to explore the uncharted territories – they're still alive and kicking. Our mission is clear: bring the latest scientific discoveries right to the clinics, ensuring more people around the globe have access to the best possible healthcare and eliminating the bias of applying the same treatment approach for every patient."

"We are convinced that real, groundbreaking innovations only happen when we team up with technological and industrial partners, clinical care specialists, and research groups. One thing that always brings a smile to my face? Seeing our employees grow individually and as a team, and being proud of what we do. The real magic happens when we join forces and co-create. Our 'partnership and innovation' mindset truly sets us apart."

"My goal is to bring the benefits of scientific breakthroughs to patients."