METZ - Anatomic Pathology Laboratory (France)

*Testimonial**

DATEXIM
A.I. Digital Cytology Company

Doctor DEPARDIEU

Anatomopathologist

Why did you choose CytoProcessor ?

I'd been leaning towards next- generation systems, such as BD and Hologic, for some time. After some research, CytoProcessor stood out as an innovative piece of technology, unlike what was being done before (motorized stages).
Thanks to this, we can truly benefit from the progress made in the artificial intelligence and digital slides sectors.

What were your main reasons ?

It was an absolute necessity for us as we had a major and ongoing shortage of cytotechnologists. This meant we had to screen and interpret quite a few pap smears ourselves, which was not ideal. The idea of potential false negatives filled me with anxiety, as did having a heavy workload at home every evening and weekend.

How did the implementation of this new technology go in your laboratory ?

I've rarely seen the implementation of a new system go so well. A few lab technicians were hesitant to begin with, but that is often the case when we introduce a new technique. And it really did simplify the workflow.

How did it change your workflow ?

The cytotechnologists can work from home, as can I.

I save each slide directly on the server so I can go back to it whenever I want, especially when I'm dealing with a biopsy. I also use it when I get the results of an HPV test, to add to the information to the server.

What benefits have you noticed since using this solution ?

I really feel like I'm finding more lesions, and finding them with far more ease. On another note, it has made life easier for me as I do a lot of screening from home. I used to bring back cases of pap smears, whereas now I just need the request forms and I can access the images, making the process a lot easier.

Anything you would like to highlight ?

Yes. It's an infinitely faster process, less tiring, and way more agreeable than the conventional way. I timed myself a short while back. As a reminder, cytotechnologists are expected to go through 60 to 80 slides a day according to American standards. I work much faster with this system. I used to believe that digital pathology was only aimed at major university centers. Yet it is easily accessible, even for a small lab!

Based on your experience, what would you recommend to a laboratory wishing to implement a digital cytology approach and its artificial intelligence ?

The biggest risk would be no longer wanting to even see a microscope ever again! But in all seriousness, you need to take your time during the staining process and be careful when it comes to stirring the sample. In terms of adapting our technique, it's like working backwards compared to how we worked before. Previously, we would start with an intermediate magnification and then go in with a normal magnification. Whereas now, we look at the cells using a higher magnification, then take a step back to look at the whole image. At the beginning, we did feel slightly anxious at the thought of not seeing all the cells, but you adapt quickly.

What do you think is the benefit of combining cytology and artificial intelligence in the context of primary cervical cancer screening through HPV testing ?

25% of endocervical adenocarcinomas are not related to HPV. That is quite a big figure. With vaccination, this number will continue to grow.
It should be noted that we regularly see cases of low-grade lesions with negative HPV test results. Incidentally, I had a case of an adenocarcinoma of the endometrium, a mucoepidermoid carcinoma, which tested negative for HPV when it should have tested positive.

Thanks to cytology and its artificial intelligence, we are able to detect lesions that may have gone unnoticed! And quickly and painlessly, at that.

(*) Feedback gathered during a webinar held by DATEXIM on 12/15/2020 with Doctor Depardieu.

TOULOUSE - Coteaux pathology center (France)

*Testimonial**

DATEXIM
A.I. Digital Cytology Company

Doctor GUILHEM

Anatomopathologist

Why did you choose CytoProcessor ?

I had personally been thinking about moving on to digital technology for a while. I feel like this is a solution for the future. I wanted to keep my ILSA slide preparation system, so I turned to DATEXIM and its CytoProcessor solution, which works perfectly alongside it. I'm very pleased with the result !

What were your main reasons ?

The two other computerized interpr etation systems available on the market were captive portals, which is why I ended up going with DATEXIM.
The true advantage of this digital technology is being able to put the machines to work at night, and having the CytoProcessor reports available by the following morning.

How did the implementation of this new technology go in your laboratory ?

It all went extremely well in our case. We already had QR Code labels that we used on our ISLA machine and could therefore easily be used in the scanner system recommended by DATEXIM.

Our technicians adapted extremely quickly.

How did it change your workflow ?

Once the cover glasses have finished the drying process, we pass the slides through the scanner, and they appear on our desktop. The whole process is completely transparent; the only thing that has changed is the small additional step of passing the slides through the scanner. Once the slides have been scanned, they are analyzed by CytoProcessor. This lasts roughly two minutes, during which time you cannot use the slides.

What benefits have you noticed since using this solution ?

I am especially happy about the amount of time it has allowed me to save, as well as the security of having the 50 most pathological cells clearly identified. These cells are detected by CytoProcessor's artificial intelligence, which detects an even greater amount and allows us to access other sets.

Anything you would like to highlight ?

In the beginning, I was slightly concerned about mycotic infections, as even though the main purpose of a pap smear is cancer screening, we were still asked whether the sample showed signs of mycosis or not. It turns out that you can clearly identify mycelial threads and even trichomonas when looking at the images of pathological cells.

Based on your experience, what would you recommend to a laboratory wishing to implement a digital cytology approach and its artificial intelligence ?

A short adjustment period is required to get used to the size of the nuclei, the size of the cells, and the screening magnification options. We can now pick up on more lesions because we are able to take a deeper look at the sample. The advantage is that when the first four cells are undeniably abnormal, even if they are spread over the whole slide, they are impossible to miss and we can see all four cells in a row.

What do you think is the benefit of combining cytology and artificial intelligence in the context of primary cervical cancer screening through HPV testing ?

In the case of a positive HPV test, being able to easily and quickly access the 50 most pathological cells identified by AI really is a game changer. If an ASC-H, a high-grade or even a low-grade lesion with only two koilocytes and a nucleus are identified, we can access the image straightaway and then increase the magnification. It truly is great to be able to work like that.

(*) Feedback gathered during a webinar held by DATEXIM on 12/15/2020 with Doctor Guilhem.