October 2018



Cataract & Refractive Surgery Today



## **BUILD YOUR PRACTICE WITH VICTUS LASER**

Five respected surgeons discuss the benefits of adding the VICTUS femtosecond laser to their practices.

# **COLLINS VISION**

## Cataract and LASIK versatility are keys to success.



Michael J. Collins, MD, is medical director and founder of Collins Vision, a cataract and refractive surgery practice in Fort Myers and Naples, Florida. *Cataract & Refractive Surgery Today* interviewed him about the VICTUS femtosecond laser (Bausch + Lomb).

#### What prompted you to begin using a femtosecond laser?

Initially, it was market pressure. Two other centers were heavily marketing laser cataract surgery, and we had a lot of patients asking about it. I wasn't sold on the technology, because I just saw it as adding cost and time to an already great procedure. When we voted on acquiring the femtosecond laser, I actually abstained.

Now I use the femtosecond laser far more than any other surgeon in the center. I feel that it makes me a better cataract surgeon. As good as cataract surgery is today, the laser simply makes the procedure, in my experience, extremely precise and reproducible. For example, in a manual case, I recently had a patient jerk his head down during the capsulorhexis, causing it to extend out to the equator. Thankfully, the procedure ended up going well, but this would not have even been an issue if I had been using the femtosecond laser. Also, the phacoemulsification times and energy are significantly decreased because of the fragmentation—for us, they are cut in half.

## With several other commercially available femtosecond lasers to choose from, why did you choose the VICTUS platform?

The first reason was my relationship with the company at the time we acquired the laser. VICTUS laser evolved from the Femtec laser, which was designed for precise corneal work, whereas all other cataract femtosecond lasers were first designed for cataract work. I wanted a laser I could use to make precise LASIK flaps, arcuate incisions, and corneal incisions in addition to performing the capsulorhexis and fragmentation part of the procedure. As a corneal surgeon, the versatility of the VICTUS laser made all the difference in the world to me.

## How was your initial experience with the VICTUS laser? Can you share any lessons learned in first using the system?

My early experience was very positive. We had to work with the engineers to fine tune our particular laser. They were very responsive, so we were able to ensure it was working perfectly in our surgery center. That would be the biggest lesson: Even a laser "Now I use the femtosecond laser far more than any other surgeon in the center. I feel that it makes me a better cataract surgeon. Also, the phacoemulsification times and energy are significantly decreased because of the fragmentation—for us, they are cut in half."

of the same make and model can respond differently in different settings, so working with engineers to get the best results with your individual laser is very important.

## How does the VICTUS laser support using multifocal, toric and accommodating intraocular lenses such as Crystalens, Trulign Toric and enVista (Bausch + Lomb) IOLs?

Our philosophy is to focus on patients' visual outcomes, rather than the lens technology. The VICTUS laser is simply included in all our premium lens package offerings.

#### What value does the VICTUS laser bring to refractive surgery?

Our VICTUS laser makes great corneal flaps for LASIK. We had to work with the engineers to improve the flaps from when we first started, but now I think they are precise and beautiful. As far as refractive cataract surgery in my practice, the VICTUS laser makes great arcuate incisions. The VICTUS laser also makes excellent corneal incisions, in my experience, which is not the case with all femtosecond lasers. Our incisions open easily and seal great as well.

## What outcomes do you see using the VICTUS platform for corneal incisions and flaps?

My corneal incisions and flaps are excellent. With my primary cataract incision, I like to make a second anterior small-pocket



incision (Wong incision). With minimal hydration of the pocket incision, the primary incision seals excellent. The VICTUS laser allows me to achieve this.

## Has the VICTUS laser changed patient flow in the OR or your practice?

Patient flow was a major concern when we first started using the femtosecond laser because it obviously requires an additional step, so it takes longer to do the entire case. A cataract case is efficient after using the laser, but the overall time is longer when one surgeon is doing both procedures.

We developed a new workflow around our three surgical rooms. I found that by having my associate surgeon run the laser, he can start a VICTUS laser case in one room while I perform a standard case in another, finish the standard case, and then move the VICTUS laser case into that OR while he starts a new VICTUS laser case at the same time. This permits us to alternate between the three rooms very efficiently. When the schedule does not allow us to alternate, I can start off doing a VICTUS laser case, move to the next OR where a standard case is waiting, do another VICTUS laser procedure, followed by another regular case, and then go back to the VICTUS laser. I follow this pattern until I'm done with all VICTUS laser cases. Afterwards, I bounce between the two rooms until all cases are complete.

## Do some patient profiles derive a particular benefit from the VICTUS laser?

I think all patients benefit from the technology, but my favorite cases are the white intumescent cataracts. I did one recently, and it is so nice to see a perfectly round 5.5 mm capsulotomy made before my eyes so quickly. This makes the capsulotomy predictable, rather than doing a capsulorhexis where there is a problem with countertraction. I don't typically charge these patients for the laser—I do it for my own well-being and stress level.

## What is the clearest strategic advantage to your practice using the VICTUS laser?

It is certainly a marketing tool. Patients like lasers, especially when it comes to eye surgery. I am asked every week by



patients if I am going to use the laser in their procedure. In southwest Florida, the laser is marketed heavily by several practices, so many patients research the benefits before they come see me. More of my patients now opt for premium lens surgery.

#### Does the VICTUS laser influence the work of your staff?

The VICTUS laser has made it easier to convert appropriate patients for premium IOL surgery. We were doing a good job before the laser, but the laser has made the conversation easier for the staff because the patients see it as added value for their surgery. I have all of my staff members shadow me in surgery, and I like to ask them afterward if they would choose to have the laser or not. All of them (and every person on our surgery center staff) have told me they would want to have the laser if they needed cataract surgery.

## What advantages or procedures do you envision for the VICTUS laser in the future?

I believe we will see the femtosecond laser improve more and more corneal procedures as time goes on. I think we'll see IOLs that require the precise size and centration of the capsulotomy that the femtosecond laser provides. There are also many corneal procedures that will benefit from the use of the femtosecond laser technology, such as anterior corneal grafts.

## What advice would you offer other surgeons who are considering using a femtosecond laser?

Do your homework. Look at all the positives and negatives. There is a cost in terms of both time and money when using the femtosecond laser, and you need to make sure this cost translates to better outcomes and the ability to do more refractive cataract surgery. We have been very happy with the VICTUS laser, so I can honestly say if I had to do it all over again, I would make the same decision.

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# SCHEIN ERNST MISHRA EYE

An experienced femtosecond user appreciates current capabilities, future possibilities.



Brett B. Ernst, MD, is a cataract and refractive surgeon at Schein Ernst Mishra Eye in Harrisburg, Pennsylvania. *Cataract & Refractive Surgery Today* interviewed him about the VICTUS femtosecond laser (Bausch + Lomb).

#### What prompted you to begin using a femtosecond laser?

We've always been a refractive surgery practice. We had been doing LASIK for many years, and I felt that femtosecond laser cataract surgery was going to be the ultimate way that cataract surgery would evolve into a refractive cataract procedure that would allow us to place implants to ensure they had the maximum effect.

## With several other commercially available femtosecond lasers to choose from, why did you choose the VICTUS platform?

A little more than 2 years ago, we looked at all the available platforms and decided to go with the VICTUS laser. We thought that the VICTUS laser was the most robust platform for potential future growth. It has the ability to operate at a maximum pulse frequency at 160 kHz versus the 50-120 pulse rate capability of other platforms. We knew that real-time OCT was coming onboard, and over time, surgeons would want to do faster, more complex treatments. This system would be able to grow as the technology grew.

Versatility was a major selling point, too. Because we do both LASIK and cataract surgery, we liked that of all the femtosecond lasers available, the VICTUS laser did a great job of creating flaps. Because the VICTUS laser can be used for more than one application, we don't need to have one laser for flap creation and a femtosecond laser for cataract surgery. Those are big boxes that need special spaces, and it's difficult to have too many of them in the surgery center. It's a huge advantage to get it all done in one space, on one machine in our laser room with the excimer laser, improving the LASIK flow.

## When you began using the VICTUS laser, how did the experience compare to your previous femtosecond system?

We could see immediately that the VICTUS laser was much different than the femtosecond laser that we had used previously (LenSx, Alcon). That laser interface required a high amount "We could see immediately that the VICTUS laser was much different than the femtosecond laser that we had used previously (LenSx, Alcon). That laser interface required a high amount of suction and pressure."

of suction and pressure. The interface that they created for the VICTUS laser provides very good suction at a relatively low pressure. Treatment is excellent, in my experience.

In the past, I would place incisions where I thought they were very near the limbus, but when I got to surgery, they were in a much different position that what I planned. With the VICTUS laser, the real-time OCT allows us to accurately place the arcuate incisions to 80% depth, at the exact locations of the incisions.

The VICTUS laser system's grid pattern is reducing my Stellaris Elite vision enhancement system (Bausch + Lomb) phacoemulsification times quite a bit, which has been a bonus of doing femtosecond laser cataract surgery. I use a larger grid pattern because I find that that prevents the nucleus from breaking into small pieces that I have to chase around the eye. It still creates good followability of the nucleus into the phaco tip and allows me to crack the central nucleus very quickly and efficiently.

## How does the VICTUS laser support using multifocal, toric, and accommodating IOLs?

The key advantages are the accuracy of the incision placement and size and the softening of the cataract, which reduces the phaco time and makes the procedure a little gentler.

## What outcomes do you see using the VICTUS platform for corneal incisions and flaps?

In my experience, the corneal incisions and flaps are excellent. One of my favorite things about the VICTUS laser is that when I'm doing flap creation, I can very easily center the flap over the cornea with a cursor. I simply grab the treatment diagram, move it around the cornea, and drop it where I want it to be. Compared with my previous femtosecond laser, I find it very easy to use this technology to get well-centered flaps. It's a major advantage of this platform.

## Do some patient profiles derive a particular benefit from the VICTUS laser?

My primary focus is to create the best possible result so they can achieve their goals. There are certain situations where the VICTUS laser excels over other options. When patients have hard cataracts and may have endothelial problems, I like to use the VICTUS laser. I use the VICTUS laser for patients with pseudoexfoliation. In these cases, I think presoftening the nucleus and reducing the phaco time can make an important difference in the gentleness of the procedure.

I'm finding that toric lenses, although they go down to very low powers, are very problematic when we get under about 1.50 D of astigmatism, even with ORA (Alcon) in the OR to help place them with confidence.

## Has the VICTUS laser changed patient flow in the OR or your practice?

Yes, definitely. Because the way we house our laser (at the same site, but in a different room than our OR), I have to go back and forth between the laser room and the operating room to complete the cases now. That is a change to the flow. It has slowed things down a little bit for us, because we do four or five laser cases, the technicians go over to the surgery center and get it prepared, and then I come to the OR and complete those cases. When I'm done, I go back to do more laser cases.

## What is the clearest strategic advantage to your practice using the VICTUS laser?

I think patients want to come to a surgeon who's using the latest technology, even if it may not be part of their care. Generally speaking, I think most people like to know that their doctor is forward-thinking and using the latest technology. They also like choices. They like that the laser option is available to them, and it's up to them whether they choose it or not. They prefer that situation versus going to a surgeon who has fewer options, limiting them to what's available. There would always be a question in their minds about whether the femtosecond laser would have been better but wasn't offered to them because their doctor just wasn't involved in that technology.



## What advantages or procedures do you envision for the VICTUS laser in the future?

I think eventually, we will be able to do significant corneal work using a femtosecond laser, such as lamellar keratectomies and corneal transplants. As they speed up the procedure, the patterns for nuclear fragmentation are going to get more advanced. I also think that softening a really dense cataract is going to get easier as they speed up the technology.

## What advice would you offer other surgeons who are considering using a femtosecond laser?

I'd recommend the same process I went through. Look at all the platforms. Think about each one in terms of its future capabilities for future applications (the ability to unlock a higher pulse frequency rate, the quality of the optics, and the ability to center flaps accurately using the system). I think that the real-time OCT makes setting up the arcuate incisions even better than it was in the past. If you do that due diligence, you're going to come back to the VICTUS laser, because it does have this tremendous robust platform that's poised to move forward with the future.

#### **BRETT B. ERNST, MD**

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# REVISION LASIK AND CATARACT SURGERY CENTER

## A boutique practice reinforces its high-tech reputation and designs a unique patient flow for the VICTUS femtosecond laser.



D. James Schumer, MD, is founder and medical director of ReVision LASIK and Cataract Surgery Center in Columbus and Mansfield, Ohio. *Cataract & Refractive Surgery Today* interviewed him about the VICTUS femtosecond laser (Bausch + Lomb).

#### What prompted you to begin using a femtosecond laser?

I'm an early adopter who embraces technology as soon as I feel it's a benefit for my patients. At an ophthalmology meeting, I saw the femtosecond laser's capabilities for making corneal incisions and very precise capsulorhexis. At the time, patterned lens fragmentation was not available, but we could see it was possible.

I have a cataract and refractive practice, and I'm first and foremost trained as a refractive surgeon. Bringing those refractive surgery toolsets to cataract surgery felt right, particularly knowing at the time that evolving IOLs were coming. It was a perfect fit that the femtosecond laser's capabilities would help us with refractive cataract surgery.

I came back from that meeting and calculated how many patients per month would need to access the femtosecond laser for us to make the payment. At the time, the answer was only 11. That was an easy decision.

## With several other commercially available femtosecond lasers to choose from, why did you choose the VICTUS platform?

I was most attracted by the first-in-the-US capability of doing both corneal and cataract work. Multiple manufacturers told me that it was very difficult to perform both with one device because the femto has to focus very superficially for corneal work and much deeper for cataract work. I wanted a femtosecond laser to help with LASIK and with cataract surgery, and the VICTUS laser really fit both needs for me, so I didn't have to have two different platforms, payments, and maintenance schedules. I think we had the tenth VICTUS laser in the United States.



"I wanted a femtosecond laser to help with LASIK and with cataract surgery, and the VICTUS laser really fit both needs for me, so I didn't have to have two different platforms, payments, and maintenance schedules."

#### How does the VICTUS laser support using Crystalens, Trulign Toric (Bausch + Lomb), and other high-technology IOLs?

I'm good at making the capsulorhexis by hand, but I'm not as good as I am with the VICTUS laser. The VICTUS laser lets me make a perfect capsulorhexis—perfectly centered, so we can treat on the lens apex and be sure that the toric or multifocal lens is centered and stable. We have the additional benefit of making very precise arcuate incisions. Also, lens fragmentation with the Stellaris Elite vision enhancement system (Bausch + Lomb) component enables me to remove the lens with less ultrasound energy and manipulation.

The VICTUS laser hardware and software upgrades just keep making the system better and better. It does edge detection of the pupil margin, the anterior capsule, and the posterior capsule. It allocates energy for the capsulorhexis across the anterior capsule. I'm very happy and comfortable with it, and it just keeps improving.

#### What are the advantages of the VICTUS laser for your refractive surgery patients?

The largest advantage is the added confidence. The excimer laser part of refractive surgery is straightforward—we've got trackers, and we basically push the button. However, it was always a little bit scary to create the flap with a mechanical microkeratome. We held our breath until we saw that that flap was perfect, without any buttonholes or irregularities. With the femtosecond laser, we watched it and built confidence over time. It became very comfortable to confidently make flaps at the precise depth and quality desired. When we're treating eyes that can see 20/20 or 20/15 with glasses or contact lenses, the last thing we want to do is harm the patient's vision. Having that confidence in our flaps is very important.

## Has the VICTUS laser changed patient flow in the OR or your practice?

Yes. We used to do the entire LASIK procedure under the excimer laser—the mechanical microkeratome, followed by the laser. Now we have two stations; patients move from the femtosecond laser to the excimer laser. The flow goes smoothly for us, and it isn't a burden for LASIK patients, who are generally young and healthy. "I'm good at making the capsulorhexis by hand, but I'm not as good as I am with the VICTUS laser. The VICTUS laser lets me make a perfect capsulorhexis—perfectly centered, so we can treat on the lens apex and be sure that the toric or multifocal lens is centered and stable."

When it comes to cataract surgery, we take a unique approach, in part because space is limited. We do the entire procedure in the VICTUS laser bed. We prep and drape the patient in the VICTUS laser bed. All the interfaces for the femtosecond portion of cataract surgery are sterile, so we can swing the patient under the femtosecond laser and do that portion of the procedure. It's a great scope, with beautiful optics and retroillumination. The patient doesn't have to move. We've put the hand control on the floor, so I can manipulate the bed's x, y, and z positions with my left foot. I think in the future, femtosecond lasers will be cataract workstations where the patient lies down and we do everything in one bed—that approach is working very well for us already.

## Does the VICTUS laser sway some patients toward premium cataract surgery?

A lot of visiting doctors come through our practice. They watch me do some femto cataracts, and then they watch me do some cataracts by hand. I ask them, "Which way do you want surgery on your eye?" Not one person has chosen surgery done by hand.

I'm not here to twist arms and talk people into this technology or premium IOLs. That's not my practice stance. What we do is educate patients about their choices. We let them ask questions, and then they choose. We can confidently back up what we're presenting to patients because we have all of the skills sets and all of the technology. That's a fun way to go about it, and we have a lot of happy patients as a result.

#### What is the clearest strategic advantage to your practice using the VICTUS laser?

Again, I'm an early adopter, and as a result, we have one of the most sophisticated eye operating rooms in the entire state. All of our technologies help our boutique practice build a reputation for embracing the latest advances to achieve the best outcomes for our patients. It's good business, and for me, it's the fun part of being a practice owner and an ophthalmologist. "I think in the future, femtosecond lasers will be cataract workstations where the patient lies down and we do everything in one bed—that approach is working very well for us already." "All of our technologies help our boutique practice build a reputation for embracing the latest advances to achieve the best outcomes for our patients. It's good business, and for me, it's the fun part of being a practice owner and an ophthalmologist."



## Has adding the VICTUS laser to your practice affected the work of your OR staff?

My staff loves doing what we do. It's all about the patients. It's all about outcomes. It's all about the happy responses we get. We make sure that even staff members who don't see patients post-operatively hear about how they've helped changed patients' lives.

We choose staff whose personalities reflect the desire for continual improvement to make the best possible experience for patients having surgery. The OR staff have to be trained, so they need to like learning. Everybody in our OR can run the VICTUS laser, the excimer laser, and Stellaris Elite vision enhancement system. They are constantly challenged and constantly learning, and the driver of all of that is patient outcomes.

## What advantages or procedures do you envision for the VICTUS laser in the future?

I'm a cornea specialist, so I'm really excited about the potential for more corneal applications with the VICTUS laser. For instance, when we do deep anterior lamellar keratoplasties and have to create a big bubble to peel away Descemet's from the back of the stroma, I think the femtosecond laser could create a channel for us deep into the stroma. We could apply an air bubble deep into the stroma to help with that procedure.

I'd also like to see the VICTUS femtosecond laser perform the incision for corneal transplant, with the flexibility of doing either a circular, oval, or star-shaped penetrating keratoplasties. If we could make that incision on the eye bank tissue and on the patient's eye, the fit would be a perfect match. Our biggest nemesis when we're doing corneal transplants is postoperative astigmatism. These patterns and techniques could help us avoid that problem and be enhanced with the femtosecond laser.

## What advice would you offer other surgeons who are considering using a femtosecond laser?

I'd say, do your homework. It has to make financial sense, and you can calculate how that will work for you, but it begins with the clinical perspective. Visit a center that's using femtosecond technology and experience its capabilities yourself. See if it fits with your practice philosophy. When I visited a practice to observe a femtosecond laser in action, I knew it would fit into the patient experience and outcomes our practice wants to deliver.

#### D. JAMES SCHUMER, MD

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# CLAREMONT EYE ASSOCIATES

## After outfitting a new surgery center, surgeons meet their clinical and business goals.



Anil M. Shivaram, MD, is a cataract and refractive surgeon at Claremont Eye Associates in Claremont, California. *Cataract & Refractive Surgery Today* interviewed him about the VICTUS femtosecond laser (Bausch + Lomb).

#### What prompted you to begin using a femtosecond laser?

We were early adopters of the VICTUS platform about 5 years ago. Patients were already asking for it, because they were under the perception that cataract surgery involved a laser as the standard of care. We didn't want to begin the conversation by deflating that expectation.

At the time, there were still big question marks hanging over the femtosecond laser. The real driving force behind adopting the technology is the precision, and it delivers.

The VICTUS laser also gave us a chance to have a cataract/refractive machine that does both the femto side of cataract surgery and LASIK flaps. That double-duty capability made the decision a no-brainer.

## With several other commercially available femtosecond lasers to choose from, why did you choose the VICTUS platform?

When we started our own surgery center, we wanted to bring in the next-generation laser and phaco technologies, which we didn't have in our former hospital setting. The VICTUS platform supports robust cornea applications, and we knew it would be beneficial for cataract surgery, and LASIK flap creation. It has an excellent live swept-source OCT imaging modality with a level of clarity that we didn't see in other machines. Patient flow was a factor as well. We knew that the VICTUS' integrated bed would be an advantage.

#### How was your initial experience with the VICTUS laser? Can you share any lessons learned in first using the system?

We just bought it and started using it. I think the skill set and techniques are very much the same as we use for other types of femtosecond lasers. All machines have a learning curve, but surgeons who are familiar with corneal refractive surgery have an easy time getting used to the VICTUS platform.

In the first few months of using the VICTUS laser, its efficiency was excellent. The capsulotomy and fragmentation are done in a

"The VICTUS also gave us a chance to have a cataract/ refractive machine that does both the femto side of cataract surgery and LASIK flaps. That double-duty capability made the decision a no-brainer."

relatively short time. But more than that, it was amazing to visualize all those things happening. The quality of visualization with the VICTUS laser is on another level, and I think that the prevalence of lasers and the integrated OCT functionality will help us improve outcomes for our patients.

#### How does the VICTUS laser support using multifocal, toric, and accommodating IOLs such as Crystalens, Trulign, and enVista (Bausch + Lomb)?

The VICTUS laser offers an added level of precision. I can customize a capsulotomy to maximize the lifelong utility of the implant. I think over time, we will see more data showing that this makes a huge difference in our ability to effectively predict where the lens will end up. Having a perfectly centered capsulotomy with the femtosecond laser goes a long way to ensure that the hinges are covered and the optic-haptic interaction in the flexing IOL is maximized.

## What value does the VICTUS laser bring to refractive cataract surgery?

Ultimately, the value is precision. Patients having one-time refractive cataract surgery get a level of precision that is often not attainable by hand. It's not just the reliability of the capsulotomy, although that's a huge part of it, but precision in other areas as well. In my experience with the VICTUS laser, we use a small "The quality of visualization with the VICTUS is on another level, and I think that the prevalence of lasers and the integrated OCT functionality will help us improve outcomes for our patients."

amount of energy to remove the nucleus.

With the VICTUS laser, I make a very stable and true three-plane incision, which I often don't need to hydrate. Wound reconstruction happens very nicely at the end of the case.

## What outcomes do you see using the VICTUS platform for cataract patients?

In the old days, barely 50% of cataract surgeries were within a half diopter of the intended target. Now, with the laser, aberrometry, better formulas, and other advances, we're consistently in the 90%-plus range. That's a great thing. Anytime we can tighten that outcome to get LASIK-like results for our cataract patients, we'll be happy and our patients will be very happy as well.

#### Has the VICTUS laser changed patient flow in the OR or your practice?

Yes, we definitely move patients around less than we would with other femtosecond platforms. We keep the VICTUS laser in our OR and do all our cases on its integrated bed, regardless of whether we're using the femtosecond laser. The patient comes in, we use the laser, and then the bed swings out about 70% and we prep and drape the patient and finish the case right there.

Not only does that save time, but it also improves the patient experience and avoids the gap time between femto and the procedure. We can perform surgery very efficiently, and our center gets patients in and out very smoothly.

## Do patients understand the difference between cataract surgery with or without the VICTUS laser?

Prior to cataract surgery, most patients are already mentally primed to the idea of having surgery with the laser. When they come in, we use a few tools to help them understand their options. For example, an iPad-based check-in application shows patients videos of their three options for surgery: 1) standard monofocal lens surgery with a manual incision, followed by glasses for distance and near, which will enable them to see clearly; 2) using the VICTUS platform to make femtosecond laser incisions, arcuate incisions, and including intraoperative aberrometry as well; and 3) VICTUS laser with either an accommodative IOL or presbyopia-correcting IOL.

## What is the clearest strategic advantage to your practice from using the VICTUS laser?

Initially, we thought we would offer something that other practices in our area did not, and then they would get femtosecond lasers and the advantage would evaporate. Five years later, we are still the only surgeons in our area with a femtosecond laser in heavy use. The VICTUS laser has driven a lot of business through our practice, helping us become well known in our area as a hightech group that provides a premium IOL experience. In addition, we now offer open access to the laser to outside surgeons, so five or six other doctors are currently using it.

#### Does the VICTUS laser influence the work of your staff?

We cross-train our staff in all of our equipment. Bausch + Lomb's training support team made sure our staff knew how to get the VICTUS laser up and running in the morning and how to work through cases. When we do femto cases, typically a technician assists me with the VICTUS laser for the femto portion while my scrub technician gets the room ready for the cataract portion. Our process is pretty streamlined at this point, and the software upgrades are continually making the system fast and intuitive.

#### What advantages or procedures do you envision for the VICTUS laser in the future?

I see several things in the future. One, because the VICTUS laser's OCT component is so robust and gives us so much data, I think we'll see people starting to use that data to change how they perform surgery. For example, surgeons will look at OCT measurements to determine the lens meridian and fine-tune the IOL choice and location in the OR.

It's possible that in the future, when we dock a patient in the VICTUS laser, the scan will recognize the type of cataract and start off the surgeon with standard presets. It could also talk to the Stellaris Elite vision enhancement system (Bausch + Lomb) and tell it to tweak the settings based on what the scan shows. That sort of intelligent communication between machines may be on the horizon.

## What advice would you offer other surgeons who are considering using a femtosecond laser?

I think most ophthalmologists are very technology-oriented. We're kind of tech geeks at heart. Any technology that boosts outcomes gets our attention. That's why we began using femto in our practice. It has certainly helped us deliver great patient outcomes, which is why we feel very comfortable promoting the laser's advantages for patients.

There have been varying levels of adoption across the profession to date, but I think a wide variety of cataract and refractive practices will use the femtosecond laser in their own practices and in shared, open-access centers.

Surgeons who are thinking of purchasing a femtosecond laser need to figure out how they want the machine to function in their

#### **BUILD YOUR PRACTICE WITH VICTUS LASER**

"The VICTUS laser has driven a lot of business through our practice, helping us become well known in our area as a high-tech group that provides a premium IOL experience. In addition, we now offer open access to the laser to outside surgeons, so five or six other doctors are currently using it." "The VICTUS is also a straightforward laser for surgeons to learn if surgeons have never used femto before. The docking procedure is intuitive. It's relatively straightforward to go through all the steps of the procedure and talk to the patient about what you're doing."



environment. The platforms are different enough to give you some factors to evaluate in terms of performance and patient flow.

If the VICTUS laser looks like a good option to someone, I'd certainly recommend it. We've been extremely happy. The corneal applications are great. The fragmentation patterns and capsulotomies have been problem-free. In my experience, the quality of the OCT is a cut above everyone else, as is the speed of the laser.

The VICTUS laser is also a straightforward laser for surgeons to learn if surgeons have never used femto before. The docking procedure is intuitive. It's relatively straightforward to go through all the steps of the procedure and talk to the patient about what you're doing. The VICTUS laser has an excellent quality side scope, so the visualization is great right from the beginning. Having the continuity of excellent corneal applications, imaging, fragmentation, flaps, and other functions makes the VICTUS laser a purchase that I enjoy using, and it has made our practice much more successful.



## What advantages or procedures do you envision for the VICTUS laser in the future?

The VICTUS laser software has been continually upgraded to make the VICTUS laser fast, as well as intuitive and user friendly. The updates have also given us additional cutting patterns, wound construction, and corneal applications as they've been developed over the course of the last few years.

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- = Financial disclosure: Consultant (Bausch + Lomb Surgical)

#### INDICATIONS FOR USE

The VICTUS® femtosecond laser platform is indicated for use for:

- The creation of a corneal flap in patients undergoing LASIK surgery or other treatment requiring initial lamellar resection of the cornea
- For anterior capsulotomy during cataract surgery
- The creations of cuts / incisions in the cornea of patients undergoing cataract surgery or other ophthalmic treatment requiring cuts / incisions in the cornea
- Laser-assisted lens fragmentation of nuclear cataracts during cataract surgery, not for posterior subcapsular (PSC) and cortical cataracts

#### SAFETY INFORMATION

The VICTUS® femtosecond laser platform emits an invisible class 3B laser beam that may injure the retina of the eyes or burn the skin. Never look directly into the laser source.

#### Misuse of the laser system may lead to dangerous situations and severe injuries. See the Operator Manual for detailed directions, proper use, and full risk and safety information.

#### Contraindications

General contraindications for using the VICTUS® femtosecond laser platform include, but are not limited to, the following: pediatric surgery, hypotony or glaucoma, retinal disorders, rheumatic diseases, occlusion of retinal vessels, pellucid marginal degeneration, existing corneal implant, heavy vascularization of the ocular tissue, epilepsy. Conditions that would cause inadequate clearance between the intended capsulotomy cut and the corneal endothelium. Valid exclusion criteria that complicate the docking procedure. Subjects with corneal disease or pathology that precludes applanation of the cornea or transmission of laser wavelength or distortion of laser light, who show signs of suspected or diagnosed keratoconus, who are pregnant or nursing, who are blind in the fellow eye, patients with any cornea disease in the eye that requires treatment (recurrent corneal erosion, severe basement membrane disease), difference of more than 5D between minimum and maximum K-values of the central 3mm zone on a keratometric map of the cornea, or maximum K-value of more than 60D, or minimum K-value of less than 37D

#### Potential Complications

Potential general complications resulting from VICTUS procedures include, but are not limited to corneal abrasion or defect, pain, bleeding, inflammation, and elevated intraocular pressure.

Please see the Operator Manual for detailed potential procedure-specific complications and contraindications for anterior capsulotomy, corneal cuts / incisions, flaps used in LASIK, and lens fragmentation. Potential complications are not limited to those included in the User Manual.

#### CAUTION: Federal (U.S.) Law restricts this device to sale, by or on the order of a physician.

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Femtosecond Laser Platform

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