Fermiscan Holdings Limited

Investor presentation

Mr David Young, Managing Director
Dr Peter French, Chief Scientist

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About Fermiscan

Technology

- Developing novel test for breast cancer using X-ray diffraction of hair
- Global patent families - “Using hair to diagnose breast cancer”
- Synchrotron X-ray capacity secured and operations commenced

Market opportunity

- 100 million mammograms (50-69 years old) per annum globally
- Target market - women aged between 25 to 80
- Global market size - in excess of 300 million women

Market entry strategy

- Low regulatory hurdles – Therapeutic Goods Administration exempt
- Commercial pilot launch October 2007
- Licensing in six South East Asia countries completed December 2006
- Feasibility study for Japan market commenced May 2007

Capability

- ASX listed Oct 2006 (ASX code: FER)
- Market capitalisation AUD $380 million
- Experienced commercial, scientific and medical executive team

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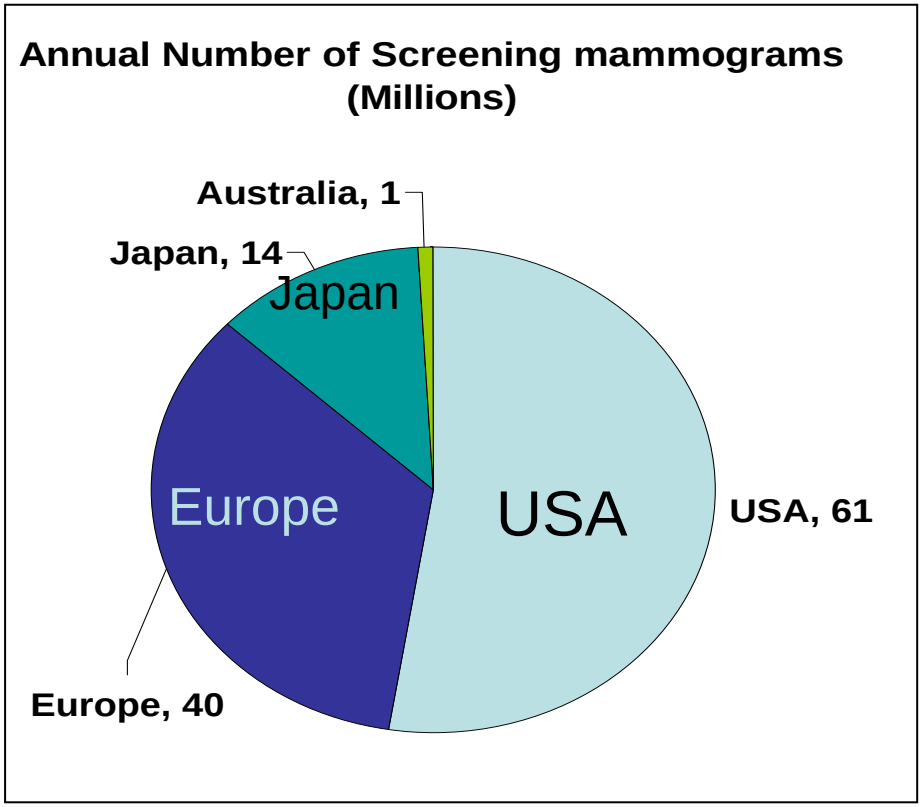
Market opportunity

- Over **100 million** women (50-69 years old) globally will have a mammogram in 2007.
- Participation rate of around 60% of eligible women
- Potential market of **306 million*** women aged between 25-80 in USA, Japan, W. Europe, Australia, S-E Asia
- Potential government / insurer subsidies



*US Census Bureau

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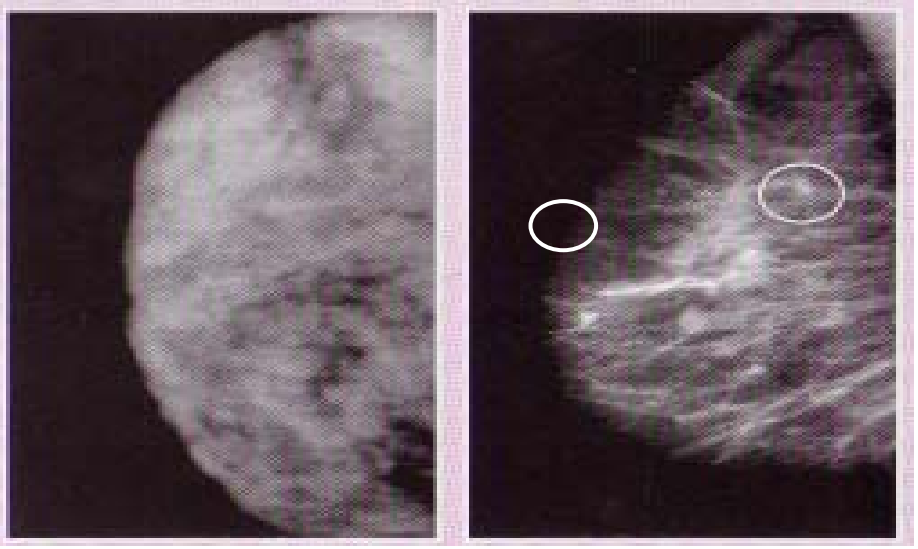
Market opportunity

Mammography is the current “gold standard” in detection of breast cancer,

BUT:

- Painful
- Significant false negative rate[1,2]
- 80% of biopsies prove negative[3]
- Declining participation[4]
- Not recommended for women under 50 years due to denser breast tissue
- Long term exposure to X-rays may increase risk of breast cancer



Mammogram of a 33 year old woman

Mammogram of a 60 year old woman; cancer is circled.

References:

[1] **Pisano et al, *NEJM;* 375:1773-83, 2005.**
[2] **Warner et al, *JAMA;* 292:1317-25, 2004**
[3] ***Siemens* (leading Diagnostic Equipment Supplier), 2007.**
[4] ***Washington Post*, May 2007**

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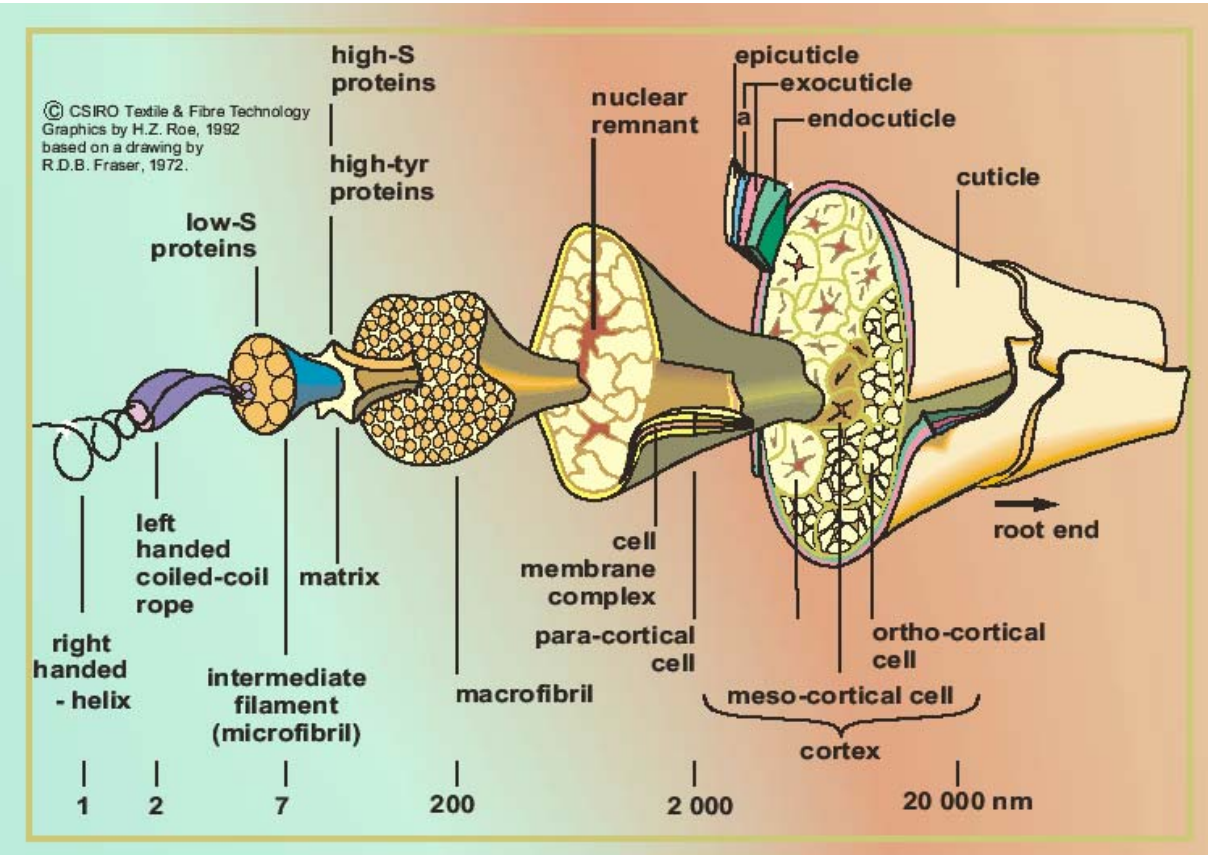
Technology - How can breast cancer be detected through hair?

- Synchrotron X-ray diffraction can identify molecular structure of hair
- Breast tumors secrete growth factors (cytokines) into blood stream which bathe hair follicles
- These growth factors can affect the way the hair follicle functions in laying down orderly arrays of keratin filaments to form hair
- This leads to an alteration in molecular structure of hair



- Because hair grows, these structural alterations are preserved in the fibre and retain an individual's biomedical history

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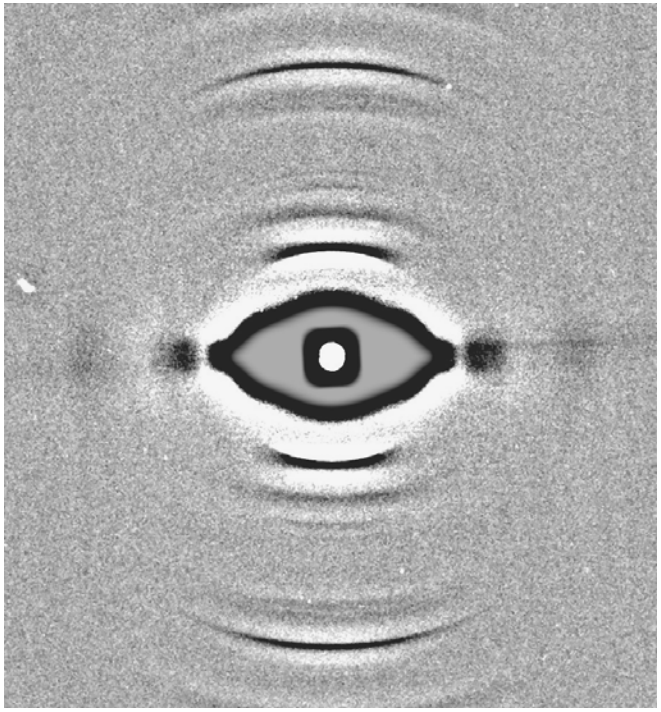
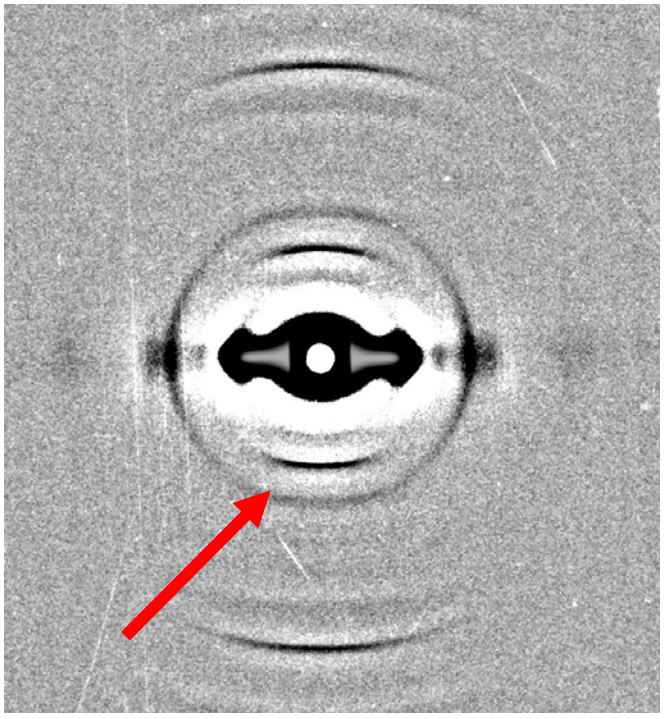
Technology

- In 1999 Australian scientists showed that the presence of breast cancer could be detected using synchrotron X-ray diffraction of hair*
- Hair fibres from individuals with breast cancer have an altered molecular structure which appears as a “ring”



Normal alpha-keratin X-ray diffraction pattern of a human hair



X-ray diffraction pattern of a hair from an individual with breast cancer.

***James, V et al. Using hair to screen for breast cancer. *Nature* 1999; 398:33-34**

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Technology - Clinical data 1999 - 2005

503 human hair samples were collected for breast cancer detection and blinded

- All positive samples were correctly identified[1].
- Some false positives were identified - some individuals were subsequently diagnosed with breast cancer and therefore not all of these may be false[2].

The results of 503 human hair samples studied for the detection of breast cancer[1]

Sample status	Sample Origin	Number of samples	Synchrotron X-ray diffraction results		Sensitivity %	Specificity %
			False negative	False positive		
Positive for breast cancer by mammography and biopsy	Australia and South Pacific	100	0		100	
	Europe	58	0		100	
	North America	52	0		100	
Assumed negative for breast cancer by mammography	Australia and South Pacific	118		13		89
	Europe	88		13		85
	North America	87		21		76
	Total	503		47	100	84

[1] International Journal of Cancer 114: 969-972, 2005
[2] Journal National Cancer Institute. 95: 170-171, 2003

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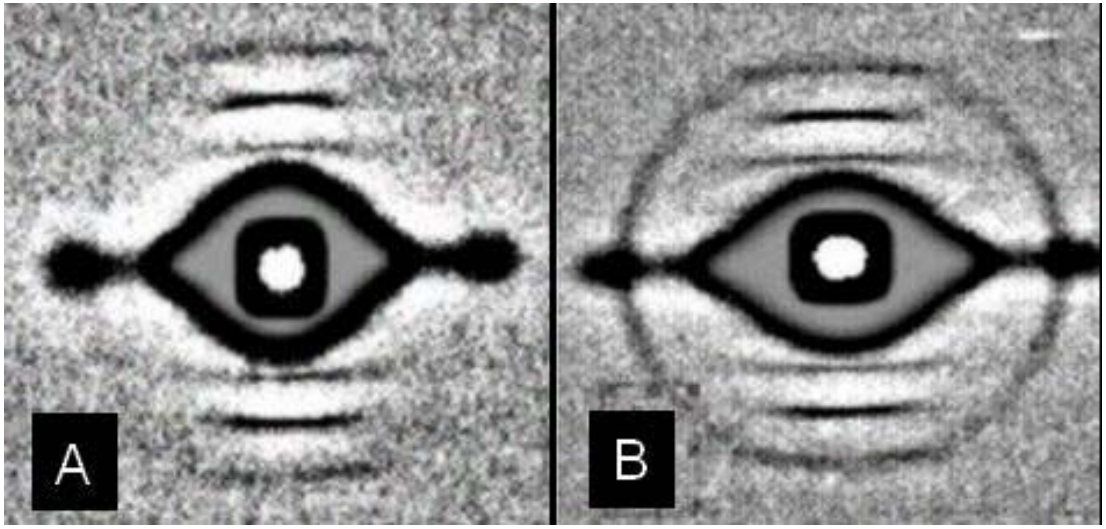
Technology - Scientific research to date

Study in Mice

- Nude mice were implanted with human breast adenocarcinoma cells[1]
- After 8 weeks, tumors had developed and the mice were confirmed to have malignant tumors
- Whiskers were removed before, and at 8 weeks after the cells were implanted, for diffraction studies
- The whiskers removed after 8 weeks showed the “ring” as seen in hair from women with breast cancer



X-ray diffraction patterns of whiskers taken from the same mouse:
A. Before implantation of cancer cells.
B. 8 weeks after implantation of cancer cells.

[1] **International Journal of Cancer 114: 969-972, 2005**

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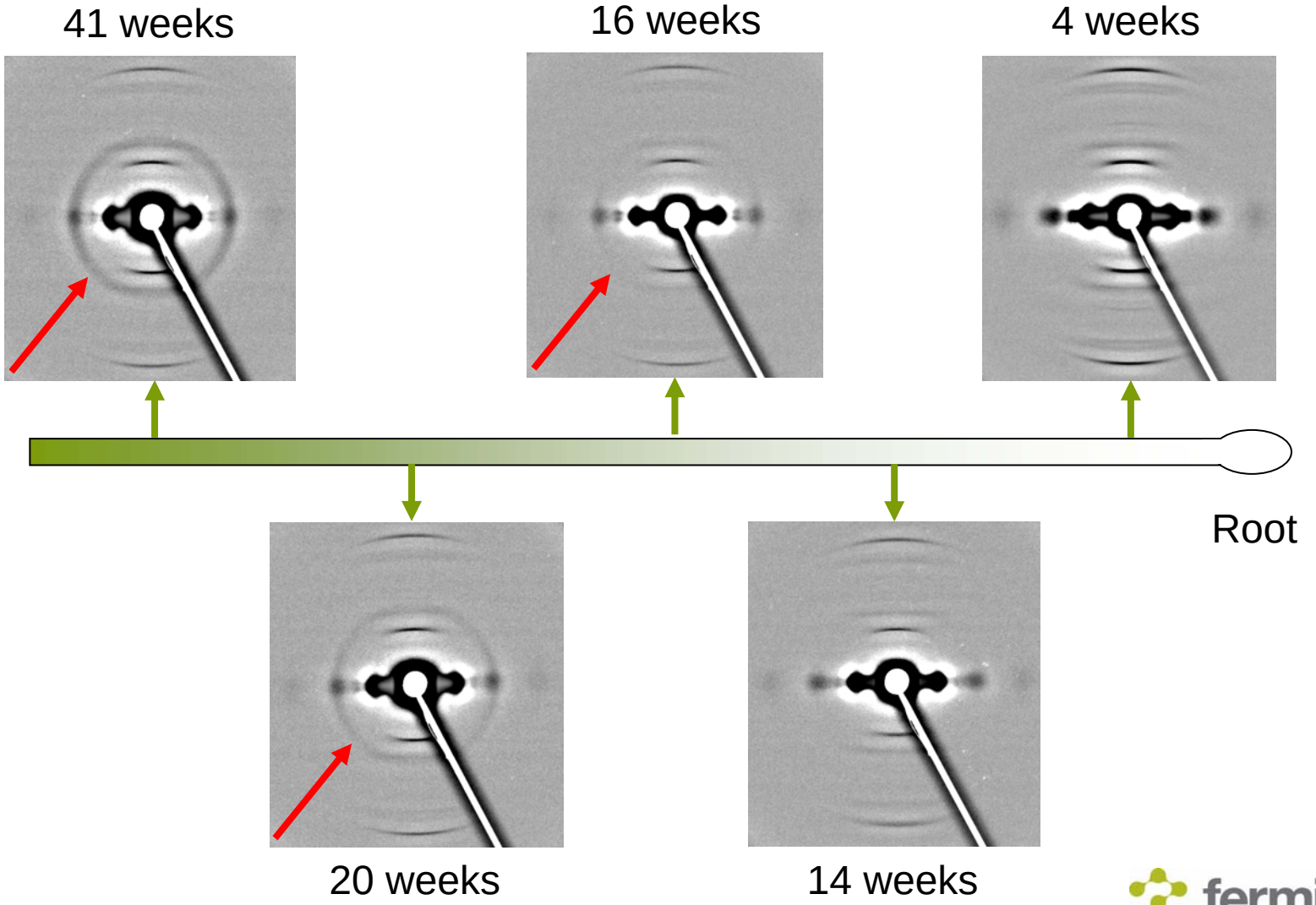
Technology - Potential for treatment monitoring

Human subject treated for breast cancer by surgery and chemotherapy
The X-ray diffraction hair history tracks the course of the treatment



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Technology - Scientific research summary

- X-ray diffraction of hair shows a correlation between the presence of the disease and an altered diffraction pattern
- In mouse studies the “ring” correlating to the presence of breast cancer appears at an early stage in tumour growth
- In studies of over 1300 blinded hair samples from individuals with varying pathological states, all samples known to be positive for breast cancer were identified
- The “ring” correlating to the presence of breast cancer is not observed for any other pathological state studied
- X-ray diffraction of hair can potentially be used to monitor the effect of treatment for breast cancer
- More samples needed to validate the efficacy of the technology

Technology - Advantages of the Fermiscan test

ADVANTAGES of the Fermiscan breast cancer test over current breast cancer testing:

- painless
- non-invasive
- safe
- suitable for women of any age
- may provide a system for early detection and
- has potential in monitoring of recurrence of breast cancer following treatment

Clinical trials

- In January 2007 Fermiscan commenced a 2,000-patient validation trial with the support of major radiology and diagnostic groups
  - Approximately 1650 samples collected from 12 clinics
  - Patient enrolment progressing with trial completion anticipated mid 2007
  - Results of the first 107 samples have been released
  - Results from the Fermiscan breast cancer test are compared to results obtained from mammograms and pathology
- A trial investigating the potential of the Fermiscan breast cancer test for monitoring of breast cancer patients is being conducted in a leading Australian hospital
- Negotiations are underway for International trials on known cancer patients in Italy and the USA
- Beam time access in the USA has been secured for all trials

Technology – Intellectual property protection

- Patents granted in Australia, NZ and the USA, 18 years to run
- European patent granting imminent – EU intent to grant received
- Japan patent in examination phase
- Canadian application pending
- New patent applications lodged covering automation, analysis and improved process
- Patents include coverage for other pathological states such as prostate cancer and Alzheimer's disease

United States Patent

USING HAIR TO SCREEN FOR BREAST CANCER

Patent No. US 6,718,007 B1

Date of Patent: Apr 6, 2004

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The business

Fermiscan is commercialising a world-first, innovative test for the early detection of breast cancer using a simple, non-invasive screening method

- Scaleable business - significant economies as volumes grow
- Profitable business - EBITDA for 500,000 tests of AUD$ 61 million
- Huge global market - 100 million mammograms annually - in excess of 300 million women in South East Asia, Japan, Europe, USA, Australia
- Current synchrotron capacity enables more than 1 million tests per annum
- International licensing arrangements require minimal up front investment
- Commercial rollout in Australia & initial license territories by the end of 2007
  - no further approvals required in Australia
  - the Fermiscan breast cancer test will be launched as a “Pilot” in Australia in the second half of 2007
- Further clinical evaluation of prostate cancer, Alzheimer’s, other cancer and pathological states provides further opportunity

Market entry strategy - Australia and International

Regulatory

Therapeutic Goods Administration - exempt as a medical device in Australia & New Zealand

US FDA – initial use will be monitoring, with a screening application in parallel

Population specific trials

Australia - several trials underway:

- comparison with mammography (n = 2000);
- recurrence of breast cancer (n = 60);
- breast cancer sub types (200)

Singapore - in discussion

Veneto, Italy - in discussion

Michigan, USA - in discussion

There are 40 synchrotrons located around the world

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Market entry strategy - International licensing

South East Asia

Avia Reed International Pte Ltd granted rights to market and sell the Fermiscan test in:

- Singapore (1.7 M target population),
- Hong Kong (2.5 M)
- Malaysia (6.2 M)
- Thailand (20.5 M)
- Vietnam (22.6 M)
- Indonesia (61.2 M)

The management of Avia Reed International have had extensive medical experience, including ownership and management of medical centres, and pathology and outpatient clinics in Singapore

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Market entry strategy - International licensing

Japan

14 million mammograms performed every year with a potential relevant population for the Fermiscan breast cancer test estimated at 42 million women

In February 2007, Fermiscan announced a feasibility study with leading merchant banking and asset management group Crosby Capital Partners Inc. to commercialise the test for breast cancer in Japan

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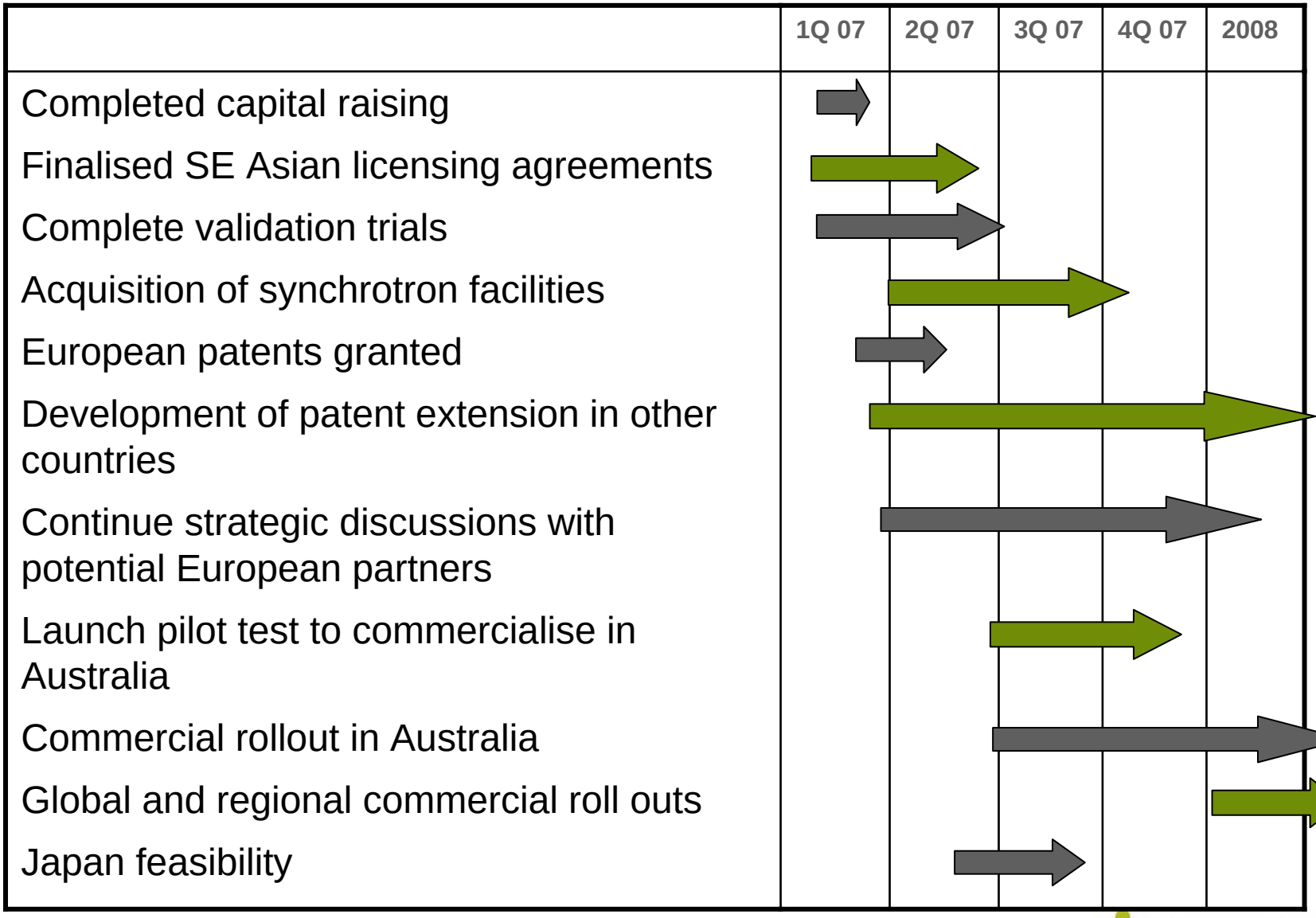
Market entry strategy - business rollout timeline



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Capital structure

- Listed on Australian Stock Exchange (ASX code: FER) since 25 October 2006
- Issued shares – 202 million fully diluted
- Cash at June 2007 was AUD$25 million
- Fermiscan is debt free
- Market capitalisation of AUD$380 million fully diluted
- Raised over AUD $30 million in capital in the last twelve months
- Fundraising of AUD$22.5 million in February 2007 from international institutions

Financial sensitivity analysis

The following sensitivity analysis is dependant upon the successful completion of the current trial. The company is presently unable to assess market penetration of the test globally.

Significant factors to note are:

- given a potential global market in excess of the 100 million mammogram's conducted annually and
- knowledge regarding pricing, regulatory approvals, costs and potential profitability
- the sensitivity model contains potential test volumes considered by the company to be reasonable

Synchrotron beam time negotiations have resulted in confirmation of costs and contracts for 2007

The sensitivity analysis compares profitability models at various volume thresholds and is predictive in character. The analysis

- may be affected by inaccurate assumptions or known or unknown risks and uncertainties
- may materially differ from the results ultimately achieved

Financial sensitivity analysis

Fermiscan tests	80k (Break even)	500k	1,000k **
	$'s millions	$'s millions	$'s millions
Gross revenue	18.1	113.2	181.6
Cost of sales	4.6	21.4	42.5
Gross profit	**13.5**	**91.8**	**139.1**
Corporate costs	3.8	8.3	9.0
Sales & marketing	3.1	7.3	7.6
Business operations	1.3	3.6	3.8
Research & development	0.5	2.8	5.7
Laboratory	4.8	9.1	9.7
Expenses	**13.5**	**31.1**	**35.8**
EBITDA	**-**	**60.7**	**103.3**

**** Includes 500k tests via licencees**

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Key sensitivity analysis assumptions

The sensitivity analysis:

- Shows a range of Fermiscan breast cancer test volumes for a fully operational year including 80k and 500k test volumes for a national roll out in Australia
- Shows a 1 million test volume which includes 500k roll out in Australia and 500k through international licences
- Implies a successful outcome from clinical trials
- Implies public and medical acceptance and uptake of the Fermiscan breast cancer test in Australia and internationally
- Is based on a full year where the business is established for the volumes indicated and therefore includes regular annual expenditure
- Shows EBITDA and does not include capitals costs, depreciation or amortisation
- Does not include any government subsidies
- Includes 2.5% of gross sales allocated to research and development
- Includes in cost of sales inventor royalty payments, retail margin, distribution and administration, packaging and data storage

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Key sensitivity analysis risk factors

- Successful outcome from clinical trials
- Regulatory risks in countries where the Fermiscan breast cancer test is to be commercialized
- Public and medical acceptance and uptake of the Fermiscan breast cancer test
- Synchrotron operational issues or significant cost increases
- Development by third parties of a competitive alternative breast cancer test
- Normal and usual business and intellectual property risks
- Managing the growth and expansion of operations and facilities
- Ability to attract and retain suitably qualified staff

Our People - Commercial experience

David Young - Managing Director

- Group Managing Director and CEO, Australian Pharmaceutical Industries Limited,
- Director of A.S Watson & Co. Limited in Taiwan
- 10 years Executive Director at DairyFarm International Holdings Limited
- 12 years with Target Australia in State and National roles.

Gary Garton - Non-Executive Chairman

- President and CEO, Brinks Inc., (USA).
- Executive Director of Brambles Holdings Limited.
- CEO and Managing Director of Aristocrat Leisure Limited.

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Our People - Medical Specialists (Radiologists)

Dr Ronald Shnier

MBBS, FRACR – Non-Executive Director

- Director of Symbion Imaging Clinical Research Imaging Centre
- Director MRI Services, Health Care of Australia.

Dr Michael Carr

MBBS, FANZCA, FANZCR – Non-Executive Director

- Director of Medical Services of I-Med Network, division of DCA Limited.
- Director Medical Services of MIA Group Limited,

Our People - Scientists

Dr Peter French BSc, MSc, PhD, MBA

- PhD in keratin proteins of the wool fibre
- Principal Scientist, St Vincent's Hospital Sydney
- A past President of the Australian and New Zealand Society for Cell Biology

Gary Corino BSc

- 20 years research experience in protein chemistry with the CSIRO Textile and Fibre Technology.
- Published papers and worked with the inventor for 7 years on the test.

Conclusion

- The Fermiscan breast cancer test is non-invasive and is suitable for women of all ages
- The business model is highly scalable and profitable with minimal up front investment
- Profitable business based on the sensitivity analysis with EBITDA for 500,000 tests of AUD$ 61 million
- The test has potential to significantly improve treatment and health outcomes due to early detection of breast cancer
- Market opportunity in excess of 300 million target women globally.
- Fermiscan has the support of key radiology groups, Government agencies including National Breast Cancer Council and the National Breast Cancer Foundation
- Licensing tie-ups in Asia should enable relatively quick regional roll out
- Further opportunity exists to test for other pathological states such as prostate cancer and Alzheimer’s disease

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Thank you

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