

# Cataract & Refractive Surgery **TODAY**

July 2013



## Patient Conversion and Satisfaction

**Integrating Laser Cataract Surgery Into the Practice**

PROF. WILLIAM CULBERTSON, MD • PROF. H. BURKHARD DICK, MD, PhD  
ROBERT P. RIVERA, MD • JONATHAN H. TALAMO, MD  
SHACHAR TAUBER, MD • WILLIAM F. WILEY, MD

Part 2 of 2

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BY PROF. WILLIAM CULBERTSON, MD; PROF. H. BURKHARD DICK, MD, PhD; ROBERT P. RIVERA, MD; JONATHAN H. TALAMO, MD; SHACHAR TAUBER, MD; AND WILLIAM F. WILEY, MD

**T**he Catalys Precision Laser System (OptiMedica Corporation) is the only laser cataract surgery platform built from the ground up to optimize all four steps of the cataract procedure. In this monograph, the second of a two-part series, we describe the Catalys system's

key advantages, the models under which we have incorporated Catalys into our practices, and how our patients have responded to the unique laser cataract technology. We hope these insights will help our colleagues in their own decision-making processes about laser cataract surgery.



**William Culbertson, MD**, is professor of ophthalmology and the Lou Higgins Distinguished Chair in Ophthalmology at Bascom Palmer Eye Institute, Miller School of Medicine, University of Miami. He is the chair of the medical advisory board for OptiMedica Corp. Prof. Culbertson may be reached at (305) 333-7439; [wculbertson@med.miami.edu](mailto:wculbertson@med.miami.edu).



**Jonathan H. Talamo, MD**, is medical director at Surgisite Boston, LLC, associate clinical professor of ophthalmology at Harvard Medical School, and partner at Talamo Hatch Laser Eye Consultants in Waltham, MA. He is a member of the medical advisory board for OptiMedica Corp. Dr. Talamo may be reached at (781) 890-1023; [jtalamo@lasikofboston.com](mailto:jtalamo@lasikofboston.com).



**H. Burkhard Dick, MD, PhD, Full Professor**, is the chairman of Ruhr University Eye Hospital, Bochum, Germany. Prof. Dick is a member of the *CRST Europe* editorial board and of the medical advisory board for OptiMedica Corp. Prof. Dick may be reached at +49 234 299 3101; [burkhard.dick@kk-bochum.de](mailto:burkhard.dick@kk-bochum.de).



**Shachar Tauber, MD**, is the section chair of ophthalmology and the director of ophthalmic research and telemedicine at Mercy Eye Specialists in Springfield, Missouri. Dr. Tauber may be reached at (417) 820-9393; [shachar.tauber@mercy.net](mailto:shachar.tauber@mercy.net).



**Robert P. Rivera, MD**, is director of clinical research, intraocular lens and refractive surgery, at Hoopes Vision in Draper, Utah. He is a consultant for OptiMedica Corp. Dr. Rivera may be reached at (801) 568-0200; [rpriveramd@aol.com](mailto:rpriveramd@aol.com).



**William F. Wiley, MD**, is medical director of the Cleveland Eye Clinic and is an assistant clinical professor of ophthalmology at University Hospitals/Case Western Reserve University in Cleveland. He is a consultant for OptiMedica Corp. Dr. Wiley may be reached at (440) 840-2020; [drwiley@clevelandeyeclinic.com](mailto:drwiley@clevelandeyeclinic.com).

**CATALYS ADVANTAGES**

The Catalys Precision Laser System (Figure 1) has been the subject of dozens of premarket and postmarket clinical studies, the results of which have been published in 11 peer-reviewed journal articles. Study findings have shown that the system delivers several advantages over traditional manual cataract surgery, including precise capsulotomies within 30 µm<sup>1,2</sup>; lens fragmentation that segments and softens the cataract, enabling the near elimination of ultrasound energy in a number of cataract grades<sup>3,4</sup>; and customized corneal incisional architecture based on anatomical landmarks.

The system’s benefits in laser cataract surgery were the subject of 31 presentations given recently at the ASCRS 2013 symposium in San Francisco. Surgeons explored several Catalys-specific advantages in laser cataract surgery, including broad inclusion criteria, even encompassing patients with glaucoma;

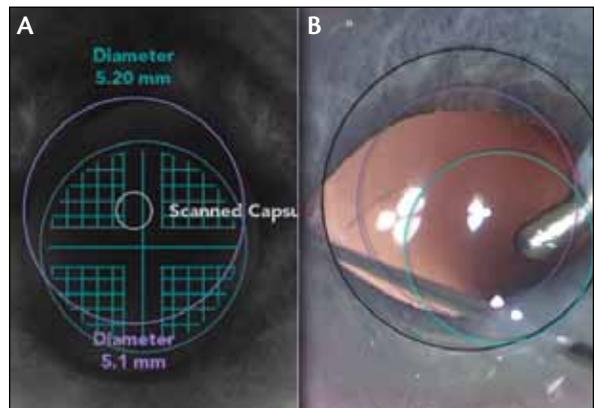


Figure 1. The Catalys Precision Laser System.

“The system’s benefits in laser cataract surgery were the subject of 31 presentations given recently at the ASCRS 2013 symposium in San Francisco.”

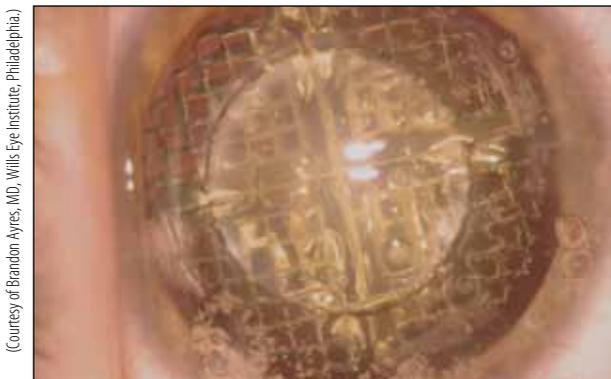
a demonstrated benefit in challenging cases; significant surgical benefits, such as the near or complete elimination of ultrasound energy and improved IOL positioning and centering; and a short learning curve (Figures 2–4).

Our collective positive experience with Catalys in clinical practice has been consistent with these findings and has fueled our individual decisions to offer the technology to our patients on a broad basis.



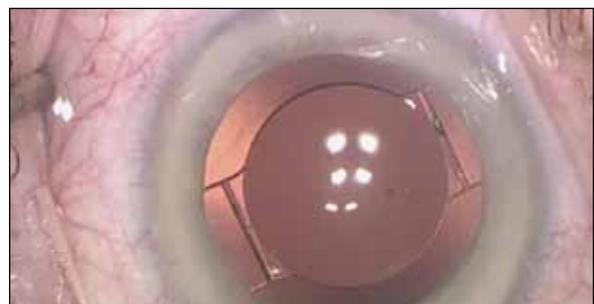
(Courtesy of William F. Wiley, MD, Cleveland, OH.)

Figure 2. A capsulotomy centration study that Dr. Wiley conducted and presented at ASCRS 2013 analyzed 50 consecutive surgeries with centration on the pupil (A) versus the scanned capsule (5.1 mm) (B), a capability that is unique to Catalys. Results demonstrated 0% incomplete optic overlap with scanned capsules versus 25% incomplete optic overlap with pupils. (Green indicates pupil center, purple indicates scanned capsule center, and black indicates the IOL optic’s edges.)



(Courtesy of Brandon Ayres, MD, Wills Eye Institute, Philadelphia.)

Figure 3. Brandon Ayres, MD, Cornea Services, Wills Eye Institute, demonstrated the Catalys system’s consistent and reproducible cuts to visitors of OptiMedica’s 2013 ASCRS exhibit.



(Courtesy of Jonathan H. Talamo, MD, Waltham, MA.)

Figure 4. Dr. Talamo shared with ASCRS exhibit visitors how the Catalys system helps surgeons achieve exceptional IOL centration.

**PATIENT CONVERSION**

**Prof. Dick**

I employ an “all-comers” approach in which my team and I offer the Catalys Precision Laser System to virtually every cataract patient that comes to our practice. The system has performed well for us both clinically and economically. We had originally projected to break even with the investment within 2 years; instead, we did so within 6 months, without any external advertising (Figure 5). Instead of treating 600 eyes within the first 2 years, as we had expected, I used the laser on more than 1,750 eyes after 18 months. Our 2-year projection is greater than 2,000 eyes, which seems to be pessimistic. We currently perform five to 10 surgeries per day with the Catalys, and our average time for the entire laser cataract procedure with lens removal and implantation is 8 minutes.

**Dr. Wiley**

Laser cataract surgery with Catalys currently represents a 90%+ conversion rate for those who can afford a premium procedure (Table 1).

My team and I have found that the key to converting cataract patients to the laser option is to deploy a multistage educational platform that can adequately address their questions about procedural benefits, cost, etc. We hired a dedicated, in-house patient educator to supplement the surgeon’s discussion. My partners and I have also invested in office literature and provided information on our website about laser cataract surgery. We have not spent significant money on external marketing yet.

**Dr. Rivera**

My clinic’s experience with patient conversion to laser cataract surgery has been positive. My staff and I present the laser option to every surgical candidate, and we truly believe Catalys is a better, safer technology for them versus conventional treatment. Our current conversion rate averages 60% of our total cataract surgical volume (Table 1), and I anticipate that that number will increase as more reports are published in the literature and more of our colleagues are able to verify the need for laser cataract surgery.

**Dr. Tauber**

Like Dr. Rivera and Hoopes Vision, the team at Mercy Eye & Ear believes that using the Catalys Precision Laser System is the best way to treat a cataract. Rather than segregating patients between those who can afford the technology and those who

“The system has performed well for us both clinically and economically.”

—Prof. Dick

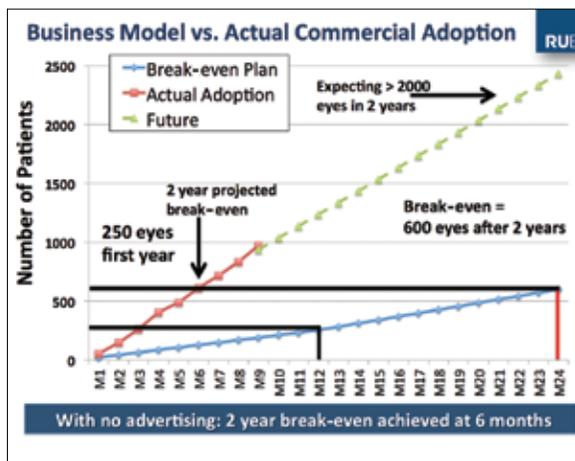


Figure 5. This chart shows Prof. Dick’s business model versus his practice’s actual commercial adoption of the Catalys Precision Laser System. Without any advertising, his practice achieved its 2-year projected break-even procedural event within 6 months of ownership.

cannot, we concluded that every cataract patient should benefit from it. So, we decided from day 1 of our laser cataract program that we would offer all patients Catalys laser treatment at no additional charge. The Mercy team is proud to have been the first clinic to offer Catalys treatments under this model.

TABLE 1. CATALYS CONVERSION RATES	
Dr. Culbertson:	40%
Prof. Dick:	70% (insured patients)
Dr. Rivera:	60%
Dr. Talamo:	50%
Dr. Tauber:	100%
Dr. Wiley:	90%+

In coming to this decision, we considered the more common model in which patients can select cataract surgery with either the conventional approach or with the laser in combination with premium lenses and/or arcuate incisions. This is a good model—particularly for private practices—and

it is working for many physicians around the country. However, it runs counter to Mercy's mission to provide exceptional care, especially to the poor. In fact, when our colleagues in other fields of medicine saw the data on Catalys, they were the ones who really embraced it for us. They said, "This is the right thing for Mercy" (Figure 6).

At the same time, economics do matter. In order to offer the Catalys procedure to every cataract surgical patient at no additional charge, we knew we would need a strong partner. More than any other laser cataract surgery company in the industry, OptiMedica stood out for its commitment to partnership. The company has been instrumental in helping us achieve procedural cost savings, working closely with our team to find new efficiencies, and seek alternative complementary technologies that could help us maximize quality of care while decreasing costs. We are grateful for their support and partnership in this endeavor.

#### Prof. Culbertson

Patients' acceptance of Catalys has been excellent at our institution. Since we began offering the system, we have been absolutely inundated by cataract surgical candidates who have heard about Catalys through word of mouth—and we have not done any external marketing (although we plan to do some in the future). I currently perform about 40% of my cataract surgeries using the Catalys laser.

#### Dr. Talamo

In my practice, patient conversion to laser cataract surgery with Catalys has been very straightforward. Patients intuitively understand the concept of using image-guided laser surgery to improve the accuracy and precision of cataract surgery. The preoperative conversation is already very broad if a patient is interested in different lens implants or other corrective options. Also, people who have had LASIK are almost always interested in doing whatever they can to continue seeing well without glasses; it is only logical to them that we would have LASIK-like technology that automates and upgrades the cataract extraction procedure.

## PATIENT SATISFACTION

#### Dr. Tauber

Since we have begun offering Catalys to all our cataract patients, our informal patient satisfaction survey has shown a very strong response. I believe this response is due not only to the exceptional quality of the laser, but also to the quality of our staff—a team

"We decided from day 1 of our cataract program that we would offer all patients Catalys laser treatment at no additional charge."

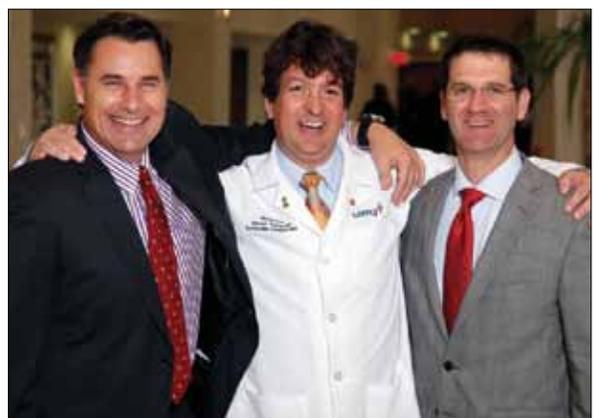
—Dr. Tauber

of hand-picked individuals who wanted to be a part of this new model of offering laser cataract surgery to everyone. In fact, the model was one of our biggest recruitment tools.

In addition, our referring physicians are very much behind us. Knowing that we offer Catalys to all cataract patients makes it a no-brainer for them to refer patients to our practice.

#### Prof. Culbertson

At Bascom Palmer, we see many "doctor shoppers" who surf the Internet for recommendations of where to have ocular surgery, and they only want to go to a place that they perceive as having the best technology. *Laser* is a magic word with these patients. It almost sells itself. They believe that a laser imparts precision, increased safety, and better outcomes—they are already thinking about these things when they come in. When these patients return home, they tell five people that they had cataract surgery with a laser at Bascom Palmer (Figure 7). It's almost like a badge of honor. Then, those people tell five people each. Catalys generates the strongest word-of-mouth referrals I've ever seen.



(courtesy of Mercy Eye Specialists, Springfield, MO)

Figure 6. OptiMedica CEO Mark Forchette, Dr. Tauber, and Robert W. Steele, MD, president of Mercy Hospital Springfield (left to right), presented Mercy's unique model for laser cataract surgery at a Mercy Health Foundation Springfield event in April 2013.

### Dr. Talamo

The improvement in patients' comfort with the Catalys system is noticeable. I have had a number of patients who, during our transition to laser cataract surgery, had undergone manual surgery in one eye and laser cataract surgery in the other. These individuals have uniformly stated that the experience with the laser was better. There was less discomfort, and they felt less manipulation.

The Catalys technology seems to be well received in our referring optometric community.

### Prof. Dick

My staff and I have enjoyed a very high level of patient acceptance for the laser procedure because of its extremely low complication rate. Our network of referring physicians was skeptical about the procedure at first, but now that they have seen the results, they refer patients for the laser cataract procedure on a regular basis.

### Dr. Wiley

Our patients have been very satisfied with the Catalys procedure (Figure 8). The system's low-pressure docking and efficient graphic user interface impart a very comfortable patient experience. In addition, the laser's ability to deliver true lens softening and near-perfect capsulotomies virtually eliminates the need for ultrasound and provides stable positioning for the IOL.

Our practice also has a fairly large comanagement network of optometrists who have been a great source of referrals for the Catalys laser technology. We periodically conduct continuing education courses for 15 to 20 optometrists, during which they watch my partners and I perform live surgery with Catalys and listen to us describe how we have integrated the system into our practice. Once the optometrists see the live surgery, they understand the clinical value that Catalys offers,

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*"Laser is a magic word with these patients. It almost sells itself. Catalys generates the strongest word-of-mouth referrals I've ever seen."*

—Dr. Culbertson

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and they in turn help to educate our patients and convert them to the upgrade packages.

### Dr. Rivera

Consumers understand the concept of using a laser in surgery. Because laser technology has found its way into other areas of medicine, there is a high level of recognition that lasers are generally faster, safer, and more precise than manual techniques. Our experience has shown that laser surgery appeals to patients from all walks of life and socioeconomic backgrounds. Because vision is the most precious of the senses, consumers can appreciate a technological advance that makes the procedure more tolerable. It has been gratifying to see patients accept the benefits of laser cataract surgery. For these reasons, I think ophthalmic practices that offer laser-based surgery are perceived as being on the cutting edge of the field and therefore have a marketing advantage.

## CONCLUSIONS

### Dr. Talamo

I think this technology is taking cataract surgery in the direction it should be going. If you do not integrate it, you are leaving behind a huge piece of the specialty, and you will lag behind your peers from a proficiency and technical standpoint.

Are we at the point where every practice absolutely has to have laser cataract technology? No. It does not make sense for every single practice. But if your practice or surgical center offers premium or



(Courtesy of the Bascom Palmer Eye Institute, Miami, FL.)

**Figure 7.** At the Bascom Palmer Eye Institute, Prof. Culbertson's team has created a "high-tech" OR for cataract surgery that includes the Catalys Precision Laser System and the ORA intraoperative aberrometer (WaveTec Vision, Inc.).

(Courtesy of William F. Wiley, MD, Cleveland, OH.)



**Figure 8. Patients have been very satisfied with the Catalys procedure.**

advanced-technology cataract services, I think laser cataract surgery is essential.

**Dr. Tauber**

My colleagues and I think we are at the beginning of a revolution in cataract surgery. We are really pleased to be in the company of such excellent physicians, engineers, and clinical staff, all of whom have helped make us very confident in our decision to offer Catalys to all the cataract patients at Mercy. This program will be long term and will define how we treat patients going forward.

**Dr. Rivera**

Having integrated the Catalys system into my practice, I would tell other surgeons to get ready, because the revolution is here. If you believe that femto-cataract surgery has not yet arrived, you need to do more homework. This is a phenomenal advancement, the greatest innovation in cataract surgery since the development of phacoemulsification. It will change outcomes for the better, it will change practices for the

“This is a phenomenal advancement, the greatest innovation in cataract surgery since the development of phacoemulsification.”

—Dr. Rivera

better, and it will bring us to an entirely different level that we only dreamed of years ago.

**Prof. Culbertson**

Laser cataract surgery is a major step forward in the continued trend toward less traumatic and more precise cataract surgery. Its potential for novel IOL applications as well as reduced or eliminated ultrasound makes this technology very attractive to leading cataract practices. Ultimately, it is destined to take its rightful place among the sophisticated tools of technically advanced cataract surgeons.

**Dr. Wiley**

The Catalys laser’s exceptional safety and efficacy profile has led to clinical success that is apparent to our patients, physicians, staff, and referring optometrists. This clinical success gives us the confidence to recommend the procedure to patients. They sense our confidence in the technology and feel very comfortable converting to the laser procedure. ■

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The accompanying article reflects the views of the respective authors, and they are responsible for its content. The OptiMedica Catalys Precision Laser System is indicated for use in patients undergoing cataract surgery for removal of the crystalline lens. Intended uses in cataract surgery include anterior capsulotomy, phacoemulsification, and the creation of single-plane and multiplane arc cuts/incisions in the cornea, each of which may be performed either individually or consecutively during the same procedure. For more information regarding the device, visit [www.optimedica.com](http://www.optimedica.com).



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