

Novo oculi

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March 29, 2001

Date

Daniel R. Burnett, Founder, NovOculi, Inc.

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1.0 Executive Summary

The Company

NovOculi, Inc. ("NovOculi") is a start-up company that has designed and plans to develop and market ophthalmological surgical techniques and tools. NovOculi's principals have had extensive experience with refractive correction techniques (both laser and non-laser based). Building on this experience, the principals have developed a unique method of **incisionless refractive correction dubbed NICS (Non-Invasive Corneal Sculpting)**.

Current refractive techniques, including LASIK, PRK and Intacs, all require destruction of at least a portion of the protective epithelial layer overlying the cornea of the eye and are accompanied by complications resulting from this loss of protection. The principals have developed a method of performing effective refractive correction without the troublesome destruction of epithelium.

Market Potential

The laser refractive surgery industry is now nearly a \$3 billion industry per year and is growing at a double-digit rate (*Ophthalmology Times*, Vol. 26, Issue 7, p1, April 1, 2001). It is estimated that approximately 54% of the U.S. population (~162 million) has refractive errors (imperfect vision), and approximately 90% of that group is eligible for correction using current techniques or those on the near horizon (*Federal Air Surgeon's Medical Bulletin* - Winter 1998). In contrast, only 900,000 Americans have had LASIK, the most popular laser correction technique, by the start of the year 2000. This represents only 0.7% of the total current market, leaving the other 99.3% untapped (*Bye-Bye Glasses, EyeCare Business Online*, September 2000). Furthermore, the demand for laser refractive surgery in the U.S. is nearly doubling annually (*Bye-Bye Glasses, EyeCare Business Online*, September 2000).

NovOculi has contacted leading ophthalmological medical institutions in the U.S., seven of which have expressed interest in participating in collaborative research and, given encouraging research results, purchasing the NICS system. Institutions expressing interest include: Johns Hopkins, Emory, Harvard, Stanford, Oregon Health Sciences, and Duke Universities as well as the University of California at San Francisco.

NovOculi's principals have also conducted a local, preliminary market survey and the results support the belief that consumers are willing to pay a premium for a refractive correction procedure with a decreased risk of complications.

Technology

The principals developed a revolutionary technique, NICS, and two novel devices that are used to accomplish incisionless refractive correction. Over 90% of all complications of current laser refraction surgery are caused by or related to difficulties associated with the incision and the subsequent healing process, virtually all of which could be avoided through use of the NICS procedure.

The NICS technique places a targeting substance (chromophore) inside the cornea without making an incision. Once the chromophore is strategically placed in the accurate layer of the cornea, a laser tuned to the wavelength of the chromophore is used to create a localized burst of energy around the chromophore. This energy production results in fragmentation and subsequent reabsorption of the corneal collagen in proximity to the excited chromophore. By exciting the chromophore in only certain areas, the surgeon can selectively change the thickness of the cornea and, thereby, alter its refractive properties. After the cornea has been sculpted, the chromophore is removed, leaving the patient with improved vision without ever disrupting the protective surface of the eye.

Strategy

NovOculi will initially market its technology to ophthalmologists performing corrective eye surgery and, as the technology is adopted, to patient-consumers. Once research data and publicity are generated, NovOculi's sales force will encourage ophthalmologists and medical centers to make the initial investment in the laser and equipment required for the procedure. NovOculi expects those ophthalmologists using NICS will be able to charge a premium for providing patients with access to this superior medical technology.

Only NovOculi is uniquely positioned to take advantage of this market opportunity due to its proprietary position. **A provisional patent that provides protection for both the technique and the two novel devices involved in the NICS protocol has been filed in the U.S. by a patent agent specializing in biomedical devices.**

Regulatory Issues

As with its predecessor LASIK, NovOculi's product will not need to wait for FDA approval prior to widespread use. LASIK was performed on almost 900,000 patients without approval by the FDA as of December 1999 (Current Trends in Refractive Eye Surgery, *128th Annual Meeting of APHA*).

This was made possible by the fact that the "FDA does not approve procedures, only the equipment used in them" (*Eye centers set their sights on LASIK surgery growth*, Houston Business Journal, July 16, 1999) and the components of the procedure had already been approved by the FDA for medical use.

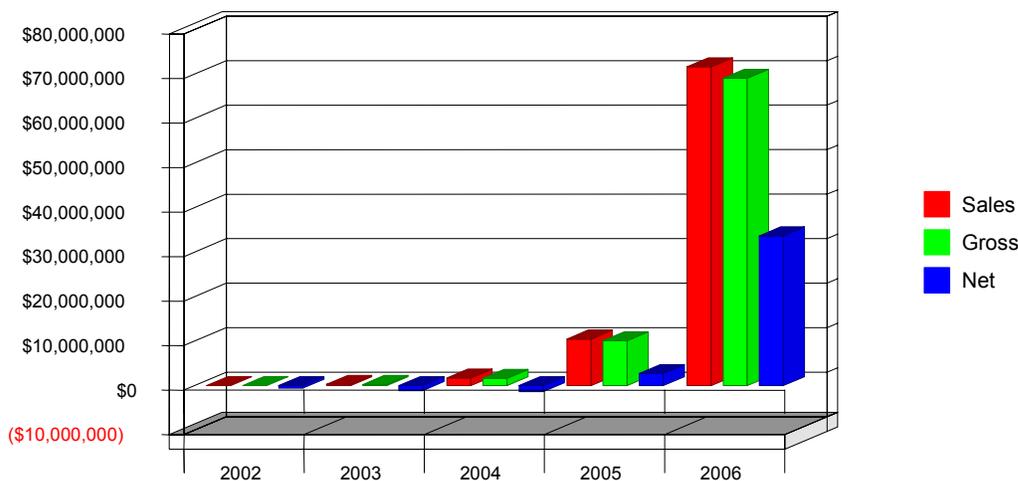
Management

NovOculi's management team consists of three MBA's, a Chemistry PhD, and a medical resident in the field of ophthalmology. Furthermore, a serial entrepreneur and technology development expert, Jim Sheldon, JD, the chairman of Stanford ophthalmology, Mark Blumenkranz, MD, Intellectual Property advisor, Trygve Laegrid, PhD, and FDA specialist, Jeffrey Porter, are providing consultation.

The principals firmly believe in, and are heavily invested in, the development and research of the proposed products, which will satisfy the market demand for a safer, less complicated laser refraction correction technique.

Financial Summary

Based on detailed financial projections, if NovOculi receives \$1.5 million in funding, **it anticipates profitable operations by year four with a net profit of \$2.7 million.** International populations were not included in the financial analysis, as expansion into these regions is not anticipated until late in the business plan. The following chart summarizes the projected financial information based on revenues of \$240 per eye corrected.



2.0 Company Summary

NovOculi, Inc. ("NovOculi") will research and develop biomedical devices to aid in the treatment of a variety of ophthalmologic diseases and conditions. Initially, its customers will be those patient-consumers that desire refractive correction but do not wish to risk the multitude of complications associated with the current procedure, LASIK. NovOculi is currently developing its patent-pending technology to final product and approval stage.

2.1 Mission

NovOculi intends to provide the field of ophthalmology with innovative technology for the treatment of ophthalmologic diseases and conditions.

2.2 Company Ownership

NovOculi will be incorporated in North Carolina. It will have 30,000,000 authorized ordinary shares and 2,000,000 preferred shares. The rights and privileges of these shares will be stated in NovOculi's Articles of Incorporation. The proposed share capital of NovOculi *prior to capital raising*:

<u>Owner</u>	<u>Percentage of Shares Owned</u>
Daniel Burnett	60%
Joseph Hewitt	10%
Andy Rubinson	10%
Loy Hong Chia	10%
Joseph Walker	10%

Management has contributed a total of \$250,000 to be used in accordance with the business plan. Additional working capital will be raised in two tranches.

Tranche 1 will be conducted in January of Year 1 and will raise \$1,500,000 for use in accordance with the business plan. Tranche 2 will raise \$3,000,000 in Year 3 of the business plan, although this number is subject to change with the influx of research grants. NovOculi will apply for research grants totaling \$1,750,000 by June 2001, and it is deemed by the principal investigators that the bulk of these funds will be secured.

3.0 Technology

NovOculi's technology is an improvement from the common laser refractive surgery procedure LASIK. In order to fully explain NovOculi's technology, it is first necessary to develop an understanding of its predecessors in the laser refractive surgery industry. After this has been accomplished, NovOculi's technology will be described and future products will be discussed.

3.1 Background

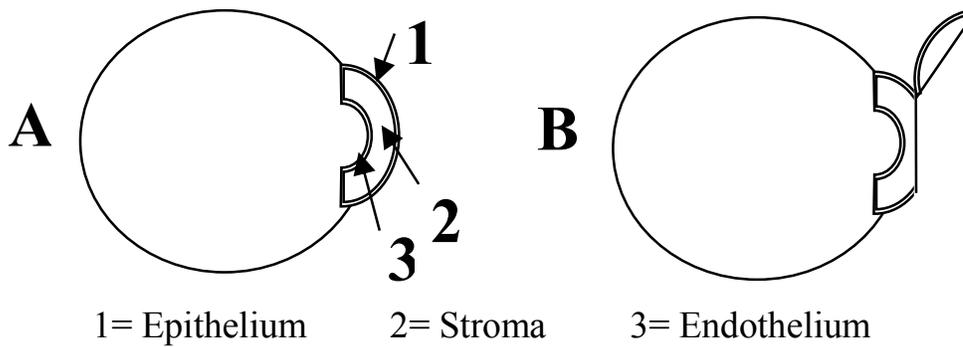
Refractive correction, in all of its forms, is accomplished through alteration of the contours of the normal cornea (Fig 1A). This alteration is accomplished by destroying either the stroma (middle layer labeled **2** in Fig. 1) or the epithelium (outer, protective layer labeled **1** in Fig. 1) of the cornea and, in some cases, both. While the stroma heals well and usually resorbs without complications, the epithelium frequently heals poorly, which results in complications due to the subsequent loss of the protective barrier.

Early procedures, such as PRK, used lasers to change the contour of the cornea by destroying both the epithelium

and the stroma through simply blasting the cornea straight on without any preparation. This procedure was difficult for patients as the healing took weeks and the destruction of the epithelium left the eye permanently susceptible to infections and ulcers.

LASIK was an improvement over PRK due to the fact that most of the protective layer of epithelium was folded back and only the stroma of the cornea was destroyed. In order to fold the epithelium back, though, a large, circular incision in the cornea (Fig 1B) was necessary. While LASIK advanced technology in that the epithelium was, for the most part, not destroyed as in PRK, the incision itself was found to cause multiple problems such as night blindness, loss of sight, permanent sensation of irritation, etc.

Figure 1- Cross-Section of Normal Eye (A) and LASIK Incision (B)



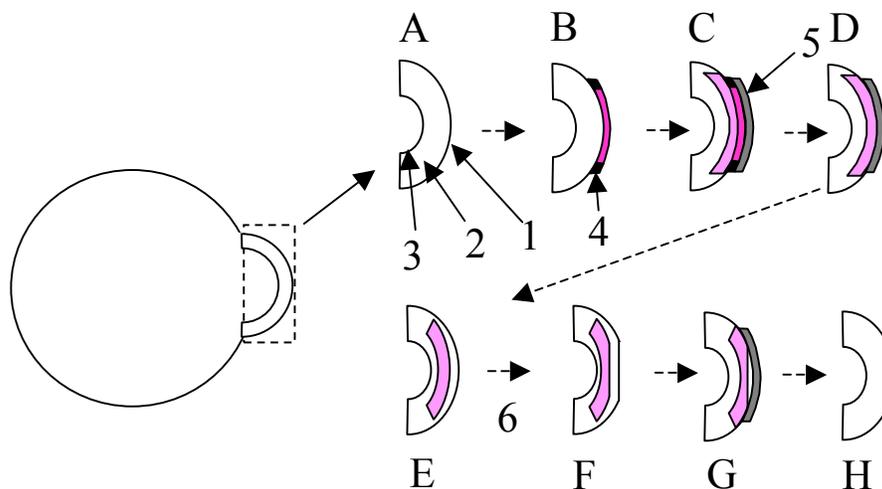
3.2 Technology Description

In an effort to avoid the complications associated with the corneal epithelial incision utilized in laser refractive surgery procedures, and the subsequent loss of this protective barrier, NovOculi's principals designed NICS (Non-Invasive Corneal Sculpting). NICS allows for effective laser refractive correction without the troublesome corneal epithelial incision.

NovOculi accomplishes this laser refractive correction through the use of its proprietary technology as follows (see **Figure 2,A-H**):

- **A-B)** The Chromophore-Impregnated Lens (“CIL” labeled 4 in Figure 2) is placed over the cornea;
- **C-D)** The Chromophore Delivery Device (“CDD” labeled 5 in Figure 2) is placed over the CIL and activated;
- **E-F)** Once the chromophore is appropriately placed in the cornea, the chromophore is stimulated with an excitatory wavelength (labeled 6 in Figure 2) using a corneal sculpting protocol, thereby altering the corneal contour;
- **G)** The chromophore is removed from the cornea through the use of the CDD; and
- **H)** The sculpted region resorbs over two to three weeks leaving a perfectly sculpted cornea without the need for an incision.

Figure 2- Non-Invasive Corneal Sculpting Technique



While NovOculi's technology is novel, the principles on which it is founded are well established. The targeted destruction of certain cells through delivery, then stimulation, of a photoactive substance has been accomplished elsewhere in the human body in the treatment of cancer and has been termed Photodynamic Therapy ("Targeted intracellular delivery of photosensitizers to enhance photodynamic efficiency," *Immunology & Cell Biology*, August 2000). Furthermore, in designing the CDD, NovOculi's principals creatively adapted a technology commonly used in other fields of medicine. Thus, the principles on which NovOculi's technology rests have been proven in related studies, yet never applied in the laser refractive surgery until now with the development of NICS.

NovOculi is currently in the proof of principle and in-vitro bench work research stage. Testing was delayed until the provisional patent was filed in December 2000, in order to ensure that no university or corporation would have a claim on NovOculi's intellectual property.

3.3 Proprietary Position

The subject matter of NovOculi's technology is currently protected by Provisional Patent No. 60/243,031. **Neither Stanford University nor Duke University have any claim on NovOculi's technology since none of the technology was developed using the facilities of either university and the developers were not employed by either university prior to the filing of their provisional patent.** NovOculi's intellectual property is currently protected with respect to:

- The overall Non-Invasive Corneal Sculpting technique (NICS);
- The Chromophore Delivery Device (CDD); and
- The Chromophore-Impregnated Lens (CIL).

Due to the novelty of NovOculi's technology, it is our legal consultant's opinion that the patent provides significant, enforceable protection. Difficulty will arise for any competitor attempting to emulate NovOculi's technology because NovOculi's patent position is well founded and enforceable. In particular, in order to sculpt the cornea precisely without an incision, it is necessary to employ a targeting chemical or compound, a process which is currently intellectual property of NovOculi.

3.4 Future Products

Future products of NovOculi will be medical devices in the field of ophthalmology. One of the principals, Daniel Burnett, and one of the consultants, Dr. Mark Blumenkranz, are intimately involved in the field of ophthalmology and have experience in the R&D of biomedical devices.

Although NICS technology is NovOculi's focus in the near-term, NovOculi hopes to leverage its core competency in ophthalmology through future R&D efforts in this field. One example of a device currently in the R&D pipeline is a Drug-Impregnated Lens in which the drug can be rapidly and effectively administered through the use of the proprietary technology found in the CDD.

4.0 Market

The market for NovOculi's products is comprised of patient-consumers with refractive errors who desire to have sharper vision without glasses or contacts. The potential market is similar to that for LASIK. However, the markets are not identical in that we expect there to be greater acceptance of a non-invasive refractive protocol versus the complication-ridden LASIK. NovOculi's principals have also conducted a local, preliminary market survey and the results support the belief that consumers are willing to pay a premium for a refractive correction procedure with a decreased risk of complications (See Appendix).

A sizable potential market base exists for the laser refractive surgery industry. It is estimated that approximately 54% of the U.S. population (~162 million) has refractive errors (imperfect vision), and 90% of that group is eligible for correction using current techniques or those on the near horizon (*Federal Air Surgeon's Medical Bulletin* - Winter 1998). In contrast, only 900,000 Americans have had LASIK (the most popular laser correction technique) by the start of the year 2000. This represents only 0.6% of the total current market, leaving the other 99.4% untapped (Bye-Bye Glasses, *EyeCare Business Online*, September 2000). Furthermore, the demand for laser refractive surgery is approximately doubling annually with 575,000 and 1,200,000 LASIK procedures performed in 1999 and 2000, respectively (Bye-Bye Glasses, *EyeCare Business Online*, September 2000).

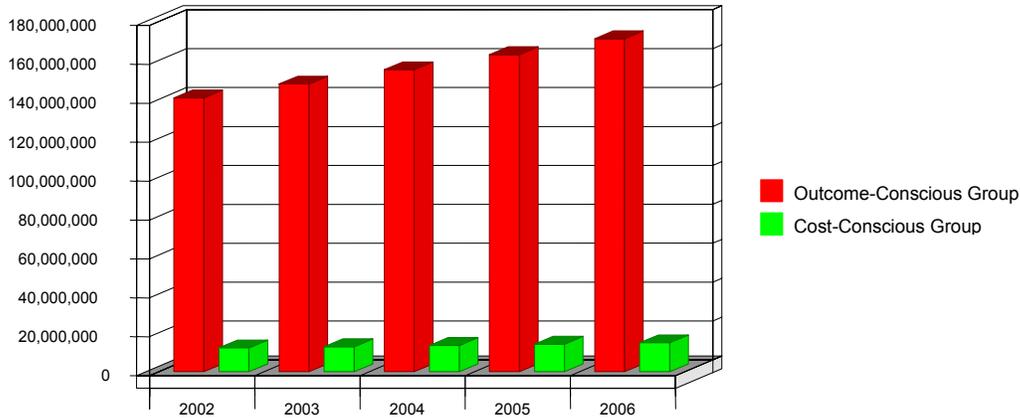
NovOculi has contacted leading ophthalmological medical institutions in the U.S., seven of which have expressed interest in participating in collaborative research and, given encouraging research results, purchasing the system. Institutions expressing interest include: John Hopkins, Harvard, Stanford, Emory, Oregon Health Sciences, and Duke Universities as well as the University of California at San Francisco.

4.1 Market Segmentation

Patient-consumers seeking permanent refractive correction typically fall into two different groups with respect to their predominant concerns related to the procedure: Outcome-Conscious Patients (Outcome Group) and Cost-Conscious Patients (Cost Group). The Outcome Group constitutes the majority of the refractive surgery market (46 out of 50 surveyed) and its members are willing to pay a premium (on average between \$500 and \$1000) in order to achieve a significant decrease in the rate of complications (defined as 50% less) with the procedure. The patients in the Cost Group typically felt that the decrease in rate of complications was not worth the extra expenditure.

The growth on the chart below assumes a 5% population growth. Values were obtained from *EyeCare Business Online*, September 2000.

Market Analysis



Outcome Group

The majority of the population, the Outcome Group seeks the highest quality procedure with the most skilled surgeon, typically regardless of price. As such, NovOculi will target the Outcome Group because they will pay NovOculi's premium to access a superior ophthalmologic procedure.

Cost Group

A fraction of the total refractive error patient-consumer population, the members of the Cost Group fly to Canada or Mexico to save money on laser vision correction procedure. NovOculi will not target the Cost Group initially because they are interested less in the superior technology and surgical skill than in the cost of the procedure.

4.2 Industry Analysis

The surgical ophthalmology industry is growing rapidly and competitors are engaging in price wars. The average consumer now pays approximately \$1650 per eye for LASIK as compared to more than \$2500 per eye less than two years ago ("Laser Eye Centers Wage an All-Out Price War," *New York Times*, December 9, 2000). As a result of the price wars, the valuation of existing surgical ophthalmology companies has plummeted. Despite their continued growth in earnings, most companies are currently experiencing 52-week lows in share prices.

We predict that NovOculi will be affected by industry trends, but to a much lesser degree than LASIK providers. Expected benefits of NICS should enable ophthalmologists who use of NovOculi's technology to charge a premium. Also, due to its proprietary position, NovOculi is in a position to prevent the commoditization of NICS and, thereby, sustain economic profits at least for the duration of NovOculi's patent.

As with virtually all medical technologies, even partial reimbursement by insurance companies will encourage patients to decide to have the procedure performed. Presently, two large insurance groups have begun partially reimbursing for LASIK. We hope that insurers will begin reimbursing for NICS and intend to lobby for such coverage. But even without reimbursement, we predict that patients will embrace NICS as much as they embraced LASIK prior to insurance company reimbursement.

4.2.1 Industry Participants

Most LASIK is currently being performed in urban and suburban settings, with very few lasers being stationed in more rural settings. The major industry participants include the following:

- Hospitals - 10%
- Large Corporate Chains - 48%
- Independent Ophthalmologists - 42%

(Laser Eye Centers Wage an All-Out Price War", *New York Times*, from December 9th, 2000)

The major corporate LASIK chains are: Laser Vision Centers, TLC Laser Eye Centers and LCA Vision, each of which will be discussed in greater detail in section 5. Each of these larger competitors is experimenting with mobile laser units in order to expand their patient base.

The 3,400 independent ophthalmologists are tending to unite in order to compete with the large corporate LASIK chains. For example, fifteen independent doctors united to form an agreement to receive patients channeled from North Carolina Blue Cross/Blue Shield in a program called Blue Optic. South Carolina Blue Cross/Blue Shield has also struck a similar deal and more are on the way (The CLASIK Report, January 31, 2000).

4.2.2 Purchasing and Distribution Patterns

The distribution pattern for the laser industry involves high-end sales with excellent manufacturer-technical support. The lasers typically cost approximately one million dollars and are large investments for the purchasing institutions. No distributor is necessary for these lasers because the internal sales staff and distribution mechanisms suffice.

The microkeratomes (blades for slicing the epithelial flap) involved in LASIK are also sold directly from the manufacturer to the LASIK provider. With the microkeratomes, though, the small, tightly knit medical device distribution channels are beginning to play a role. For NovOculi, these medical device distributors will play a key role due to the fact that the Chromophore-Impregnated Lens (CIL) involved in NICS is single-use and will require frequent purchasing and delivery.

NovOculi will develop relationships with microkeratomes distributors in order to build on their well-established distribution infrastructure. In utilizing these distribution channels, NovOculi expects to pay a percentage of total revenues collected through the channel and an estimate of 4% has been used for the purposes of financial analysis.

As with most significant investments in medical technology, adoption of the NICS procedure and purchase of NovOculi's technology will require an executive-level decision at the purchasing institution. While it may be possible to decrease the cost of switching by retrofitting existing lasers, it will still be necessary to justify this expense. In order to accomplish this justification, NovOculi must first prove the effectiveness and increased safety of NICS. Once this has been established, and marketing efforts begin to take effect, demand will be generated among ophthalmologists and patients, and institutions and practices will consider investing in NICS.

Typically, ophthalmology departments are held financially accountable and, if they decide to purchase technology, the decision is reviewed by the hospital administration. If the department is profitable, the decision is rarely overturned. Therefore, the most important market to consider in targeting sales will be ophthalmology departments. NovOculi's management recognizes that decision-making processes vary at different institutions and so the sales team will consider each institution individually.

5.0 Competition

Competition in the field of refractive correction, both permanent and temporary, has been escalating. Not only are glasses, contact lenses, PRK, LASIK, Intacs and other technologies competing with each other, but competitive forces within these arenas are becoming fierce as well. As mentioned early, LASIK providers are experiencing price wars,

which are cutting into profit margins.

NovOculi will rely on the superiority of its technology in order to thrive in this competitive market. Based on management's research, NovOculi's is the only technology in the field of refractive surgery that provides permanent correction of significant refractive errors without making any complication-ridden incisions into the cornea. This competitive advantage should help NovOculi navigate these competitive waters and capture a large portion of the refractive surgery market.

5.1 Competitive Advantage

NICS has significant advantages over existing technologies. As was explained previously, current procedures all require destruction of a portion of the epithelium of the cornea. This destruction places the eye in danger of multiple complications, the overall rate of which is ~10%. Following is a list of frequent and infrequent complications associated with the corneal epithelial incision in LASIK (I Know Why Refractive Surgeons Wear Glasses-Complications Summary and Discussion, 11/10/98, <http://www-psy.ucsd.edu/~mm/eyeknowwhy/complica.htm>).

Common Complications- (greater than 5% of the patient population)

- Pain (possibly chronic)
- Photophobia (fear of light as a result of ultra sensitivity)
- Induced Irregular Astigmatism (corneal flap wrinkling)
- Corneal Scarring
- Epithelial Ingrowth (extension of scarring in cornea)
- Tearing / Excess Mucous / Dry Eye
- Chronic Headaches

Less Common Complications- (less than 5% of the patient population)

- Corneal Epithelial Flap Dislocation
- Corneal Rupture
- Complete Blindness

These complications are associated with the corneal epithelial incision and its subsequent post-operative healing. NovOculi's competitive advantage arises from the proprietary technology associated with the NICS procedure, which provides refractive correction without the need for the corneal epithelial incision.

5.2 Competitive Technology

Competition in the refractive correction arena is expected from three main sources: external aids, existing laser refractive surgery, and alternative refractive correction procedures. A potential future source of competition may arise from emerging technologies as well, most of which are focused on correction of vision changes associated with aging.

External Aids

Contact lenses and glasses have been around for centuries. The fact that LASIK has become so popular, with demand doubling annually despite its complications, displays the fact that many patients who were once content with external aids now desire permanent refractive correction.

LASIK and Other Laser Refractive Surgeries

Initially the largest source of competition will be from the LASIK industry, consisting of both LASIK providers

and LASIK equipment manufacturers. The competition NovOculi's technology faces is significant since many institutions have already purchased the excimer lasers required for LASIK, a hefty investment that creates lock-in to the LASIK procedure. Once the superiority of NovOculi's procedure is known, though, laser refractive surgery centers will be pressured to invest in NICS by both ophthalmologists performing the procedure and patients desiring the procedure.

Another competing technology worth mentioning is the newly developed technique employing femtolasers (high-frequency wavelength lasers). This technology also was developed to correct refractive errors without a corneal epithelial incision by using multiple lasers focused on a single position at which their destructive effects would be additive. Recent studies, though, have found multiple, unavoidable technical complications, including formation of gas, debris and cauterized tissue at the site of cellular destruction. It is highly unlikely that this technology will be able to overcome these hurdles and accomplish incisionless refraction without the use of some form of dye or chemical to target the selected tissues, a method that is currently intellectual property of NovOculi.

Alternative Refractive Correction Procedures

In the U.S., the most popular non-laser surgical technique in the industry is Intacs. Intacs are implanted into the stroma of the cornea where they bend the overall curvature to the desired angle so that the refractive error is corrected indefinitely, but reversibly. This procedure, as well as fully implantable contact lenses, has the added benefit of being reversible, but the disadvantage of still requiring a significant incision in the cornea with disruption of the stroma. Also, the procedure can only be performed on those with mild near-sightedness, comprising only 20% of the existing market. Despite these disadvantages, this alternative is gaining a niche in the market and will be a source of competition.

Emerging Technologies

The most recent emerging technologies are focused on the treatment of presbyopia (vision changes associated with age). In this arena, three new potential competitors, SurgiLight, Inc., Presby Corporation and Sunrise Technologies International, Inc., have begun testing new technologies that may provide alternative methods of refractive correction in the future.

SurgiLight has recently developed a technique employing an infrared laser to correct presbyopia and Presby has developed a scleral expansion band (SEB), which is implanted below the surface of the sclera (or white part of the eye), outside the corneal area. Presby's procedure is performed under local anesthesia, and requires approximately 30 minutes.

Sunrise has entered the market as well, with a thermal laser that corrects mild farsightedness, called the Hyperion LTK Laser System. The procedure involves heating the collagen in the periphery of the cornea, allowing for shrinkage to steepen the curvature of the cornea. This procedure is known as laser thermal keratoplasty (LTK), and only requires three seconds for each eye, with no instrument coming in contact with the cornea. However, this procedure has the following severe limitations: patients must have +0.75 to +2.50 diopters of refractive error with less than or +/- 0.75 diopters of astigmatism, *and* patients must also be over 40 years of age with a six-month record of refractive stability—resulting in a small overall market.

None of these companies are expected to compete with NovOculi in the near future due to their distinct focus on the presbyopia market. It is possible, though, that as their technologies mature, the companies will enter additional markets in which they will compete directly with NovOculi.

5.3 Main Competitors

The competitors included in the table below are comparable, as NovOculi is poised to enter into the target markets of these companies. The market share prices for the LASIK providers and the LASIK equipment manufacturers quoted are current as of March 29, 2001. Based on current market conditions, NovOculi will be valued at a Price to Earnings ratio of between 8.90 to 31.40 times. The share prices of NovOculi's competitors are currently trading close to their 52-week lows due largely to market consolidation on both the Dow Jones and Nasdaq. Several analysts have issued

favorable opinions for the long-term prospects of the biotech industry.

NovOculi's competitors can be divided into two categories, those competing within the field of laser refractive surgery and those with alternate refractive correction technology.

Laser Refractive Surgery Competitors

Competition will arise from both LASIK laser manufacturers and LASIK providers. Amongst these competitors, though, lies the possibility for the formation of strong, strategic alliances in both arenas.

Partnerships are currently being formed among LASIK eyecare centers and laser equipment manufacturers (i.e. TLC Laser Eye Centers and VISX) to provide increasingly cost-effective refractive surgery to potential patients. With the increasing competition looming from other laser equipment manufacturers such as Summit Technology and Bausch & Lomb, these companies seek to obtain superior technology, superior market share and support networks to proliferate their products in the market.

LASIK Laser Manufacturers

The largest of the LASIK laser manufacturers is VISX (EYE). Down from its peak valuation of \$100/share in July of 1999, VISX now trades at \$16.59 with a market cap of \$955 million and a P/E ratio of 30.2. VISX is a good candidate for a potential ally in the development of a laser for NICS.

LASIK Providers

One of the largest commercial chains providing LASIK is TLC Laser Eye Centers ("TLCV"). Recently, TLCV has experienced large devaluations associated with the increasingly competitive price wars in the LASIK industry. Due to these price wars, TLCV has experienced *negative* 100% income growth. The fact that TLCV has rapidly eroding margins associated with significant devaluations makes TLCV an ideal target for a strategic alliance. Currently, TLCV's stock trades at approximately \$6.81 with a market cap of \$258.7 million.

<u>Competitor</u>	<u>Mkt Cap (\$M)</u>	<u>EPS</u>	<u>P/E</u>	<u>52-wk range (\$)</u>	<u>Mkt Price (\$)</u>
VISX (EYE)	955	0.55	30.20	8.75 - 36.62	16.59
Laser Vision Centers (LVCI)	110.4	0.16	27.20	1.12 - 11	4.34
TLC Laser Eye Centers (TLCV)	258.7	-1.24	n.a.	1.12 -15.68	6.81
LCA Vision (LCAV)	110.3	-0.05	n.a.	1 - 6.62	2.34
Coherent Inc. (COHR)	943.3	2.72	12.7	25 - 107.37	34.5
NovaMed Eyecare (NOVA)	46.27	0.21	8.9	0.87 - 15.25	1.88

Alternative Refractive Correction Competitors

The greatest competition in this field could arise from Intacs, the reversible corneal implants for refractive correction from KeraVision, Inc ("KERA"). Founded in 1986, KeraVision received the Food and Drug Administration's 510K approval for its instruments in mid-1999. After approval, KERA's stock peaked at nearly \$30 in July of 1999. Subsequently, as demand for laser refractive correction rose, KERA's stock plummeted despite positive research results in human trials.

In February 2001, KERA filed for Chapter 11 bankruptcy. Also, NASDAQ threatened to delist KERA and proceedings are underway.

<u>Competitor</u>	<u>Mkt Cap (\$M)</u>	<u>EPS</u>	<u>P/E</u>	<u>52-wk range (\$)</u>	<u>Mkt Price (\$)</u>
Keravision (KERA)	n.a.	n.a.	n.a.	0.02 - 8.00	0.04
Bausch and Lomb (BOL)	2,508	1.49	31.40	33.56 - 80.87	46.81

6.0 Strategy and Implementation Summary

NovOculi's strategy will be to initially market its technology to ophthalmologists and, as the technology is adopted, to patient-consumers. Once research data and publicity are generated, NovOculi's sales force will encourage ophthalmologists and medical centers to make the initial investment in the laser and equipment required for the procedure.

The sales team will begin with six sales personnel and grow to 44 members by Year Five. The sales team will work closely with laser manufacturers to promote the technology to patients and ophthalmologists.

NovOculi will earn approximately half of the nearly \$1000 premium through licensing fees associated with its patent-pending procedure and through sales of the individual components.

6.1 Value Proposition

The true value proposition for NovOculi's technology lies with the patient. The patient stands to gain permanently increased visual acuity with a greatly decreased risk of complications.

The value proposition for institutions and ophthalmologists to adopt the technology is two-fold: 1) Economic profit will be able to be sustained as 50% of the total price increase associated with NovOculi's procedure will be retained by the provider of the procedure; and 2) Use of this procedure will constitute superior patient care for those providers to whom this matters.

6.2 Marketing Strategy

Promotion of NovOculi's technology will involve targeting two different populations including, 1) ophthalmologists performing laser refractive surgery and 2) patients with refractive errors. NovOculi's success is dependent upon acceptance of its technology by both groups and its promotional strategies will be reflective of this fact. Of course, acceptance by either group will be helpful in obtaining acceptance by the other.

6.2.1 Promotion Strategy

NovOculi's technology will be marketed to its two target populations, 1) ophthalmologists performing laser refractive surgery and 2) patients with refractive errors.

Ophthalmologists Performing Laser Refractive Surgery

Acceptance among the more than three thousand ophthalmologists who perform refractive surgery will be one of the keys to NovOculi's success. Even with strong patient demand, if the ophthalmologists are unwilling to perform the NICS procedure, then the market will remain untapped. Furthermore, ophthalmologists are persuasive in consulting patients concerning procedures and those ophthalmologists who have embraced NovOculi's technology will be powerful advocates.

In marketing the procedure to ophthalmologists, the main consideration will be the effectiveness of the procedure and its superiority over existing technology. The most important factor in promoting NovOculi's technology will be concrete research results displaying its superiority over existing technologies. NovOculi will utilize four channels to target ophthalmologists; 1) publication in visible and reputable medical journals, 2) advertising in these same medical journals 3) presentations at national conventions and 4) direct calling or visiting. Using these channels, along with the free publicity associated with the introduction of a novel, superior technology, NovOculi will generate a demand among ophthalmologists.

One important trend is for independent ophthalmologists to use the facilities of the larger corporate chains, usually for a fee between \$500-\$900 per eye. Laser Vision Centers has been successfully employing this business model to collect fees from ophthalmologists who would otherwise be direct competitors. This highlights both the fact that marketing of the procedure to independent ophthalmologists will be important and that a strategic alliance with one of

the larger corporate chains would be valuable in developing facilities and accessing independent ophthalmologists.

Patients with Refractive Errors

The most important factor in promoting NovOculi's technology to the patient population will be concrete research results displaying its superiority over existing technologies. Once this superiority has been established, NovOculi will embark on a large-scale, national advertising campaign focusing on television and print media. Using these channels, along with intentionally facilitating publicity, NovOculi will be able to pull demand from individuals with refractive errors.

6.2.2 Pricing Strategy

As was mentioned in section 4.1 on Market Segmentation, NovOculi will target the Outcome Group. In analyzing the results of the survey found in the Appendix, it was found that the Outcome Group constituted 92% of the market. Also, this patient population was found to be much more price inelastic, willing, on average, to pay \$500-1000 more for a procedure with significantly fewer complications.

NovOculi intends to charge \$200 per eye licensing fee for use of NovOculi's NICS procedure, and another \$40 for each CIL. Not including the CDD, NovOculi will charge ~\$480 per patient assuming that both eyes will be corrected. Assuming that the ophthalmologists will be able to charge \$1000 more than the average charge for LASIK, this will leave over \$500 per patient as the incentive for the ophthalmologists and institutions to make the investment and adopt NovOculi's technology.

The average price for the LASIK procedure is currently \$3300 for both eyes ("Laser Eye Centers Wage an All-Out Price War", *New York Times*, December 9, 2000), while the price for NovOculi's superior procedure is expected to be approximately \$4300 for both eyes. This is still well under the upper end of current prices for LASIK surgery which exceeds \$6000 for both eyes ("Laser Eye Centers Wage an All-Out Price War", *New York Times*, December 9, 2000). Institutions using NovOculi's technology will be able to charge this amount, even in the current increasingly price-competitive environment, due to the superiority of NovOculi's technology.

The CDD will be a higher margin, lower volume item as this component of NICS will be durable and reusable. Due to this fact, the CDD will be priced at \$3500.

6.3 Sales Strategy

NovOculi's sales strategy will link with the sales strategy of the laser manufacturer. The key step for each will be to initiate the investment in NovOculi's technology by purchasing the laser to be used in the procedure. As with LASIK, the laser is a major investment, and the combined efforts of both the laser manufacture and NovOculi's salesforce will be required to encourage the initial investment. Once the laser has been purchased, the sales effort required from NovOculi will decrease as the institutions performing the procedures will require the additional components sold by NovOculi in order to perform the refractive surgery. Therefore, the salesforce will be relied on heavily for the initial demand push for the laser, then to a much lesser extent for the additional components for the procedure.

NovOculi's salesforce will initially consist of six sales personnel in Year 2. This number is expected to swell to forty-four by Year 5 with expected dramatic increases in sales.

6.3.1 Sales Forecast

NovOculi's technology is an improvement over LASIK, much the same as LASIK was an improvement over PRK. In fact, a poll of ten Duke University and Stanford University ophthalmologists revealed that, on average, they believed that the improvement of NovOculi's technology over LASIK was of the same magnitude and caliber as the improvement of LASIK over its predecessor, PRK. Using this fact along with historical LASIK diffusion data ("Expanding the Horizons of Surgical Correction", *Review of Optometry*, 5(9), 1998) and the assumption that the

diffusion constants will be similar between the two technologies, the following sales forecasts were compiled.

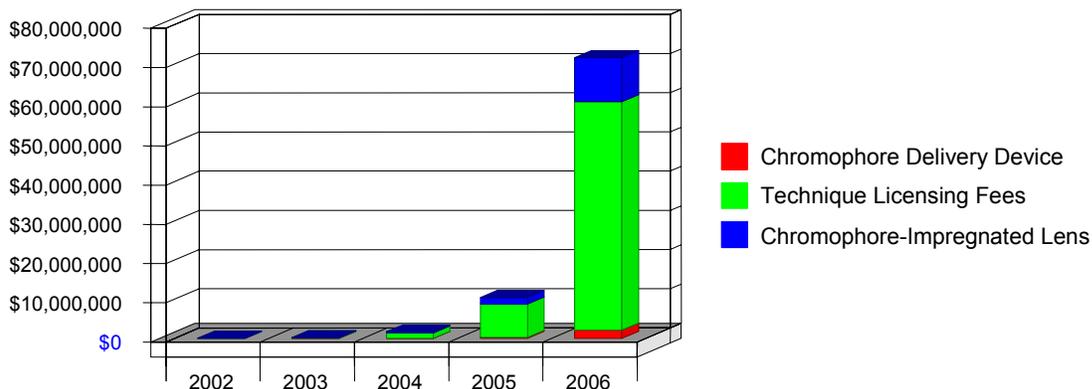
These forecasts do not take into account the fact that the market has become more receptive to ophthalmic laser surgery with the successes of LASIK and PRK and that the diffusion rate would probably be accelerated due to this increased acceptance of precedent technologies.

In developing the Sales Forecasts, it was assumed that only 1/3 of all patients will require refractive correction bilaterally (both eyes), while actual data supports a fraction closer to 2/3.

Sales Forecast

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Unit Sales					
Chromophore Delivery Device	-	2	13	80	533
Technique Licensing Fees	-	1,067	6,667	40,000	266,667
Chromophore-Impregnated Lens	-	1,120	7,000	42,000	280,000
<i>Total Unit Sales</i>	-	<i>2,189</i>	<i>13,680</i>	<i>82,080</i>	<i>547,200</i>
Unit Prices					
Chromophore Delivery Device	-	\$3,500.00	\$3,675.00	\$3,858.75	\$4,051.69
Technique Licensing Fees	-	\$200.00	\$206.00	\$212.18	\$218.55
Chromophore-Impregnated Lens	-	\$40.00	\$40.00	\$40.00	\$40.00
Sales					
Chromophore Delivery Device	-	\$7,467	\$49,000	\$308,700	\$2,160,900
Technique Licensing Fees	-	\$213,333	\$1,373,333	\$8,487,200	\$58,278,773
Chromophore-Impregnated Lens	-	\$44,800	\$280,000	\$1,680,000	\$11,200,000
<i>Total Sales</i>	-	<i>\$265,600</i>	<i>\$1,702,333</i>	<i>\$10,475,900</i>	<i>\$71,639,673</i>
Direct Unit Costs					
Chromophore Delivery Device	-	\$150.00	\$142.50	\$135.38	\$128.61
Technique Licensing Fees	-	\$10.00	\$5.00	\$4.75	\$4.51
Chromophore-Impregnated Lens	-	\$5.50	\$5.23	\$4.96	\$4.72
Direct Cost of Sales					
Chromophore Delivery Device	-	\$300	\$1,900	\$10,830	\$68,590
Technique Licensing Fees	-	\$10,667	\$33,333	\$190,000	\$1,203,333
Chromophore-Impregnated Lens	-	\$6,160	\$36,575	\$208,478	\$1,320,358
<i>Subtotal Direct Cost of Sales</i>	-	<i>\$17,127</i>	<i>\$71,808</i>	<i>\$409,308</i>	<i>\$2,592,281</i>

Sales by Year



6.4 Strategic Alliances

NovOculi will initially try to encourage strategic alliances in three different arenas: laser manufacturers, refractive surgery providers and research institutions.

Laser Manufacturers

As NovOculi will provide all the components necessary to perform its patent-pending procedure except for the laser, developing a strategic alliance with a laser manufacturer will be an important step. Existing laser manufacturers, including VISX and Alcon, will be approached as a prelude to this partnership.

Refractive Surgery Providers

Possibilities for strategic alliances abound in the current refractive surgery industry. Due to the increasingly fierce competition, LASIK providers are expected to be very receptive to a strategic alliance that would allow them access to a proprietary technology with which they could charge a sustainable premium. As was noted in section 4.2.1, 48% of all LASIK surgery is being done by corporate chains. A large corporate chain would be an ideal initial strategic alliance as it would provide excellent exposure and access to its well-established patient base and distribution networks.

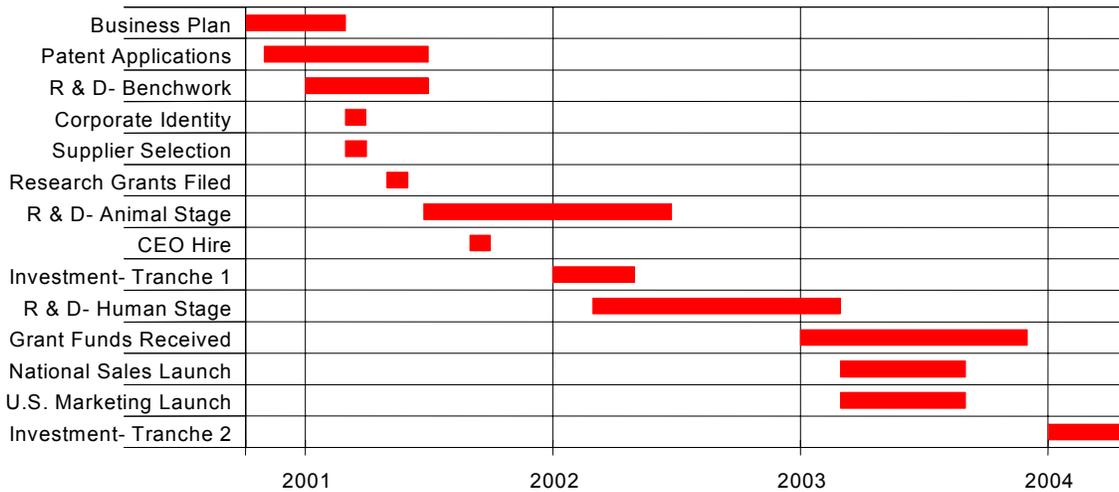
Research Institutions

Research related to NICS has already been arranged to be done in collaboration with Stanford University. NovOculi is open to further collaboration and expects to utilize five additional institutions as training sites, including research institutions in: Boston, MA, Atlanta, GA, Baltimore, MD, Portland, OR and Durham, NC.

6.5 Milestones

The following are the key milestones for the first year of operations:

- Strategic business plan completed by March 1, 2001.
- Management Investment completed by June 1, 2001.
- Research and Development bench work completed by July 2001.
- All patents, domestic and foreign, applied for by July 1, 2001.
- Animal trials initiated by June 2001.
- Start-up capital raised by January 1, 2002.
- All other first year milestones are currently on schedule in accordance to the business plan.



7.0 Regulatory Issues

Since the "FDA does not approve procedures, only the equipment used in them" (*Eye Centers Set Their Sights on LASIK Surgery Growth, Houston Business Journal, July 16, 1999*) and the components of NICS have already been approved by the FDA for medical use, NovOculi will not need to obtain approval to market their patented technique and devices. An example of such expedited market entrance can be seen with the laser vision correction procedure LASIK. Prior to its approval by the FDA in winter 1999, LASIK had been performed on 900,000 patients due to the fact that the equipment used for LASIK, the excimer laser and the microkeratome, had prior FDA approval for medical use. (*Bye-Bye Glasses, EyeCare Business Online, September 2000*) We hope to similarly expedite market entrance.

Furthermore, it is the opinion of Jeffrey Porter, NovOculi's regulatory consultant, that NovOculi will experience no difficulty in entering the market with any of the components required for NICS.

8.0 Management

The principal contact for NovOculi is Daniel Burnett, Box 2887 Duke University Medical Center, Durham, NC 27705, Phone (919) 403-0955, Fax (509) 352-5103, burnett@novoculi.com.

NovOculi's Management Team consists of five principals, all of which plan to retain positions in the company once key milestones have been reached. The roles that each of the principals intend to assume are listed below in the organizational chart. NovOculi will hire personnel, including an experienced CEO, once funding is obtained.

8.1 Management Team

Principals:

Daniel Burnett: Currently an MD/MBA student at Duke University, Mr. Burnett was recently accepted to an ophthalmology residency training program at Stanford University in which he has negotiated a deferred entry in order to focus on launching NovOculi. Mr. Burnett has a long history of biomedical device design and testing and has spent a total of 10 months at the Food and Drug Administration. In addition to currently pursuing an MD/MBA, Mr. Burnett also invented a myringotomy tube insertion device (patent pending) and created a magnetic nerve stimulation device (patent pending).

Joseph Walker: A current MBA candidate at the Fuqua School of Business, Mr. Walker has a BA in Biology and has participated in five science internships ranging from space life science at NASA to gene therapy research at the University of Nebraska Medical Center. Mr. Walker also has considerable international experience having studied in

Mexico, China, Sweden and Japan. His experiences at both The Aurora Funds, Inc., a southeastern venture capital firm, and its portfolio company, Alerts.com, have given him detailed knowledge of the venture capital and start-up process. Mr. Walker plans to pursue a career in venture capital and entrepreneurship.

Andy Rubinson: Currently attending MIT Sloan, in the New Product and Venture Development Track, Mr. Rubinson spent six years working for the Department of Defense at Boeing Space Systems where he worked to improve product design and development and manufacturing processes for Delta rockets and the International Space Station. He then spent two years assigned to Andersen Consulting's (now Accenture) High Tech and Electronics Market Unit during which time he obtained experience in Product and Processes Development, Integrated Materials and Manufacturing, Procurement, and Manufacturing Strategy and Operations.

Joseph Hewitt: Currently pursuing a PhD in Chemistry at Duke University, Mr. Hewitt has research/teaching experience in both UV/Vis and Fluorescence spectroscopy. His dissertation research involves the application of Capillary Electrophoresis and Fluorescence Lifetime spectroscopy to characterize and study a class of environmental molecules called Humic Substances. As part of this research he has had extensive experience with both lasers and fluorescent dyes, making him a valuable addition to the management team.

Loy Hong Chia: Mr. Chia is currently an MBA candidate at the Fuqua School of Business. Mr. Chia was previously involved in several Initial Public Offerings and Mergers & Acquisitions as an investment banker and is a Certified Public Accountant with extensive experience in the U.S., Asia and Australia. He is also a founding director of a successful start-up company in Singapore involved in organizing round-table conferences for senior bankers, publishing banking journals, and creating banking intelligence and proprietary research reports.

Consultants:

James E. Sheldon, JD: Mr. Sheldon's background includes over twenty-five years experience in business, law, and education. For 12 years, he was one of two principals in The Synertech Group, Inc., a North Carolina-based venture development firm. Two public companies, Embrex and EnSys, resulted from Synertech's efforts. Prior to founding Synertech, Mr. Sheldon was a principal in or consultant to, several high technology start-up companies in the Research Triangle. These included venture capital backed firms such as BioNexus, CTi Data, Healthware Corporation, and Triangle Biomedical Sciences. In addition, Mr. Sheldon has held a faculty position with the Fuqua School of Business, Duke University for 21 years. He has served as a member of the Business Review Board of the Technological Development Authority, NC Department of Commerce, and the NC Biotechnology Center Task Force on University-Industry Technology Transfer. Mr. Sheldon is currently is a founder and principal of The Technology and Commercialization Group (<http://www.t-c-group.com>).

Mark Blumenkranz, MD: Dr. Blumenkranz is Professor and Chairman of the Department of Ophthalmology at Stanford University. Dr. Blumenkranz is the author of more than 100 peer-reviewed publications and book chapters and was instrumental in developing the successful laser vision correction program at Stanford. He currently serves as a principal investigator on a number of clinical research trials at Stanford evaluating the effects of laser and pharmacologic agents on eye disease. He has served on the Editorial Board of the journals *Retina*, *Graefe's Archives for Ophthalmology*, and *Ophthalmology*. He is a past recipient of the Research to Prevent Blindness Special Manpower Award, the Heed Award, the Rosenthal Award in Visual Sciences, and the American Academy of Ophthalmology Senior Honor Award.

Trygve Laegrid, PhD: Dr. Laegrid is currently pursuing an Executive MBA at the MIT Sloan School of Management. After obtaining a PhD in condensed matter physics, Dr. Laegrid became involved in licensing, valuation and management of intellectual property. He is currently the Manager for Intellectual Property and Commercialization for Statoil Industrial Development.

Jeffrey Porter: After graduating from Tulane University with a degree in Biomedical Engineering, Mr. Porter joined the Food and Drug Administration in the Center for Devices and Radiologic Health where he spent a total of five years. His duties with the FDA included research in the Hydrodynamics and Acoustics Branch and new device evaluation in the Office of Device Evaluation. He then spent two years with the Red Cross prior to his current position with the Radiology Department at Duke University where he has been employed for one year.

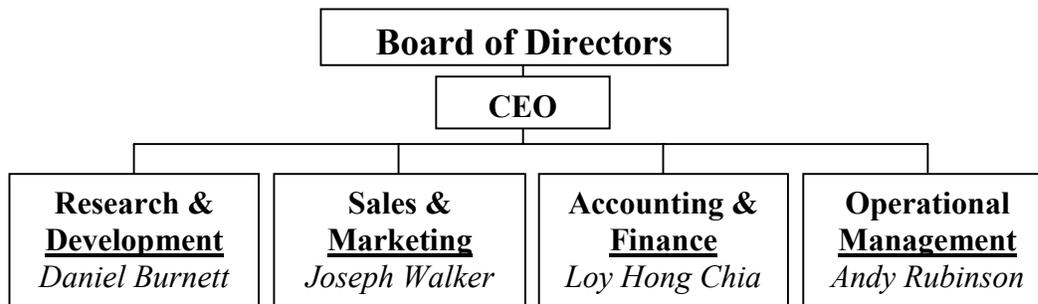
8.2 Management Team Gaps

The founders of NovOculi are actively seeking an experienced CEO. The desired profile for a CEO is an individual experienced in the medical device arena, ideally who was part of a previous successful start-up venture.

Once recruited, the CEO will assist the management in the search for a CFO, design engineers and sales/marketing personnel.

8.3 Organizational Chart

The following diagram outlines the organizational chart for NovOculi with the preliminary roles of the principals.



8.4 Personnel Plan

The Personnel Plan chronicles the growth of the organization to an estimated 77 employees in the first five years. Each year may require a few additional people besides those indicated, based on the growth of NovOculi in accordance with the Business Plan.

Personnel Plan

<u>Personnel</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Research Engineer	\$90,000	\$160,000	\$320,000	\$400,000	\$400,000
CFO	\$16,000	\$100,000	\$110,000	\$121,000	\$133,100
CEO	\$30,000	\$125,000	\$137,500	\$151,250	\$166,375
Administrative	\$6,000	\$48,000	\$52,800	\$116,160	\$255,552
Sales/Marketing	\$36,000	\$260,000	\$680,000	\$1,420,000	\$4,130,000
Total Payroll	\$178,000	\$693,000	\$1,300,300	\$2,208,410	\$5,085,027
<i>Total Headcount</i>	<i>9</i>	<i>14</i>	<i>24</i>	<i>44</i>	<i>77</i>
<i>Payroll Burden</i>	<i>\$39,160</i>	<i>\$152,460</i>	<i>\$286,066</i>	<i>\$485,850</i>	<i>\$1,118,706</i>
<i>Total Payroll Expenditures</i>	<i>\$217,160</i>	<i>\$845,460</i>	<i>\$1,586,366</i>	<i>\$2,694,260</i>	<i>\$6,203,733</i>

9.0 Operational Plan

NovOculi's products consist of both manufactured goods and product support. The strategic operational plan is to minimize overhead through the outsourcing of production and the rental of necessary equipment whenever possible. Support will be provided for both the Non-Invasive Corneal Sculpting technique as well as the devices required to perform the NICS procedure.

9.1 Manufacturing

Potential manufacturers have been identified and the raw materials required for manufacture are relatively ubiquitous and, therefore, easy to obtain.

9.1.1 Products

Three components are required in order to perform NICS, a Chromophore-Impregnated Lens (CIL), a Chromophore Delivery Device (CDD) and a Wavelength Specific Laser (WSL).

- *CIL*: This device holds the targeting chromophore prior to its delivery and will be required for every eye corrected. The CILs are single-use, disposable components which are standardized for all patients.
- *CDD*: This device is used to position the chromophore and is able to both deliver and withdraw the chromophore from the cornea. The CDD is a sterilizable, reusable device for which we have predicted a life span of two years.
- *WSL*: A partnership with a laser manufacturer is being sought in order to complete the development of the laser. Efforts made in forming relationships to facilitate the development of this laser have been well received.

9.1.2 Planned Operations

NovOculi will outsource production, but retain sales and marketing, of the Chromophore-Impregnated Lens and the Chromophore Delivery Device. NovOculi hopes to partner with a laser manufacturer in order to develop the laser required for NICS, but will not be involved in its production or sale. Research will be conducted, as well, into the possibility of retrofitting existing LASIK excimer lasers. If this is found to be feasible, the overall switching costs will decrease dramatically and lock-in to the LASIK procedure will be greatly reduced.

NovOculi is currently seeking to establish business relationships with suitable manufacturers. Two potential manufacturers have been identified: Colorado MedTech in Boulder, CO and JCD Manufacturing in Nashville, TN. Both of these companies specialize in the manufacture of medical equipment and NovOculi would be able to outsource production of all the components required for NICS to either manufacturer.

Manufactured components will be stored in a storage area of the company office in the early stages then later held in rented warehouse space.

9.1.3 Production Costs

Through outsourcing production, NovOculi will be able to keep initial capital requirements lower with the trade-off of higher production costs. It is estimated that the total cost of production for the components required for Non-Invasive Corneal Sculpting, including shipping and handling, will be:

- Chromophore Delivery Device- \$150.00 per device
- Chromophore-Impregnated Lens- \$5.50 per lens

It is estimated, as well, that production costs will drop 5% per year as volume increases and experience with manufacturing techniques is gained.

9.1.4 Sourcing

Most of the components involved in NovOculi's method of corneal sculpting are relatively inexpensive and common. The CDD, for example, is constructed of standard electronic components and its power source can be either an outlet or a common battery. The components involved in the construction of the CIL, including the chromophore

itself, are also relatively ubiquitous.

The one component which will be more expensive and difficult to obtain will be the refractive laser tuned to the wavelength of the chromophore. A partnership with a laser manufacturer will be beneficial in facilitating the development of this laser and efforts made to form this relationship have been well received.

9.2 Product Support

Training for the NICS procedure will be available at research institutions in the following cities: San Francisco, CA, Boston, MA, Atlanta, GA, Baltimore, MD, Portland, OR and Durham, NC. Each site will be coordinated by, but financially independent of, NovOculi and will have in-depth training sessions led by a prominent ophthalmic surgeon.

Technical support will be available in the form of educational materials as well as an on-call ophthalmology resident for urgent issues related to the NICS procedure.

Device support will be available through an on-call technician. Questions concerning the components required for NICS will be fielded by the on-call technician then referred on if necessary.

9.3 Facilities and Properties

NovOculi will initially be based in the Research Triangle Park area in North Carolina. The website <http://www.NovOculi.com> has already been registered and the trademark process has been initiated.

In view of the strategic plan to contract with a third party for all manufacturing requirements, the facilities needed will be mainly offices for personnel and storage space for inventory of the components required for NICS. Initial Research facilities for the NICS procedure will be provided through a collaborative effort with the Stanford University Department of Ophthalmology.

All of NovOculi's Design and Development of new technology will be conducted solely on company property in order to avoid legal issues with Stanford concerning intellectual property rights.

10.0 Financial Plan

CAPITAL RAISING (THE OFFER)

NovOculi intends to raise an amount of approximately U.S.\$1,500,000 of seed capital. Management has already committed \$250,000.

Current Capital Structure:

<u>Stock Type</u>	<u>Shares Authorized</u>	<u>Shares Issued</u>
Common	30,000,000	3,000,000
Preferred	2,000,000	-

Current Shareholders:

<u>Owner</u>	<u>Shares Granted</u>	<u>Stock Type</u>
Daniel Burnett	1,800,000	Common
Joseph Hewitt	300,000	Common
Andy Rubinson	300,000	Common
Joseph Walker	300,000	Common
Loy Hong Chia	300,000	Common

For \$1,500,000, the investing party will receive convertible, preferred shares equivalent to ownership of 33.3% of NovOculi. Preferred shares will include liquidation preference and anti-dilution provisions as negotiated.

The proceeds from the offer will be used to fund the working capital requirements including employee compensation, research and development, initial operations facilities and patent and trademark registration. NovOculi has no intention to purchase land, building, or plant, and will attempt to leverage its current assets with lease and rental whenever economical. NovOculi intends to issue equity options for subscription of common shares up to 20% of the capital as employee incentives which will result in dilution of current shareholdings.

Liquidity for Investors and Equity Valuation

NovOculi's management intends to grow NovOculi organically and become the market leader due to its innovative, therapeutic ophthalmic devices. With the attainment of each of its milestones, NovOculi's potential will accelerate and its enterprise value will grow accordingly. With consistently strong performance, it is likely that private investors will continue to show interests in NovOculi's common and preferred shares, creating market liquidity for current investors even without the benefit of an initial public offering.

To the extent that actual operational results materially exceed those projected herein, the probability of an initial public offering increases dramatically. In this scenario, the need to liquidate or convert preferred shares prior to issuance of public common stock will arise and need to be addressed.

10.1 Important Assumptions

Market

- Growth of NICS will parallel that of LASIK with similar rates of diffusion.
- Expansion into foreign markets will not occur within the first five years of operations.
- Projections related to consumer acceptance were estimated using market survey of n= 50.
- Market size was based on 1/3 of patients having both eyes corrected (market data supports ~2/3).

Production

- Production costs will drop 5% per year as volume increases.

Research

- Stanford University support will decrease total research and design expenditures by 50%.
- Training sites will be developed at research institutions with minimal cost to NovOculi.

Sales/Revenues

- Projections were based on denial of insurance companies to reimburse for refractive surgery.
- Acceptable premiums were developed using preliminary market survey of n=50.

General Assumptions

	2002	2003	2004	2005	2006
Short-term Interest Rate %	12.00%	12.00%	12.00%	12.00%	12.00%
Long-term Interest Rate %	10.00%	10.00%	10.00%	10.00%	10.00%
Payment Days Estimator	49	49	49	49	49
Collection Days Estimator	45	45	45	45	45
Inventory Turnover Estimator	6.00	6.00	6.00	6.00	6.00
Tax Rate %	25.00%	25.00%	40.00%	40.00%	40.00%
Expenses in Cash %	10.00%	10.00%	10.00%	10.00%	10.00%
Sales on Credit %	75.00%	75.00%	75.00%	75.00%	75.00%
Personnel Burden %	22.00%	22.00%	22.00%	22.00%	22.00%

10.2 Projected Profit and Loss

The Projected Profit and Loss takes into account the significant subsidization of NovOculi's research efforts by the Stanford University Department of Ophthalmology. Due to this strategic alliance, NovOculi's research expenditures have been nearly halved.

Projected Profit and Loss (Income Statement)

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Sales	\$0	\$265,600	\$1,702,333	\$10,475,900	\$71,639,673
Direct Cost of Sales	\$0	\$17,147	\$71,808	\$409,308	\$2,592,281
Gross Margin	\$0	\$248,453	\$1,630,525	\$10,066,593	\$69,047,393
<i>Gross Margin %</i>	<i>0.00%</i>	<i>93.54%</i>	<i>95.78%</i>	<i>96.09%</i>	<i>96.38%</i>
Operating expenses:					
Advertising/Promotion	\$18,000	\$350,000	\$1,200,000	\$1,150,000	\$3,500,000
Research and Development	\$500,000	\$500,000	\$1,000,000	\$1,500,000	\$3,000,000
Travel	\$6,000	\$25,000	\$75,000	\$150,000	\$250,000
Miscellaneous	\$15,000	\$20,000	\$25,000	\$25,000	\$25,000
Payroll Expense	\$178,000	\$693,000	\$1,300,300	\$2,208,410	\$5,085,027
Payroll Burden	\$39,160	\$152,460	\$286,066	\$485,850	\$1,118,706
Depreciation	\$0	\$0	\$0	\$0	\$0
Leased Equipment	\$0	\$0	\$0	\$0	\$0
Utilities	\$12,000	\$0	\$0	\$0	\$0
Insurance	\$30,000	\$0	\$0	\$0	\$0
Rent	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000
Other	\$0	\$0	\$0	\$0	\$0
Total Operating Expenses	\$816,160	\$1,758,460	\$3,904,366	\$5,537,260	\$12,996,733
Profit Before Interest and Taxes	(\$816,160)	(\$1,510,007)	(\$2,273,841)	\$4,529,332	\$56,050,660
Interest Expense Short-term	\$0	\$0	\$0	\$0	\$0
Interest Expense Long-term	\$0	\$0	\$0	\$0	\$0
<i>Taxes Incurred</i>	<i>(\$204,040)</i>	<i>(\$377,502)</i>	<i>(\$909,536)</i>	<i>\$1,811,733</i>	<i>\$22,420,264</i>
Net Profit	(\$612,120)	(\$1,132,505)	(\$1,364,305)	\$2,717,599	\$33,630,396
<i>Net Profit/Sales</i>	<i>0.00%</i>	<i>-426.39%</i>	<i>-80.14%</i>	<i>25.94%</i>	<i>46.94%</i>

10.3 Projected Cash Flow

Important points to note in Projected Cash Flow are as follows:

- In Year 1 of the business plan, NovOculi expects to raise \$1,500,000 (Tranche 1) in working capital.
- While NovOculi has planned for additional capital raising of \$3,000,000 (Tranche 2) in Year 3 of the business plan, it is expected that many of the research grants for which NovOculi has applied, collectively totaling \$1,750,000, will have been secured by this point and that the actual required capital will be significantly less.
- Dr. Mark Blumenkranz has been heavily funded by the National Eye Institute and his backing, along with his name as the principal investigator on any research studies, will greatly increase the likelihood of securing research grants.

Projected Cash Flow

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Net Profit	(\$612,120)	(\$1,132,505)	(\$1,364,305)	\$2,717,599	\$33,630,396
<i>Plus:</i>					
Depreciation	\$0	\$0	\$0	\$0	\$0
Change in Accounts Payable	\$47,401	\$237,599	\$182,000	\$456,450	\$822,550
Current Borrowing (repayment)	\$0	\$0	\$0	\$0	\$0
Increase (decrease) Other Liabilities	\$0	\$0	\$0	\$0	\$0
Long-term Borrowing (repayment)	\$0	\$0	\$0	\$0	\$0
Capital Input	\$1,500,000	\$0	\$3,000,000	\$0	\$0
<i>Subtotal</i>	<i>\$935,281</i>	<i>(\$894,906)</i>	<i>\$1,817,695</i>	<i>\$3,174,049</i>	<i>\$34,452,946</i>
<i>Less:</i>					
Change in Accounts Receivable	\$0	\$33,200	\$179,592	\$1,096,696	\$7,645,472
Change in Inventory	\$0	\$1,244	\$6,922	\$43,283	\$308,700
Change in Other Short-term Assets	\$0	\$0	\$0	\$0	\$0
Capital Expenditure	\$0	\$0	\$0	\$0	\$0
Dividends	\$0	\$0	\$0	\$0	\$0
<i>Subtotal</i>	<i>\$0</i>	<i>\$34,444</i>	<i>\$186,514</i>	<i>\$1,139,979</i>	<i>\$7,954,172</i>
Net Cash Flow	<u>\$935,281</u>	<u>(\$929,351)</u>	<u>\$1,631,182</u>	<u>\$2,034,070</u>	<u>\$26,498,774</u>
Cash Balance	<u>\$1,085,281</u>	<u>\$155,931</u>	<u>\$1,787,112</u>	<u>\$3,821,182</u>	<u>\$30,319,956</u>

10.4 Projected Balance Sheet

While Inventory on the Balance Sheet may appear disproportionately low in comparison to sales, this is due to the fact that one of the components of total sales, licensing fee, is not a durable good and will require no inventory.

Pro-Forma Balance Sheet

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Assets					
<i>Short-term Assets</i>					
Cash	\$1,085,281	\$155,931	\$1,787,112	\$3,821,182	\$30,319,956
Accounts Receivable	\$0	\$33,200	\$212,792	\$1,309,488	\$8,954,959
Inventory	\$0	\$1,244	\$8,167	\$51,450	\$360,150
Other Short-term Assets	\$0	\$0	\$0	\$0	\$0
Total Short-term Assets	<i>\$1,085,281</i>	<i>\$190,375</i>	<i>\$2,008,070</i>	<i>\$5,182,120</i>	<i>\$39,635,066</i>
<i>Long-term Assets</i>					
Capital Assets	\$0	\$0	\$0	\$0	\$0
Accumulated Depreciation	\$0	\$0	\$0	\$0	\$0
<i>Total Long-term Assets</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Total Assets	<i>\$1,085,281</i>	<i>\$190,375</i>	<i>\$2,008,070</i>	<i>\$5,182,120</i>	<i>\$39,635,066</i>
Liabilities and Capital					
<i>Short-term Liabilities</i>					
Accounts Payable	\$47,401	\$285,000	\$467,000	\$923,450	\$1,746,000
Short-term Notes	\$0	\$0	\$0	\$0	\$0
Other Short-term Liabilities	\$0	\$0	\$0	\$0	\$0
Subtotal Short-term Liabilities	<i>\$47,401</i>	<i>\$285,000</i>	<i>\$467,000</i>	<i>\$923,450</i>	<i>\$1,746,000</i>
<i>Long-term Liabilities</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>	<i>\$0</i>
Total Liabilities	<i>\$47,401</i>	<i>\$285,000</i>	<i>\$467,000</i>	<i>\$923,450</i>	<i>\$1,746,000</i>
Paid in Capital	\$1,750,000	\$1,750,000	\$4,750,000	\$4,750,000	\$4,750,000
Retained Earnings	(\$100,000)	(\$712,120)	(\$1,844,625)	(\$3,208,930)	(\$491,330)
Current Year Earnings	(\$612,120)	(\$1,132,505)	(\$1,364,305)	\$2,717,599	\$33,630,396
Total Capital	<i>\$1,037,880</i>	<i>(\$94,625)</i>	<i>\$1,541,070</i>	<i>\$4,258,670</i>	<i>\$37,889,066</i>
Total Liabilities and Capital	<i>\$1,085,281</i>	<i>\$190,375</i>	<i>\$2,008,070</i>	<i>\$5,182,120</i>	<i>\$39,635,066</i>
Net Worth	<i>\$1,037,880</i>	<i>(\$94,625)</i>	<i>\$1,541,070</i>	<i>\$4,258,670</i>	<i>\$37,889,066</i>

10.5 Business Ratios

Ratio Analysis

	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
Profitability Ratios:					
Gross Margin	0.00%	93.54%	95.78%	96.09%	96.38%
Net Profit Margin	0.00%	-426.39%	-80.14%	25.94%	46.94%
Return on Assets	-56.40%	-594.88%	-67.94%	52.44%	84.85%
Return on Equity	-58.98%	0.00%	-88.53%	63.81%	88.76%
Activity Ratios					
AR Turnover	0.00	6.00	6.00	6.00	6.00
Collection Days	0	30	35	35	35
Inventory Turnover	0.00	27.56	15.26	13.73	12.60
Accts Payable Turnover	7.50	1.78	3.04	5.33	18.02
Total Asset Turnover	0.00	1.40	0.85	2.02	1.81
Debt Ratios					
Debt to Net Worth	0.05	0.00	0.30	0.22	0.05
Short-term Liab. to Liab.	1.00	1.00	1.00	1.00	1.00
Liquidity Ratios					
Current Ratio	22.90	0.67	4.30	5.61	22.70
Quick Ratio	22.90	0.66	4.28	5.56	22.49
Net Working Capital	\$1,037,880	(\$94,625)	\$1,541,070	\$4,258,670	\$37,889,066
Interest Coverage	0.00	0.00	0.00	0.00	0.00
Additional Ratios					
Assets to Sales	n.a.	0.72	1.18	0.49	0.55
Debt/Assets	4%	150%	23%	18%	4%
Current Debt/Total Assets	4%	150%	23%	18%	4%
Acid Test	22.90	0.55	3.83	4.14	17.37
Asset Turnover	0.00	1.40	0.85	2.02	1.81
Sales/Net Worth	0.00	0.00	1.10	2.46	1.89
Dividend Payout	\$0	0.00	0.00	0.00	0.00

11.0 Appendix

The following survey was given to 107 consumers at a local grocery store in Durham, N.C. on January 12th and 13th:

SURVEY

1. Do you now have, or have you ever had, a refractive error (Vision that is worse than 20/20).
 2. Have you considered, or would you ever consider, permanent correction of your vision.
 3. If so, would you be willing to pay more money for the surgery in order to decrease the rate of significant complications (pain, night blindness, etc.) by 50%?
 4. If so, how much would you pay?
 - A) less than \$500
 - B) \$500-1000
 - C) \$1000-2000
 - D) more than \$2000
-

RESULTS

Once fifty participants answered "Yes" to questions number 2 and 1, the survey was terminated and the following results compiled:

<u>Surveyed</u>	<u>Refractive Error</u>	<u>Consider Surgery</u>	<u>Pay Premium</u>
107	72	50	46

Of those that would pay the premium in order to decrease the rate of complications, the following distribution was found:

<u>less than \$500</u>	<u>\$500-\$1000</u>	<u>\$1000-\$2000</u>	<u>more than \$2000</u>	<u>Total</u>
10	19	7	10	46

The data clearly indicate that of those consumers in this sample population with refractive errors that would consider surgery for permanent correction, an overwhelming majority would pay a premium for a decreased risk of significant complications. Of the premiums that would be paid, the most common value was \$500-\$1000 with a mean dollar value of approximately \$1100 (using midpoints and assuming midpoint for more than \$2000 is \$2500).