



# The Power of the New Aquilion ONE / PRISM Edition

Since its global launch in December 2019, the Aquilion ONE / PRISM Edition has been making waves all around the world particularly with its Advanced intelligent Clear-IQ Engine (AiCE), Deep Learning Spectral and CT fluoroscopy capabilities. To find out more about what our customers think, we sat down with leading clinicians from two-prestigious institutions, Radboud University Medical Center (the Netherlands) and Strasbourg University Hospital (France), for an in-depth review of the CT system that's designed for deep intelligence.

One of the most exciting features of the PRISM is our Advanced intelligent Clear-IQ Engine (AiCE), a cutting-edge Deep Learning Reconstruction technology that's been trained to reduce noise and boost signal to deliver sharp, clear and distinct images at speed.

**Can you tell us a bit about how your teams have adopted AiCE?**

*Prof. Ohana:* We weren't sure in the beginning whether to use AiCE for specific applications or as an additional reconstruction, so we tried it with the

first patients. The difference with AIDR 3D was so immense that we decided, ok, let's use it for every patient.

*Prof. Prokop:* Our people accepted AiCE extremely quickly and have used it immediately for most applications.



Watch here the promo video of Aquilion PRISM.





Radiology Team Strasbourg University Hospital, France

Watch here the full video testimonial of Prof. Roy.



*“The image quality is excellent with the new PRISM Edition.”*

*Prof. Catherine Roy, Radiologist, Strasbourg University Hospital, France.*



*“AiCE lets us obtain thinner images at high quality, which helps us make a more confident diagnosis.”*

*Prof. Mathias Prokop, Head of Radiology, Radboud University Medical Center, the Netherlands.*

Watch here the full video testimonial of Prof. Prokop.



- Part 1 -

- Part 2 -



Prof. Catherine Roy and Prof. Mickaël Ohana at Strasbourg University Hospital, France.

Watch here the full  
video testimonial  
of Prof. Ohana.



- Part 1 -   - Part 2 -

**“With Spectral  
Imaging,  
we are more  
confident.”**

Prof. Mickaël Ohana, Radiologist,  
Strasbourg University Hospital,  
France.



**What’s the most significant  
difference that AiCE has made  
to your practice?**

Prof. Prokop: AiCE lets us obtain thinner images at high quality, which helps us make a more confident diagnosis. When you’re looking at complex cases in which you have to focus on detail, your confidence goes up.

Dr. Smit: I really like AiCE because of its low contrast detectability, especially with liver lesions or peritoneal metastases. Also, the contours are much sharper, which helps with the delineation of bowels, to assess fat stranding, or to see if a tumour is infiltrating another tissue.

**What about dose, have you seen  
any benefits there?**

Dr. Smit: Because AiCE is integrated in the automatic exposure control, there’s no guessing on how low the dose should be. It’s just about switching on the button for dose reduction. I generally check the dose report for every scan, and I’m often surprised at how low the dose is.

Prof. Prokop: We wanted to move on from using morphological information, like in the past, to using more functional information, and we wanted to do that using the lowest possible dose and in a repeatable, reproducible fashion. AiCE lets us do that.

**Spectral Imaging: Improved  
quality and workflow**

In addition to AiCE, the new Aquilion ONE / PRISM Edition features advanced spectral imaging to improve workflow and help reduce patient iodine load. Images can be analysed directly at the workstation with a range of new Vitrea applications.

**Have you seen an overall reduction  
in iodine load?**

Prof. Roy: That’s the main application in our department and all around the world. Spectral imaging means that we’re now able to use a contrast agent of 270 mg I/mL instead of staying in the 400 mg I/mL range. Plus, you can still see everything perfectly, with all the tiny details. This is a user-point that still amazes me.



Watch here the full video testimonial of Dr. Smit.

**“I really like AiCE because of its low contrast detectability and the much sharper contours.”**

*Dr. Ewoud Smit, Radiologist, Radboud University Medical Center, the Netherlands.*



**“I really like working with the new console. It’s faster and I can stay more focused for a more efficient and safe procedure.”**

*Dr. Sjoerd Jenniskens, Radiologist, Radboud University Medical Center, the Netherlands.*

Watch here the full video testimonial of Dr. Jenniskens.



**Have you noticed an improvement in tissue classification?**

*Prof. Ohana:* In oncology imaging, we sometimes have subtle lesions. With spectral imaging, we are more confident and can see if there is or isn't contrast uptake in these lesions. Spectral imaging is also more specific, mostly for gout or kidney stones. We are able to characterize the tissue and give more specific answers to the clinician.

**What about workflow, is that better?**

*Prof. Ohana:* Acquisition time is the same as a single energy examination; there's no difference in terms of timing. But also, speed of reconstruction is almost the same.

**CT Fluoroscopy: More control where you need it**

The new Aquilion ONE / PRISM Edition features a hybrid CT Fluoroscopy interface that enables one-handed operation with ergonomically designed controls and a versatile touchscreen tablet.

**Has the new CT Fluoroscopy panel made things easier for your team?**

*Dr. Jenniskens:* I really like working with the new console because it's faster and I have everything under my control. I have an overview of the whole process and can stay more focused for a more efficient and safe procedure.

*Prof. Prokop:* It's important to control the system from inside to do what you want quickly and without too much hassle. The Aquilion ONE PRISM Edition offers more flexibility for improved control and safety during the procedure.

**Are there any benefits for the patient?**

*Dr. Jenniskens:* Absolutely. You can now stay close to the patient, which is more comfortable for everyone. Patients also benefit from the new console because the procedure can be expedited, and they can be out of the room earlier. //

Find out more about Aquilion ONE / PRISM edition on our website: <https://eu.medical.canon/product-solutions/computed-tomography/aquilion-one-prism-edition/>