

Aperio, Cerner Interface Digital Path and Path LIS

► **Interface allows pathologists to integrate digital pathology system with anatomic path system**

►► **CEO SUMMARY:** *For pathologists watching the market acceptance of digital imaging and digital pathology systems, another milestone has been reached. The nation's largest health IT companies are beginning to develop interfaces between their anatomic pathology laboratory information systems and digital pathology products. One such interface is now available to interface Cerner Corporation's CoPathPlus with the Aperio Technologies' Spectrum pathology (PACS) software.*

DIGITAL PATHOLOGY SYSTEMS are evolving on a path that uncannily mirrors the evolution of digital radiology systems. Several developments in recent weeks confirm this fact.

One milestone in the market acceptance of digital radiology systems was the development of partnerships between radiology PACS (picture archiving and communication system) vendors and radiology information system (RIS) vendors. These partnerships emerged as the big health IT vendors recognized that sales of digital imaging products were accelerating and they needed to integrate these radiology imaging (PACS) products with their RIS offerings.

Now the same phenomenon is unfolding with digital pathology (PACS) systems and AP laboratory information systems (LIS). Last month, **Aperio Technologies, Inc.**, of Vista, California, announced the development of an interface with **Cerner Corporation** of Kansas City, Kansas.

One of Cerner's pathology laboratory information systems (AP LIS) is Cerner CoPathPlus. CoPathPlus can now interface with Spectrum, Aperio's digital pathology

information management system which is essentially a pathology PACS. The interface between CoPathPlus and Spectrum is designed "to optimize workflow and facilitate access of digital slide images and case data between the two systems."

This arrangement is also significant because Cerner CoPathPlus has a large installed base. Susana Coelho, Cerner CoPathPlus Director, says about 500 of the nation's 3,300 pathology groups currently use CoPathPlus. Therefore, the interface between CoPathPlus and Spectrum opens up a broader market for Aperio.

► **Interface Agreements**

Aperio has also developed interfaces with **IMPAC Medical Systems, Inc.**, whose AP LIS is Powerpath, and with **McKesson Corporation's** Horizon AP LIS. Collectively, these three interface agreements highlight that AP LIS vendors recognize the need to support the digital pathology systems that growing numbers of their anatomic pathology customers are purchasing.

Aperio CEO Dirk Soenksen said the interface between Cerner and Aperio is

significant because “getting the attention of a big company like Cerner to invest resources in building an interface means that they must view this interface as an important activity,” he said. “A company of Cerner’s size and scope constantly juggles thousands of requests from customers.”

“The fact that Cerner dedicated resources to develop this capability shows that there is demand for this interface from its pathology customers,” explained Soenksen. “That customer demand affirms what we see in the market ourselves.”

► Meeting Customers’ Needs

Another factor driving the decision to create an interface between CoPathPlus and Spectrum is the need to support optimum work flow for the pathologist. Both Cerner and Aperio have a common motive to streamline the steps a pathologist must take to evaluate a case and sign out the report.

“This interface supports productivity and ease of use,” observed Soenksen. “The pathologist doesn’t need to have a glass slide in his possession. He or she can simply click on a digital slide from within CoPathPlus and begin viewing it on the monitor. Instant access to a digital slide archive is one way the interface increases pathologists’ efficiency and saves time.”

Cerner’s Coelho acknowledged that digital pathology is still early in its adoption phase. “Like the first radiology imaging systems, digital pathology systems will require time to become mainstream,” she said. “However, the early adopters in pathology are clamoring for high quality and systems that give an immediate response. In response, Cerner is leveraging its relationships with technology companies, such as Aperio, to create those capabilities.

For Aperio’s users, the two systems have three essential points of integration. “One point of integration is the ability to launch the Aperio image viewer from within CoPathPlus,” stated Mark Wrenn, Aperio’s Senior Manager, Professional

CoPathPlus–Spectrum: Explaining the Interface

IMPROVING THE PATHOLOGIST’S PRODUCTIVITY and contributing to improved accuracy are important benefits from interfacing a digital pathology system with a pathology laboratory information system.

Alex Medas, Senior Software Architect for Cerner Corporation, explained how the interface works. “Our essential role is to incorporate digital slides into the pathologists’ workflow—and that is the most complicated part of the interface,” noted Medas. “Digital pathology slides in Aperio’s Spectrum are first labeled by CoPathPlus with a two-dimensional barcode,” he said. “The slide is then scanned by Aperio’s slide scanner, which also decodes the barcode, and CoPathPlus processes the slide based on the barcode.”

“To get digital slides organically incorporated into the pathology workflow, we created a protocol so that a pathologist working in CoPathPlus will never feel that he or she is looking and working with a foreign application,” Medas continued. “This interface makes it look and feel as if the pathologist never left CoPathPlus. That’s the whole idea: They don’t need to jump back and forth. All the functions of the Aperio system are working under the supervision of CoPathPlus. At the same time, there is two-way communication between the two systems.”

Services. “The second is the ability to exchange data between the CoPathPlus database and the Spectrum database. Third is the ability to capture an image from a digital slide and incorporate it into a report to a referring physicians.”

The integration of image analysis results into the LIS report represents a fourth future point of integration. Pathologists should expect to see relatively rapid acceptance of digital imaging solutions. Improving technologies will reinforce this trend. **TDR**

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