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*From the Desk of R. Lewis Dark...*

# THE DARK REPORT

RELIABLE BUSINESS INTELLIGENCE, EXCLUSIVELY  
FOR MEDICAL LAB CEOs/COOs/CFOs/PATHOLOGISTS

*R. Lewis Dark:*

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**R. Lewis Dark**

**Founder & Publisher**



## ***When Laboratory Vendors Go Bankrupt***

BANKRUPTCY AMONG VENDORS AND SUPPLIERS in the laboratory industry is an uncommon event. Since it is so rare, that is one less issue about which laboratory directors and pathologists must worry.

However, occasionally there are reminders that it is good management practice to track the financial stability of your laboratory's primary vendors and suppliers. One such example is **IMPATH, Inc.**'s recent bankruptcy, which had the potential to cause significant problems for **Tamtron, Inc.**, its business division which sells PowerPath®. As most know, PowerPath is one of the nation's leading information systems for anatomic pathology. Had Tamtron been affected by IMPATH's financial woes, the effect might have been felt across several hundred laboratory sites where PowerPath is in use. (*See pages 6-9.*)

The other reminder is **LAB-Interlink, Inc.**, the manufacturer of laboratory automation systems based in Omaha, Nebraska. In late November, the company laid off the majority of its employees and operates from a skeleton staff and shoestring budget. This followed a year of strenuous effort to find an investor or buyer for the company. As you will read, the company has not filed bankruptcy in the United States. However, its inability to properly fund service staff and stock inventory has placed a burden on at least some laboratories which use its automation systems. (*See pages 2-6.*)

Laboratory administrators and pathologists should consider both these examples to be timely warnings about the importance of "knowing your supplier." No laboratory wants to go through the experience of having an automated line in the high-volume core laboratory cease operations completely—with no warning and no opportunity to regroup. Yet that's precisely the situation at the laboratory division of **West Tennessee Healthcare** in Jackson, Tennessee. It may take more than six months before that laboratory can get a replacement automation solution installed and into full operation. In the meantime, imagine the stress on the laboratory staff, already at full productivity, having to compensate for the lack of the automation system.

Another lesson to be gleaned from the Tamtron and LAB-Interlink examples is that things can change for the worse very rapidly. For that reason, lab directors and pathologists should regularly evaluate the financial stability of their laboratory's key vendors and suppliers.

# LAB-Interlink Hangs On Despite Financial Woes

*Contrary to rumors, lab automation firm has not filed for bankruptcy protection*

**CEO SUMMARY:** *It's an uphill struggle at LAB-Interlink, based in Omaha, Nebraska. Short of funds, staffed with only a few employees, and urgently seeking capital, the company has so far managed to avoid filing for protection under bankruptcy laws. It is an unwelcome turn of events, since, in past years, LAB-Interlink was considered one of the leading manufacturers of laboratory automation products.*

**By June Smart, Ph.D.**

“**W**ILL THE REAL LAB-Interlink please stand up!” That’s a question being asked by some customers and suppliers of this laboratory automation company.

It was last November 25, the day before Thanksgiving, when LAB-Interlink laid off the majority of its employees. A number of the company’s laboratory automation customers were unable to get service or parts. Local newspaper coverage of the company indicated that LAB-Interlink’s financial woes were significant. (*See TDR, December 1, 2003.*) In the weeks that followed, a lack of information caused many to assume that LAB-Interlink had ended up in bankruptcy court. However, rumors about a bankruptcy are not true.

“We have not filed bankruptcy,” stated Rodney S. Markin, M.D., Ph.D., CEO and Chairman of LAB-Interlink. “As part of our down-sizing efforts, we did restructure our subsidiary, LAB-Interlink Canada, through a Chapter 11-like bankruptcy action in the Canadian courts. But in the United States, LAB-Interlink has not filed for protection under bankruptcy laws.”

Markin said he was not surprised to learn that bankruptcy rumors were circulating, but was surprised with stories about the difficulties some LAB-Interlink clients were having in getting service and parts. He does not deny that his company encountered significant problems over the past 12 months, but says that business operations continue. “Currently we have three people work-

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ing in the United States. There are four people working in Canada, as well as some staff in Israel,” he explained. “LAB-Interlink is not getting complaints about lack of service or parts. We continue to service almost 30 laboratories which operate our automation products, but with three employees in Omaha, we are less-than-rapidly responsive.”

### **Early Leader in Automation**

In recent years, LAB-Interlink was considered to be one of the more successful vendors offering laboratory automation products and services. Compared to its competitors, which were mostly billion-dollar IVD manufacturers, LAB-Interlink was a small company of dedicated employees. It holds numerous patents and counts prominent national and international laboratories among its customer base.

It was in the early 1990s when Markin launched LAB-Interlink, based on his research work at the **University of Nebraska Medical Center**. Initially funded by capital from Markin and his wife, the company attracted investors which included Warren Buffet, the **University of Nebraska**, and **Beckman Coulter Corporation**, to name a few.

### **“Open” Systems Approach**

Within a few years, LAB-Interlink’s automation products caught the interest of such lab instrument manufacturers as **Kodak** and **Coulter**. Coulter bought a 10% interest in the company. Because LAB-Interlink’s approach was to develop “open” automation products, any diagnostic instrument engineered to meet NCCLS’ clinical laboratory automation standards could be connected to their automated system.

By the beginning of this decade, LAB-Interlink was selling its automation solutions to a growing number of laboratories. It was at this time, however, that the seeds of this current financial crisis were sown.

Reliable sources tell THE DARK REPORT that problems began to surface inside LAB-Interlink as the company attempted to grow and expand. **Transition Partners, LTD**, a management team from Boulder, Colorado, was retained in 2001 to develop a master plan for LAB-Interlink. It was to be LAB-Interlink’s blueprint for how it would grow, how it would obtain venture capital, and how it would build its sales and marketing team.

As this business plan was implemented, LAB-Interlink grew rapidly. It quickly went from 50 to about 150 employees, including a new CFO and a new production operation. The sales staff numbered 20 people. But by April 2003, the company’s increased overhead was eating capital. There were instances of paychecks bouncing and some employees resigned. That spring, the company was forced to lay off about 50 employees and take other measures to preserve its cash while it looked for new investors.

### **Other Problems Surface**

In an interview with THE DARK REPORT, Markin shared his view of what went wrong in the company. He confirmed that the service and advice provided by Transition Partners, LTD fell short of expectations. “Several other things also happened in tandem with the master plan for expansion and growth,” he explained. “In hindsight, we had two major business relationships which allowed competitors to know our every move and strategy. One was with Beckman Coulter, as an investor. The other was with our major distributor, **Ortho-Clinical Diagnostics**, the division of **Johnson & Johnson (J&J)**.

“Another business issue involved the cost of a sales force,” he continued. “Marketing at Ortho-Clinical Diagnostics (OCD) decided not to allow us to train their sales force in our lab automa-

tion products. We hired sales reps who, along with laboratory experience, had experience in automation technology such as pharmacy automation from **Pyxis** and **McKesson** automation systems.

“With the LAB-Interlink sales team in the field, OCD stopped selling LAB-Interlink products,” said Markin. “It was not until things got tight last summer that OCD agreed to provide the technical and production engineering assistance that we requested in January of 2002.”

***“In spite of these obstacles, however, LAB-Interlink is still here and is still weathering the storm.”***

LAB-Interlink’s acquisition of a company called **Labotix** also proved both problematic and expensive. “This company’s financial problems were not revealed in the due diligence process. Additionally, LAB-InterLink’s new transportation product, Trax 2000, had intermittent and persistent problems with one function,” he noted. “Approximately \$3.5 million was spent to resolve what turned out to be a design problem on a \$25 microchip.

“Collectively, these factors prevented us from generating more sales and developing a profitable business,” he added. “In spite of these obstacles, however, LAB-Interlink is still here and is still weathering the storm.”

### **LAB-Interlink’s Future**

Markin has no predictions about LAB-Interlink’s future. Several companies considered investing in LAB-Interlink, based on its market potential. Two other companies expressed an interest in acquiring LAB-Interlink’s technology and patents. “I think either of these two companies would be a good fit with our technology and products,” stated Markin. “Due diligence is ongoing and,

because of non-disclosure requirements, I cannot identify these companies.”

Markin acknowledges it will take lots of effort to avoid bankruptcy. But he is also confident that the quality of LAB-Interlink’s automation products and its installed customer base represent assets to a potential investor or acquirer.

“LAB-Interlink was one of the pioneers in laboratory automation systems,” he noted. “It is an open system, so any instrument compliant with NCCLS clinical laboratory automation standards can operate on the line, unlike the closed automation systems offered by some competitors. LAB-Interlink has good technology behind it and my hope is that the eventual solution to our current business situation allows our products to stay in the forefront of laboratory automation.”

### **Start-Up Challenges**

LAB-Interlink’s experience shows the upside and downside to smaller, start-up companies in diagnostic manufacturing. It has doggedly developed a credible line of laboratory automation equipment and products. It has attracted investment dollars from respected investors and corporations.

But lacking the deeper pockets of its billion-dollar IVD competitors, it had neither the sales and marketing reach into laboratories worldwide. Nor did LAB-Interlink have the ample capital needed to sustain a company through the many lean years required until demand for laboratory automation systems can generate substantial sales.

However, don’t count out Dr. Markin yet. For almost 15 years, he’s demonstrated patience, persistence and determination to turn his vision of laboratory automation into a reality. Certainly LAB-Interlink’s current financial struggles are not the end of his story. **TDR**

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# LAB-Interlink Clients Experience Highs & Lows

*Although service is still available, some laboratory customers report problems*

**CEO SUMMARY:** *It was right before Thanksgiving weekend when LAB-Interlink laid off most of its staff and was left with a skeleton crew. Since that date, at least one major laboratory customer was unable to get needed service and parts, causing a total shut-down of its automated line. However, other customers of LAB-Interlink report no unusual problems or service issues.*

**By June Smart, Ph.D.**

**I**N THE WAKE OF LAB-Interlink's financial woes, laboratory customers using the company's automated systems give mixed opinions about the availability and quality of services.

On one side, there are laboratory customers of LAB-Interlink who report minimal disruption or problems with the company since its radical downsizing in late November. Then there is the other side, with laboratories encountering problems in keeping their LAB-Interlink system in full operation.

At least one large laboratory in the United States has been left with no service, no parts, no support, and no communication from LAB-Interlink. The resulting problems from an inoperative automation line have exposed the laboratory to potential loss of its clients and revenue. It is fighting to maintain turnaround time and other services.

At **West Tennessee Healthcare**, in Jackson, Tennessee, Leo Serrano, FACHE, Executive Director of Lab-

oratory Services, first got an inkling of possible problems at LAB-Interlink when he heard about layoffs in the company early last year. His laboratory serves a multi-hospital health system and has a thriving out-reach program.

"We've generally had a good experience since the installation of our LAB-Interlink automated system in 2000," stated Serrano. "However, that changed during the last Thanksgiving holiday weekend. There was trouble with the automated line on Thanksgiving Day. Neither parts, software help nor service were available for the holiday weekend. Staff at LAB-Interlink told us to shut down the line. By Monday, LAB-Interlink was not even answering the phone.

## **Quick Response**

"Needless to say, with our automated line shut down, we had to scramble," he added. "If it wasn't for the marvelous efforts of our staff and the remarkable things they've done to meet customer expectations, we could

have lost clients and the associated revenue. With no automation to meet our turnaround times, our lab staff has been working miracles to keep our clients satisfied and stay on schedule!”

One element that helped Serrano’s lab cope with the unexpected loss of its automated line was the extensive work flow redesign completed by his laboratory by mid-2003. “Fortunately, we used Lean management methods to streamline the work processes in our laboratory earlier in the year,” observed Serrano.

“That paid big dividends when it was finished, but it’s paying even bigger dividends during this crisis,” he explained. “Our staff is determined to make this whole experience transparent to the clients, even to the ER staff—and Lean has provided them with the sophisticated management tools to accomplish this!”

### De-Install Under Way

Serrano has provided parts from his automated system to help other LAB-Interlink users keep their automation lines running. His laboratory is also in the process of de-installing the LAB-Interlink system. A new automated system is en route from Europe.

Astute and experienced when it comes time to negotiate contracts for his laboratory, Serrano originally signed a contract with **Ortho-Clinical Diagnostics** (OCD) when he chose LAB-Interlink as the automation system of choice. OCD was a distributor of LAB-Interlink’s products.

“Because the contract was between our lab and OCD, I now don’t have to go to the board and explain how we lost \$1 million in hardware,” stated Serrano. “OCD is standing by their agreement. They are replacing LAB-Interlink with the **Thermoelectron** system, currently used in Europe and Asia. It is marketed as ‘enGen<sup>TM</sup>’ in the United States.

“However, this system won’t be operational until April or May of this year,” added Serrano. “It means our staff must work at least six months under sustained pressure before things return to some semblance of normal.”

### No Problems At Kaiser

In Portland, Oregon, the regional laboratory at **Kaiser Permanente Northwest Region** is an example of a LAB-Interlink customer that reports no difficulties in obtaining parts or getting service for its automated line. “Our system was built and bought from the Canadian arm of the company in January 2002,” said Dixie McFadden, Administrative Director of Laboratories at Kaiser. “Before its purchase by LAB-Interlink, the company was called **Labotix**.

“We started with front-end automation in 1997,” she noted. “Automation is embedded and integrated into our way of doing business, reinforced by the laboratory design principles we learned during our laboratory’s ISO-9000 certification. We added the new system so we could connect front end automation to some of our instruments, allowing us to boost productivity.”

McFadden had heard rumors about bankruptcy problems with the company and wanted reassurance. On January 15, Kaiser Permanente NW received a call from the LAB-Interlink in Canada. It was told that “creditors have accepted our offer, and the company remains solvent and in business.”

Most likely, neither of these two examples tell the real story about the impact LAB-Interlink’s problems are having upon its laboratory customers. But they do powerfully illustrate how the vicissitudes of luck or fate can deliver totally different experiences to different laboratories.

**TDR**

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# Free of IMPATH, Tamtron Ready For A New Future

*IMPAC buys the company from IMPATH, Tamtron is handed new opportunities*

**CEO SUMMARY:** *Tamtron's fortunes look much brighter with its acquisition by IMPAC Medical Systems, Inc., a healthcare information vendor with existing products for radiation oncology, medical oncology, and urology. IMPAC's strategy is to create a "total solution" for oncology. That means Tamtron's anatomic pathology information system is expected to play a major role in IMPAC's core strategy.*

**By June Smart, Ph.D.**

**C**AN TWO LETTERS make a difference to **Tamtron, Inc.**? Sold by **IMPATH** to **IMPAC** six weeks ago, Tamtron's new owner has ambitious plans for the company and PowerPath®, its anatomic pathology information system.

For Tamtron, IMPAC Medical Systems, Inc. is its second owner in 22 months. Tamtron's PowerPath should fit right in with IMPAC's existing product mix. IMPAC sells several healthcare information systems, including IntelliLab™, a laboratory information system (LIS). For the fiscal year ending 9/30/03, IMPAC posted revenues of \$61 million.

Steve Tablak, Tamtron's President, says the new owner creates several opportunities for Tamtron that didn't exist during the short time that Tamtron was owned by IMPATH. "We see the new relations with IMPAC as positive for everyone," he said. "For Tamtron, it means we can devote full attention to enhancing PowerPath and its capabilities.

"Moreover, IMPAC bought both Tamtron and IMPATH's Cancer Registry (now called Medical Registry Services)," added Tablak. "These two products can be integrated with IMPAC's IT products in radiation oncology, medical oncology, and urology.

"This gives us all the pieces to create a meaningful oncology suite for health systems and clinics," he continued. "We want to develop total solutions to address the diagnosis, treatment, and outcome management of cancer patients."

## **Unmet Expectations**

For both Tamtron and its pathology group customers, the acquisition by IMPAC was welcome. Tamtron had been purchased by IMPATH in early 2002. But IMPATH's deteriorating financial problems throughout 2002 and 2003 meant that Tamtron never received the capital and resources it expected at the time of the sale.

When IMPATH filed a Chapter 11 bankruptcy petition on September 29, 2003, both Tamtron employees and PowerPath customers became more



concerned about how IMPATH's problems might affect Tamtron. (See *TDR*, November 10, 2003.) However, because Tamtron was viewed as a non-core asset by the bankruptcy court and IMPATH's creditors, there was swift agreement that the company could be sold. IMPAC was the eventual buyer and the transaction closed at the end of December.

### **Employee Loyalty**

"Tamtron is a stronger company as a result of this experience," declared Tablak. "During those turbulent times, we retained almost all our employees. That's important, because it was a statement to our customers about our confidence in the future. Of equal importance, it allows us to maintain a continuity of service with our customers. Putting IMPATH's bankruptcy behind us removes those customer concerns and allows us to restore our focus on innovation and execution."

***...many customers were uneasy about Tamtron's relationship with IMPATH, which they considered to be a competitor in at least some aspects of the anatomic pathology marketplace.***

One interesting opportunity that IMPAC's ownership opens for Tamtron is the ability to sell PowerPath internationally. "IMPAC already has the process and quality credentials in place to compete internationally," noted Tablak. "IMPAC has placed its products in 56 countries world-wide. Short-term, Tamtron will continue to concentrate on the domestic market. Long-term, however, we expect IMPAC's expertise will open doors for PowerPath internationally."

Tamtron will enjoy another benefit as a result of its new owner. "None of

our pathology group customers consider IMPAC to be a competitor," explained Tablak. "In contrast, some pathology group customers considered IMPATH to be a competitor and that situation complicated their business relationship with Tamtron. Obviously, since we are no longer owned by IMPATH, that concern has disappeared."

In the short-term, IMPAC's ownership of Tamtron is not expected to change some existing business relationships. "Early indications are that **McKesson** and **Siemens Medical Systems** will both continue to be strategic partners," noted Tablak. "At this point, both companies seem to be pleased that it was IMPAC that acquired Tamtron."

For anatomic pathology group practices which use Tamtron's PowerPath system, news of IMPAC's acquisition was most welcome. As noted by Tablak earlier, many customers were uneasy about Tamtron's relationship with IMPATH, which they considered to be a competitor in at least some aspects of the anatomic pathology marketplace.

But of greater concern was whether IMPATH's rapidly-declining business fortunes would have a negative impact on Tamtron. The concerns centered on whether Tamtron would be able to provide a high level of ongoing support while also constantly upgrading and improving the product. Those concerns were heightened when IMPATH filed bankruptcy last September.

However, less than 12 weeks later, Tamtron found itself acquired by a company with grand plans for the oncology marketplace. Tamtron's anatomic pathology information system certainly appears to be a complementary fit with IMPAC's existing software systems for radiation oncology, medical

## Tamtron Has New Opportunities for Expanding the Anatomic Pathology Informatics Market

**U**NDER NEW OWNERSHIP, Tamtron is developing an expanded vision for pathology informatics. One element of this new vision is the concept of a "total" oncology solution.

"IMPAC is developing a 'total' oncology solution, one that includes pathology, laboratory, practice management, specialized charting, cancer registry, and data aggregation and reporting," stated Steve Tablak, President of Tamtron. "In acquiring Tamtron and IMPATH's Cancer Registry, IMPAC added two important pieces to this project.

"The goal is to make comprehensive, accurate data readily accessible for use in population-based reporting," he continued. "Ultimately, we hope these tools positively impact the lives of cancer patients and their families."

The "total" oncology solution might give PowerPath<sup>®</sup>, Tamtron's information system for anatomic pathology, an interesting competitive advantage. That's because almost 70% of pathology cases are cancer-related. The emphasis on population-wide reporting has triggered work between IMPAC, Tamtron, and the **National Oncology Database (NODB)**. The three organizations are exploring ways to compare data with national standards related to treatment and outcomes of cancer cases.

"Pathology information is a valuable subset of the total information the can-

cer registrar must track," observed Tablak. "We are investigating ways in which pathology information can be electronically transferred directly from PowerPath to IMPAC's registry products. At the same time, we'd like to incorporate pathology information into IMPAC's oncology EMR (electronic medical record) which, in turn, would feed our registry products."

Tablak also discussed the issue of single field capture versus whole slide imaging. "Single field capture was our solution to make the imaging module simple and efficient," he said. "The goal was to allow the pathologist to capture selected images without having to be a professional photographer. Pathology customers tell us this capability is finding wider use for education purposes and in marketing their pathology services to referring physicians.

"To date, the whole slide imaging technologies we've reviewed show promise. But there are technical limitations to their use, such as workflow issues and managing the data generated from whole slide imaging. At this time and at this stage of technology development, these are not yet practical. However, whole slide imaging is a fast-developing field. We may all be surprised at how quickly these types of technologies become robust and ready for widespread adoption."

oncology, and urology. There is a commonality in products and services, which will bring strength to Tamtron, and potential future growth.

And at least one person is enthusiastic about Tamtron's future. Tablak quipped "The future's so bright, we gotta wear shades!" That statement cer-

tainly captures the reversal of fortunes at Tamtron in recent months. But much hard work remains ahead if Tamtron is to make the most of its new opportunity and the potential synergy from IMPAC's oncology strategy. **TDR**

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# Web Lab Test Ordering Market Is Increasing

*Growing numbers of labs are buying systems for lab test ordering/reporting*

**CEO SUMMARY:** *In recent years, the market for browser-based laboratory test ordering and results reporting systems has grown at a steady rate. Second and third generation products are more robust, offer more features, and are easier to install and operate. To date, smaller start-up companies are capturing more sales than the big healthcare IT corporations, and at least one expert predicts that trend will continue.*

**E**NTREPRENEURIAL START-UP FIRMS are winning lots of business in the market for Web-based lab test ordering and results reporting systems.

In compiling a list of companies offering such systems, THE DARK REPORT counted 27. This is almost double the number from winter 2001, when our published directory of firms offering Web-based lab test reporting totaled 13.

To learn more about how and why this market is expanding, THE DARK REPORT contacted Bruce Friedman, M.D., Professor of Pathology at **University of Michigan Health Systems** in Ann Arbor. For more than 20 years, Friedman has produced the laboratory industry's biggest annual meeting devoted to laboratory information systems and laboratory informatics.

"One reason the demand for these systems is increasing is the need for hospital laboratory outreach programs to offer services which match or beat their commercial laboratory competitors," stated Friedman. "The other rea-

son is that the systems themselves are based on Web-type architecture, making them flexible and easy to customize. Many incorporate second and third generation Internet technologies, making them faster, more reliable, and less complicated to operate."

## **Small, Nimble Start-Ups**

Friedman also offered an opinion on why the start-up companies seem to be placing more systems in laboratories than the big healthcare IT corporations. "I think it has to do with strategic focus," mused Friedman. "The big IT companies have a hospital workflow and information flow mindset that mirrors their biggest customers, which are hospitals and health systems.

"They tend to view hospitals and health systems in general as a holistic, self-contained universe and offer a variety of clinical information systems to serve different areas within this universe," continued Friedman. "With this mindset, most of the leading IT firms have never understood the 'dis-integration' occurring within the lab industry,

because so much is happening outside that closed universe of the hospital.

“I believe ‘dis-integration’ is the right word,” stated Friedman. “After years of consolidation, which fed centralized core labs (and the need for a centralized IT solution), there is now a fragmentation of laboratory services. Testing is moving out into physicians’ offices, into home health settings, and closer to the patient.

### Dealing With Variables

“Some of the billion-dollar healthcare IT giants seem lost when discussing the ramifications of laboratory outreach testing, which involves serving all types of physician offices, nursing homes, and other healthcare providers,” added Friedman. They often have trouble conceptualizing service to the private physician’s office not served by the health system central IT services and the hospital intranet.

“When it comes to direct access testing (DAT) programs, they don’t understand why a lab might want the ability to charge a customer’s credit card at the time of the blood draw,” he explained. “Nor are they ready to address the needs of home health services, where workers must send lab test requests or access lab results by dial-up or wireless.

### Know The Market

“In contrast, smaller, newer companies offering browser-based systems for lab test ordering and results reporting literally live outside the hospital or health system in this space,” observed Friedman. “They are close to their laboratory customer. They are close to the physicians’ offices served by labs. They must be nimble and responsive to survive. Much of this perspective derives from their having large reference labs as customers early in their corporate lives, or, in fact, being a spin-off of large reference labs.

“As first movers, these start-up firms know that the risk of a second

mover capturing their market is ever-present. This fear keeps them alert and nimble—listening to customers’ needs and always introducing new features into their products,” commented Friedman. “Because they are focused on their main revenue source—hospitals—the IT giants generally view the laboratory information services market as mature, offering little opportunity for growth.”

### Not A Mature Marketplace

Friedman says the number of laboratories using browser-based test order/results reporting systems is steadily increasing. “When I see one of the larger of these firms double the number of FTEs and office space in only 18 months, that’s a good indication they are selling new systems,” he observed.

Another sign may be the changes Friedman sees at his annual lab information systems meeting. Formerly called “AIMCL” and based in Ann Arbor, Michigan, it is now called the “Lab InfoTech Summit.” Dates are next month, on March 10-11. The location is the Venetian Hotel in Las Vegas.

“This year, we already have 24 vendors committed to exhibit, a much higher number than in previous years,” he said. “Early registrations are also up, because of interest in developments on lab portals, new enhancements in LIS, first examples of e-laboratories, and LIS/IVD integration.

“Clearly the marketplace is driving laboratories to become more information systems-savvy,” concluded Friedman. “It’s created an opportunity for the start-up firms to sell systems. But it’s also pushing lab directors and pathologists to upgrade their lab’s IT capabilities, or lose market share to competitors.”

**TDR**

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# More Firms Now Offer Web Lab Info Products

*Growing number of products in the market for lab test ordering and results reporting*

**CEO SUMMARY:** *Since our last vendor directory in winter 2001, the number of companies selling browser-based systems for laboratory testing ordering and results reporting has doubled! That's a sign that laboratories recognize the need to have an Internet strategy and are taking steps to deploy these types of Web-based services for their physicians.*

IT'S BEEN THREE YEARS since publication by THE DARK REPORT of the first national survey of vendors offering browser-based systems for laboratory test ordering and results reporting.

During that time, more laboratories have introduced Web browser-based ordering and results reporting to their physicians. New products have entered the marketplace, some which incorporate second and third generation technology.

With so many changes, it's time to update the national survey. On the following pages are listed 26 companies which currently offer some type of browser-based system to link laboratories and their physician-clients.

## **Accurate Information**

Acquiring this information was a time-consuming chore. Many vendors, particularly the large, traditional HIS/LIS companies, do not respond rapidly (nor with honest, accurate information) to inquiries about the actual status of these products and which laboratories are pay-

ing customers with live installations. For that reason, some entries on the pages which follow indicate that the company did not provide requested information.

This national survey had three objectives. First, to list companies which have a product for browser-based lab test ordering and reporting results. Two, to identify what aspects of each product differentiates it from others in the marketplace. Third, to provide names of two laboratories with live systems in use. Each listing is condensed from the original material provided by those companies which responded. The format and space available dictated the descriptions which follow.

For clients and regular readers of THE DARK REPORT, this national survey provides a look at the breadth of this product segment, individual companies which offer such products, and specific laboratories which have acquired and put these systems into use. It is a helpful tool for several aspects of strategic planning.



Further, in comparing this national survey with the one published earlier (*see TDR, February 26, 2001*), several insights emerge. First, the number of companies offering these products has doubled. This indicates there is more market demand than just a few years ago. Second, the list of customers includes some of the nation's most prominent commercial lab companies and hospital/health system outreach programs. Take this as evidence that growing numbers of physicians are becoming comfortable with using the Internet to order lab tests and access results.



[www.4medica.com](http://www.4medica.com)

### **4Medica**

*Los Angeles, CA*

4Medica's system is called Retriever and was developed by physicians. Retriever was designed to be robust, yet uncomplicated to learn and to implement.

4Medica differentiates its application from other products in these areas: a) ability to integrate the services of multiple organizations, providing users with a single access point for information from multiple sources; b) unique pathology ordering and resulting module; and c) proprietary technologies to optimize screen management and background data processing over the Internet.

Two laboratories which hold contracts with 4Medica are **Quest Diagnostics Incorporated** and **Stanford University Medical Center**.



[www.antekhealthware.com](http://www.antekhealthware.com)

### **Antek Healthware, Inc.**

*Reistertown, MD*

Antek's product for browser-based laboratory test results reporting is the DAQreporter option. It is used in conjunction with the LabDAQ Laboratory Information System. Subscribing physicians have secure access to laboratory test results on their patients via the Internet.

Two accounts now providing this option to their physicians are **Foxhall Internists and Valley Medical Group**.



[www.atlasmedical.com](http://www.atlasmedical.com)

### **Atlas Medical Software**

*Calabasas, CA*

Atlas Medical Software calls its system Atlas LabWorks. The product has been in use for several years and handles both lab test orders and lab test results reporting.

Atlas LabWorks is differentiated by its ability to operate in a variety of modes, including remote dial-up, LAN, WAN, Internet, distributed, and ASP-based Web outreach. It can deliver lab test results to wireless devices and has the capability to handle pathology orders and results reporting. A module supports "front-end data verification, using payer and billing system-specific criteria."

Atlas Medical Systems reports that **Spectrum Laboratory Network** currently uses Atlas LabWorks.



[www.axolotl.com](http://www.axolotl.com)

### **Axolotl Corporation**

*Tampa, Florida*

Axolotl Corporation provides a lab ordering solution, electronic results delivery and a data store. They are the Elysium Intelligent Ordering, Distribution Manager, and the Lab Data Store.

Elysium Intelligent Ordering enables physicians to order lab and radiology tests in real time directly from electronic patient results. It incorporates Medicare medical necessity rules, ICD and CPT coding checks, and generates ABNs. Patient ID, insurance, and demographic data is automatically included on all orders. The Elysium Lab Data Store aggregates lab order information in the database regardless of where patients' samples are drawn. It tracks orders, assigns accession numbers (obtained from the laboratory legacy system or auto-generated), and can print bar code labels.

Axolotl has active installations at **HealthBridge** in Cincinnati, Ohio and **Catholic Health West** in San Francisco, California.



[www.careevolve.com](http://www.careevolve.com)

### **Careevolve**

*Elmwood Park, NJ*

Careevolve's laboratory solution is called LabEvolve. It was developed in-house at **Bio-Reference Laboratories, Inc.** and is designed specifically to meet the needs of a laboratory competing for physicians' office business.

It can run either as ASP or client-hosted, thin or thick client, and provides the full range of services and options that can be easily customized to the specific needs of laboratory customers. It can also be fully or partially "branded" as unique to the laboratory customer.

LabEvolve is in use at **Bio-Reference Laboratories, Inc.** (BRLI), Elmwood Park, NJ and **SED Medical Laboratories**, Albuquerque, NM.



[www.cerner.com](http://www.cerner.com)

### **Cerner Corporation**

*Kansas City, MO*

Millenium@ePathLink is Cerner's name for its browser-based lab product. It is designed to be compatible with Cerner's LIS products and connect laboratories with their outreach customers.

Clients can seamlessly register and order from remote locations (with the option to support medical necessity checking where desired). Information is captured in the laboratory with no need to re-enter, re-label or take additional action upon specimen receipt.

Two current customers using Millenium@ePathlink are: **North Shore-Long Island Jewish Health System** and **Anderson Area Medical Center**.



[www.ctcsurge.com](http://www.ctcsurge.com)

### **Computer Trust Corporation**

*Boston, MA*

Computer Trust Corporation's Win-Surge system is designed for use by anatomic pathology (AP) laboratories.

WinSURGE can support multi-site AP laboratories. It is flexible, scalable and allows "custom windows" for data entry, customer report formats that include distribution and imaging, and ad hoc reporting.

The company declined to provide the name of laboratory customers where WinSurge is currently in use.



[www.ccainc.com](http://www.ccainc.com)

### **CCA**

*Calabasa, CA*

CCA offers laboratories its CyberLab (7.0) system.

CCA differentiated its product by designing the entire system to be browser-based, not just order entry and results reporting. It also believes its total cost of ownership (TCO) is among the industry's lowest, based on how it incorporates browser technology.

Two current customers are **Springfield Clinic**, Springfield, IL and **Grenada Lake Medical Center**, Grenada, MS.



[www.eclipsys.com](http://www.eclipsys.com)

### **Eclipsys Corporation**

*Boca Raton, FL*

Sunrise XA is the system **Eclipsys Corporation** offers to laboratories. No additional information was provided about this product or the laboratories currently using it.



[www.healthvision.com](http://www.healthvision.com)

### **Health Vision**

*Irving, TX*

**Health Vision's** system is called Clinician Desktop (Lab Orders and Reporting Module).

Clinician Desktop offers full capabilities expected of a browser-based lab test order and resulting system. Some differentiations include the ability of the ordering module to determine patients' insurance eligibility, medical necessity

checking, ABNs, and a module for phlebotomists. Its reporting module can allow physicians to view results received from multiple labs and consolidate these into a single view.

Customers actively using this system are **Yale New Haven Health System**, New Haven, CT and **Covenant Health System**, Lubbock, TX.



[www.healthworksalliance.com](http://www.healthworksalliance.com)

### **Healthworks Alliance, Inc.**

*King of Prussia, PA*

**Healthworks Alliance, Inc.** has a system called Compliance Checker All Payer.

This is not an order entry/results reporting system, but interfaces with other products when lab test orders are placed. It features “versatile, front-end, proactive denial management.” It integrates with all major registration and order entry systems and eliminates data reentry. It can be deployed in point-of-care or in hospital settings. It screens orders against Medicare LMRPs, commercial payer edits and generates requisitions and ABNs.

Compliance Checker is currently used by **St. John’s Health System**, Detroit, MI and **Maury Regional Hospital** in Columbia, TN.



[www.impac.com](http://www.impac.com)

### **Impac Medical Systems**

*Mountain View, CA*

**IMPAC Medical Systems, Inc.** offers Intellilab, a laboratory information system with the capability of handling browser-base laboratory test orders and results reporting.

IMPAC differentiates Intellilab on these points: 1) system is based entirely on Internet technology; 2) it supports most standard laboratory outreach program needs; and 3) it enables secure transmission of lab reports via email.

Customers currently using Intellilab are **Slocum-Dickson Medical Group** and **Durham Internal Medicine**.



[www.labdat.com](http://www.labdat.com)

### **LabDat**

*Glendale, CA*

**LabDat, Inc.** has a system called LabDat. The company did not provide information about its product nor about laboratories currently using this system.



[www.labtest.com](http://www.labtest.com)

### **Labtest Systems, Inc**

*Bethlehem, PA*

**Labtest Systems Inc.** was an early entrant in the market for browser-based lab test ordering/results reporting systems. Its products are Lab Valet and Lab Valet SA.

Labtest Systems differentiates itself by length of time in the market, and ongoing relationships with its first laboratory customers. Other differentiators are pricing structure, hosted or ASP model, touch screen order entry, capability to serve patient service centers and nursing homes, and ability to interface with any LIS, APS, or interface engine.

Two active laboratory customers include **William Beaumont Hospital Reference Laboratory**, Royal Oak, MI and **Continuum Health Partners**, New York, NY.



[infosolutions.mckesson.com](http://infosolutions.mckesson.com)

### **McKesson Corporation**

*Alpharetta, GA*

**McKesson’s** entry in the browser-based lab test order/resulting market is Horizon Lab Web Outreach.

This product is capable of the full range of services and functions using Internet connectivity. It includes Medicare compliance checking, specimen labeling and routing, and full Web access to laboratory test data.

Laboratories currently using this product include **Regional West Medical**



Center, Scottsdale, NE and **Southeastern Regional Medical Center**, Lumberton, NC.



[www.medplus.com](http://www.medplus.com)

### **MedPlus, Inc.**

*Mason, OH*

**MedPlus, Inc.** declined to provide any information for this listing.



[www.misyshealthcare.com](http://www.misyshealthcare.com)

### **Misys Healthcare Systems**

*Tucson, AZ*

**Misys Healthcare Systems'** Hospital Systems Business Unit offers the Misys Encompass for outreach use.

Misys Encompass is a client-hosted Web application. It works with both Misys Laboratory and Misys Commercial Laboratory LIS products. It offers online ordering, real time diagnosis checking, ABNs, and other customizable features.

Customers are **Palmetto Health**, Columbia, SC and **TriCore Reference Laboratories**, Albuquerque, NM.



[www.opushealthcare.com](http://www.opushealthcare.com)

### **Opus Healthcare Solutions, Inc**

*Austin, TX*

**Opus Healthcare Systems, Inc.** offers OpusMD for browser-based laboratory test orders and results. The company provided neither information about this product nor laboratories currently using OpusMD.



[www.orchardsoft.com](http://www.orchardsoft.com)

### **Orchard Software Corporation**

*Carmel, IN*

**Orchard Software Corporation** has two systems for laboratories in this market segment. One is Orchard Copia. The other is Orchard Harvest Webstation.

Harvest Webstation is the outreach component of Orchard Harvest LIS.

Copia is designed to unite lab networks under one lab order management and results delivery system, regardless of existing laboratory information systems. One important differentiation is that both systems are technically advanced for interfacing with other systems and linking multiple laboratories and remote users over a common communication network. Each is designed to accommodate a broad range of workflow requirements for laboratory and phlebotomy operations.

Two laboratories with systems in active use are **Piedmont Healthcare**, Statesville, NC and **NorDx Laboratories**, Scarborough, ME.



[www.parkcitysolutions.com](http://www.parkcitysolutions.com)

### **Park City Solutions**

*Park City, UT*

**Park City Solutions** (formerly **Chi Laboratory Systems**) offers what it calls Dx Laboratory Portal.

Strategic differentiations are: 1) ability to use either a digital pen, conventional order forms, or direct entry of lab test orders; 2) on-line patient pre-registration before visiting either the physician or the patient service center; 3) patient information/education module; 4) on-line guidance for test selection; and 5) assistance in phlebotomy and inventory control of drawing supplies.

Two customers are **Genesis Clinical Laboratories**, Berwyn, IL and **United Regional Health System**, Wichita Falls, TX.



[www.cybear.com](http://www.cybear.com)

### **Physicians Online**

*Boca Raton, FL*

**Physicians Online**, a subsidiary of **Cybear, Inc.** declined to provide information for this listing.

[www.proxymed.com](http://www.proxymed.com)

## **Proxymed**

*New Albany, IN*

**Proxymed's** product is called ProxyMed.net. Its product was developed to complement the laboratory information services offered by **Key Communications**, its business division that serves laboratories throughout the United States.

One strategic differentiation is that ProxyMed.net does not require an HL7 interface, thus saving the time and cost required to develop such an interface. It receives results in a print stream format, much like the Key Communications remote teleprinters.

Currently using this system are **Health Network Laboratories**, Allentown, PA and **Doctors Lab**, Valdosta, GA.

[www.psychesystems.com](http://www.psychesystems.com)

## **Psyche Systems**

*Milford, MA*

**Psyche Systems'** primary laboratory information (LIS) product is LabWeb, which includes the capability for browser-based lab test ordering and resulting.

Some features of the product include advanced rules-based analysis, mobile access to pathology cases, and a competitive total cost of ownership (TCO).

Two current customers are **Huron Medical Center** and **Columbus Community Hospital**.

[www.smed.com](http://www.smed.com)

## **Siemens Medical Solutions**

*Malvern, PA*

**Siemens Medical Solutions USA** offers NOVIUS Lab, which supports the outreach market via various web-based options.

For high volume outreach customers, Siemens HIS or NOVIUS Lab provides remote order entry. NOVIUS Lab provides secure web access to results by the

clinician directly from the application. Siemens also offers the Health Enterprise Dashboard, which provides lab results across the continuum of care, as well as access to other information such as patient history, physicals, radiology, etc.

Names of two laboratory customers were not provided.

[www.specialtylabs.com](http://www.specialtylabs.com)

## **Specialty Laboratories**

*Santa Monica, CA*

As a national reference/esoteric laboratory, **Specialty Laboratories, Inc.** developed its system, Outreach Express, as a value-added offering for its hospital laboratory clients.

Several aspects differentiate Outreach Express. Because primary users are hospital laboratories, Outreach Express is designed to be flexible to meet the individual needs of such labs while connecting outreach clients to the lab's LIS. As an ASP-based system it can support multi-entity health-care systems. It includes medical necessity checking.

[www.sia-molis.com](http://www.sia-molis.com)

## **Sysmex Health IT Systems**

*Tucson, AZ*

**Sysmex Health IT Systems** offers a laboratory information system called Molis. Its product for browser-based laboratory test orders and results is eClair.

Formerly called TLC (total lab connection), the eClair system is differentiated by its use of the latest generation Web technologies of XML and dHTML, which incorporates **Microsoft** .net tools. It provides integrated health systems with a single portal for lab test ordering and viewing lab results, radiology images, pharmacy results, patient history and physicals, cardiology, and more.

The company did not provide names of labs currently using this system. **TDR**

# INTELLIGENCE

**LATE & LATENT**  
Items too late to print,  
too early to report



Changes are afoot in the national market for anatomic pathology services. At **AmeriPath, Inc.**, the search is on for a new CEO. Current Chairman and CEO, James C. New retired, effective February 1. The company has commenced the search for a new CEO. New had been with AmeriPath since its earliest days.

Meanwhile, over in Nashville, Tennessee, a couple of ex-AmeriPath executives are rumored to be launching another laboratory company. Brian Carr and Jim Billington are said to be developing a new business which will offer anatomic pathology services. Prior to working with AmeriPath, both executives had formed **Pathology Consultants of America (PCA)**. This was one of the handful of pathology physician practice (PPM) management companies funded by venture capitalists during the second half of the 1990s. PCA became **Inform DX**, which was acquired by AmeriPath in 2000.

## **MORE PHYSICIANS DECIDE TO DROP MALPRACTICE INSURANCE**

Pathologists should take note of this developing trend. With medical malpractice premiums continuing to climb at double and triple digit rates, the number of physicians choosing to self-insure is growing. And this phenomenon is not limited to physicians. In Arkansas, at least 100 of the state's 237 nursing homes had no liability insurance of as June 2003. Florida is the state to watch for physicians "going bare." It has some of the nation's highest malpractice premiums. But Florida also has one factor which helps physicians in their decision to self-insure. By state law, assets such as a home and annuities, are protected from creditors. Statistics from the **Florida Department of Health** indicate that 5% of the state's 47,000 physicians currently lack malpractice coverage. Last year, the number was 4%.

### **ADD TO: Malpractice**

Even more remarkable, estimates are that one in five physicians in Miami-Dade

County are now self-insured against malpractice claims! Most physicians making this choice are in specialties consider high-risk, such as obstetrics and neurosurgery. Florida state law requires physicians lacking malpractice insurance to post a notice in their office or give patients a statement informing them of this fact. Because pathologists do not see patients directly, giving patients notice would be more difficult. Experts believe this trend will grow in states where tort reform does not occur.

It's deja vu in the for-profit sector of the hospital industry. On January 28, **Tenet Healthcare Corporation** announced that it would sell 27 hospitals and post a \$1.4 billion charge. Last year it sold 14 hospitals and announced plans to sell four more. When completed, these transactions will leave Tenet with only 69 hospitals. The company's problems with Medicare have weakened its finances. Tenet's situation seems a replay of 1997-98. That year, then-named **Columbia HCA** ran into problems with Medicare, lost money, and divested almost one-third of the hospitals that it then owned.

*That's all the insider intelligence for this report.  
Look for the next briefing on Monday, February 23, 2004*

## *PREVIEW #3*

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