



## **Optiscan CEO AGM 2005 Address**

The 2004/05 year was an important one in Optiscan's development.

The high point for the year was the market launch of Pentax's flexible endo-microscope, the ISC 1000 in May at the annual Digestive Diseases Week Congress in the USA.

But this was only one of many major achievements completed during the year. Others included:

- \$5M+ Pentax first year order for 80+ systems
- Product sales of more than \$1M for the first time
- Further outstanding clinical trial results indicating high sales potential for endo-microscopy
- Regulatory clearances with FDA and CE Mark
- Certification to ISO 13485 quality accreditation for medical device production
- A \$1.9M Commercial Ready Grant to fund new product development
- Significant patent wins validating our technology and increasing royalty income.

These are significant achievements, and we share the disappointment of all that follow the fortunes of our company that they have not resulted in a stronger share price.

These achievements should have been interpreted as defining the commercial future of this company, as reducing the risk associated with new technology and bringing us closer than ever to market. These outcomes should have led to a re-rating of the company.

There is no doubt that despite the value we attach to our achievements, the market is awaiting reporting of product sales revenues and development of further product commercialisation opportunities, particularly in rigid endo-microscopes.

### **Pentax ISC 1000**

I will now outline the progress made with Pentax leading to our current position.

This time last year, we expected full scale production to be completed to coincide with the market launch planned for DDW in May 2005. We knew that Pentax internal processes of transferring new products from their R&D department to their full scale manufacturing production line would be appropriately meticulous and exacting. However, we underestimated the time that would be taken to observe all the required protocols and in particular the time consumed in recommencing protocols when minor assembly process changes were necessitated.

Today this process is now well underway with Pentax gearing up their full scale production manufacturing of ISC 1000 flexible endo-microscopes. We are receiving parts and component strictly classified under Pentax's quality regime

for use in full scale production instruments and we are using these components in the miniaturised scanners and the control boxes we are building and shipping to Japan.

The first instruments from Pentax's production line are targeted for release to customers in February 2006. In the lead up to this we expect to ship nearly \$2million of product over the next few months.

Market demand for Pentax's ISC 1000 flexible endo-microscopes is looking particularly strong. Over the last financial year and on into this year our confidence in Pentax achieving significant sales and market penetration has consistently increased.

Pentax are devoting substantial resources to promotion, market development and education. They adopted the highly appropriate marketing theme of "More than meets the eye". Their promotional activity includes brochures, educational image atlases, live procedure demonstrations, hosted visits by customers to trial sites and exhibits at numerous medical meetings and congresses for gastroenterologists including:

- Digestive Diseases Week
- World Congress of Gastroenterology Societies
- United European Gastroenterology Week
- Medica

At the DDW and UEGW Pentax sponsored a special evening satellite symposium on endo-microscopy. Both events were well attended with doctors hearing their peers talk passionately and favourably about the technology, its practicality in use and the place it will have in mainstream clinical practice.

At the World Congress of Gastroenterology Societies live procedures were direct telecast to audiences of 2000+ doctors. This format is excellent to enable doctors to observe directly that the skills required are straight forward to master and that the technique offers instant microscopic information during their regular procedures.

This high level of promotional activity is pleasing for all of us to see and is consistent with Pentax's growth ambitions for their endoscope business. These ambitions were confirmed in a recent report by Goldman Sachs on Pentax. The report set outs high growth expectations for their endoscope business, discusses their collaboration with Optiscan and the role endo-microscopy is expected to play as a key driver of growth.

We are delighted to note that Goldman Sachs rated Pentax a buy.

### **Optiscan Production**

One of the opportunities created by the slower than expected ramp up to full production in Japan has been our ability to establish and then extend quality

certification for Optiscan under the ISO 13485:2003 standard required for medical devices. This has enabled us to more critically balance our in-house and outsourced production skill sets, with the result that more of high value added assembly work surrounding our strategically important core designs and intellectual property is now being completed in-house here in Notting Hill with the required quality accreditation.

Our production of miniaturised scanners and control boxes for Pentax has accelerated rapidly over the last few months. We are now shipping production to fill firm production requirement forecasts from Pentax.

As expected this ramp up in production is causing our inventory levels to increase. This is a necessary step to meet Pentax requirements and hence secure sales, margins and royalties.

One of the important issues now confronting us is production capacity. We are confident that our production can be scaled up to meet increasing demand and we are continually assessing our production infrastructure and capacity against future product demand expectations.

I will now hand over to Peter Delaney, our Director of Technology to talk to you about our extremely successful clinical trials programme.

## **Cinical Trials**

I would like to start by drawing your attention to the DVD that was playing on the screen in the foyer, which is promotional material produced by Pentax Europe. It features the lead investigator at Mainz University Hospital, Dr Ralf Kiesslich, whose comments also featured on our annual report this year. This shows exactly how the Pentax endoscope is used in the clinical setting, as well as an interview with Dr Kiesslich as to the value of the technology to his practice. It will also be played afterwards for those interested.

Clinical flexible endo-microscope trials are continuing to be funded by Pentax. Over the last year these trial produced a host of absolutely outstanding results. Our endo-microscopes are continuing to providing exceptionally high sensitivity, specificity and overall accuracy, especially in diagnosing the key question asked by GI Physicians – is this early stage cancer or not.

Our results now cover several different GI diseases and conditions and they have all been reported by the investigator clinicians at DDW and/or in industry publications such as *Gastroenterology*.

Of particular importance is the most recent study of Ulcerative Colitis. As well as achieving high accuracy using the endomicroscope, this study also directly compared the new procedure to the normal endoscopic approach. In this

randomised prospective blinded study a group of Ulcerative Colitis patients were split into two groups (of around 80 patients each). One received the current standard of care, which included random multiple biopsies to find early cancers within the inflamed tissue of UC. The second received the flexible endo-microscope procedure.

The investigators reported that the endo-microscope procedure:

- Required 4 versus 42 biopsies (less than one tenth the biopsies)
- Was 10 minutes faster procedure (11min endomicroscopy – 21min taking biopsies)
- Found more than 4 times the number of early stage cancers

These results were so outstanding that the study was selected by the American Gastroenterology Association for plenary presentation at its largest annual conference, DDW, making it one of the highest profile presentations for the 25,000 attending doctors.

Interestingly, on the back of these results, the hospital in Mainz Germany that conducted this trial has moved beyond trials in UC, and rather has adopted the endomicroscope as their standard of care. The hospital therefore no longer requires ethics board approval to provide the technique to any patient. Patient knowledge of the new technique has also seen their waiting list for UC patients grow by 6 weeks.

Pentax is currently working to expand their trial program further into a controlled and centrally administered multi-centre trial. The overall objective of this multi-centre trial is to replicate the powerful outcomes achieved to date in individual trials across a range of hospital sites and a range of doctors.

Planning for these trials is well advanced with Pentax actively engaging the service of professional trial design specialists and the FDA in the process.

If as expected these trials demonstrate that uniform and predictable outcomes can be achieved by use of the instrument, then Pentax will gain regulatory clearance to assert these benefits to potential customers. Note that although Pentax have already obtained FDA clearance to sell the product, this clearance restricts them from promoting specific clinical benefits.

Hence successful completion of these multi-centre trials and subsequent clearance from the FDA are key steps on the path to growing sales.

But it doesn't stop there. The efficacy outcomes from multi centre trials will also be a critical reference point for gaining additional reimbursement from medical insurers. While the Pentax ISC 1000 already qualifies for all standard reimbursements for endoscopy, there is currently no additional reimbursement for its use. Rather, endo-microscopy's current value proposition is based on clinician's appreciation of time savings, procedural efficiencies, and expected improvements in patient outcomes.

However, the multi centre trial data will be one of the inputs used by Pentax to build the case for medical insurers to provide additional reimbursement for set procedures using endo-microscopes. Once additional reimbursement is available, Gastroenterologists will also have a stronger financial incentive to buy an endo-microscope.

Based on trial results to date we are confident that medical insurers will favourably consider this additional reimbursement. Through improved early stage cancer diagnosis and reduced cost of biopsy the instrument has the capacity to create savings in healthcare costs while simultaneously offering better levels of patient care.

In addition to the Pentax trial program we are also embarking on human pilot clinical trials of rigid endo-microscope applications.

Working with leading doctors and hospitals we will complete limited number patient trials in carefully selected "high potential" applications.

Doctors in Sydney will soon commence a trial studying intra-operative pancreatic cancer diagnosis.

This will be closely followed by a trial in Germany with doctors studying liver disease diagnosis.

Importantly these trials will be conducted wholly under our control. There is no Pentax involvement. We have assessed that both the cost and technical risk of these trials is well within our capabilities to manage.

The instruments to be used in these trials are of a prototype design. Significant engineering work has recently been completed to meet the sterilisation requirements for the surgical environment.

Completing these pilot clinical trials successfully is an extremely important value creating step for commercialising our rigid endo-microscope technology.

We are also planning to commence trials Australia and the USA in endo-microscope bronchoscopy applications. Doctors are interested in exploring efficacy in important diseases such as asthma, allergy and emphysema.

Taking biopsies from the lungs is seldom warranted due to the high bleeding risk for the patient. Yet without biopsies, it is difficult for doctors to achieve accurate disease diagnosis using a bronchoscope. These factors make bronchoscope procedures relatively uncommon for the above medical conditions. Hence, an endo-microscope offering accurate biopsy-free disease diagnosis could radically increase the number of procedures performed and associated bronchoscope sales. We are thus very excited about the potential of this product.

Bronchoscopes are a type of flexible endoscope and hence this has the potential to become a second product line for Pentax who hold an exclusive license for all flexible endoscope instruments.

Again, the instruments to be used in these trials are of a prototype design. The requirement for reduced size relative to the current Pentax ISC 1000 scopes was achieved by modifying an existing Pentax scope, removing some functionality and replacing it with our miniaturised endo-microscope scanner.

So in summary, I would like to add that, having now delivered endo-microscopy into successful clinical applications, Optiscan has gained crucial expertise to guide us in pursuing further applications.

We have strong engagement with leading doctors in clinical trial activities across multiple fields of medicine. We also have a detailed understanding of how our technology can be used in practical, clinical workflows. These factors are leading us to new medical applications that will fit uniquely with our technology, and for which the health economics suggest commercially attractive markets. These considerations are fundamental drivers of our technology and product development activities.

### **Optiscan FIVE 1**

As you can see Peter and his small but dedicated team have achieved a tremendous amount in this critically important area of clinical trials.

I now want to talk about a forthcoming new addition to our product portfolio.

Over the last year or so doctors and researchers who have used our prototype rigid instruments in pre-clinical research studies have consistently asked us if an endo-microscope instrument is available for commercial purchase.

After careful analysis we have decided to develop and supply such an instrument. It will be called the Optiscan FIVE 1. FIVE standing for Fluorescent In Vivo Endo-microscope.

In essence, the instrument will be a repackaging of the miniaturised scanner supplied to Pentax into a small rigid endoscope style probe. Other technical variations to the instrument will be extremely modest and hence low cost and quick to achieve.

The instrument will not be regulation certified for human clinical use.

The Optiscan FIVE 1 will be squarely focussed at the pre-clinical research market. Ease of use and ability to do in-vivo imaging will be its strong selling features.

Our exploration of the target market has revealed strong interest from drug companies for pre-clinical analysis of new drug therapies. The Optiscan FIVE 1 will greatly accelerate their understanding of cellular responses to drug action.

Proof of this interest was obtained last year when one of the global top 5 pharmaceutical companies approached us to supply them with an endo-microscope instrument. In a one off transaction we made an instrument for use in their drug development research activities.

Commercially the Optiscan FIVE 1 offers an attractive and useful adjunct market for our existing miniaturised confocal technology. Our experience in successfully selling to the research market during the 1990's shows that very modest levels of promotion and minimal overhead are required to be an effective supplier.

Pivotal in our decision to develop the Optiscan FIVE 1 is the strategic benefits it will create. Working closely with leading researchers will bring benefits in two areas:

- Obtaining important inputs to guide future product development
- Stimulating sales of clinical instruments by developing new and innovative mainstream clinical applications from successful pre-clinical techniques.

The Optiscan FIVE 1 will be available in the second half of the current 2005/06 year.

We will keep shareholders informed of developments as we progress these plans.

### **Market Product Portfolio**

For the last two and half years we have consistently identified 3 key markets for our miniaturised confocal microscope technology:

- Flexible endoscopes
- Rigid endoscopes
- Research instruments

Our current product portfolio of products is

- The Pentax ISC 1000
- The prototype rigid endo-microscope
- The Optiscan FIVE 1

These align as shown in the slide to be our current product offering for our three markets.

Moving forward we believe it is commercially very important for us to retain our current position of global leadership in microscopic imaging for medical markets.

To achieve this we will need to further develop and improve our products.

Over recent months reductions in workload on the Pentax system has for the first time in several years enabled us to direct some of our resources onto future improvements to our technology platform. We have adopted an approach that all such developments must be market driven. Feedback from doctors, feedback from Pentax and analysis of market directions and trends have enabled us to select improvements that have the greatest expected commercial returns.

Over the coming period we will actively develop three key projects:

1. A second generation full digital architecture system  
...that will enable future endo-microscopes to seamlessly integrate into the digital image and records management systems now being actively adopted by hospitals worldwide
2. New smaller, lower cost scanners  
... smaller to allow improved physical access to tissues generating additional sales from new applications in bladder, joints and airways.  
  
... lower cost to enable preservation of margins while offering lower end user pricing to increase market penetration.
3. Multiphoton laser instruments  
... initially targeted at the research market  
  
... but eventually expected to enter clinical use and by deeper tissue imaging enable new medical uses such as ovarian cancer diagnosis

The development of a multiphoton laser instrument has been underpinned by winning a Commercial Ready Grant providing \$1.9 million in funding over the next three years. This funding was an essential prerequisite for us to undertake this longer term and more technically risky development. We thank the Federal Government for this support.

All three of these developments will have applicability across all three of our key markets.

In addition the bronchoscope Peter spoke of earlier represents a significant additional opportunity for Pentax in flexible endoscopes.

With these initiatives we are confident we will maintain our current global leadership position.

## Rigid Endo-microscope Commercialisation

I now want to talk about the progress and process for moving rigid endo-microscopes from prototype to full commercialisation.

At approximately US\$800 million per year the global rigid endoscope market is significant and attractive.

However the global market is quite fragmented. Many medical specialities use rigid endoscopes to perform a variety of different applications in different tissue types and locations within the body. There are many companies producing and selling rigid endoscope systems with their market positions varying significantly driven by history of geography, medical speciality customer bases and instrument types.

Over the last two years we have been in active dialogue with many of the major participants in this industry. We have been offering them an exclusive partnership opportunity provided they collaborate in early stage development. In particular we sought to leverage potential partner knowledge in two key areas:

- Input on the shape and dimensions of the ideal instrument and design expertise to make it sterile
- Identification of the endo-microscope applications most likely to be commercially successful

Somewhat ironically the areas where we sought their input from potential partners were the exact same areas these companies sought risk reduction before they would proceed. They expressed high levels of interest in our technology and asked us to stay in close contact while we did further development and evaluation on these two issues.

Accordingly we developed and deployed a number of prototype rigid endo-microscope instruments that were used by doctors primarily in pre-clinical investigations of medical applications that our analysis and their medical experience indicated would be potentially attractive.

We reached two very important conclusions from this process:

1. The first was that the shape and dimensions of the rigid endo-microscope most preferred by doctors is a very simple long straight single viewing instrument. This provides the imaging they desire and will integrate well with their current minimally invasive practices.

This was a critically important outcome because we are capable of designing, manufacturing and completing regulatory clearances for such a simple instrument. We are comfortable doing this because we have developed and proven our competence in these skills working with Pentax.

2. The second was that several high potential clinical applications for rigid endo-microscopy exist. All address a known medical need, have decent procedure incidence, good indicative health economics and are performed by doctors with appropriate levels of practice capital intensity.

This outcome has significantly increased our optimism for significant sales success in this market.

It has also convinced us that our approach must develop more than one application.

Our discussion with potential partners is therefore now emphasising reaching an exclusive licensing or exclusive supply partnership in a selected application area.

With this approach we are able to work with partners who have strong market positions in specific market segments and hence increase our speed to market over several applications.

Several leading German and US rigid endoscope companies are keenly interested in our technology and have asked to be kept informed of progress with the pilot clinical trials Peter spoke of earlier.

Again we will keep you informed of progress.

### **Optiscan Outlook**

I now want to talk about the outlook for the current financial year.

There is no doubt that meeting Pentax ISC 1000 orders is our number one priority.

As we do this the key question for all of us is when will Optiscan become a profitable company. This question is most accurately answered in terms of how many systems do we have to sell to break even.

Based on some robust assumption we have projected that we need to sell approximately 200 endo-microscopes a year to reach the break even point. Sales beyond that will take us into profit.

The extremely positive market response we observe Pentax creating makes us very confident that annual sales volumes will be well over a 1000 systems a year in coming years.

However as Peter outlined earlier, this will only be achieved once Pentax can actively sell the benefits of using the system to doctors and the FDA will not provide clearance for Pentax to do this until multi centre trials are completed successfully.

Pentax's first year order of 80+ systems was for us to supply scanners and control boxes for their full scale production. We have obviously started deliveries of these systems but only our most optimistic projections would result in all 80+ systems being delivered this financial year.

We will therefore not sell the necessary 200 systems to break even in the current 2005/06 year. Hence for our business to record a profit this year we will need to secure a once off contribution from a licensing deal with up-front components and/or payment of back royalties due following patent prosecution wins last year in Japanese and European jurisdictions.

While we are extremely optimistic about our future commercial success and profitability we do not yet have visibility of the timing of emerging sales patterns. This may become clearer towards the end of the current quarter

### **Optiscan Milestones**

So what are the future key milestones for Optiscan to become a profitable and successful medical technology company.

Of the milestones we set ourselves in April 2003, 5 of the 7 have been fully completed and we have made significant progress on the other two.

Given these achievements and our plans it is now timely for us to be adopting a new set of milestones that will focus our activities on the commercial road ahead.

Following ratification by the Board this morning Optiscan's new milestones are:

#### **Pentax ISC 1000**

- Achieve company breakeven by sales volumes of 200 units pa
- Consistent outcomes achieved by doctors in multi centre trials
- Receive FDA clearance for claims of efficacy

#### **Other**

- Achieve sales of Optiscan FIVE 1 instrument
- Rigid endo-microscope pilot trials demonstrate clinical utility
- Enter into an additional partnership(s)
- Secure further Pentax flexible products
- Complete design of smaller lower cost scanners
- Complete design of digital architecture systems
- Achieve regulatory status for Optiscan application of CE Mark

Your Board and all Optiscan staff will be focussed on completing these milestones and developing our business so that it can emerge as a highly profitable and successful medical technology company.

Matthew Barnett  
Chief Executive Officer  
Optiscan Imaging Limited

8 November 2005