

'Defining Life's Signals'

Annual Report





#### FINANCIAL SUMMARY

ALL FIGURES IN A\$M UNLESS OTHERWISE STATED	2008	2007
Revenue for continuing operations	38.6	36.7
Earning's before interest, income tax, depreciation and amortisation (EBITDA)	1.9	1.4
Earning's before interest and income tax (EBIT)	1.4	1.0
Net operating profit after tax (NPAT)	0.8	0.1
Research and development costs as a percentage of operating revenue	11.9	12.5
Total assets	20.1	19.2
Shareholders funds	8.5	6.9
Net tangible assets per share (cents)	4.1	4.3
Weighted average number of shares (million)	143	143
Earnings per share (basic) (cents)	0.5	0.1
Earnings per share based on earnings before interest, tax, depreciation and amortisation (cents)	1.4	1.0

#### UNDERSTANDING THE NUMBERS

Revenues: Revenue increased by 5.2 % from \$36.7m to \$38.6m over the previous corresponding period.

EBITDA: Improved to \$1.9m in the current financial year from \$1.4m in the previous financial year

PAT: The business made \$0.8m this year compared to \$0.1m last year due to ongoing improvement in the business in the financial year as a result of the restructuring and continued focus on the turnaround and increasing revenues.

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**Compumedics Limited** ABN 95 006 854 894

**Annual General Meeting** 

Thursday 20th November 2008

at 10.30am

To be held at: Compumedics Limited

30-40 Flockhart Street Abbotsford

Victoria 3067

# 'Our focus...



## Building a world-class medical technology company.

Since 1987, Compumedics' strategy has focused on developing its core competency – Sleep Diagnostics – which has enabled the company to become one of the leaders in this growing international healthcare market. In recent years, Compumedics has leveraged its Sleep Diagnostics technology platform to develop new opportunities in neurological research and Doppler ultrasound as we build a world-class medical technology company.

Today, Compumedics' technologies and products are distributed to clients around the globe, helping millions of people who suffer from debilitating sleep, neurological and other healthcare problems.

# ...remains firm.'

# A focused strategy in action

For over 20 years, Compumedics' focus in Sleep and associated medical disorders has established a solid platform for growth.

#### Compumedics established

David Burton founded Compumedics to design and manufacture medical electronics Prior to Compumedics, analysis and diagnosis depended, in large part, upon manual recording methods, which were very time consuming and costly to implement. The sleep monitoring system developed by Compumedics comprises powerful computer-based hardware and sophisticated software programs which eliminate thousands of pages of paper readings and countless hours of work by technicians freeing them for more productive work.

1988

#### Computer-Aided Sleep Scoring system released

Dr M.W. Johns and David Burton released an abstract: An improved Method for EEG Analysis and Computer-Aided Sleep Scoring. This system is the basis for Compumedics' current sleep staging software that is now recognised throughout the world.

1990

S-Series – the Australian digital sleep system in Asia Pacific



#### P-Series and S-Series released

Compumedics announced the release of the P-Series Portable Sleep Monitoring System with features including intelligent CPAP control.

Compumedics released its S-Series optical erasable disk storage sleep systems.

1992

1993

#### NASA contracts won for International Space Station and Space Shuttle flight preparation

NASA chose Compumedics' P-Series Portable Sleep Monitoring System for the 1998 Neuro-mission Space Shuttle flight preparations.

Compumedics entered into cooperation with the US\$5 billion dollar Japanese conglomerate, Teijin for the development of the Japanese sleep market.

Compumedics developed its
Paperless EEG system in conjunction
with world-renowned EEG researchers
and technicians including Dr Sam
Berkovic and Mr Milosh Vosnansky
of the Austin Hospital Neurology
Department – leading epilepsy centre
in the Southern Hemisohere.

Compumedics was awarded a patent for its on-line analysis.

Compumedics was awarded AS3901/ ISO9001 Total Quality Management certification by NATA Used by NASA and SHHS



#### Key awards and wins

Compumedics was awarded the European CE mark for Quality and Good Manufacturing Processes.

Compumedics won the contract to supply medical hardware for the International Space Station's Human Research Facility (HRF) under contract to NASA.

007

#### Epworth installs first Sleep Disorders Unit

1989

Compumedics' first sleep system was installed at the Epworth Hospital Sleep Disorders Unit (Melbourne, Victoria). TIME magazine and the television series 'Beyond 2000' both featured the Epworth sleep center.

1991

#### Royal Prince Alfred Hospital installation

Compumedics sleep equipment was chosen by the internationally recognised Sleep Disorder Centre at the Royal Prince Alfred Hospital, Sydney. This centre, under the direction of Prof. CE Sullivan (University of Sydney) was responsible for the breakthrough discovery in the treatment of sleep apnoea with nasal CPAP in 1981.

1995

#### NZ's first Sleep Laboratory installed

Compumedics installed
New Zealand's first fully
computerised sleep laboratory
at Green Lane Hospital.

1994

Sales revenue

\$1.7M

Sales spli



Domestic \$1.5rExport \$0.2m

## Chosen for world's largest sleep study

1996

Compumedics won the competitive US Governmentfunded contract to supply the equipment for the world's largest sleep study (6000 patients). The five year Sleep Heart Health Study (SHHS) was won against a field of 22 competitors, including multinationals. Compumedics supplied 40 P-Series Sleep Monitoring Systems along with 9 replay and 6 analysis systems. The equipment selection committee was made up of sleep experts from 11 leading University Hospitals across the USA

Compumedics was granted IEC 601-1 patient safety certification for its S-Series and P-Series products.

1997

#### P-Series products wins award and FDA approval

Compumedics' P-Series wins a Highly Commended Award at the Australian Engineering Excellence Awards.

Compumedics was awarded the 1997 Premier's Award for Technological Innovation in the Telstra & Victorian Government Small Business Awards.

#### FDA approval for P-Series

P-Series receives FDA clearance to market in the USA.

Sales revenue

\$5.4M

Sales split



Domestic \$1.6mExport \$3.7mOther \$0.1m

Globally read TIME magazine cover and article brings the "Trouble with Sleep" to the world. Compumedics recognised

Compumedics was named Australian Exporter of the Year

Compumedics was awarded the Commonwealth Bank Small to Medium Innovative Manufacturer Award.

Compumedics was awarded the 1998 Governor of Victoria Award for Victorian Exporter of the Year

Compumedics was awarded the 1998 Governor of Victoria Export Award for Small to Medium Innovative Manufacturer.

Compumedics was awarded the 1998 AusIndustry Innovation Award

Compumedics was awarded the 1998 Telstra Innovation Award.

1999

Compumedics' ASX listing Compumedics listed on the

E-series EEG/ PSG system receives FDA clearance to



Australian Stock Exchange.



Somté -

'holter-style"

both cardiac and

respiratory data

recording for

Furopean Market Compumedics' completes first acquisition

- Neuroscan.

2003

Compumedics acquires German based DWL Electronishe Systeme GmbH

FDA approval for Summit IP Summit IP receives FDA clearance to market in the USA

FDA approval for SynAmps2 SynAmps2 receives FDA clearance to market in the USA

Sales revenue

Sales solit



Domestic \$4.3m Export \$29.5m Other \$0.2m

Sleep Products received regulatory clearance in Taiwan

Sales revenue Regional Split



Domestic Export

Key distributor agreement signed with Medigas Italia, a division of Praxair, Inc., for the distribution of the complete Compumedics product line.

Neuroscan MaglinkRT released with CE mark approval. Latest generation technology for recording EEG and ERP in the MRI.



2007

US Office relocated to Charlotte, NC

\$200m of revenue achieved since listing

Compumedics DWL awarded membership to Germany's top 100 innovative companies

neuvo LTM is released the new standard in LTM and epilepsy monitoring.

Xegis EMG/EP/IOM released leading the way in

Neurophysiology EMG/EP/IOM.

CURRY 6 released the world's most powerful Multi-modal Neuroimaging



2008

2001

#### Compumedics awarded

2000

Compumedics was named Small Business of the Year at the Telstra and Australian Government Small Business

Compumedics won the AusIndustry Innovation Award at the Telstra and Australian Government Small Business

Compumedics won the Ansett Australia Business Owner Award at the Telstra and Victorian Government Small Business Awards

Compumedics was awarded the 1999 Business Asia Best Australian Small Medium Business Activity in Asia Award.

#### CMP receives more

recognition

Compumedics won the 2001 Australian Export Award for Small to Medium Manufacturers.

2002

Compumedics won the 2001 Governor of Victoria Export Award for Small to Medium Manufacturer.

Compumedics won the AVCAL (Australian Venture Capital Association Limited) award for Best Early Stage Investment for 2000/2001.

**FDA approval for Siesta** Siesta Systems receives FDA clearance to market in the USA

#### \$10 million deal signed with Draeger Medical

Compumedics signs the largest distribution deal to date worth AU\$10 Million with Draeger Medical (Germany).

2004

FDA approval for Somté

Somté cardio-respiratory System receives FDA clearance to market in the USA.

2005

#### DWL division established for blood-flow Doppler technology.

2006



 Australasia 42% USA 38% Europe 20%

Sales revenue

Compumedics awarded the 2006 Frost & Sullivan Technology Leadership Award.

Compumedics and chairman inducted into the Victorian Manufacturing Hall of Fame.

#### Somté PSG is released -

the simplest and most convenient way to meet requirements for recording full PSG, in both attended and unattended settings.

Profusion PSG3 is released the next generation world class sleep diagnostics software redesigned and with more powerful productivity tools. World's first to be AASM compliant.

Somté PSG & Profusion PSG3



Somté PSG™ - Full PSG absolutely anywhere.





Siesta 802™ – World leading wireless system for sleep and EEG.

## Chairman's address

#### Dear Compumedics investors and stakeholders,

I am pleased to be able to report that Compumedics continued in the 2008 financial year to build on its financial performance recording not only record revenues of \$38.6m (up from \$36.7m in the prior year), but also a significant jump in net income to \$0.8m (up from \$0.1m in the prior year) and, importantly, operating cash to \$1.9m (up from \$0.8m in the prior year).

The ability of the Company to continue to improve its financial performance in 2008 occurred against a back-drop of a volatile Australian dollar and a turbulent and uncertain economic environment, both of which present significant challenges for the Company. Compumedics' focus and diligence on its fundamentals has returned the Company to positive cash flow and profitability, while diminishing its debt to an historically low balance. However, the scope of the focus has not been overly narrow and only cost-based. It has included the best growth prospects for the Company with the completion of our most significant new and innovative product developments to date, which build on the Company's current product suite and span both well established EEG (electroencephalography), EMG (electromyography) and EP (evoked potential) medical disciplines, but also includes new and innovative sleep treatment products.

Despite the challenging environment, Compumedics achieved the following key outcomes in the 2008 financial year:

- a further strengthening of the financial performance of the business
- sales increased by about 5% despite the adverse impact of foreign exchange movements
- debt reduced further from \$3.4m to \$2.8m
- new products from R&D pipeline for imminent release e.g. Neuvo® LTM device
- new breakout SomniLink® SPAP® technology ready for first commercial shipments
- new EMG product, Xegis®, to be delivered as part of expanded product offering

Compumedics employees and related parties continued to work diligently and vigorously with the end result being that Compumedics achieved a net profit after tax in 2007-08 of \$0.8 million compared with a profit of \$0.1 million in the prior year. Revenue increased by about 5% to \$38.6m from \$36.7 million despite the adverse currency movements.

The Company continued to strengthen its key financial metrics markedly in the 2008 financial year including:

- Gross margins stable at about 58% despite currency movements
- Cash expenses stable despite significant investing activities undertaken during the year
- EBITDA in 2007-08 was \$1.9m compared with a \$1.4 million result in 2007
- Operating cash flow improved further to \$1.9m from \$0.8m in the 2007 financial year
- Borrowings were again reduced from \$3.4 million at June 2007 to \$2.8 million at June 2008
- Borrowing costs were also lower at \$0.7m in the 2008 financial year compared to \$0.9 million in the 2007 financial year.

Sales grew again in the 2008 year despite the appreciation of the Australian dollar and other external factors the Company had to deal with. Importantly the US business grew by 10% in US dollars over the prior year. The Australian and Asian businesses also performed well, growing over the prior period. As a consequence, the Company is now in a stronger position to further build on its traditional growth trajectory, whilst restoring its cash reserves and continuing to build on its financial performance.

Compumedics' current core businesses include the manufacture and sale of sleep devices and consumables from its Sleep Division, Doppler ultrasound blood-flow diagnostic products from its DWL Division, and brain function research and clinical neurology products from its Neuroscan and Neuroscience Divisions. Each of these divisions demonstrated continued improvement over the past year. Compumedics will continue to pursue profitable and sustainable growth opportunities in each of the divisions of the Company.

It gives me great satisfaction that Compumedics has been able to achieve the 2008 financial results from its current product range, but at the same time I am equally aware and impatient for Compumedics to achieve improved levels of profitability and financial performance.

The Company has a great portfolio of intellectual property that must be fully developed and commercialized so that Compumedics can achieve financial results commensurate with the potential of its world

leading technologies. To this end, Compumedics' research and development teams have continued to focus on maintaining the Company's leading technological edge.

As a consequence, the Company has released over the last financial year several new products to markets and will, over the course of this financial year, release several new break-through and modified products, in particular, the SomniLink® SPAP® system, an integrated positive airway-pressure system for the treatment of sleep apnoea. The sleep-treatment market is approximately tenfold greater in magnitude than the sleep-diagnostics market in which Compumedics' current suite of sleep products competes.

I am also very pleased to note that Compumedics' long-term strategy of complementing its suite of products for sleep diagnostics with new and innovative sleep-treatment products was pursued with vigour during the year. Following on from the letter of intent signed with Medigas Italia in June 2007, I am pleased to note that Medigas Italia took a strategic stake in the Company in July 2008, acquiring just under 3% of the issued capital. Medigas Italia is a member of the global Praxair, Inc. group of companies. This investment by Medigas Italia strengthens Compumedics with two of its very important distribution partners, the other being Teijin Pharma Limited, a major participant in the Japanese sleep devices market, which has maintained its shareholding.

It would be remiss of me not to mention the hard work and dedication of our operational and manufacturing staff around the world who continued to not only focus on "getting the product out the door" but who have actively engaged in on-going measures that will see further cost savings and quality improvements flow to our clients and the business in the year ahead. These factors, together with improvements in our installation and training teams and technical service support will continue to provide the Company with further opportunities to meet customers' requirements in the most efficient manner possible.

In conclusion, this financial year has been one of further building on the financial performance of the Company. As mentioned, the continued improvement in the financial performance of the Company was achieved due to the efforts of Compumedics' dedicated and highly skilled team of employees focused on restructuring the Company to more cost-effectively deliver its world-class products.

Finally, I would like to again thank all those patient and trusting Compumedics clients, stakeholders, employees, families and friends who continue to contribute their support, resolve, goodwill and encouragement during yet another very demanding year for the business but a year that clearly builds further the foundations for our future growth prospects. Compumedics is positioned to become one of the great global medical devices organisations.

Yours sincerely,

David Burton

Executive Chairman and Chief Executive Officer Compumedics Limited

38.6

+5%

#### The Company has continued to build on last year's return to profits. Where to from here?

The Company has worked very diligently to grow profitability over the last couple of years. There is no certainty for any small-medium size company operating in the global economy. However, we remain very focused on our business and ensuring that it grows profitably in demanding economic times. The Company has a very solid portfolio of intellectual property. For example, innovations in the new SomniLink® SPAP® product are protected by patents in major markets. The challenge is to continue to grow profitability whilst selectively and aggressively pursuing those opportunities that will grow the business significantly into the future.

#### Are you satisfied with the results to date?

The business has performed well over the last two years but there is much more that can be done to achieve and then maintain market-acceptable levels of earnings and cash generation. The work that has been done to date will enable the business to continue to execute its strategic goals which includes a return to strong growth and increasing profitability.

# What does the business need to do to ensure that it continues grow and prosper over the next few years?

There are a wide range of on-going programs and initiatives that will continue to progress. The existing programs range from continuing to strengthen our Asian and European distribution arrangements, launch our new long term monitoring EEG product range (Neuvo®), intensify our sales and marketing efforts, through to on-going cost reductions. The Company is commencing to build its own direct sales force in Europe to enhance the distribution arrangements there.

The Company has also entered an agreement to sell under its brand a range of EMG devices, the Xegis® range. In doing so, the Company has a complete neurophysiology product offerings that places it well to compete with the product ranges of larger players.

The entry of Medigas Italia onto Compumedics' share registry indicates the commitment of that strategic partner to success in Compumedics' foray into the sleep-treatment market. Compumedics continues to seek similar arrangements for its complete suite of products.

# Research and development spending continues to fall. Will this have any adverse impacts for the business in future years?

The Company capped research and development (R&D) expenditure at about 15% of revenues in 2008, excluding the booking of the intangible asset in the year. This is a significant reduction from the 20% of revenues spent on R&D two years ago. The Company plans to hold R&D spending in dollar terms at current levels until on-going revenue growth in the business sees R&D spending at about 12% of revenues. Compared to our peers overseas this is an appropriate target to aim for without jeopardising the new product flow for the business.

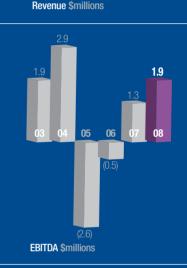
Most importantly, Compumedics released several new products in the 2008 financial year and has a significant pipeline of products ready for release in the current financial year. The business is in a very strong position as far as product development and releases are concerned.

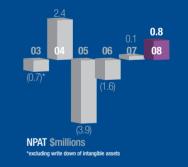
# The Australian dollar to the US dollar exchange rate appreciated significantly in the 2008 year and proved very resilient against the US dollar. How will this impact the business going forward?

The Board reviews the Company's foreign exchange policy on a regular basis. In the 2008 financial year the Company booked a \$0.7m net foreign exchange loss as a direct consequence of the falling US dollar exchange rate. However, it is important to note that in the over seven years since listing Compumedics the impact of foreign exchange movements on the profitability of the business has been almost neutral.

The Company estimates that a plus or minus one cent movement in the Australian dollar to the US dollar exchange rate has an approximate plus or minus \$20,000 impact on profits after tax.

The on-going strength of the Australian dollar relative to the US dollar forces the business to continue to rigorously seek efficiencies so that underlying profits can be maintained, which is not a bad thing.







# Borrowings reduced from \$3.4M to \$2.8M in the current financial year.

# US home office relocated to Charlotte, North Carolina

# The US business grew when expressed in US dollars. Do you expect this to continue?

The US market is critical to the current and future success and growth aspirations of the Company; therefore we will continue to focus intensely on this market and our business there. While the US is an inherently competitive marketplace, we have grown and expect to continue to grow our market share in each of the markets we compete in there.

## The Company tends to have a softer second half compared to the first half. Why is this so?

The core Compumedics business is sleep and neurological diagnostic equipment sales, which are ultimately capital equipment sales. As a consequence, the buying patterns of our customers in the northern hemisphere tend to be skewed to the first half of our financial year. This appears to be largely a result of the budget cycles of the major customers in these markets.

The onus on Compumedics is to continue to expand the global geographical footprint of its businesses so this seasonal effect is diminished. This is a primary focus of the business in these two geographic areas over the next couple of years.

#### How has the DWL business performed in the current year?

The DWL business posted revenue growth of about 6% over the prior year and has consistently done this over the last couple of years. The DWL business has revamped its product offering, which has put the business in very solid position for not only this year but also the coming years.

In addition DWL has several step-out opportunities that the Company is currently progressing, which could significantly expand the business.

# Describe your company's principal products and the healthcare markets they relate to

Compumedics Limited, founded in 1987, is a global leader in the design and manufacture of diagnostic products for sleep disorders, neurophysiology and cardiology. All of these fields were pioneered or discovered in the 1980s, validated in the 1990s and are only now undergoing a rapid commercialisation into the fast expanding 1 billion dollar plus global market for each of these product groups. Compumedics holds an 80% share of the Australian sleep-diagnostics equipment market, and has a major and rapidly growing presence in the US, European and Asian markets for its sleep, neurological, and Doppler blood-flow diagnostic monitoring devices.

The Company has increased sales more than 4-fold from \$9 million (in 1999) to the region today of \$40 million. This reflects our continued commitment to R&D as well as sales and marketing. On those numbers, you can see we are a relatively early "play" but our outlook in these unique fields is high growth. Our move into the adjoining field of sleeptreatment with a new patented product, switches us from a core global diagnostics sleep-market, which is estimated in the region of \$250 million, to the \$2 billion treatment market. We now have a new "intelligent" CPAP device called "SPAP". which is an innovation the Company has developed and which is a natural step-out for the Company. Our focus has been primarily in high growth, early phase, good outlook markets, in relatively new areas and we are now switching into the treatment sector, which is a complementary market but much larger.

# What is the rationale for the Company moving beyond diagnostics technologies for sleep disorders where you have a strong market position into the more competitive treatment market?

The development of advanced products for treating sleep apnoea is a natural step-out from our traditional diagnostics business and leverages the Company's knowledge and experience in the field to develop advanced, next-generation solutions for the management and treatment of an increasingly prevalent problem. This is a major milestone for Compumedics, as the development of new and innovative products in the sleep-treatment market have been a part of our long-term vision for the Company. While some experts view sleep treatment primarily as addressing deficient respiratory function, our development of the SomniLink® SPAP® system is based on the premise that both quality-of-life and sleep-quality are integral to the optimal treatment for sleep-disordered breathing conditions, including sleep apnoea.

# 9

# Geographic territories that did grow revenues year on year and their growth rates.

Last year: 
$$+11\%$$
 This year:

We understand that Compumedics is a global leader in the \$250 million sleep – disorder diagnostics technologies market. This move takes the Company into the \$2 billion global sleep—treatment market. What impact is this likely to have on Compumedics if it can take a significant share of this market?

Being the only independent sleep-diagnostics company and having such a large installed base of sleep beds in many of the most prestigious clinical and sleep-research organisations in the world, the SomniLink® SPAP® system may become a logical choice for practitioners to recommend to patients, subject to any regulatory constraints. We expect that Compumedics' market presence in the sleep-treatment market will grow organically from its well-known and dominant presence in the sleep-diagnostic realm.

Further, the design approach to the SomniLink® SPAP® system took into account sleep efficiency and patient comfort, as well as being a simple treatment for obstructive sleep apnoea. The SPAP® system has the ability to link to a patient's diagnostic data for controlling the system. This has resulted in a treatment system that is arguably superior to those currently available in the market. The SPAP® also has the ability to link into the sleep-diagnostics laboratories and clinics with a product that can be individually controlled according to both sleep- and respiratory-related diagnostics for an individual patient, all at a competitive price. It is unlikely that there will be head-to-head competition and undercutting on price by competitors, because the SPAP® products are well differentiated.

Given established players in the market and the early stage of your commercialisation program, are you targeting any specific opportunity or market segment to build a presence?

Obstructive sleep apnoea (OSA) may affect up to 10% of the population. Only a small proportion of OSA sufferers have been diagnosed to date. The estimate of market size may be very conservative and growing. Compumedics already has its diagnostic equipment installed in over 4,000 beds around the world, in a significant proportion of the world's sleep laboratories, representing hundreds of millions of dollars of sleep-treatment device sales per year to other companies.

The sleep practitioners who run the laboratories with Compumedics equipped beds that are used in diagnosing OSA will likely represent a ready market for the new SomniLink® SPAP® gas-delivery systems. Even a small proportion of new gas-delivery systems sold each year will result in Compumedics gaining a market presence very quickly. Initial trials have indicated that the technology in the SomniLink® SPAP® system provides the potential for a superior treatment experience for the ultimate decider – the patient.

What expectations do you have for these products over the next few years? Do you see the time when treatment technologies surpass diagnostics as the core of the group's operations?

The sleep-treatment device market is nearly 10 times the value of our diagnostic market and we have patented, premium value and innovative products so the outlook is promising and has the potential to surpass the size of our diagnostic business.

#### What do the next 12 months hold for investors?

Aust/NZ

+5%+6%

The core business focus will continue to be based on our three diagnostic competencies - sleep, neurology and Doppler blood flow technology. We now need to drive the scale and officiency of our sales and marketing to achieve leadership within these multi-billion dollar device segments. In terms of the treatment side of our business which we demonstrated recently, we hope that the 1-2% market share which we achieved as the first test, signing with our partner in Italy, will be complemented with a global large-scale OEM deal.

We will retain our continued focus on productivity, and importantly, strive to switch our growth engines back into gear as we replenish our capital reserves without unnecessary shareholder dilution.

Dut

**David Burton**Executive Chairman and Chief Executive Officer
Compumedics Limited

# The Business of Compumedics

Compumedics is a global technology leader in the development and commercialisation of computer based medical products.

Our technology has so far focused on the fast growing, high value sleep medicine market. We are now also focusing on the associated fields of neurodiagnostics and brain research.

By defining life's signals, our technology turns vast amounts of data into valuable information that leads to more accurate diagnosis and consequently more effective therapy for some of the most serious health conditions.

We are an Australian based company with global operations and customers.

#### Global Sleep Diagnostics market

#### Description of the market:

The global Sleep Diagnostics industry is comprised of diagnostic and therapeutic technologies and medicines. Compumedics' core business lies in the design and manufacture of technologies for the diagnosis of sleep disorders — a market estimated to be worth AUD\$250 million worldwide and growing.

#### **Current Market Share:**

6%

#### Competitive Advantages:

- 1 Innovative strength
- 2 Active involvement in sleep science globally
- 3 Market placement and momentum

#### Where we compete:

- Asia 14%
- Europe 15%
- USA 56%
- Australia/NZ 15% (Total Sales)

# Key drivers:

The key driver for growth in brain research will be to maintain Neuroscan's preeminent technological lead and to back this by expanding the sales and support infrastructure to harness this expanding market opportunity.

#### Global Brain Research market

#### Description of the market:

Global Brain Research is the study of the brain's functionality, using Quantitative EEG (QEEG) methods to supplement traditional EEG findings. With the advent of high speed digital information processing and statistical analysis, QEEGs extract and quantify brain electrical activity to address aspects of EEGs that cannot be appreciated visually.

#### **Current Market Share:**

28%

#### **Competitive Advantages:**

- 1 Superior patented technology
- 2 Uncompromised system design
- 3 Unmatched innovation

#### Where we compete:

- Asia 27%
- Europe 23%
- USA 40%
- Australia/NZ 11%
- (Total Sales)

#### Key drivers:

The key driver for growth in brain research will be to maintain Neuroscan's preeminent technological lead and to back this by expanding the sales and support infrastructure to harness this expanding market opportunity.



#### Global Neurodiagnostics market

#### Description of the market:

Global Neurodiagnostics is the study of electrical activity in the brain, spinal cord, nerves and muscles for the diagnosis and monitoring of neurological based diseases. Tests may be performed in hospital outpatient departments, neurophysiology labs, operating theatres, intensive care units and private practice.

#### **Current Market Share:**

less than 1 %

#### Where we compete:

- Asia 1%
- Europe 70%
- USA 13%
- Australia/NZ 16% (Total Sales)



#### **Competitive Advantages:**

- 1 Complete range from clinical to research technologies
- 2 Uncompromised system design
- 3 Highest industry quality standards

#### Kev drivers:

The key drivers for achieving growth in this market are to have technologically superior products that differentiate Compumedics from the existing competition. With the current products being complemented by a completely new long-term monitoring device in 2005, this will be achieved.

#### Global Neuromedical Supplies market

#### Description of the market:

The Neuromedical Supplies market comprises sleep consumables, brain research consumables and neurodiagnostic consumables.

Typically, items sold in these markets comprise electrodes, sensors, head caps, gels, respiratory bands and the like. Items replacement cycles range from disposable to replacing once every six months.

Current Market Share:

#### **Competitive Advantages:**

- 1 Existing installed base
- 2 Proprietary products
- 3 Growing distribution network

#### Where we compete:

- Asia 11%
- Europe 10%
- USA 51%
- Australia/NZ 28 % (Total Sales)



#### Key drivers:

The key drivers to growth in this market are marketing initiatives to increase our brand awareness followed by on time delivery and product quality and consistency.

#### Global Doppler Ultrasound market

#### Description of the market:

The Doppler Sonography technique utilises sound frequencies to measure the blood flow conditions in vessels and evaluate haemodynamics by using highquality diagnostic and monitoring systems.

DWL Doppler systems are used in a wide range of specialist branches of medicine including neurology, neurosurgery, cardio- and vascular surgery, anesthesia, intensive treatment, internal medicine, angiology and radiology.

The products are purchased by private practices and clinics, hospitals (both public and private), and by major universities, national research institutes and corporate research laboratories around the world.

#### **Current Market Share:**

less than 35%

#### Where we compete:

- Asia 36%
- Europe 52%
- USA 10%
- Australia/NZ 2% (Total Sales)

#### **Competitive Advantages:**

- 1 Full Digital Doppler Technology
- 2 Bilateral Doppler
- 3 Multi-Range Doppler Technology
- 4 Physiological Tests
- 5 Emboli Differentiation and Multi-Frequency probes
- 6 Highest Doppler sensitivity
- 7 Best signal to noise ratio
- 8 Reference gates
- 9 High and low temperature endurance systems
- 10 Space endurance systems

#### Key drivers:

- Digital Doppler Technology
- · New application areas for the use of TCD
- Expanding market opportunities by new Health Care Regulations for the use of TCD
- Expanding Sales and Support Infrastructure



# Clients of Compumedics

#### **Key Clients**

- Austin Repatriation & General Hospital (Aust)
- Monash Medical Centre (Aust)
- Royal Prince Alfred Hospital (Aust)
- Sir Charles Gairdner Hospital (Aust)
- Royal Children's Hospital (Aust)
- Royal Edinburgh Infirmary (UK)
- University of California in San Diego (US)
- Hennepin County Hospital (USA)
- University of Florida, Shands Hospital (USA)
- Redmond County Hospital (USA)
- NASA (USA)
- US National Institutes of Health Sleep Heart Health Study (USA)



#### Products provided

- Siesta™ PSG the ultimate in wireless Sleep recording systems
- Somté PSG™ unique holter style full PSG system
- Somnea<sup>™</sup> unique holter style sleep screener
- Somté<sup>™</sup> unique holter style cardio-respiratory system
- Profusion PSG<sup>™</sup> the next generation world class sleep diagnostics software
- Profusion Nexus<sup>™</sup> laboratory management system
- E-Series™ EEG/PSG network ready laboratory and portable Sleep system
- Safiro™ PSG ideal for ambulatory applications in sleep
- P-Series<sup>™</sup> portable sleep recorder used by NASA and Sleep Heart Health Study
- S-Series™ the original sleep recording system

# Sleep Diagnostics

#1

#3

**IN AUST** 

**IN USA** 

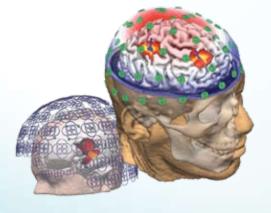
**MARKET POSITION** 

Compumedics is ranked 3rd in the fastest growing Sleep market, the US

\$155M<sub>p.a.</sub>

#### **Key Clients**

- University of Melbourne (Aust)
- Flinders University (Aust)
- University of Queensland (Aust)
- University of Sydney (Aust)
- University of Newcastle (Aust)
- Swinburne Centre for Applied
- Neuroscience (Aust)
- Starship Children's Hospital (New Zealand)
- University of California, Davis (USA)
- Pediatric Epilepsy Center (USA)
- Yale School of Medicine (USA)
- Kennedy Krieger (USA)
- National Institute on Alcohol Abuse & Alcoholism
   (USA)
- The Mayo Clinic (USA)
- Albert Einstein College of Medicine (USA)
- Harvard Medical School (USA)
- Harvard University (USA)
- Stanford University School of Medicine (USA)
- Oxford University (UK)
- Tokyo University (Japan)
- Kyoto University (Japan)
- Communications Research Laboratory (Japan)
- Peking University (China)
- Tsinghua University (China)
- National Yang-Ming University (Taiwan)
- Taipai Veterans General Hospital (Taiwan)



#### **Products Provided:**

- SynAmps2™ world's most powerful and advanced amplifier
- Scan™ data acquisition software
- Curry™ multi-modal neuroimaging software
- MagLinkRT<sup>TM</sup> system for EEG recording in the fMRI environment
- Stim™ audio visual stimuli presentation software
- Source™ offers source localisation capabilities
- Electric Source Imaging<sup>™</sup> system to measure and analyse EEG, EP and ERP signals

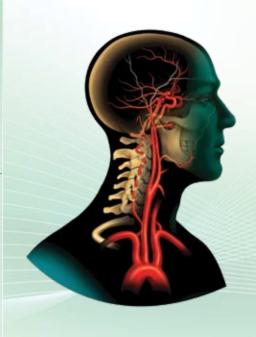
# Brain Research

 $^{\#}1$ 

GLOBAL MARKET POSITION

# DWL #1

EUROPEAN MARKET



#### **Key Clients**

- Dr. Rune Aaslid, PhD, Berne, Switzerland
- Prof. Andrei V. Alexandrov, MD, University of Texas, Houston, USA
- Prof. David Russell, MD, PhD,
   The National Hospital Oslo, Norway
- Dr. David W. Newell, MD,
   University of Washington, Seattle, USA
- Prof. Geoffrey Donnan, MD, Austin & Repatriation Medical Center, Melbourne, Australia
- Prof. Laszlo Cziba, MD, Medical School of Debrecen, Hungary
- Prof. Erich B. Ringelstein, MD, University of Munster, Germany
- Prof. Michael G. Hennerici, MD,
   University of Mannheim, Germany

#### **Products Provided**

- Doppler-Box: Digital Doppler device including Doppler M-Mode
- EZ-Dop®: Very compact and portable Doppler device for routine diagnostics
- Multi-Dop® T Series: Portable Doppler device with upgradeable bilateral monitoring
- Multi-Dop® X Series : All around Doppler device with emboli detection
- Embo-Dop®: Doppler device for emboli differentiation
- Hemo-Dop®: Doppler device with Doppler guided haemorrhoid arterial ligature technique (DG-HAL)

# Neuro Diagnostics

GLOBAL MARKET POSITION BEING BUILT

Exciting opportunities exist in the massive Neuro-diagnostics market worth:

 $\$890 M_{p.a.}$ 



#### **Key Clients**

- Flinders Medical Centre (Aust)
- Austin Repatriation & General Hospital (Aust)
- St. Vincent's Hospital (Aust)
- Royal Children's Hospital (Aust)
- Royal Brisbane Hospital (Aust)
- Royal Perth Hospital (Aust)
- Princess Margaret Hospital (Aust)
- Royal North Shore Hospital (Aust)

#### **Products Provided**

- E-Series EEG network-ready laboratory and portable EEG solution
- Safiro EEG a perfect solution for ambulatory applications
- Siesta EEG the ultimate in wireless capabilities in EEG

# NeuroMedical Supplies

GLOBAL MARKET POSITION BEING BUILT



#### **Key Clients**

- Winmar Diagnostics (USA)
- Maine Medical Center (USA)
- Providence Medical Center (USA)
- Landauer Medical (USA)

#### Products provided

Our comprehensive range of products produced for this market are:

- Airflow Sensor
- Chest Sensor
- Electrodes
- EMG Needles
- Leads
- Snoring Monitor

# Clinical Sleep Diagnostics:

# Discovering, developing, and delivering new technologies that are dramatically improving people's lives.

"Compumedics provides us with unrivaled flexibility and power in its PSG acquisition, scoring and reporting systems. The sales and service staff are second to none in customer satisfaction and are just as reliable as their equipment.

I just hope that our competition doesn't catch on!"

Luis A. Garcia, RPSGT Clinical Director LMI Sleep Diagnostics Division Landauer Metropolitan Homecare



Number of known classified sleep disorders:

Compumedics Profusion PSG3™
- the next generation of world class
PSG acquisition, review and
analysis software.

85

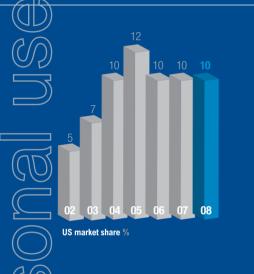
#### What is a Sleep Disorder?

A sleep disorder is a medical condition that affects a person's ability to have a 'normal' night's sleep. There are 85 classified sleep disorders ranging from snoring, obstructive sleep apnoea and insomnia to narcolepsy. Identified in 1966, obstructive sleep apnoea (OSA) is the most common form of sleep disorder and is a serious and potentially life threatening condition. Of the estimated 40 million Americans believed to suffer from treatable sleep disorders it is thought that 50% suffer from OSA.

#### How are Sleep Disorders Diagnosed?

General practitioners will refer patients who suffer from a variety of sleep-related symptoms (severe snoring, daytime tiredness, general fatigue and poor sleep patterns) to sleep physicians or respiratory physicians. At the specialist's recommendation, the patient may need to undertake a sleep study either in a sleep clinic or at home. In sleep studies, sensors are attached to the patient's head, chest, hands and legs. In home studies the patient is connected to a portable sleep diagnosis device prior to sleep. For 8 to 10 hours, breathing patterns, leg movements, eye





movements, patient position and responses to light, sound and temperature are monitored using ECG, EEG, EMG, SaO2, TcCO2 and CPAP (a Continuous Positive Air Pressure device). High-resolution monitors display on-line and off-line physiological waveforms as well as trend analysis data.

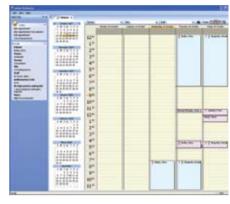
#### **How Common are Sleep Disorders?**

Sleep disorders are estimated to affect approximately 40 million Americans. In 1993, the National Commission on Sleep Disorders Research estimated that approximately 20 million individuals in the USA suffer from OSA. Of this 20 million, more than 30% (6.5 million) over the age of 30 suffer moderate to severe OSA. However, only a small proportion of OSA sufferers were aware of the cause of their sleep problems.

Compumedics Somté PSG™ - the next generation of Somté recorders. Full PSG... absolutely anywhere.



Computed ics Nexus<sup>TM</sup> - a complete management system for the Sleep and Neurology laboratory.



This rate of occurrence ranks sleep disorders as more prevalent than asthma in the USA. Sleep disorders remain a relatively new area of medicine and due to the lack of awareness, a large percentage of sufferers are currently undiagnosed.

Certain segments of the population appear to be at more risk of developing sleep disorders. Typical sufferers are middle-aged males, with a history of severe snoring. There are also certain risk factors that increase the chance of developing sleep disorders including:

- Obesity
- Ageing
- Genetic predisposition
- Smoking
- Alcohol consumption

Many of these risk factors reflect the characteristics of modern society. It is anticipated that these risk factors, combined with the increasing awareness of sleep disorders within the medical community, will continue to generate substantial growth in the sleep device market.

#### Links to Other Diseases

Sleep disordered breathing is more common in people with high blood pressure, heart disease, diabetes, stroke and a number of other common medical conditions. It is thought that the lowering of blood oxygen during sleep and the frequent apnoeic episodes contribute to

vascular, heart and brain dysfunction (such as stroke and memory impairment) for people with these medical conditions. Sleep disordered breathing is also more common in people with spinal cord injury and may contribute to daytime dysfunction and excessive sleepiness in this group. There is also a newly discovered link between sleep disordered breathing and pre-eclampsia in pregnancy and it may be that upper airway obstruction disrupting sleep leads to the high blood pressure in this condition.

As the understanding of the links between sleep quality and normal function across the whole range of body systems increases, new and valuable insights into the cause of many common diseases, and the potential role for improving breathing and sleep quality in the treatment of those conditions will be gained.

Impaired and disturbed sleep quality has an enormous impact on psychological function, mood, memory and general cognitive performance. This has led to increased awareness of the importance of good sleep quality in prevention of industrial and motor vehicle accidents and absenteeism in the work place. Clearly, strategies to improve and promote sleep health in the community are of considerable socio-economic importance in creating a healthy society.

# Clinical Neurodiagnostics:

Continue to expand our neurological diagnostic business in the USA off of the successful development of the business in Australia.

"As Compumedics users of some five years standing, we have been consistently impressed by the reliability and ease of use of our systems. Staffing changes and budget restraints have challenged us in many ways but we have not experienced any downtime and have been able to carry out "on the job" training with great success.

Debra Anderson R.EEG T. Shands Hospital University of Florida, Gainesville



Compumedics Profusion EEG4™ - the next generation EEG acquisition and analysis software



Compumedics Xegis™ - leading the way in Neurophysiology - EMG / EP / IOM



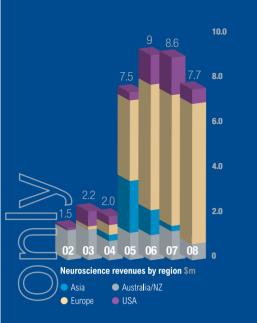
Compumedics Neuvo<sup>™</sup> - the ultimate long-term EEG monitoring system

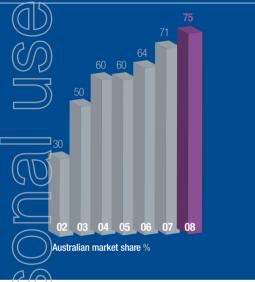
#### What is clinical Neurodiagnostics?

It is the study of electrical activity in the brain and spinal cord for the diagnosis of neurological-based disorders. The methods used to study clinical neurophysiology include Electroencephalography (EEG), Electromyography (EMG), Nerve Conduction (NCS), and Evoked Potentials (EP). These tests may be performed in hospital outpatient departments, neurophysiology labs, operating theatres, intensive care units, epilepsy centers and private practice offices.

EEG is used in the evaluation, monitoring, diagnosis, and/or management of the following brain related issues: Epilepsy, Traumatic Brain Injury, Infarction, and Intracerebral Hemorrhage as well as a host of research purposes.

EEG is an important growth area and part of the "journey" for Compumedics: EEG is the largest segment of the world market for Neurodiagnostics. In 2002 the world market for EEG devices alone, was estimated at USD 46m and this is expected to grow to approximately USD 90m in 2010.





The primary markets for these devices are Europe and America with approximately 40% of the world market. However, Asia Pacific and Latin American markets are also expected to grow at a strong rate over the next 10 years.

EEG is inexpensive and non-invasive. It is virtually pain and risk free and is one of the most benign tests for monitoring brain function in the evaluation of epilepsy.

Growth in neurodiagnostics is being driven by the prevalence of reliable technology and performance requirements of the EEG as a clinical instrument in surgical therapy, known as Intraoperative Monitoring (IOM), and for extended epilepsy monitoring or Long Term Monitoring (LTM). Epilepsy is a chronic neurological disorder that affects 1% of the world population. Most of the health care costs associated with epilepsy are attributable to those patients with medically intractable seizures. Many of those disabled by epilepsy may be candidates for surgical therapy. Note: in 2003 there were an estimated 100,000 – 200,000 potential surgical candidates in the USA alone. Early and successful surgical intervention might prevent or reverse disabling consequences of uncontrolled seizures during critical periods of adolescence and adulthood

Continuous EEG monitoring in the Intensive care arena also demonstrates excellent utilisation and potential for expansion in EEG testing. EEG is now utilised, not only for surgical therapy but also for detection of seizures in traumatic brain injuries, infarction and intracerebral hemorrhage. Sub-clinical seizures occur frequently after traumatic brain injury. If one does not monitor for seizures, one may not know they are occurring. In addition, people are experimenting with better methods to record EEG in emergency rooms and even in emergency transport vehicles. Such monitoring concentrates on prevention and early intervention to avoid the likelihood of far more serious clinical events.

Another growth sector is the demand for better patient outcomes by enabling recording in a "natural environment". Ambulatory EEG gives a patient the freedom to leave the artificial environment of a hospital, to go anywhere and maintain a relatively normal school or work day schedule. This type of recording improves the opportunity for a quicker and more accurate diagnosis resulting in a positive impact on quality of health care.

Compumedics is keenly in tune with the technical need for more flexible, productive and simpler EEG devices. As a world supplier in the EEG market, we have developed unique solutions that are automated, ambulatory and wireless. More importantly we focus on value-added services like remote access, networking and lab management products that are

easily integrated with the equipment in order to maximise productivity and minimise costs.

EEG is a cost-effective, well respected and proven clinical Neurodiagnostics tool and the predicted growth for these products is expected to continue. Compumedics is positioned with the right mix of products, services and tools to capitalise on this area of growth.

Compumedics is a leader in addressing pressing market needs in Neurodiagnostics...

# Compumedics Neuroscience competitive Advantages include:

- A wide product range from basic clinical to advanced research methodologies
   Through the Neuroscan acquisition techniques developed for research applications are now being integrated into the clinical field. This solidifies
   Compumedics' commitment and reputation as a world-class developer of clinical neurodiagnostic systems.
- 2) Complete vertical integration of all operations.

Compumedics has integrated research, development, engineering and manufacturing and service in all facets of our business. This provides customers with a complete solution while allowing Compumedics to keep intense attention to detail and provide rapid change to ensure a quality product that continually exceeds market requirements.

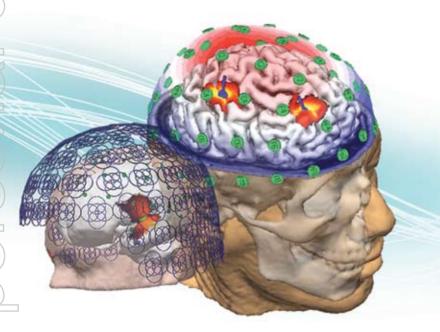
3) Strong collaborative links
Strong collaborative links through
extensive involvement in Neuroscience
research activities with major teaching
hospitals and Universities have
enabled Compumedics to develop
practical, state-of-the-art clinical
Neurodiagnostics systems and
solutions.

## Neuroscan: Brain Research

# Release innovative products to capitalise on opportunities and maintain leadership in all key markets.

"I have used the Neuroscan system for 15 years both clinically and in numerous research protocols studying human movement disorders. Its strong perfromance and versatility allows each acquistion to be specially designed. The off-line analysis package is state of the art and allows me to analyze results in various ways so as to get as much as possible out of my data."

JOHN N. CAVINESS, MD PROFESSOR OF NEUROLOGY MAYO COLLEGE OF MEDICINE



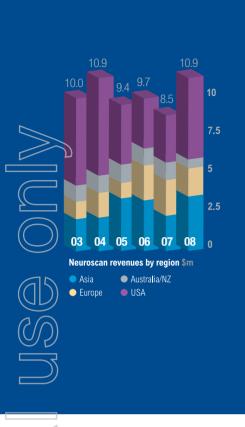
CURRY6<sup>™</sup> - Compumedics advanced Multi-Modal Neuroimaging software.

Increase in MaglinkRT shipments from the previous financial year

60%

#### What is brain research?

Brain research is the study of the brain's functionality, using quantitative measures of EEG to supplement traditional EEG findings. With the advent of high speed digital information processing and statistical analysis, extracting quantitative measures of EEG to assess the status of brain function allows access to aspects of EEGs that cannot be appreciated visually. Theoretically, such techniques incorporated the heuristics of visual analysis of EEG but move it to a state of processing beyond "the eye of the beholder". There are a variety of quantitative analysis techniques ranging from simple surface mapping of recorded EEG activity, to complex models that accurately define the source of these electrical activations in a three dimensional model of the head. Advanced brain source reconstruction techniques highlight regions of interest to the neuroscientist in understanding brain function and may assist in clinical diagnosis and treatment planning of some medical conditions.



The majority of these key decision makers use Compumedics Neuroscan products.

Or to put it practically, more than 1,400 physiological research laboratories across the world use Compumedics Neuroscan brain research products. These laboratories include prestigious laboratories such as: Albert Einstein College of Medicine (USA)- Stanford University School of Medicine (USA)- Oxford University (UK)- The Mayo Clinic (USA)- Yale School of Medicine (USA)- University of Melbourne (Aust)- Tokyo University (Japan)- University of Sydney (Aust). It is these research institutes that will drive clinical practices in the future, all using Compumedics Neuroscan equipment in their investigations. This gives our neurodiagnostic business a significant competitive advantage and will ensure the neurodiagnostic functionality in our sleep diagnostics also remains leading edge.

Compumedics Neuroscan Competitive Advantages include: (1) Superior Patented Technology. Being one of the first providers of designer solutions for the research market, Compumedics Neuroscan is able to provide a singleprovider solution, allowing integration and scalability ensuring the greatest flexibility and upgrade potential, (2) Uncompromised system design with decades of experience; the R&D and Engineering teams have approached the system design of the software and hardware with scientific precision. The combination of advanced hardware and software sets the standard to which all other systems on the market are compared (3) The highest industry quality standards. Compumedics Neuroscan has established quality systems to enable ongoing improvements and brain research instrument leadership. This level of certification can only be obtained by careful consideration in the design and engineering process and with reliable manufacturing methods.

#### Why is this important to Compumedics?

Leadership in objective and quantitative methods of EEG analysis and other brain research activities is important not only in terms of maintaining Neuroscan's pre-eminent position in this market and therefore its dominant market share, but to also lead the sleep and neurodiagnostic business technologies into the future. The Neuroscan Brain Research business is focused on working with key academics and researchers around the world in the pursuit of new neurophysiology research tools that have the potential to open up new clinical diagnostic solutions for known neurological disorders. The Neuroscan Brain Research business works with key researchers and industry leaders who write the research articles that form the basis of knowledge for neurodiagnostic clinical practices for the next 10-15 years.



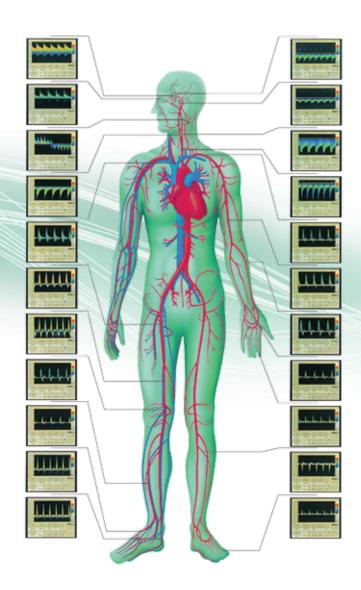
SynAmps RT™ - sets a new standard in EEG and ERP amplifier technology.



Compumedics Source5<sup>™</sup> - a remarkably simple and accurate software that combines reconstructed electrical activity in the brain with anatomical or functional images.

# **DWL: Doppler Sonography**

To grow the business by innovations and developments in technology and products and by capitalising on opportunities in application fields for practicable routine Doppler Sonography, Neuro-monitoring and Neuro-protection.

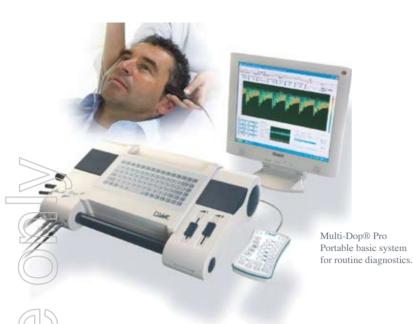


#### What is Doppler Sonography?

The Doppler Sonography technique utilises sound frequencies to measure the blood flow conditions in vessels and evaluate haemodynamics by using high-quality diagnostic and monitoring systems.

Transcranial (1 and 2 MHz), extracranial (4 and 8 MHz), peripheral (4 and 8 MHz) and microvascular (16 MHz) arteries and veins, as well as gastroenterological examinations can be carried out using DWL Doppler systems in either continuous wave (cw) or pulsed wave (pw) modes.

In cw mode, one frequency is continuously transmitted and received, in pw mode the probe emits pulses of ultrasound and receives the reflected signals in between, thus a depth selection is possible. Transcranial Doppler sonography is not possible without depth selection.





Multi-Dop® X Digital high-end system for clinical routine and monitoring examinations, special function tests and emboli detection.

#### Different kinds of Doppler Sonography Transcranial Doppler Sonography

... is carried out using 1 or 2 MHz probes in pw mode only. The arteries of the Circle of Willis and the A. basilaris are examined.

#### **Extracranial Doppler Sonography**

Using the 8 MHz probe, the artery to the eye (A. supratrochlearis) is examined. All other brain supplying arteries are typically examined using the 4 MHz probe.

#### Peripheral Doppler Sonography

The arteries and veins of the pelvis and upper thighs are examined using the 4 MHz probe.

In other peripheral areas the 8 MHz probe is normally used according to the constitution of the patient.

#### Microvascular Doppler Sonography

... is carried out using a 16 MHz probe. The neuro or vascular surgeon places the probe directly onto the exposed blood vessel and measures its blood flow. The ability to sterilise the probes is very important in these cases.

#### **Doppler Sonography Diagnostic/Application**

Routine examinations are carried out to diagnose ...

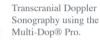
- cerebral and peripheral circulatory problems
- cerebral and peripheral vessel stenosis and occlusions
- extracranial and intracranial aneurysms
- inflammatory vessel diseases e.g. vasospasms
- vascular diseases e.g. varicosis, thrombophlebitis

#### or to perform

- functional tests of the cerebral hemodynamics
- pre-operative determination of risks
- diagnosis of brain death, prognoses for skull-brain trauma
- post operative control examinations e.g. after carotid operations
- intra-operative examinations in vessel surgery
- differential diagnoses in urology

#### Doppler monitoring examinations for

- Doppler functional tests e.g. orthostasis
  - dynamic autoregulation
  - tipper table examinations
  - CO<sub>2</sub> reactivity
  - visual stimulation
  - cognitive stimulation
  - emboli detection





- Monitoring during surgery
  - vessel surgery
  - reconstructions of aorta arch
  - organ transplantations
- Monitoring in intensive care units
  - vasospasms after sub-arachnoidal bleedings
  - after skull-brain trauma
  - hydrocephalus and meningitis
  - monitoring in stroke units e.g. indication to use Lyse and control during application of Lysing drugs.

# NeuroMedical Supplies:

Expand this business segment into a leading provider of a comprehensive range of consumable items to serve not only our installed customer base but the entire sleep and neurodiagnostics industry.

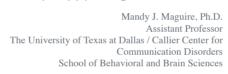
Before using QuickCel we had problems with our youngest subjects, under the age of 3 or 4, sitting through the tasks. With the QuickCel the children are able to sit through the cap application with no problem. This allows for much longer testing sessions and overall clearer data. A happy child means a happy parent. As a result, not only are the testing sessions cleaner and easier, but we've found that parents tell their friends and suddenly our recruiting is up!

We've been incredibly happy using the QuickCels.

#### What is NeuroMedical Supplies?

NeuroMedical supplies is a leading manufacturer and full-range distributor of supplies and accessories for Sleep and Neurodiagnostic laboratories, research facilities and transcranial Doppler professionals.

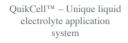
As innovators in our field, we understand how vital accessories, sensors and disposable items are in the diagnosis and study of sleep, the nervous system and the brain. Through our intimate





over 2,200







Summit IP™ – Respiratory effort sensor system using true inductive plethysmography

understanding of this area, we manufacture and procure supplies and accessories that complement our system standards and are of the highest quality. Our goal is to be a single source provider for every conceivable customer need.

NeuroMedical supplies endeavors to provide our clients with competitively priced supplies and accessories for all of their sleep and neurodiagnostic needs. We are constantly expanding our product offerings and looking for creative and effective ways to enhance customers' purchasing experience with our company. Just in time delivery, annual contract purchase discounts and per-patient

customised pricing bundles are a few of the initiatives we pursue to enhance our clients productivity while minimising their costs.

In addition to seeking out and selecting the best available supplier-partners, Compumedics designs and manufacturers its own line of products from our 6000 sqm facility in Melbourne, Australia. Our operations and products are regularly audited for FDA, CE, ISO and ETL standards, to ensure that our customers receive consistent world-class products and services.



Quik-Cap PSG<sup>™</sup> – Electrode application system for Sleep Diagnostics

US Market for Neuromedical supplies:

over \$250м Number of beds installed with Compumedics sleep equipment in the USA:

over 2,100

Quik-Cap PSG is the first universal application system for sleep diagnostics.
Compatible with virtually all manufacturers systems, the Quik-Cap PSG offers rapid placement, consistency for improved quality control, comfort for the patient and quick easy clean-up to enhance overall lab productivity.

## Board of Directors:



Compumedics is committed to developing a world class working environment that (Newards individuals for the contributions they, and their teams, make to the business each year. Compumedics is proud of the diversity of its people, and continues to develop its people infrastructure under the guidance of the Senior Management Team and the Board.

#### Mr David Burton

Executive Chairman, CEO

Mr Burton, 49, is the founder, Chairman and CEO of Compumedics. Established in 1987, and under Mr. Burton's leadership, Compumedics was listed on the ASX in 2000, and has been awarded 24 awards for design, innovation, business and exports including the Australian Exporter of the Year in 1998 and Small Business of the Year in 1999

Mr. Burton has an Associate Diploma in Electronics from the Royal Melbourne Institute of Technology, and is currently completing a Phd (Eng. Sc.) in the area of medical technology innovation at Monash University. With a background in engineering, which includes the design and project management of Compumedics' first laboratory and portable sleep systems, Mr Burton has authored fourteen patents or patent applications that form part of Compumedics' key intellectual property. Mr. Burton is a former member of the

Council for Knowledge, Innovation, Science and Engineering (KISE) – being the Victorian Government's key advisory body on issues and policies focusing on science and innovation.

Mr. Burton was presented the Clunies Ross National Science and Technology Award in 2002 for his development of innovative sleep monitoring technology. He was awarded the 2003 Centenary Medal by the Prime Minister and Governor General of Australia for outstanding contribution to science and technology, particularly public science policy. In 2003, Mr Burton was awarded the Ernst & Young Victorian Entrepreneur of the Year award for technology, communications, E-commerce and life sciences. In 2007, Mr Burton was inducted into the Victorian Manufacturing Hall of Fame Honour Roll for pursuit of excellence in manufacturing.

#### Professor Graham Mitchell AO

Non-Executive Director

Professor Mitchell, 67, is recognised as one of Australia's leading biological scientists. His expertise extends over a wide range of science and technology fields. He has a detailed knowledge of the academia and industry interface, has authored more than 350 publications, and received numerous awards for scientific achievement. In 1993, Professor Mitchell was appointed an Officer of the Order of Australia for services to science, in particular immunoparasitology. Professor Mitchell is a principal of Foursight Associates Pty Ltd., and Non-Executive Director of Antisense Therapeutics Limited, the Geoffrey Gardner Dairy Foundation and AVS Pty Ltd. He acts as a principal adviser to the Victorian Government through the Council for Knowledge, Innovation, Science and Engineering. He is joint Chief Scientist for the Department of Primary Industries. He is also a member of the World Health Organisation committee for special programs in tropical diseases.

#### **Mr Alan Anderson**Non-Executive Director

Mr Anderson, 52, is a leading American attorney in the areas of commercial litigation, intellectual property and computer law. He has represented Compumedics for all legal matters in the USA since late 1998.

Mr Anderson completed his Bachelor of Arts with Honours (Political Science) at Coe College. He also holds a Master of Business Administration with Distinction, a Doctor in Law with Honours from Cornell University, and a Certificate in International Business and Commercial Law from the McGeorge School of Law (University of the Pacific).

# Senior Management:



**David Burton**Executive Chairman, CEO



David Lawson
Chief Financial Officer
& Company Secretary



**Warwick Freeman**Chief Technology Officer



**Kerry Hubick**Trademark, Patent
& General Legal Attorney



Andrew Kegele
Business-Director, Australia
and New Zealand



Christoph Witte General Managing Director DWL Compumedics Germany GmbH



Claude Buckles Vice President - Sales, Americas



**Curtis Ponton** Vice President, Chief Scientist, Neuroscan



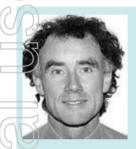
**Tom Lorick** Vice President, Marketing Americas

# Medical Advisory Board:

When Compumedics was established as a public company in December 2000, the Company set up a Medical Advisory Board (MAB) to assist in evaluating new product developments and trends in the medical diagnosis industry.

The Medical Advisory Board meets twice a year with members of Compumedics senior sales, marketing and R&D teams to advise the Company on trends in sleep disorder technology and the associated fields of cardiology and neurology. Members of the Medical Advisory Board also consult with senior members of the Company on an as needs basis.

Members of the Medical Advisory Board are international leading medical practitioners and researchers from the sleep, respiratory and cardiology areas and include:



#### Professor Rob Pierce

M.B.B.S., M.R.A.C.P., F.R.A.C.P., M.D., F.C.C.P.

Prof. Pierce is an experienced researcher who has a long standing interest in respiratory and sleep physiology and

Prof. Pierce is a Director of Thoracic Services, Austin & Repatriation Medical Centre, Studley Road, Heidelberg, Australia and a Prof. of Respiratory Medicine, The University of Melbourne, Parkville, Victoria, Australia.



Dr. Yuji Takasaki, B.Sc., M.D.

In addition to a broad background in pulmonary diseases, Dr. Takasaki has been a leader in Japan regarding disorders of respiration during sleep for almost two decades. In 1993 he supervised the establishment of the Sleep-Related Respiratory Disorders Centre at Tokai University, one of the first specialised sleep laboratories in Japan.

Dr. Takasaki is Associate Professor at Nippon Medical School, Japan.



**David Burton** 

Mr Burton, is the founder, Chairman and CEO of Compumedics.

Mr. Burton has an Associate Diploma in Electronics from the Royal Melbourne Institute of Technology, and is currently completing a Phd (Eng. Sc.) in the area of medical technology innovation at Monash University.

Mr. Burton is a former member of the Council for Knowledge, Innovation, Science and Engineering (KISE) – being the Victorian Government's key advisory body on issues and policies focusing on science and innovation.

Mr. Burton was presented the Clunies Ross National Science and Technology Award in 2002 for his development of innovative sleep monitoring technology. He was awarded the 2003 Centenary Medal by the Prime Minister and Governor General of Australia for outstanding contribution to science and technology. In 2003, Mr Burton was awarded the Ernst & Young Victorian Entrepreneur of the Year award for technology, communications, E-commerce and life sciences. In 2007, Mr Burton was inducted into the Victorian Manufacturing Hall of Fame Honour Roll for pursuit of excellence in manufacturing.

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