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From the Desk of R. Lewis Dark...

THE DARK REPORT

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

Restricted information, see page 2

Commentary & Opinion by...

R. Lewis Dark

Founder & Publisher

Where Are "Laboratories Of The Future?"

At this year's *Executive War College* in New Orleans last May 20-21, there was plenty of talk about the radical changes laboratories are undergoing. But one question went unanswered: If laboratories must change, what should they look like after they change?

Our Editor, Robert Michel, criss-crosses the country looking for laboratory models which represent the future of the industry. He believes **UroCor, Inc.** of Oklahoma City is one valid model for the successful laboratory of the future. As you will read on pages 2-9 of this issue, Robert's assessment is based on the management culture at UroCor, its focus on customer needs, and its tangible development of innovative disease management products which go beyond diagnostic test result reporting.

In contrast to a hospital laboratory or regional commercial laboratory, UroCor is focused exclusively on the urology market. That is what distinguishes this laboratory model from the mainstream. Yet UroCor's recognition of the demand for disease management products is a key trait which other laboratories would do well to emulate. Paul Mango of the now-defunct **Reference Laboratory Alliance** network in Pittsburgh said it succinctly: "If all I do is report the test results for a chemistry panel, I will be doing great to get paid 10% more than my competition for that test. In order to make sufficient money to survive managed care, RLA's member laboratories must deliver other clinical products which have value to clinicians, and for which both they and the payers are willing to amply reimburse."

Paul's statement strikes to the core of any laboratory model representing the future. That laboratory model must deliver clinical services above and beyond individual test results if it is to be reimbursed at adequate levels to maintain financial solvency. UroCor is one laboratory which is learning how to accomplish that.

I recommend that you carefully read UroCor's story. UroCor is uncovering answers to many of the problems now threatening the foundations of our industry. Although UroCor's single-minded focus on urology makes them a unique laboratory model, the management philosophies and techniques used by UroCor bear ready application in any laboratory. It is these management principles which will shape the laboratory of the future. You are encouraged to take this management knowledge and use it to transform your laboratory. In so doing, you will probably create your own successful laboratory model of the future.

Future Laboratory Model Found In Oklahoma City

Urocor, Inc. is quietly developing what may be the next generation of diagnostic labs

CEO SUMMARY: Even as commercial laboratories struggle to maintain financial solvency, Urocor displays phenomenal growth in specimen volume, market share and revenue during the last five years. It is no accident that this laboratory is succeeding. Urocor's executives use sophisticated management techniques, with remarkable results.

PROBABLY THE MOST SPECTACULAR success story in the clinical laboratory industry is a company which is unknown to most laboratory executives, doesn't describe itself as a clinical laboratory and is based in the unlikely location of Oklahoma City!

Yet this same company earned a ranking on **Inc. Magazine's** *500 Fastest Growing Companies* list in each of the past four years. Not only has it grabbed a significant market share for its chosen menu of diagnostic testing, but it is poised to grow at a blistering pace for several more years.

This high-performance laboratory is **Urocor, Inc.** It specializes in providing diagnostic testing services to urologists. UroCor represents a viable model for laboratories in the future. The characteristics of this laboratory model will be a market niche strategy accompanied by disease management products for that market niche. Such laboratories are frequently referred to as "boutique" laboratories to distinguish them from commercial laboratories which offer a broad menu of tests to all clinical specialities.

UroCor, however, is something different from today's boutique laboratory. UroCor is organized to offer a full array of disease management services and business products for its target market: urologists.

Recently THE DARK REPORT traveled to Oklahoma City to investigate first-hand the management secrets at UroCor. Executives at Urocor shared their story in detail.

"UroCor is a company dedicated to serving the needs of urologists," stated Socrates Choumbakos, Senior Vice President, Corporate Planning and Development at UroCor. "However, we

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R. Lewis Dark, Founder & Publisher. Robert L. Michel, Editor.

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go beyond simple diagnostic testing. We offer services in disease management which are unique to UroCor. In order to understand what UroCor is, it is important to know that we are organized around four integrated business initiatives.

"They are UroDiagnostics, UroTherapeutics, UroSciences and Disease Management Information Systems," he explained. "Each business initiative supports UroCor's primary mission, which is to provide urologists with *all* services necessary to run a clinically effective practice."

> ***"We believe that UroCor, Inc. is one of the most highly evolved and successful companies in the emerging field of disease management."***
>
> ***-E. Keaney & M. Elwood***
>
> *Volpe, Welty & Company; June 20, 1996*

"Our UroDiagnostics Group currently is the primary source of revenue to our company," explained Choumbakos. "This initiative generates 95% of UroCor's total revenues. We concentrate our services on four disease states: prostate cancer, bladder cancer, microhematuria and kidney stones."

Evaluating Prostate Cancer

"Among the disease management products we offer is UroScore®, for evaluating prostate cancer," said Choumbakos. "This is a proprietary, computer-assisted analysis that provides the urologist with a prediction of whether or not the tumor is confined to the organ."

Such information has high value to clinicians and payers. Retrospective studies show that cancer had already metastisized in at least 40% of patients undergoing radical prostatectomy. If the prostate cancer has already metastisized, the procedure, averaging $12-$16,000, does little to extend life expectancy in such patients.

"We believe this is 'value-added' medicine for specialists," added Choumbakos. "Urologists using these tools can make more informed decisions about patient care. We have similar disease management products for other types of urology-related diseases."

Therapeutic Drugs

"Because our sales force already calls on urologists, we believe it is appropriate to provide therapeutic drugs in addition to our diagnostic services," said Choumbakos. "These will be offered through our second initiative, the UroTherapeutics Group. For us, this is a logical tie-in. Our staff already works with individual urologists to interpret the diagnostic test results and develop effective treatment plans for individual patients. It is a natural complement for UroCor to provide access to therapeutic drugs.

"UroSciences is the third initiative within UroCor," he continued. "We feel this business initiative makes us unique among our competitors. We are funding research and development which is done here at our corporate headquarters. We also collaborate with researchers at such institutions as **M.D. Anderson Cancer Center**, **Johns Hopkins**, **Baylor College of Medicine** and others.

UroCor's fourth business initiative also sets it apart from competitors. This is the Disease Management Information Systems Group. "This group has two initial priorities," Choumbakos explained. "First is to improve how our clinical data is warehoused and accessed by our physician clients. Second is the type of practice management services we can offer the urologist, including a billing/receivables management service.

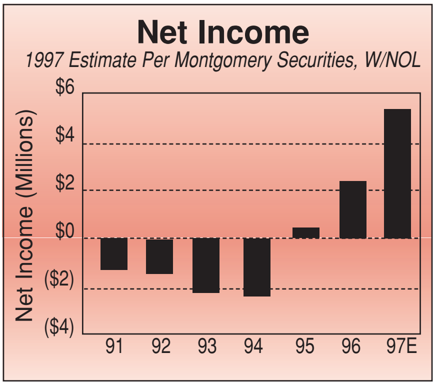
"Our long-term mission is to integrate diagnostic and therapeutic data with the client's information system. If we do this right, we can integrate the entire decision tree for the clinician. This system aids the urologist to better

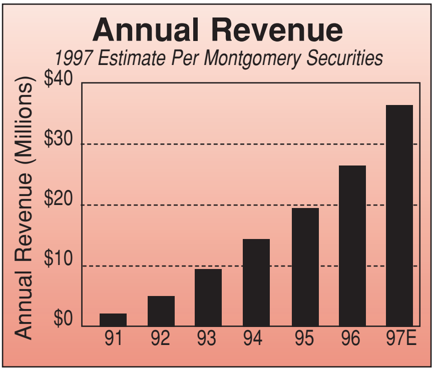
UroCor's Numbers Tell The Tale

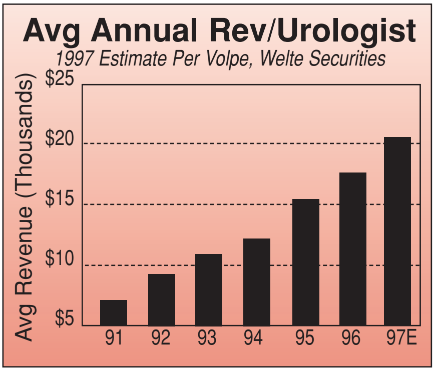
These charts dramatically document how UroCor's professional sales program steadily increases the number of urologists using UroCor, leading to significant increases in both revenue and operating profits.

Because of the fixed-cost structure of a laboratory, UroCor's increasing revenues generate greater profit margins. UroCor uses these increased profits to fund internal research and new product development.

As new products are introduced and accepted by urologist-clients, the average annual revenues generated per urologist increases. This further enhances overall profit margins for Urocor.







UroCor's Market Penetration of Urologists

	Number of Customers	%increase In Customers	% Penetration	% of Multiple Product Users
1991	380	N.M.	5.1%	13%
1992	620	63.2%	8.3%	19%
1993	1,030	66.1%	13.7%	24%
1994	1,250	21.4%	16.7%	34%
1995	1,320	5.6%	17.6%	41%
1996	1,895	43.6%	25.3%	48%

Source: UroCor financial statements

triage the patient, regardless of how many different specimens and different tests are involved in a particular case.

"We are also launching a service to manage the billing and account receivables for urology practices," explained Choumbakos. "It is a new product for us and we are just now establishing this service with our first customers. "

High-Risk Strategy

By offering urologists a contract billing service, UroCor is following a high-risk strategy. Failure to properly bill and collect the urologist's accounts can lead to an unhappy client who sends diagnostic testing to another laboratory.

"You correctly point out the risk," responded Choumbakos. "But the upside far outweighs the risk. We know the needs of urologists and we want UroCor to be a total solution for both their clinical and business needs."

Choumbakos' answer reflects the management culture at UroCor. It is a key factor in UroCor's phenomenal growth. UroCor is fanatic about meeting and exceeding the expectations of their urologist customers. To guarantee success, they do something unheard of in the clinical laboratory industry.

Executive Team Visits

"All of our senior executive team spends plenty of time in the field visiting urologist clients," noted Choumbakos. "In order to understand their needs, we regularly visit clients in their offices, watching what takes place on a daily basis.

"In fact, our President and CEO, William Hagstrom, spends one full month every year visiting urology offices," added Mark Dimitroff, Vice President and General Manager of UroDiagnostics Group. "He will put on a white coat and actually work as a staff member for as long as four to eight hours in a urologist's office.

"Because we are close to our customer in this way, we understand precisely what types of products and services they need to be successful," Dimitroff said. "Not only is it excellent market research, but it also motivates us to provide perfect service, since we are personally familiar with our clients' problems and needs."

Dimitroff is responsible for UroCor's sales and marketing program. Unlike the sales teams at most clinical laboratories, it is tightly managed, professionally supported and generates consistent results year after year. *(See market penetration table on page 4.)*

UroCor knows their numbers, which is another management key to success. Each quarter, when UroCor releases financial results, it includes full information about the number of urologist clients, average sales per urologist and number of multiple product users. Few laboratories have comparable information about their market penetration and how many laboratory services are used by their clients.

UroCor Is Reorganized From CytoDiagnostics

FOUNDED IN 1985, UroCor was originally known as CytoDiagnostics, Inc. It was launched with tumor diagnostic technology developed at the University of Oklahoma.

The company offered a single proprietary diagnostic test, but never found economic success. New management was brought on board in late 1989 and CytoDiagnostics filed a Chapter 11 bankruptcy reorganization plan in November 1990.

From that date forward, new CEO William Hagstrom focused CytoDiagnostics on the urology marketplace. In 1994 the company adopted the new name of UroCor, Inc. to reflect its chosen market niche in urology.

UroCor's rapid growth also fuels a demand for pathologists. The company currently employs twelve full-time pathologists. Financial analysts believe UroCor may have the largest urologic pathology practice in the world. UroCor seems ahead of competing laboratories in their understanding of how to market anatomic pathology services in such a way as to complement diagnostic testing and still generate profits.

Market Channel Strategy

According to Choumbakos, UroCor developed its urology market niche by concentrating on three successive steps. "Our first strategic wave was to develop a market channel," he explained. "Starting back in 1991, this meant we would offer simple services, but deliver them well. We concentrated on providing a full menu of urology-relevant diagnostic tests while maintaining good turnaround time and error-free service. At that time we had no products which were proprietary. We simply wanted to outperform our competition."

Choumbakos overlooks the fact that UroCor has done several innovative things to provide a service advantage. For example, to properly diagnose the potential recurrence of kidney stones requires a physical and chemical analysis of serum, urine and the stones.

Different Testing Services

Urocor noticed that urologists typically sent these three specimens to different testing services, such as hospitals, local labs, national GRLs and specialized regional stone labs. Urologists would spend several weeks coordinating the return of test results before they could proceed with a final diagnosis.

UroCor committed itself to be a single source provider, offering a maximum three-day turnaround for an integrated analysis and report. In the two years since its introduction, this kidney stone panel is now used by over 300 urologists. It is an example of how UroCor takes an existing situation and gives it "added value" to the urologist.

"Our second strategic wave involves technology," said Choumbakos. "This relies on our ability to develop proprietary diagnostic tests which urologists find useful. Our UroScore product is one example of our second-wave technology strategy.

"Our third-wave strategy revolves around information resources," he continued. "We want to take the best clinical practices today and expand their effectiveness and efficiency. That is why we are investing heavily in hardware and software. We not only want to capture and warehouse useful data, but we want to use that data to feed our clinical algorithms and similar products.

"One example is our 'information suite'," added Choumbakos. "This integrates clinical and economic information. Using internet access, the urologist can access their patient files with one 'screen click.' Urologists find it useful because it means they won't have to take charts home at night."

Dramatic Growth

UroCor's revenue growth during the past six years provides dramatic evidence that they are doing many things right. At a time when clinical laboratories are cutting back and shrinking, UroCor is expanding. UroCor's example demonstrates that effective management can sustain success in a declining marketplace.

Although UroCor's market niche strategy is not adaptable by most clinical laboratories, certainly much of UroCor's management strategies and tactics can be emulated by other laboratories throughout the United States. After all, good strategic planning, effective implementation and successful sales are essential to any laboratory's success. TDR

(For further information, contact Socrates Choumbakos at 405-290-4000.)

Management Philosophy Drives UroCor's Success

UroCor teaches many worthwhile lessons about effective management of laboratories

CEO SUMMARY: In the year 1997, UroCor shows a financial strength and growth potential unlike most commercial laboratories. UroCor's current success is a direct result of how UroCor's management did things differently during the years from 1991 to the present. Much of UroCor's success can be attributed to doing simple things better than the competition.

FOR EXECUTIVES of both commercial and hospital laboratories, **Urocor, Inc.** of Oklahoma City provides proof that there is profit in diagnostic testing… *if* their own laboratory will do four things.

First, the laboratory must have a focused strategic plan which accurately anticipates marketplace changes. Second, it should deliver services which exceed the expectations of its customers.

Third, the laboratory must utilize high-performance management techniques to run the business. Fourth, it needs to execute and sustain a professional marketing and sales campaign.

UroCor succeeds at all four. This is why its revenue growth during the last six years is superior to other publicly traded laboratories. For these and other reasons, UroCor is an outstanding laboratory company to study.

However, THE DARK REPORT has discovered other important differences at UroCor which should not be overlooked. During the decade 1984-1994, laboratory competitors pursued a strategy of increasing profits by acquiring laboratories. Today's three national laboratories, **Laboratory Corporation of America**, **Quest Diagnostics Inc.** and **SmithKline Beecham Clinical Laboratories** are the end product of this widespread industry strategy.

At $25 million in annual revenues, critics may say that UroCor cannot be compared to the three billion-dollar behemoths. THE DARK REPORT believes otherwise, for very good reasons.

The fruits of this acquisition strategy are not impressive. All three national laboratories struggle to maintain a constant revenue base from year to year. Operating and net profits at each disappoints senior management and stockholders alike.

At $25 million in annual revenues, critics may say that UroCor cannot be compared to the three billion-dollar laboratory behemoths. THE DARK REPORT believes otherwise, for very good reasons.

UroCor did two radically different things during the years 1991-1997. First, UroCor emphasized providing simple diagnostic services with excellence. It was the **Nordstrom's** department store approach toward giving customers a noticeably better level of service and attention.

Flawless Service Lacking

During the years of 1991-1997, flawless customer service was never the hallmark of **Damon**, **Allied**, **National Health**, **Nichols Institute** and the Three Blood Brothers, LabCorp, Quest and SmithKline. Even today, regional independents outdeliver their national competitors in many market areas.

The second area where UroCor pursued a different strategy than most commercial laboratories was in the area of growth. UroCor did not buy other labs. Instead, UroCor used a professional sales force to *earn* the business of urologists. This meant that UroCor's revenues were generated by a base of clients who made an informed decision to use UroCor for their diagnostic testing needs.

Another Difference

This sets up another difference between UroCor and most commercial laboratories. During the years 1991 through 1994, UroCor's diagnostic testing generated the same high profit margins as other commercial laboratories. What UroCor did with their operating profits was to invest it differently. UroCor did not acquire other laboratories as a way to grow. Instead, UroCor used the operating profits to invest in service enhancements and proprietary diagnostic products.

While other lab companies were gobbling up regional laboratories and growing at a break neck pace, UroCor was quietly developing a menu of value-added services for its urology niche.

Handicapped by its small size and financial problems lingering from the 1990 bankruptcy reorganization, UroCor concentrated on developing a business organization which could deliver a full menu of diagnostic and other services to its urology market.

From revenues of $2.1 million in 1991, Urocor doubled in size in 1992 and again in 1993, to revenues of $4.8 million and $9.3 million, respectively. It doubled again between 1993 and 1995, to $19.8 million. This is the performance that earned UroCor a ranking on **Inc. Magazine's** *Fastest Growing 500 Companies* list during the previous four years.

UroCor's rapid revenue growth provides compelling evidence that clinicians will recognize a laboratory which provides demonstrably better service. It illustrates how UroCor's strategy of focusing on meeting and exceeding the expectations of the customer is a valid management approach for clinical laboratories, even in today's managed healthcare environment.

As UroCor brings its proprietary products to the marketplace, it will only become a tougher competitor. UroCor is doing two things common to the most successful companies in the world

"Disease Management" Firm Versus Clinical Laboratory

UROCOR DEFINES ITSELF as a disease management company, not a clinical laboratory. Because it uses a different SIC (Standard Industrial Code) than clinical laboratories, it has escaped the notice of most executives within the laboratory industry.

There are a number of similar companies seeking to build disease management services from diagnostic testing. **Impath, Inc.** from New York City is one such firm. Like UroCor, it raised money through an initial public offering in 1996. Impath is focusing on oncology. In San Diego, a start-up company called **Prometheus Laboratories, Inc.** will concentrate on gastrointestinal diseases.

today. First, it is learning what its customer wants, and developing innovative products to meet those needs.

Second, UroCor is offering its customers products and services which fall outside the traditional range of diagnostic testing, but have value to the customer.

For example, by handling a urologist's billing and collections, UroCor effectively becomes a partner with the urologist in the successful management of his practice. The urologist begins to view UroCor as an essential resource in the clinical and economic success of his/her urology practice.

Niche Laboratory Strategy

Another niche laboratory pursuing this same strategy of offering non-diagnostic testing services to clients is **Lab*One*** of Lenexa, Kansas. *(See TDR, March 18, 1996.)* Lab*One* provides diagnostic testing to life insurance companies. To assist their clients, LabOne developed a software program that allows an insurance underwriter to collect the credit report, the results of physical examination, including laboratory tests and the underwriting data on new policy holders.

It is reported that this software product has proved a big hit in the life insurance industry. LabOne is seeing new business as a result. Their strategy of "adding value" with non-diagnostic services generates additional diagnostic business.

Laboratory executives studying UroCor's management strategies should also keep in mind that UroCor encourages innovation and change within the organization.

"It is not enough to say you want to meet customer expectations," pointed out Socrates Choumbakos, Senior Vice President, Planning and Development at UroCor. "You must organize the company to permit people to accomplish those goals. At UroCor, we recognize the need to respond to rapid changes in the healthcare marketplace."

UroCor has a passion for anticipating, meeting and exceeding the expectations of its urologist-customers. Employees are empowered to take action consistent with UroCor's mission of meeting customer expectations.

Change And Empowerment

This environment of change and empowerment is not accidental. It is a direct result of the leadership of UroCor's executive team. Under the guidance of President and CEO William Hagstrom, UroCor has evolved into a productive laboratory which is successfully meeting the challenges of managed care.

Laboratory executives seeking answers to management challenges in their own laboratory should understand that UroCor combines several important characteristics of a high-performance company.

Leader With Vision

First, there is a leader who has a vision understood by all employees of the company. Second, this leader is not afraid to change people who fail to deliver. On the other hand, this leader has a knack for recruiting winners into the organization, then getting out of their way so they can succeed to the laboratory's benefit.

Third is the focus on the customer, and meeting their expectations. Fourth is the knowledge that to provide simple services with excellent delivery is an immense competitive advantage.

Fifth is the encouragement of the company culture toward innovation and experimentation. Out-of-the-box thinking is encouraged and celebrated. TDR

(For further information, contact Socrates Choumbakos at 405-290-4000.)

Market Assessment Leads Quest To Do Several Deals

Acquires independent Connecticut laboratory while pursuing joint ventures in several cities

CEO SUMMARY: Quest CEO Ken Freeman is moving rapidly to restructure Quest's regional laboratory system. Using the financial head-start provided by the January spin-off from Corning, Inc., Quest purchased one laboratory and seeks to do joint venture deals in several cities. Quest's activities will change the competitive situation in cities affected by these developments.

Competition for laboratory services is about to radically change in several markets. **Quest Diagnostics Inc.** is altering the status quo with acquisitions, joint ventures and laboratory restructuring.

Connecticut, Arizona, Montana and California will be impacted by Quest's activities. In some cases laboratory competitors will benefit. In other cases Quest may emerge as a tougher competitor.

The biggest influence will probably be in Connecticut. Quest acquired **Diagnostic Medical Laboratories** (DML) of Branford, Connecticut. The sale was consummated last month. With an estimated $30 million in revenues, DML represents the largest acquisition by Quest since 1995.

Reasons For Sale

Owned by Joseph Canavan, Diagnostic Med Labs was the biggest independent commercial laboratory remaining in Connecticut. Reasons behind the sale were not made public. However, Connecticut's aggressive managed care market may have been a factor in Canavan's decision to sell.

"DML won the laboratory services contract for **Physicians Health Services** (PHS), a large health plan here in Connecticut," stated one laboratory executive in the Hartford area. "To properly service this contract, I know that DML expanded draw sites, added courier service and hired more staff.

"DML may have not done well financially with the PHS contract," he continued. "If so, it could have contributed to Canavan's decision to sell his laboratory."

Logical Acquisition

DML was a logical acquisition candidate for Quest. Not only are the two labs less than 20 miles apart, which simplifies the consolidation of DML into Quest, but the acquisition removes Quest's largest competitor from the Connecticut marketplace.

In Arizona, Quest is pursuing a joint venture strategy. Quest operates a regional laboratory in Phoenix that fails to meet Quest's criteria for operating profit and growth potential. To make the best of a marginal situation,

Connecticut Lab Network Subcontracts With Quest For Blue Cross Lab Work

PROVIDING ANOTHER SIGN that it is not "business as usual," Quest Diagnostics subcontracted with the **Connecticut Hospital Laboratory Network** (CHLN) to provide laboratory services to **Blue Cross/Blue Shield** patients.

When Blue Cross initially chose Quest to be the exclusive laboratory provider, a number of physicians complained to Blue Cross. These physicians wanted to continue sending laboratory tests to their hospital laboratory. An arrangement was worked out between Blue Cross, Quest and member laboratories of the Connecticut Hospital Laboratory Network.

"It represents a change in thinking by this national laboratory," said Charlotte Selinger, Sales Manager at **Hartford Medical Laboratories**. "We believe that Quest would like to build good relations with hospital laboratories and this is one way of demonstrating good faith."

The arrangement is simple. CHLN member laboratories can provide testing for Blue Cross patients. Information is transmitted monthly to Quest. Quest receives a capitation payment from Blue Cross and remits a pro rata portion of that capitation payment to each hospital laboratory, based on the volume of tests performed by that laboratory. A similar arrangement between Connecticut hospitals and **SmithKline** two years earlier may have encouraged Quest to follow the precedent.

Quest is negotiating to create a joint venture with another laboratory in that market.

Rumors are widespread that Quest and **Sonora Laboratory Services** are in serious negotiations to pool their laboratory resources and run a common laboratory organization in the state. Neither group will comment publicly at this time.

THE DARK REPORT believes these rumors are true. Further, such a joint venture would be a winner for both laboratories. Sonora and Quest each hold about one-third of the market for outreach testing in Phoenix. Combined, they would have a dominant market share with the added benefit of significantly lowering test costs.

Clients of THE DARK REPORT should recognize that this joint venture would be a tangible demonstration of the regional laboratory strategies discussed in the May 12, 1997 issue of THE DARK REPORT and at the *Executive War College* in New Orleans.

Sonora Laboratory Services is owned by the **Samaritan Hospital System**. It is a consolidated laboratory organization with a successful outreach program. This is the regional model we find to be universally profitable throughout the country.

It validates our prediction that consolidated hospital laboratories will play an essential role as regional laboratory systems evolve throughout the country. The fact that Quest is approaching Sonora as a venture partner also reflects the reality of today's marketplace. The national laboratories no longer have the financial clout to dominate any city where they offer testing.

In Montana, Quest is implementing the same strategy of market restructuring, but in a different way. Quest is closing down the regional laboratory in Billings. Those specimens will be shipped to the Quest laboratory in Denver.

Quest determined that the economics of maintaining the Billings laboratory did not meet corporate targets. Montana is a relatively small market for laboratory services. Estimates are that the Billings lab generated about $4 million in annual revenue with limited growth potential in that market.

Further, in keeping with Quest's goal of reducing anatomic pathology and cytology, Quest sent a letter to clients of the Billings laboratory notifying them that the facility would no longer offer in-house AP and cytology in Billings after June 18.

30-Hospital Venture

Within California, Quest has the inside track to work with **Tenet's** 30 southern California hospitals. A final decision on the RFP process has not been announced, but bidders indicate that Quest has the edge. One attraction for Tenet is the close proximity of the former **Nichols Institute** reference laboratory in San Juan Capistrano.

As market trend indicators, Quest's activities signal an important shift in corporate strategy. Quest is demonstrating a bias for action. These four situations are just a sample of negotiations Quest is conducting throughout the country. Expect more surprising announcements of unorthodox joint ventures from Quest.

Institutional Indecision

Contrast Quest's new-found bias for action with the institutional indecision at **SmithKline Beecham Clinical Laboratories** (SBCL) in similar market situations. In Detroit, SmithKline has an underutilized laboratory facility of more than 40,000 square feet. During the past three years SBCL executives explored various partnership and joint venture models with individual hospital systems in Greater Detroit and the **Joint Venture Hospital Laboratory Network**.

Participants in these discussions tell THE DARK REPORT that SBCL managers recognize the need to either fill the lab with specimens or downsize the Detroit operation. These same participants say that SmithKline proposed several shared laboratory service arrangements which they found attractive, yet no one at SmithKline could get approval from higher levels to proceed. After three years, meetings and negotiations continue and SmithKline's Detroit laboratory remains open and underutilized.

Change To Environment

For Quest, this flurry of restructuring provides definite proof of change to the competitive environment for laboratory services. On one hand, Quest is demonstrating a new management culture which emphasizes both profitability and service. Quest is willing to exit markets which do not generate adequate operating profits. Quest is also willing to joint venture with strong partners where terms are flexible for both participants.

On the other hand, hospital laboratories are regaining market clout. Increasingly, the national laboratories will need to include and accommodate hospital laboratories in their regional operations.

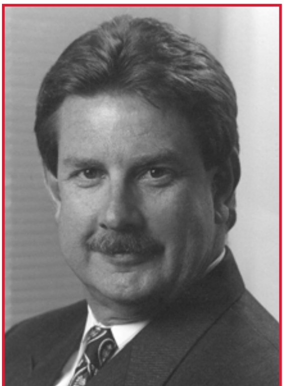
What has yet to be determined is whether both hospitals and commercial laboratories can succeed in these joint ventures. In addition, although Quest is the first national laboratory to demonstrate a changed attitude toward market strategies, both SmithKline and **Laboratory Corporation of America** have yet to weigh in on the same issue. **TDR**

(For further information, contact Robert Michel at 503-699-0616.)

Lab Industry Profiles

President Of SmithKline Lab Unit Respected As "Tough Competitor"

WITH troubles at **Corning/Quest** and **LabCorp** attracting publicity during the previous 18 months, few people observed a discreet but important change at **SmithKline Beecham Clinical Laboratories** (SBCL).



John B. Okkerse, Jr., Ph.D.
President-SBCL

John B. Okkerse, Jr., Ph.D. has quietly assumed full executive responsibility at the $1 billion company. Although Okkerse was promoted to President in 1995, Vickery Stoughton was the Chief Executive Officer at SBCL.

This changed in early 1996 when several SmithKline divisions, including SBCL, were merged into a business unit called **SmithKline Beecham Healthcare Services**. *(See TDR, January 15, 1996.)* SmithKline wanted to gain market synergies by aligning its healthcare services into a unified operating structure.

Okkerse assumed chief executive responsibilities of SBCL at that time. Insiders credit Okkerse with bringing a new focus to SBCL's operations and goals. As noted in earlier issues of THE DARK REPORT, Smithkline's laboratory company has weathered the laboratory industry's recent financial stresses much better than its two national laboratory competitors.

For laboratory competitors, Okkerse may be a tough man to beat. He launched his laboratory career in 1976 at **Bio-Science Laboratories** in Van Nuys, California. After SBCL acquired Bio-Science in 1985, Okkerse was promoted to Vice President and General Manager of SBCL's Tampa laboratory. In 1993, Okkerse was given corporate responsibilities as Vice President and Director of Science and Technology at SBCL.

One former executive with **Allied Clinical Laboratories** says that Okkerse was a tough competitor in the Florida market. "During my time in Florida, John always ran a solid operation in Tampa," he recalled. "John was fair in his business dealings and always a tough competitor. If he energizes the entire SmithKline operation the way he did in Tampa, they will surprise some people."

Among the biggest challenges facing Okkerse and SBCL are declining reimbursement and managed care's impact on test utilization. As a unit of a public company, SBCL is expected to demonstrate yearly increases in revenue and operating profit. That is a tough goal in the current healthcare marketplace.

As Okkerse takes the opportunity to stamp his imprint on SBCL, expect to see more focus on execution and implementation at the laboratory. If it happens, it will be in keeping with Okkerse's track record with laboratories in California and Florida. TDR

Pap Smear Wars Intensify

Pap Smear Technologies Battle For Market Share

Investors pressure competing companies to increase sales volume and earnings

CEO SUMMARY: Cytyc, NeoPath and Neuromedical each tapped the public capital markets during the past 18 months. Now investors expect to see earnings growth and dividends as soon as possible. Clinical laboratories should expect intensified sales and marketing efforts from these three companies as they strive to increase sales.

Probably the most ubiquitous sales representatives visiting clinical laboratories today are those from the three major "Pap smear" technology companies.

Their pervasive presence is due to the pressure on **Cytyc Corp.**, **NeoPath, Inc.** and **Neuromedical Systems, Inc.** to generate increased revenue and earnings that meet expectations of investors and the Wall Street brokerage firms which helped them raise capital from the public during the last 18 months.

These three companies have the same two hurdles to overcome. First, they must demonstrate the clinical efficacy of their technology to improve the current standard of care for diagnosing Pap smears. Second, because each company's technology increases the cost of diagnosing Pap smears, they have to figure out how to get their technology reimbursed by Medicare and private payers.

As the forces of managed care, clinical integration and declining reimbursement radically transform the healthcare industry, the struggles of these three cytology-based companies provide valuable understanding about how new laboratory technology will become accepted by clinical laboratories around the country.

It is critical to understand how the healthcare marketplace accepts new laboratory technology, particularly for those laboratory executives responsible for buying instruments, laboratory automation systems and LIS software. With falling reimbursement and declining profit margins, any laboratory investing in the wrong technology or the wrong company could find themselves literally out of business.

Different Strategies

For example, all three cytology companies have dramatically different business strategies. Cytyc's Pap smear technology serves a different function than that of NeoPath and Neuromedical. Cytyc's ThinPrep® monolayer process is designed to improve the current method of collection and specimen preparation. *(See TDR, January 27, 1997.)*

Once the ThinPrep process is used to prepare the Pap smear, a cytotechnologist can read the slide in the usual manner. The monolayer slide can also be read by the automated cytology systems offered by NeoPath and Neuromedical.

Cytyc's most recent market development is an agreement, announced May 29, with **Mead Johnson & Company** to co-promote ThinPrep. Cytyc already has 55 sales people in the field. Mead Johnson has a sizeable sales force calling on OB/GYNs. Apparently Cytyc feels that Mead Johnson's sales reps can help educate the 15,000 OB/GYNs about the benefits of ThinPrep.

After gaining FDA approval for the ThinPrep Pap smear preparation process late last year, Cytyc commenced direct sales activity in January 1997. Company documents state only that "65 companies became customers of Cytyc during the first quarter of 1997." Such carefully chosen wording indicates that not all of these laboratories have actually purchased ThinPrep processing instruments or are paying "per slide" fees.

Marketing Battle

Of greater interest is the marketing battle between NeoPath's AutoPap® 300 QC Automatic Pap Screener and Neuromedical's PapNet® system. The two companies are ardent competitors, although their positioning in the marketplace is totally different.

Further, both companies have active marketing programs under way overseas. Sales in foreign countries are important goals for both companies. The fact that each company emphasizes both domestic and foreign sales is important. In the healthcare world of the future, even clinical laboratories will be doing significant business overseas. THE DARK REPORT is uncovering a growing number of examples where clinical laboratories such as **Specialty** and **SmithKline** are developing overseas ventures.

East Asia is a major starting point for Neuromedical. "While we were a private company, Hong Kong-based investors provided us with venture capital in two rounds of financing," stated Jack Henneman, Vice President of Corporate Development. "Investors from this group operate a cytology laboratory in Hong Kong. We recently purchased that cytology laboratory, called **New Systems International, Ltd**. The existing management team will remain at New Systems and it will operate independently of our scanning center in Hong Kong."

> ***The fact that each company emphasizes both domestic and foreign sales is important. In the healthcare world of the future, even clinical laboratories will be doing significant business overseas.***

"For us, the China marketplace is more of an opportunity than an established business," he continued. "But our operational base in Hong Kong is positioned to pick up increasing test volumes. Specimens flow into our Hong Kong scanning center from that city as well as Australia, mainland China and Taiwan."

Domestically, Neuromedical reports that 47 new laboratories were added to the PapNet distribution system during the first five months of 1997.

Neuromedical's PapNet

Neuromedical's PapNet test was approved by the FDA as an adjunct test. It is priced at $35 to the patient and the laboratory performing the test pays Neuromedical $17 for the procedure. The slide is prepared in a normal fashion. It is sent to Neuromedical's scanning center in Suffern, New York.

Using video imaging technology and neural net-based software, the PapNet system identifies the 128 cells most likely to be abnormal. The data file and slide are returned to the original laboratory where a trained cytologist reviews the slide to make a diagnosis.

In contrast to Neuromedical's "direct to consumer" market strategy, NeoPath's AutoPap is targeted at laboratories with high volumes of Pap smears. The AutoPap system was approved by the FDA for quality control and adjunct testing.

NeoPath successfully placed AutoPap units in all three of the national laboratories. After FDA approval and HCFA approval, **Quest Diagnostics, SmithKline Beecham Clinical Laboratories of America** and **Laboratory Corporation** signed contracts. **Unilab, Inc.** of California is another major commercial laboratory with multiple AutoPap instruments. Recently NeoPath announced an exclusive national contract with SmithKline to install AutoPap systems in ten more of its laboratories. AutoPap systems already operate in SmithKline's St. Louis and Atlanta labs.

Whereas Neuromedical's earliest overseas successes were in Hong Kong and the Far East, NeoPath has made Japan its highest priority. NeoPath lined up **Nikon** as a partner and gained approval from the Japanese Ministry of Health and Welfare to use the AutoPap system as a primary screener. NeoPath also has a foothold in Korea, where **Samsung Hospital** uses the AutoPap system.

Intensified Sales/Marketing

THE DARK REPORT predicts that sales and marketing efforts by the three companies will intensify during the next year. Clinical laboratories will notice the heightened sales activity.

If that wasn't enough, three more companies will soon join the Pap smear battlefield. Marketing for **Accumed International's** TracCell® system and **Compucyte, Inc.'s** PathFinder® system will soon intensify. **AutoCyte, Inc.** is preparing a monolayer system linked to a cytology screening system and is optimistic about early FDA approval. TDR

(For further information, contact Jack Henneman at 914-368-3600 and Alan Nelson, Ph.D. at 800-636-7284.)

Pap Smear Practices Differ Overseas

FOREIGN MARKETS REPRESENT lucrative opportunities for the three cytology companies. In many countries, the percentage of women receiving regular Pap smear screening is significantly lower than in the United States and Canada. For this reason, it is expected that Pap smear test volumes will increase in such countries.

Another benefit is that the regulatory environment is different than in the United States. All medical device manufacturers try to get their device approved and into clinical usage in as many countries as possible. This permits them to demonstrate the effectiveness of the technology in a wide variety of clinical settings.

"We find that each country requires a unique strategy," stated Jack Henneman, Vice President of Corporate Development at Neuromedical Systems. "For different reasons, we see the most attractive markets for us as the United Kingdom, Germany and Italy. Each country has a large middle class that is ready for improvement in healthcare services. They represent good potential and have clinical practices similar to what we have in North America.

"We have operations in Europe, like we have in Asia," he continued. "We operate a scanning center in the Netherlands. Pap smears from our client laboratories throughout the region are scanned at the scanning center. It is the base from which we intend to expand our European sales."

NeoPath is also pursuing overseas markets. "Currently over 12 million Pap smears are done annually in Japan," stated Alan Nelson, Ph.D., President of NeoPath. "Japan has a number of high-volume clinical laboratories similar to the United States, so our AutoPap systems are already designed to effectively meet their needs. In preparing to enter Europe, we are going through the regulatory process. Among the milestones, we obtained the CE Mark for the AutoPap system."

The Dark Index

Shareholders Hugely Oversubscribe LabCorp's $500 Million Offering

COMMERCIAL LABORATORIES may be regaining favor on Wall Street. **Laboratory Corporation of America's** $500 million convertible stock offering not only sold out, but was oversubscribed by a huge amount.

In addition to the 10 million convertible shares offered, subscription agreements and payments for an additional 3.98 million shares were tendered. Investor response to LabCorp's offering surprises many industry observers. However, when viewed in tandem with the surprisingly strong price for the shares of **Quest Diagnostics, Inc.**, this could be an early vote of confidence in the financial turnaround of the national laboratories.

"We are pleased at how successful this offering was," declared Pamela Sherry, Investor Relations Director at LabCorp. "It is a strong demonstration of support from our shareholders."

The $500 million will be used in three ways. "First, all fees and expenses for the offering will be deducted," explained Sherry. "Second, the $187 million loan from **Roche**, along with accrued interest, will be repaid. Third, all funds remaining will be used to reduce principal on our outstanding bank debt."

An interesting twist to this situation was the disclosure, on March 31, 1997, that **Berkshire Hathaway** owned a 4.1% stake in LabCorp. Because of Warren Buffet's connection with Berkshire Hathaway, many investors were curious as to why Berkshire Hathaway took a position in LabCorp.

"The Berkshire information released on March 31, 1997 reflects stock purchases up to a year old," responded Sherry. "We do not know if Berkshire Hathaway still holds this position, since there has been no subsequent disclosure about a reduction or increase in LabCorp holdings by Berkshire Hathaway."

Not including the Roche loan, LabCorp's first quarter financials disclosed a total of $1.077 billion in credit obligations, comprised of $693.8 million in short- and long-term debt plus a revolving credit facility of $384.0 million. It is estimated that approximately $300 million of the offering proceeds will be applied to retire the existing bank debt.

LabCorp also reported another milestone during first quarter, 1997. Revenue per accession increased 1.6% over the same quarter in 1996. It was the first time in a number of quarters where revenue per accession did not decline. The increase was attributed to better pricing discipline on new contracts and increased price schedules.

These early signs of a turnaround do not mean that LabCorp will soon return to robust financial health. Future cuts in Medicare funding and managed care's ongoing erosion of laboratory reimbursement will maintain financial pressure on LabCorp, Quest Diagnostics and **SmithKline Beecham Clinical Labs**.

What can be concluded is that LabCorp's existing shareholders have great confidence in the future of the company. They just bet $500 million that LabCorp can succeed! TDR

INTELLIGENCE

LATE & LATENT

Items too late to print, too early to report

Joint Venture Hospital Laboratory network (JVHL) of Detroit added another hospital system to its growing regional laboratory network. **M-Labs**, the laboratory division of the **University of Michigan Health System,** joined JVHL. This is the eighth hospital system laboratory division to become an equity member of JVHL

ADD TO...JVHL

Jack Shaw, Executive Director at JVHL, reports that the network also signed a new managed care contract. JVHL now has provider status with **DMC Care**. The contract covers 28,000 lives.

Managed care's impact on healthcare prices continues. The **U.S. Department of Labor's** Producer Price Index for acute-care hospital services climbed only 1.2% for the twelve-month period ending April 30. The index was unchanged for the month of April.

CLASS ACTION SUIT

Not only is **Columbia/HCA** a target for federal investigators, but now lawyers have staked a claim against the $20 billion corporation. The New York law firms of **Abbey, Gardy & Squitieri** and **Curtis V. Trinko** filed a class action suit in April against Columbia. It represents the interests of all purchasers of Columbia common stock bought between February 14, 1996 and March 27, 1997. The complaint alleges that Columbia withheld material facts from investors concerning Medicare reimbursement practices, patient referral arrangements and "practices used to acquire hospitals."

MORE ON... COLUMBIA

In terms of beds, Columbia/HCA is the largest hospital system in the United States with 57,000 beds. It overshadows the second largest system, which is the **Veterans Administration**, at 44,082 beds. Who's number three in beds? It's **Quorum Health Group**, with 22,235 beds.

Laboratory reimbursement shrinks whenever individual states add managed care to their Medicaid programs. **HCFA** reports that enrollment in Medicaid managed care plans is up 170% since 1993, including a 33% rise from 1995 to 1996. As of June 30, 1996 (most recent data available), 35% of Medicare beneficiaries, about 13 million people, were in some type of managed care plan.

ADD TO.... MEDICAID

Currently every state but Alaska and Wyoming offer a Medicaid managed care option. California and Tennessee have the largest numbers enrolled in managed care plans. Medicaid managed care beneficiaries total more than 1.2 million in each state.

Another pathology-based physicians' practice management company may be preparing to hit the marketplace. Based in Nashville, it is said that Heywood Cochrane, former CEO of **Allied Clinical Laboratories,** is part of the management team.

That's all the insider intelligence for this report.
Look for the next briefing on Monday, July 14, 1997

THE DARK REPORT

UPCOMING...

- *Elegant Solutions To Ongoing Problems With Hospital-Reference Lab CPU-CPU Links.*
- *Advanced Laboratory Regionalization Found In Unlikely City.*
- *Effective Compensation Strategies In Pathology Practice Consolidation.*
- *Case Study Of Laboratory Consolidation Demonstrates The Good, The Bad And The Ugly Of Management Strategies.*