



OPTISCAN IMAGING LIMITED

ANNUAL GENERAL MEETING 24 NOVEMBER 2008

**Address by the Chairman, Mr Grant Latta**

Welcome to the 2008 Annual General Meeting of the members of Optiscan Imaging Limited. My name is Grant Latta, and I am Chairman of the board of Optiscan. I would like to introduce my fellow directors present today. From my left they are

Ms Vicki Tutungi, the Managing Director,  
Mr Peter Delaney, the Director of Technology,  
Mr Keith Daniel,  
Mr Tony Rogers,  
Dr Jim Fox.

I would also like to introduce the management group. In addition to Vicki Tutungi and Peter Delaney, the other members are:

Mr Bruce Andrew, who is Company Secretary and CFO,  
Dr John Allen, Commercialisation and Business Development Manager, and  
Dr Robert Pattie, the R&D Manager.

May I take this opportunity to welcome Mr Anthony Seyfort from our solicitors, Lander & Rogers, and Mr Don Brumley, from our auditors, Ernst & Young. Don will be available to respond to any questions you may have concerning the conduct of the audit and the preparation and content of the auditor's report.

I now formally declare the meeting open, as there is clearly a quorum present. Let me begin by outlining the business of the meeting today.

Firstly I will take the opportunity to convey my views about the issues that have confronted our company in the past few months. We are all aware that the commercial world has changed dramatically in recent times, and we wish to provide our shareholders with an up to date view of our current position. I will then hand over to the Managing Director, Vicki Tutungi to provide a detailed review of operations. After Vicki's address, Peter Delaney will provide a short update on current trial activity and new development directions. We will then deal with the statutory items of business, being the resolutions included in the Notice of Meeting. When those formalities have been completed, I will open the meeting for a question and answer session, where you will have the opportunity to raise any questions that are not dealt with in the presentations or during consideration of the formal resolutions.



I would like to take this opportunity to thank our staff for their contribution over the past year. They understand the potential of our technology, and they understand the rigours, risks and challenges of the biotech industry. On behalf of the Board and all shareholders I wish to thank the staff for their efforts in very difficult and challenging times.

I would also like to express my thanks to my colleagues on the board. It has been an arduous year, and our non –executive directors have continued to provide invaluable assistance and wise counsel over the past 12 months. I would like in particular to acknowledge the service provided to the board by Keith Daniel. Keith is to retire at the conclusion of the meeting today, after serving as a non-executive director since August 2001. His extensive experience in the Australian medical device industry has enabled him to provide very practical advice to the board and management over the past 7 years. He has an engineering background, and has unique experience with the technical, regulatory and management issues that pervade our industry. His experience has extended into areas of marketing, product management, sales structure, and after sales support. He has provided valuable input and independent views on a range of issues. I know his input has been highly valued by his colleagues on the board and in the management team. Keith, we thank you for your service and wish you good health and a happy and rewarding retirement.

I would now like to bring you up to date with our current position, and what we have been doing in recent months in response to the turmoil in global financial markets.

The 2008 financial year started well, with the Gen 2 agreement with Pentax, and our first deal in rigid with Carl Zeiss. We were also forming plans for new applications in robotic surgery and women's health. We had good grounds for optimism in July last year. However, as you well aware in August last year, Pentax dropped the bombshell about stock build, slow sales and a cessation of new orders pending a reduction of their inventories. We were concerned at this news, but we believed we were in for a period of a few months of reduced sales while Pentax corrected their stock levels. We were disappointed that it took so long to achieve meaningful dialogue with Pentax, and eventually, with Hoya. Unfortunately, our key contacts were casualties of the Hoya takeover. We had to re-establish new relationships with people who did not have an appropriate understanding confocal technology and its applications. It was becoming clear to us that there would be no quick turnaround, that their entire organisation was transfixed with the machinations and fallout from the takeover process. It is profoundly disappointing that Pentax and Hoya would allow both our relationship and the commercial opportunity we share to degenerate in such a manner.

As far back as last November we began reviewing our forecast position without income from Pentax. At December, we reported a cash balance of \$4.5M. This represented approximately 6 to 9 months cash at our historical burn rate. These are necessary outlays to enable us to meet our obligations to supply second generation products to Zeiss & Hoya, as well as launch FIVE 1 and to pursue the women's health opportunity. We knew last Xmas that additional capital would have to be raised by mid year to keep our business strategy on track.



Early in 2008, with our new CEO on board, our first priority was capital raising.

As soon as Vicki was briefed and up and running, we completed a roadshow to local investors, brokers and institutions to introduce Vicki, to update them with our position and the drawn out saga with Pentax and Hoya, and ultimately, to determine their appetite for investment in Optiscan. This process ran across a number of months, and by May, it was clear to us that a broad based “sell” through brokers was not going to work. The financial markets were subdued at that time and storm clouds were gathering. Our advisors, without exception, said a normal market based capital raising would not succeed, and our experience confirmed their view. We decided that a better strategy in those circumstances was to approach a small number of existing and potential new investors on a one to one basis to enlist their support. We did this during late May and early June and eventually concluded a small placement involving a small number of investors for \$2.5M, supported by a further \$0.5M from directors. Throughout this entire period of time, we kept an eye on the US investment market, which, remarkably, was proving to be fairly resilient. In particular, in the biotech space, there continued to be good funding for good stories. A number of advisors suggested we consider a US fundraising, and we were aware that several other Australian biotech’s were having some success.

Our plans about moving in this direction were given considerable impetus when a highly reputable institutional investor in Australia indicated they would support a US capital raising. We retained the services of a sector specialist investment bank from San Francisco. Their advisors travelled to Australia, and extensively de-briefed with our key people. They were extremely confident about a US roadshow, and suggested that in the larger US capital market, a minimum placement of US\$15 – 20m was the likely outcome.

Our advisors were particularly buoyed by the strong prospects identified in the Boston Healthcare report into the Women’s Health opportunity particularly in the USA. In addition, there was some coincidental support from Pentax activity in the US, because their initial US trial sites were mainstream, high profile hospitals that lent further recognition and credibility to our technology and our story. We carefully monitored these arrangements as they were coming together for a roadshow October. However, as we all now know, the market collapse intervened and our plans had to be shelved. Our US advisors were candid about the need to shelve the plan, so much so that they refunded the small fee we had paid. The unravelling of the market had taken them, and everyone else, by surprise.

We immediately regrouped and reviewed our plans and forward cash position. We took action to assess our core and critical activities, and moved to immediately reduce our costs by around 20%, which unfortunately in our business, involved mostly people. We advised the market of our circumstances, and that we would be seeking to raise capital in the domestic market as a matter of priority.

This brings us to where we are today.

We have conducted discussions with a number of parties in our efforts to identify new capital for the business. Some of the discussions have concluded without success,



others are continuing as we speak. Of course, if and when we conclude any arrangements, we will immediately advise the market.

So what does this all mean for the future direction of our business?

As we indicated in our ASX release last month, we need to raise capital to continue to fund the development of our technology. We are near completion of the second generation product and we have some exciting new applications to pursue. However, without sales revenue to support the cost of this development, we must recognise the finite nature of our existing cash reserves. Additional capital will enable us to move forward with a reduced operating capacity, but still with enough to complete the tasks at hand. We are currently evaluating various business models or scenarios going forward including hibernation, where we would park our development and await improved circumstances, or we may have to consider the sale of manufacturing rights, or perhaps downsizing to an IP and licensing company without the infrastructure for new development, or the sale of the business to a larger enterprise with the capacity to take the technology forward.

It remains to be seen how all this will play out, and what circumstances will prevail for our company. For the time being, we will continue to vigorously pursue new funding to keep our strategy on track. We will remain frugal and prudent with our management of resources and will continue to look for opportunities to reduce costs.

In this regard, your directors have ceased to take fees in cash, and will leave the matter of equity remuneration in abeyance until the AGM next year.

We will be implementing further significant cost savings across the organisation including restructuring of Management and the Board over the next few weeks. We will continue to apply our best efforts to steer the company through these challenging times. However, we must all recognise the risks we are navigating and the consequences for the business if we cannot secure additional funding. We are meeting almost weekly to review our position and we will keep you informed.

I will now hand over to the CEO for her presentation.

### **Address by the CEO, Ms Vicki Tutungi**

As this is my first address as CEO for Optiscan and as there are a few people in the audience whom I haven't met, I will start with a short summary of my background.

I will then take you through the year in review and will finish with a few thoughts on what the next 12 months holds for the business. Finally, I will hand off to Peter Delaney who will bring you up to date on our trial activity most specifically the trials announced just last week.

Prior to joining Optiscan I was the Director of the Niche Manufacturing Flagship at CSIRO and before that the Chief of Division of Manufacturing at CSIRO. One of my key roles in both jobs was to commercialise CSIRO technology. I did this through



negotiating licensing deals and establishing spin off companies. At the time, I was critical of the job CSIRO's business partners did in commercialising the CSIRO technologies and the time it took to generate returns. So, when the opportunity arose with Optiscan to take a more hands on approach to generating revenues from technology I was keen to take it up.

### **The Year in Review**

Let me start by acknowledging that it was a disappointing year financially. We simply did not sell enough product to Hoya/Pentax. The other revenues we generated from royalties and from milestone payments in the Zeiss contract were in line with expectations.

In 2006/2007, the first full year of sales for the ISC-1000, we achieved revenues of more than \$5 million, with 88 systems sold to Pentax. We were looking forward to a further increase this past year. Unfortunately, in August 2007, Pentax advised that a stock build had occurred, and that forward orders would be suspended until the sales rate had improved sufficiently to clear the accumulated inventory.

As you know, Pentax was then preoccupied with the takeover by Hoya (Hoya is around ten times the size of Pentax and has annual profits in the order of US\$1 billion, with interests in a range of businesses including optics and precision lenses.) This acquisition was finally completed on 30 March 2008 at the end of the Japanese financial year when the balance sheets of the two companies were merged. It was during the August 2008 visit to Optiscan by the new Hoya management, that Hoya shared with us its plans for the product and advised that ordering of the ISC-1000 was expected to recommence around April 2008.

This temporary halt in sales has caused a significant cash flow issue for Optiscan. The only silver lining is that during the past 12 months, the user groups, the endoscopists and gastroenterologists have continued to publish compelling results from using the ISC-1000 and the markets interest in the product continues to grow.

On the local front three Melbourne based hospitals are in the process of getting the equipment and one Sydney hospital and one Perth based hospital are also in the process of purchasing the equipment.

Senior Hoya management is visiting Optiscan later this month to discuss how best to move forward with both the current product and the new generation product. Under the terms of the agreements on the current generation product Hoya is responsible for sales and marketing. During the coming visit Optiscan is keen to investigate how it can protect itself in circumstances where Hoya's sales are less than expected.

The Optiscan board and management have always understood the risks associated with being a one product, one client company. This year Optiscan took two significant steps to address these risks. Firstly, in July 2007, Optiscan signed a commercial deal with Carl Zeiss of Germany for a new application of the endomicroscopy technology. This project has progressed significantly during this first year. The preclinical trials were successfully completed and clinical trials are now underway. Output from the clinical trials will be used to finalise the product specification and will feed into the documentation for manufacturing. The Zeiss



project has proceeded smoothly and it is easy to see why they are leaders in their field. Zeiss have a great appreciation of both the value of the technology and what their clients need. Given the well thought out and carefully planned approach that Zeiss adopts we do not anticipate that introduction of the Zeiss product will be plagued with the same issues that the introduction of the ISC-1000 faced.

The other product line that has progressed significantly over the past 12 months is the Optiscan own brand research instrument, the FIVE1. As evidence that Optiscan has matured from an R&D company to a manufacturing and sales company, Optiscan employed its first sales representatives. Optiscan has one sales representative in the US and one in Australia. These sales representatives are assisted by a network of distributors in Europe, Japan, Northern China, Southern China, Taiwan, India, South Korea and Malaysia. Lead time on sales into the research market is significant as most research organisations rely on budget cycles and grants to purchase capital equipment. However, Optiscan is now seeing a number of successful grant applications come through and sales from Japan, Canada and here in Australia are being filled. Whilst the market for the FIVE1 was never expected to be of the size of the medical market, it can certainly be used to supplement the other product lines and because there is no development partner involved provides Optiscan with a healthy margin.

As well as working on the new product for Zeiss, Optiscan has made significant advances in the development of its new products in Women's Health and Robotic Surgery. A preliminary clinical trial in Women's Health is currently underway and the preliminary clinical trial of the Roboscope for robotically assisted prostatectomy surgery was announced last week and patient recruitment has commenced. Peter will tell you more about the trials later, but these two new potential products, offer different commercial advantages to Optiscan.

Optiscan contracted Boston Healthcare to conduct primary research into the Women's health space and to value the opportunity for us. The results of their analysis clearly indicated that there was a significant market need for this product in the US and that the size of the market in the US was considerable. Boston estimated that there were 2 million laparoscopic procedures for the women's health condition - endometriosis and a similar number of procedures for cervical cancer performed in the US in 2006 alone. This product also has the potential to incorporate a single use disposable sheath and this in turn would provide Optiscan with a new revenue line.

As well as development of the endomicroscope for new medical applications, Optiscan has made considerable advances towards its second generation technology platform. This second generation system (CIS2) offers a number of advantages over the current system including;

- It will be cheaper to manufacture.
- Development of new medical applications will be faster based on its modular platform; and
- It will provide greater functionality for clients.

The other R&D project that Optiscan has run over the past 12 months is the smaller scanner project. The prototype of the smaller scanner is working and the team are



now testing the prototype and preparing it for transfer to manufacturing. Again, the smaller scanner offers a number of advantages over the existing system:

- It includes no Pentax parts and so makes Optiscan self sufficient.
- It is more robust than the current model
- It is cheaper to manufacture.
- Given it is smaller it opens up more possible medical applications.
- It is more competitive in the FIVE1 space with Mauna Kea's bundle probe system.

### **Moving Forward – The Operational Strategy**

The overall short term goal of Optiscan has not changed. It is to get to a cash flow positive position as soon as possible. To achieve this short term goal Optiscan has identified the following priorities.

1. Complete the CIS2 system and smaller scanner development asap as the Zeiss product is based on this platform.
2. Support the sales and marketing team for FIVE1's.
3. Complete the preliminary 30 patient trial in women's health. This activity is a priority as it is critical to have this information to present the opportunity to commercial partners in the women's health space.
4. Get the Roboscope™ into market quickly. This will be dependent on how successful the trials in Texas are and what deal could be struck with a commercial partner.

Thank you very much for your ongoing support of Optiscan.

### **Address by the Director of Technology, Mr Peter Delaney**

Amidst and despite the financial challenges of the past year, the clinical field of endomicroscopy has developed and matured tremendously. The lead applications are migrating from niche to mainstream on the back of compelling and growing clinical evidence. At the same time, the reach of endomicroscopy has been extended from those lead applications into several new medical fields including Women's health, robotic surgery in Men's health, and abdominal surgery for disease of the liver and pancreas. Leading medical institutions around the world have embraced the technology and coined terms such as "endopathology" to acknowledge the new era of diagnostic imaging that has been enabled and pioneered by Optiscan.

I would now like to briefly take you through the progress that has been made during the period in each of the key areas.



### **Gastroenterology – (Pentax/Hoya product)**

I will start with a review of the Hoya-Pentax product line, the ISC-1000 and associated endoscopes.

The Pentax-Hoya product, the ISC-1000, is now established in over 60 hospitals globally. It has been taken up most strongly in western Europe, but now has a significant footprint in the USA and has reached several other corners of the world including, Singapore, China and Eastern Europe.

Importantly, the establishment of the US users has taken place in some of the highest calibre medical institutions in the world, with most of the sites falling in the top 20 hospitals in the USA. These include renowned institutions such as the Cleveland Clinic, the Mayo Clinic and Johns Hopkins Hospital, ranked consistently in US News and Reports as the number one hospital in the US for the last 18 years.

### **Applications**

Endomicroscopy has achieved excellent clinical efficacy data across multiple applications.

Foundation studies established that endomicroscopy could predict histology with 98% accuracy.

More recent studies have established that this can be used to increase the clinical benefit of endoscopy by increasing detection rate of cancer at the same time as reducing biopsies numbers.

Endomicroscopy has been tested in over ten relevant gastrointestinal indications and consistently yielded compelling data.

The list of applications now reads more like a list of the major issues in gastroenterology than a group of niche uses. The technology is thus widely applicable in the field, with instruments gaining utility across a growing proportion of endoscopy procedures.

### **Publications list**

The list of publications has grown steadily and a regularly updated list of key articles is available on our website.

- Peer reviewed publications in gastrointestinal endomicroscopy now number over 30 papers, and the rate is still growing. Notably, studies from different centres show high agreement, even from groups who have had no contact with each other. Endomicroscopy is being found to be a reproducible technique.

Atlas and review facsimile Some of these publications have been extraordinarily significant in the field – GIE personally acknowledged one such paper for increasing the impact factor of the journal and increasing its ranking among journals.

- As well as the above there are now more than 4 text book chapters, and most significantly, the first dedicated atlas of endomicroscopy published in January





this year by Springer publishing. The atlas is a teaching guide that starts with the basics of the device and how to use it through to reference images and commentary across more than a dozen key diseases in the field.

- There are now 16 review articles in peer reviewed journals. Reviews signify that there is a sufficient body of original research papers to warrant their assessment by experts to “put it all together” in terms of what it means. These reviews have been consistently positive, drawing conclusions such as “the time of random biopsies may finally be over”.

### **Conferences summary**

Conference presentations are now too numerous to count (we are aware of over 200). Perhaps the most significant shift during the period in the profile at conferences is that most experts in gastrointestinal endoscopy now routinely include information about endomicroscopy as one of the key techniques, even where no new research is being presented. The published data, some now from randomised controlled clinical studies, simply must be acknowledged by experts, even those who have not yet procured access to the device.

### **First International Conference on Endomicroscopy**

Endomicroscopy has also matured to the point where it now has it's own dedicated international conference, first held this year in Milan, Italy, in April.

The organisation of this meeting is a major acknowledgement that endomicroscopy is now a serious new modality. The meeting was attended by over 150 delegates, more than 80 of whom were already endomicroscopy users, with many of the others attending as a prelude to their own use of the technology.

Diverse studies from all corners of the globe were presented, with impressively consistent clinical data. This included a strong US contingent including two of the top US hospitals (Hopkins and Cleveland Clinic), both of whom voiced strong advocacy.

Live cases from a local hospital were streamed direct to the conference venue, several of which resulted in real time diagnosis leading to therapy during the demonstration endoscopies.

### **Online Education**

There is a dedicated medical education website, [www.endomicroscopy.org](http://www.endomicroscopy.org), that includes explanation of the technology, image interpretation guides, real cases studies. Users can also register and conduct tests to evaluate their competency in image interpretation. The site also acts as a communications portal to contact the experts in the field. The website is a joint project between the University of Mainz, in Mainz, Germany, Johns Hopkins Hospital in Baltimore, USA, Pentax and Optiscan.

### **Training in Endomicroscopy**

There are now training centres established in both Europe and USA, with a recent emphasis on establishment of a 2<sup>nd</sup> tier of expert centres to extend regional access to training.



For example, at the training centre at the University of Mainz, gastroenterologists can attend a one, two or three day training course, perform hands on procedures, receive didactic training in image interpretation, and spend time with up to 4 experts at the centre. About 8 courses are held per year, with over 100 endoscopists trained in the past year. Delegates can register for the course through the online educational site described above.

The above resources have significantly lowered the barriers to adopting and becoming competent in the technique and have been instrumental in the establishment of new sites.

### **US advocacy on the rise**

One of the frustrations that we have reported previously is the lag between strong establishment of endomicroscopy in Europe and uptake in the US market. We are pleased report that, albeit much later than we had hoped for, Hoya/Pentax have recently achieved a very significant seeding program and early sales into key US institutions. As mentioned above, the technique is now established in a significant number of the top 20 hospitals in the US. Even more noteworthy has been the growing advocacy from these US experts in gastroenterology and the bullish statements they have made at international conferences.

For example:

- “Can we learn this consistently as endoscopists? Well, numerous studies are showing we can - the inter-observer agreement is higher than any previous endoscopic technique – diagnostically, this is as good as it gets”
- “I urge you to learn this technique – if you have endomicroscopy, don’t keep it in the back room - use it on all your patients and you will master it before very long”
- “I once asked if I would trust these images, but after a few rounds of checking with my pathologist, I now know that if I see significant disease, it is real and it is there – if I don’t act on that information, I am not doing the best for my patient”

So with compelling published data to support adoption, established medical education programmes, published text book atlas, a growing clinical footprint, and rising advocacy like the above, endomicroscopy is now considered an established new modality in gastroenterology.

### **What’s next in Gastroenterology?**

What remains is to complement existing data through completion of multi-centre randomised controlled studies in both Europe and USA. Such data is ranked at the highest level of medical evidence and cannot be ignored in review of the guidelines that prescribe the standard of care to the profession, including providing their framework for indemnity and reimbursement. For example, the US guideline for the management of Barrett’s esophagus already acknowledges the early studies in endomicroscopy (conducted several years previous), but does not recommend adoption as standard of care subject to emergence of broader studies. Randomised controlled clinical trials are the highest ranking evidence influencing inclusion in guidelines and hence we fully expect that if such studies reproduce single centre



data produced thus far then such caveats would be removed and a recommendation in the guidelines would be forthcoming.

Of course, progress in achieving these milestones remains in Hoya's control and not ours.

### **New applications**

But, as mentioned by Vicki, Optiscan is pursuing several other applications areas through clinical studies aimed at establishing the technology in key new markets. We have pursued clinical studies in each of these areas, and now have clinical trials underway in each of the following areas.

These include:

- Women's health – endometriosis and cervical cancer
- Men's health – robotic prostatectomy
- Carl Zeiss – confidential application with clinical trial underway.
- Pancreatic cancer resection (the Whipple procedure)
- Liver laparoscopy

The most advanced of these that we are pursuing as new business opportunities at present are [bold key selections], women's health, robotic surgery and the Carl Zeiss application. As the Carl Zeiss application remains confidential I cannot report further detail however I will now provide a brief update on our trials in women's and men's health.

### **Women's Health endometriosis medical need**

In the past year we have been conducting an ongoing clinical trial in the application of endometriosis at the Royal Women's Hospital here in Melbourne. I will report on progress in a moment, but first I would like to outline the medical need driving this application.

- Endometriosis is a condition where the cells that normally line the uterus are found displaced inside the abdominal cavity, often in the lower pelvic wall. These are the same cells that respond to female hormones causing proliferation and menstruation. The displaced cells also respond to hormones in this way, leading to proliferation and bleeding inside the abdomen with monthly hormonal cycles. This causes internal inflammation, bleeding, pain and sometimes infertility. The main symptom is bad period pain.
- Endometriosis is surprisingly common, affecting around 10% of women of child bearing age, or over 5 million young women in the US alone.
- However the only way to obtain a confirmed diagnosis is biopsy, taken during laparoscopy, or keyhole surgery. A rigid viewing endoscope is passed through the abdominal wall through a small "keyhole" incision and used to look for suspicious tissue. If lesions are observed, they may be biopsied or surgically resected. If no obvious place to biopsy is observed, no biopsy is taken and the procedure is negative. Unfortunately, this is associated with very low diagnostic yield. The mean time to diagnosis from when the patient presents with symptoms is 7-9 years, and may involve 3, 4 or even 5 laparoscopies



before the disease is confirmed. For a disease causing chronic pain and possibly affecting fertility, this is a long time.

- We are evaluating if endomicroscopy can be used to identify areas of microscopic disease for biopsy targeting that would otherwise go unnoticed.

### **Women's Health endometriosis**

Our initial trial in this application is a 30 patient descriptive study being conducted at the RWH here in Melbourne. The primary goal is to document the endomicroscopic appearance various tissues that are observed during laparoscopy and biopsies, We then review the pathology of those lesions to establish an image classification that we can use to predict sites of endometriosis. We are presently up to patient 19 of 30.

### **Women's Health endometriosis confocal images**

At this stage, it appears that we can identify glands of endometriosis in various abdominal organs. For example, this image on the left shows the typical fibrous connective tissue matrix of normal body wall, whereas this image on the right shows a mosaic of cells arranged in a glandular architecture, typical of the appearance of endometriotic glands on conventional histopathology of biopsy.

If at the end of this study, we have established, as we expect, the endomicroscopic appearance of endometriosis, we will refine the clinical protocol and progress to studies aimed at measuring whether this can be used to predict endometriosis in tissue where no obvious disease is found, with the aim of seeing if this can increase the sensitivity of laparoscopy and reduce the false negative rate of the procedure.

At the same time, we are in discussions with several further interested institutions regarding expanding the clinical program and would be in a position to begin further trials in both endometriosis and the other women's health applications early in the new calendar year.

### **Robotic Endomicroscopy**

We are pleased to report that we have just received approval to conduct the first human study combining endomicroscopy with robotically assisted prostate cancer surgery. This is a 30 patient study being conducted at the Hospital at Westlake in Austin, Texas, USA. Prostate cancer resection is a very delicate procedure as the prostate is bedded deep in the pelvic region underneath the bladder where surgical access is very limited. The robots provide the surgeon remote control of tiny robot hands with wrist joints allowing fine surgery even in these tight confines. This allows for very precise dissection around delicate structures such as nerve bundles that are important for return of erectile function and urinary continence after the surgery. However, even with the excellent visualisation offered by the robotic system's endoscope, it can remain difficult to identify some structures – for example, sinuses (stringy connective tissue) can be difficult to differentiate from nerves.



### **Robotic Endomicroscopy equipment**

Optiscan has developed a “drop in” probe that the surgeon can manipulate with the robot to obtain endomicroscope images that could be used to microscopically identify tissue in real time.

- Video?

Experienced robotic surgeon Dr Randy Fagin, in Texas, hopes that the device will help him to identify structures in real time that he can use to guide his dissection and potentially improve the outcomes for his patients.

The robotic application is exciting for Optiscan as it represents a product that could be brought to market quickly for a group of users that are all technology early adopters and who work in well capitalised environments.

So with new applications and clinical studies underway in:

- Women’s health – endometriosis and cervical cancer
- Men’s health – robotic prostatectomy
- Carl Zeiss – confidential application with clinical trial underway.
- Pancreatic cancer resection (the Whipple procedure)
- Liver laparoscopy

...and all of these applications built on a mature understanding from the technical success achieved in gastroenterology, we are confident that endomicroscopy is set to become an important and diversely applicable imaging modality in medicine, alongside ultrasound, MRI, CT scanning and endoscopy itself.

This concludes the presentations from management and the board.