



25 November 2019

Compumedics (CMP.ASX)

Outperform

Initiating coverage: getting a good night's sleep

Current Price: 85c

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Summary (AUD)

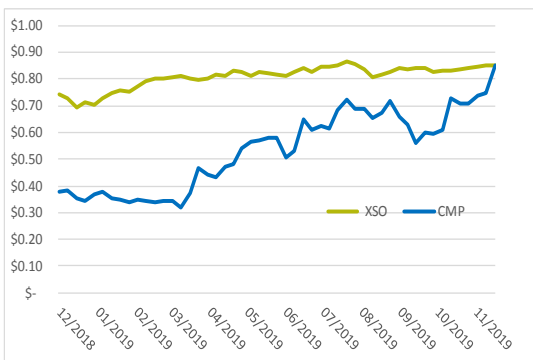
Market Capitalisation	150.5
Share Price	0.850
52 week low	0.320
52 week high	0.890
Ave Monthly Vol (year rolling)	2,330,506

Key Financials (AUD)

June Year End (\$m)	FY19 Act.	FY20 Est.	FY21 Est.
Revenue	41.5	46.2	55.0
EBITDA	5.9	7.3	8.7
NPAT (adj)	4.0	5.3	6.3
PE Ratio (x)	37.7	28.2	24.0
DPS	0.00	0.0	0.0
Div Yield	0.00%	0.0%	0.0%
Franking	0%	0%	0%
EV	146.0	144.9	144.9
EV/EBITDA	24.7	19.7	16.6
ROIC (post tax)	15%	19%	20%
Payout ratio	0%	0%	0%

(Source: Actual + Taylor Collison estimates)

Share Price Graph (AUD)



(Source - IRESS)

Taylor Collison initiates coverage with Outperform.

- Compumedics is a leading global developer and manufacturer of medical devices (and software) for diagnosing sleep disorders, monitoring neurological disorders including, long-term epilepsy monitoring, brain research and ultrasonic monitoring of blood flow through brain transcranial doppler techniques.
 - Compumedics has four growth drivers: -
 1. Strongly positioned to benefit from the ongoing growth of the **core sleep testing market**. The core sleep diagnostic market remains in growth driven by greater awareness and need to treat sleep problems, better treatment and growth in offshore markets
 2. Solid growth prospects in the **MEG (brain scan) market** with a new installation currently deployed and the technology has been submitted for FDA approval
 3. Growth in the personal sleep tracking device market via Somfit™ device that uses medical grade technology to measure personal sleep fitness. A fitbit for sleep. It is also waiting on further regulatory approval.
 4. Expansion of the technology into other fields of medicine particularly brain disease and related problems.
- Risks include:** - FDA approval, project delays, competition from others, product recall, currency (rising AUD) and IP protection.

Valuation and recommendation

Compumedics is well positioned to grow with a sound balance sheet and past investment set to deliver returns. Compumedics core markets are expected to continue to grow, helped by new product releases, sales staff added to key geographies and enhanced distribution relationships. Compumedics has upcoming regulatory approvals (if forthcoming) would be very beneficial. In addition, the Business has pursued operational improvements. These factors should combine to underpin a solid year for FY20. Compumedics has provided guidance of sales between \$42-\$44m and EBITDA of \$6.5-\$7.5m for FY20. Our forecasts are at the top of this range. Compumedics is a solid way to invest in the sleep industry with good growth prospects and financial resources to execute carefully considered growth plans. The blended DCF and EV/EBITDA methodology derives a \$1.00 per share valuation.

Financial model

CMP Compumedics					Price	\$	0.85
PROFIT & LOSS SUMMARY					Act	Est	Est
Period	A\$m	30-Jun-19	30-Jun-20	30-Jun-21			
	Operating Revenue	41.5	46.2	55.0			
	Total Revenue Adj.	41.5	46.2	55.0			
	EBITDA Adj.	5.9	7.3	8.7			
	Dep'n	-0.3	-0.4	-0.5			
	Amort'n	-0.2	-0.3	-0.5			
	EBIT Adj.	5.4	6.6	7.8			
	Net Interest	-0.3	0.1	0.1			
	Pre-Tax Profit	5.1	6.7	7.8			
	Tax Expense	-1.1	-1.3	-1.6			
	Minorities	0.0	0.0	0.0			
	NPAT Adj.	4.0	5.3	6.3			
	Abnormals	0.0	0.0	0.0			
	Reported Profit	4.0	5.3	6.3			
Margins on Sales Revenue							
	EBITDA Adj.	14.2%	15.9%	15.9%			
	EBIT Adj.	13.0%	14.3%	14.1%			
	NPAT Adj.	9.6%	11.6%	11.4%			
Change on pcp							
	Total Revenue		11.3%	19.0%			
	EBITDA Adj.	n/a	24.6%	18.8%			
	EBIT Adj.	n/a	22.5%	17.2%			
	NPAT Adj.	n/a	33.5%	17.5%			
PER SHARE DATA							
Period		30-Jun-19	30-Jun-20	30-Jun-21			
	EPS Adj \$	0.023	0.030	0.035			
	<i>Growth (pcp)</i>	n/a	34%	18%			
	Dividend	0.000	0.000	0.000			
	Franking	0.0%	0.0%	0.0%			
	Gross CF per Share	0.03	0.02	0.02			
	NTA per share	0.15	0.14	0.16			
KEY RATIOS							
Period		30-Jun-19	30-Jun-20	30-Jun-21			
	Net Debt / EBITDA Adj. (x)	-0.51	-0.62	-0.64			
	Net Debt : Equity (%)	-0.1	-0.1	-0.1			
	EBIT Interest cover (x)	-18.0	110.2	85.1			
	Current ratio (x)	3.0	3.5	3.5			
	ROE Adj. (%)	14.7%	16.4%	16.1%			
	ROIC Adj. (%)	14.5%	18.8%	19.5%			
	Adj. Dividend Payout Ratio	0.0%	0.0%	0.0%			
VALUATION MULTIPLES							
Period		30-Jun-19	30-Jun-20	30-Jun-21			
	PER Adj. (x)	37.7	28.2	24.0			
	Dividend Yield (%)	0.0%	0.0%	0%			
	Free CF Yield	3.4%	2.7%	2.5%			
	EV/EBITDA (x)	24.7	19.9	16.7			
	EV/EBIT (x)	27.0	22.1	18.8			
BALANCE SHEET SUMMARY					Act	Est	Est
Period	A\$m	30-Jun-19	30-Jun-20	30-Jun-21			
	Cash	4.6	4.6	5.6			
	Receivables	17.8	19.9	23.6			
	Inventories	7.8	8.8	10.4			
	Other	0.0	0.0	0.0			
	Total Current Assets	30.2	33.2	39.7			
	Property Plant & Equipment	1.6	1.6	1.9			
	Intangibles	6.8	8.5	10.0			
	Other	0.0	0.0	0.0			
	Total Non-Current Assets	8.4	10.1	11.9			
	Total Assets	38.6	43.3	51.6			
	Accounts Payable	4.4	4.9	5.8			
	Borrowings	1.6	0.0	0.0			
	Provisions	4.2	4.6	5.5			
	Other	0.0	0.0	0.0			
	Total Current Liabilities	10.2	9.5	11.3			
	Accounts Payable						
	Borrowings	0.0	0.0	0.0			
	Provisions	0.0	0.0	0.0			
	Other	1.1	1.2	1.4			
	Total Non-Current Liabilities	1.1	1.2	1.4			
	Total Liabilities	11.3	10.7	12.7			
	Total Equity	27.3	32.6	38.9			
CASH FLOW SUMMARY							
Period		30-Jun-19	30-Jun-20	30-Jun-21			
	EBIT	5.4	6.6	7.8			
Add	Depreciation	0.3	0.4	0.5			
	Amortisation	0.2	0.3	0.5			
	Change in Working Capital	-0.5	-2.2	-3.6			
	Other non cash/unusual items	0.0	0.1	0.2			
Less	Tax Paid	0.0	-1.3	-1.6			
	Net Interest	-0.3	0.1	0.1			
	Gross Cashflows	5.1	4.0	3.8			
	Net Capex	-1.3	-0.5	-0.8			
	R&D	-2.6	-2.0	-2.0			
	Other Investments	0.0	0.0	0.0			
	Free CF's Attributable	1.2	1.6	1.0			
	Dividends Paid	0.0	0.0	0.0			
	Debt/(Repaid)/ added to cash	0.0	1.6	1.1			
	Equity Issued/(Buyback)	0.2	0.0	0.0			
	Cash Flows	1.4	0.0	0.0			

(source – Taylor Collison estimates)

Initiating coverage: Outperform

Compumedics has good growth prospects and some new growth initiatives that should underpin a higher growth rate into the future. Three reasons to buy include: -

1. Core market has good growth prospects driven by underlying demand and new product releases.
2. MEG (Magnetoencephalography used to record electrical activity within the brain via measurement of magnetic fields) provides a major new market – facilitated by the upcoming completion of the MEG system at BNI (Barrow Neurological Centre – St Joseph’s Hospital – Phoenix, US) and then (successful) FDA approval. Failure to gain this approval would harm the valuation of Compumedics.
3. Somfit™ provides growth in the consumer device at home sleep diagnosis market. It is not yet available to the public. The target market includes athletes, parents, medical professionals looking to examine insomnia and depression within their patients and those interested in sleep outcomes. It is not a treatment for sleep apnea.

Strong competitive advantage, well capitalised balance sheet also adds to the appeal of the business. We outline these growth drivers in further details in this report. Compumedics has been investing heavily in these new initiatives (\$5m in FY19). Compumedics has also streamlined manufacturing via some outsourcing, streamlined online shopping chart for its products and introduced global 24-hour support for its products.

Valuation technique 1

Our prime valuation method is a DCF. We have assumed a strong long-term growth rate and a slightly lower than market beta (to reflect the health care nature of the industry). This derives a DCF of 98 cents. We have also assumed some success in the MEG and Somfit initiatives.

Valuation Technique 1 – DCF

<u>Free Cash Flow Valuation</u>		<u>Cost of Equity</u>	
Valuation year:	FY1	Risk Free Rate	6.0%
PV of FCF	6.2	Beta	0.90
PV of Terminal Value	173.3	Risk Premium	4.0%
Add: Other assets not in cash flow	-	Cost of Equity	9.6%
Enterprise Value	179.4		
Less: Net debt	4.6	Cost of Debt	6.0%
Less: Preference capital	-	Debt Weight	0%
Less: Minority Interest	-	Equity Weight	100%
Equity Value	184.0		
Issued shares	177.1		
Yr end adjustment	0.946		
Value per share	\$ 0.98		
<u>Assumptions</u>			
LT Growth	7.0%		
WACC	9.6%		
RONIC after Yr 5	15.0%		

(source – Taylor Collison)

Valuation technique 2 – EV/EBITDA

EV/EBITDA multiples - FY20 + FY22			
	EBITDA	Multiple	Valuation
Core business	7.2	20.0	144.0
FY22 - Future growth business	1.8	22.5	40.5
Valuation			184.5
Less corporate costs	-1.5	6.0	-9.0
Add cash			4.6
Valuation			180.0
Share outstanding			177.1
Price per share		\$	1.02

(source Taylor Collison forecasts)

Our EV/EBITDA valuation derives a \$1.02 per share using an EV/EBITDA valuation. This model breaks apart the core business from the growth (existing) business in FY20 and values the growth business in FY22 to reflect its more settled growth profile. The blended valuation DCF and EV/EBITDA derives a valuation of \$1.00.

Investment highlights

1. Sleep diagnosis and brain healthcare market – continued growth

Compumedics has a comprehensive range of sleep diagnostics (and brain) and related technologies and has benefitted from the growth in the sleep market and increasing sophistication brain monitoring software and devices used within healthcare.

The core sleep market is expected to grow at mid to high single digits (in the medium to longer term), driven by the ageing population, rising obesity rates, greater patient and clinicians' awareness of sleep problems and better ability to treat these problems. Additional factors likely to help the growth, include improved technology assisting in diagnosis (at home sleep testing) and rising emerging market middle classes that demand and seek better quality scientifically based health care. Compumedics also has a raft of product innovations to monetise including: -

- Nexus 360™ laboratory management solution (HTML 5) with cloud data capabilities – core product with thousands of users – is being updated. Features include anywhere, anytime, any device, better integration, easier reporting, two factor login, web review of reports, automated backup and an audit log.
- New range of home sleep devices via the Somte™ range. Innovation includes greater integration to the other products and easy patient attachment (of the device).
- Okti™ – next generation of epilepsy recording devices. The new product combines two products and has enhanced cyber security and data collection, increased processing power, extender battery life and more specific application modules.
- Coriss™ – cortical stimulation product (need for high end epilepsy surgery) is being developed and will integrate into other Compumedics products. Corris is important, because approval will enable other Compumedics products to be sold to the very high-end epilepsy neurosurgical centres.

- Profusion EEG™ – new clinical neurology software (EEG = electroencephalogram – measures electrical activity in the brain).
- Profusion PSG™ – updated clinical sleep software builds on the latest windows software
- DWL division's new range of ultrasound-based neurosurgery and intensive care and neuro monitoring systems with updated software.

Compumedics also has some additional demand from the replacement cycle with over 23,000 systems installed over the 30 year plus life of Compumedics. Providing a call to action to replace old equipment is enhanced via innovation. We expect that the average hospital-based sleep diagnosis system and related brain monitoring equipment (used in a sleep lab) system, last for about 5-7 years until a replacement is required (often due to the Windows software replacement cycle). Reducing labour cost, ease of use (not having to retrain everyone) and compatibility with other equipment are all factors used in making the decision (equipment cost is only about 6% of a hospital overall budget).

The Sleep market in some more detail

The exhibit below starkly reveals the ongoing growth in the sleep market due to a very low realisation by the general community that they might need treatment. This fact underpins positive market growth rates.

Exhibit 1 – prevalence of sleep problems in the US population



(source Resmed presentation – based on medical studies)

There are also widespread scientific studies that suggest sleep Apnea contributes to a range of serious health problems such as diabetes, stroke and heart problems. Estimates vary as to the rate of growth of the sleep market. It is expected to grow at 6-8% p.a and is a US \$7-\$8bn market in total according to SomoMed (SOM, not covered). The *Lancet* (via scientific paper Benjafield et al) sizes the market at 1.3bn people, with about 70% having a mild/moderate form of sleep Apnea and 30% suffering from a more severe form. We also suggest that the sleep market is not particularly susceptible to macro-economic disruption.

The research into the sleep market has broadened the scientific and equipment application to look at other very complex medical and brain related problems. The market is expanding outside of sleep into other areas – such as Alzheimer's and concussion.

Breakout box - Diagnosing sleep apnea problem – In Australia

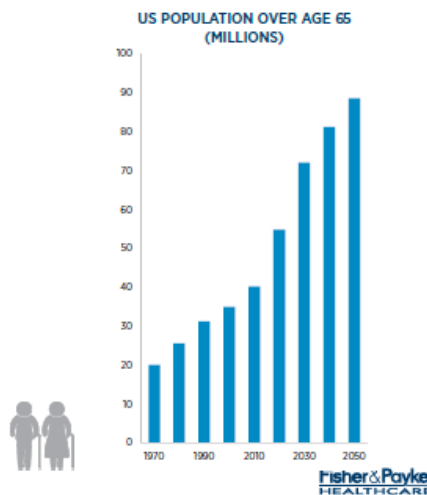
1. The patient, over time, notices that they are often sleepy (during the day), wake up tired, tend to snore loudly et al. Call to action might be an accident, complaint(s) from a partner, or other health problems or even a check-up or combination.
2. The patient sees a GP.
3. GP refers patient to sleep specialist.
4. Sleep specialist looks at the problem – is it weight, dental work (teeth removed), alcohol, age, family history. The patient may fill out survey and looks at various other risk factors.
5. Sleep test ordered – usually at a Hospital if bad / and able to. Otherwise perhaps home test.
6. Booked in to at the Epworth Sleep clinic (in Melbourne). Costs about \$1,000 (some back from Medicare etc) per night.
- 7. Patient turns up at night at Epworth Hospital, hooked up to electrodes, monitors, sensors, video and sound by nurse – takes 20-30 minutes – Compumedics play here.**
8. The patient goes to sleep.
9. Test results sent to the sleep specialist – tests results are very helpful diagnosing heart problems.
10. Patient sees specialist – get results – therapy suggested – CPAP, mouth device etc
11. New sleep test undertaken using suggested therapy – to see if therapy improves problem

Market drivers

Exhibit 2- impact of demographics and weight on the sleep market

Impact of Changing Demographics

- Population age and weight both increasing
 - US population 65 years+ to grow -80% over next 20 years¹
 - US males 60 - 74 years, average weight increased 0.4 kg/year since 1960²
- 60% of US healthcare cost is after age 65 years³
- Developing markets increasing healthcare spending
 - China healthcare expenditure projected to grow at 12% per year between 2014-2018⁴



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(source – Fisher and Paykel Healthcare results presentation)

The other major driver is the emergence of a middle class in developing countries that have a far greater demand for western style scientific medical treatment. This is occurring at the same time as awareness of the seriousness of sleep problem continues to intensify.

According to World Health Organisation, in 2016, more than 1.9 billion adults aged 18 years and older were overweight. Of these over 650 million adults were obese. In 2016, 39% of adults aged 18 years and over (39% of men and 40% of women) were overweight. Overall, about 13% of the world's adult population (11% of men and 15% of women) were obese in 2016. The worldwide prevalence of obesity nearly tripled between 1975 and 2016.

2. Completion Orion Lifespan MEG system and approval by the FDA – big positive fully executed

In 2017 Compumedics won a multi-million tender MEG brain imaging contract with US Barrow Neurological Institute (BNI) in Phoenix, Arizona at the St Joseph Hospital and Medical Centre.

Compumedics is in the final phase of installing its revolutionary MEG equipment at BNI. The first stage has already been successfully completed in 2H19. The MEG equipment (phase one) was calibrated over the US summer in 2019. The first phase was the installation of the adult patient evaluation, the second phase is the delivery of the paediatric helmet and then final commissioning.

The MEG equipment uses Compumedics software, The MEG FDA clearance (510K) was submitted in June 2019 and is “progressing well” and approval should be forthcoming in the next few months according to Compumedics. There are further enhancements expected for the MEG product after full commissioning. Compumedics wants to expand the role of MEG in detecting and researching other brain disorders, injuries, concussion, pharmaceutical trials (take drug and then measure brain) and diseases outside epilepsy.

Exhibit 3 - MEG – picture of BNI and the equipment are work and some output



(source – Compumedics annual report)

The neuroscan software suite (brain analysis platform) is also due to be updated with a new release and will include an epilepsy detection module.

The MEG system includes the ability to deliver higher rates of sensitivity, greater resolution of brain activity, updated sensors (SQUIDS), combined with updated software and a dual and adult functionality (which reduces the need for single magnetic shield room (not two sperate rooms) and expanded addressable markets for the hospital in one combined facility. The other important feature of the MEG is that it is designed with a zero-loss helium cooling system (the gas is recycled by the device). The helium gas saving can equate to over US\$100,000 p.a in reduced gas costs for the hospital. The new system has software that can integrate EEG and MEG at the same time /image data and with other data.

The global MEG market is about 20 systems a year with an average selling price of US\$4m. The global market is 200-300 units. The total MRI installed base is now approaching 34,000 units globally. While noting that MEG is not the same as MRI – the market for advanced medical equipment that helps diagnose complex medical problems is large. The largest MEG competitor Elekta turned over about US\$11m p.a prior to being sold to a private equity player. It is a substantial market. Compumedics need to complete the commissioning of the BNI system and get FDA clearance to really open this market up. China is possibly a new and large market for MEG system(s). The market typically grows at 10% p.a.

¹ MEG = Magnetoencephalography – measures and localized brain images via recording the magnetic fields associated with electrical currents generated by synchronal active populations of neurons in the brain. MEG uses highly sensitive detectors called SQUIDS (super-conducting quantum interference devices). Used to detect and isolate where epilepsy occurs within the brain

There is also a structural change in the market leader in this market – Elekta has been sold to a York Instruments, which is backed via private equity interests. This could provide greater opportunity for Compumedics due to the distraction it will face due to a change in ownership.

3. Getting Somfit™ approved and in the market

Somfit is a personal sleep tracking device that uses hospital grade software (and has the benefit of 30 year of Compumedics research knowledge) to deliver high-quality sleep insights to the user (forms of sleep, structure, meaning of the results). The device can be used for athletes, diabetics, medical uses, Sleep apnea devices users and possibly for the treatment of depression and other brain related problems. In many ways it is like the Catapult (CAT, not covered) sports tracking device or a Fitbit™ – but for sleep. FDA and other regulatory approvals are being sought for this product and this will also materially enhance its prospects.

Exhibit 4 - picture of Somfit device on a patient



(source Compumedics)

The devices should sell for a few hundred dollars and be very useful for a variety of patients and general users including athletes, parents and medical professionals (who may use if for diagnosis of patients’ problems such as insomnia and depression).

Exhibit -5 - Somfit marketing material

Quality Sleep is Essential

“Every aspect of who you are as a human, every capability is degraded, impaired, when you lose sleep. What does that mean? Your decision-making, reaction time, situational awareness, memory, communication, and those things go down by 20 to 50 percent.”

(Mark Rosekind, member of the National Transportation Safety Board in Sleepless in America – National Geographic Channel Documentary December 2014)

Why use Gold Standard Sleep Technology?

The technology in Somfit® is medically validated and the data collected is Gold standard – meaning that it is the accepted methodology to accurately measure and detect REM, and the data can be used for medical consultations with your GP if and when the need arises.

(source Compumedics marketing material)

Company overview

Compumedics is a leading global developer and manufacturer of medical devices (and software) for diagnosing sleep disorders, monitoring neurological disorders including long-term epilepsy monitoring (LTEM), brain research, ultrasonic monitoring of blood flow through the brain transcranial doppler (TCD).

Compumedics has substantial business in Australia (market leader), Japan, China and the US. It also operates in geographies outside these main markets. Compumedics has been in business since 1987 and listed on the ASX in 2000. Compumedics is head quartered in Melbourne and has 130 employees in seven locations (Melbourne, Charlotte, Hamburg, Dresden/Singen, Paris and Daejeon (South Korea)). Compumedics divisions include Sleep, Neuroscience, Neuroscan, DWL (Ultrasound) and Neuromedical supplies

Core products include sleep diagnostics, generally used for testing and diagnosing sleep problems rather than the direct treatment of them.

Exhibit 6 - Sleep diagnostics range

Core Products

Sleep Diagnostics



(source – Compumedics annual report)

Neuro diagnostics (including brain research) range

Exhibit 7 – Neuro diagnostics range

Neuro Diagnostics (including Brain Research)



(source Compumedics annual report)

The business also has a range of ultrasonic blood flow monitoring products - that tend to be used in markets where MRI's are not accessible.

Compumedics has tended to sell into the upper end of the market, part of the new range of products which are more competitively priced will appeal to a greater range of customers in a more diverse (larger) range of markets.

Compumedics has an extremely high-quality client list and this acts as a reference site and creates adjacent sales opportunities, provides valuable product feedback and research insights, key opinion leader relationships and a renewal cycle to sell into.

Exhibit 8 – Key clients



(source – Compumedics Annual report)





Global sleep and brain market

There are 4 markets that Compumedics operates in:

1. **Global sleep market** – comprises of diagnostics and therapeutic technologies (and medicines). Compumedics core market is the design and manufacture of technologies for the diagnosis of sleep disorders but not the treatment of them. Resmed (RMD, not covered), Fisher and Paykel (FPK, not covered), Philips (and others) operate treatment segment of the market which is very large. It is estimated that the diagnosis market is sized at AUD\$250m and Compumedics has about 6% of this market.
2. **Brain research** – the study of the brain functionality using EEG² using both quantitative EEG and traditional EEG findings. Increased computing power, better statistical techniques better quality data can be delivered. Compumedics has a 30% share of this market via Neuroscan. Pharmaceutical markets that use brain testing during R&D of new drugs are worth pursuing, along with other brain diseases and problems.
3. **Global neuro-diagnosis market** – study of the electrical activity of the brain, spinal cords, nerves and muscles, for the diagnosis and monitoring of neurological (brain) diseases. Test may be carried out in a variety of medical settings. Compumedics has less than 1% of this market and is keen to expand its market share in this market (via MEG and other initiatives).
4. **Global doppler (ultrasound) market** – uses sound frequencies to measure blood flow in the vessels. Used in a wide range of setting – uses in a variety of medical settings, tends to be used where MRI access is limited (or it is too expensive).

² EEG – Electroencephalography = measurement of (brain) activity – records brain wave patterns

Exhibit 9 – Compumedics position in various addressable global markets

	Sleep Diagnostics	Neuro Diagnostics – Clinic	Neuro Diagnostics - Research	Brain Blood Flow Diagnostics
Global market – USD pa	250m	1,300m	20m	15m
Compumedics market share (approximate)				
Compumedics market position	Aust – 1 USA – 3 China – 1	Aust – 1 USA – 3 China – 1	Aust – 1 USA – 1 China – 1	Aust – 1 USA – 1 China – 1 Germany – 1

(source – Compumedics annual report)

Competitive advantage

- Since 2014 – Compumedics has spent a total of \$28.7m on R&D, and over the lifetime of the business this would be much larger again. It is substantial sum and solidifies the various advantages of its products over others and against new entrants.
- Complete range of clinical to research technologies. This complete range reinforces the brand excellence of the business.
- Single vendor solution.
- Not distracted by other areas of medicine – focussed player.
- Patent protection from over 30 years of R&D effort in the sleep market.
- Adherence to quality system design and high-quality standard. The business is not distracted by other electronics and health markets. It is a pure play.
- Reference customers and familiarity by medical staff with the use of the products (less need to retrain staff in the use).
- Reimbursement codes (where applicable) are already established, the equipment has already been approved and inducted into the hospital environment.
- Medical sales relationships – the business has relationships with key decision makers within the medical markets that it operates in. Compumedics is not coming in “cold”.
- Established distribution network- including in China (Bestmed) and Japan (Fukuda Denshi) and research collaboration partnership with KRISS (Korean Institute of Standards and Science).
- Direct market presence in major markets such as Germany, France and the US.
- Installed customer base that can be serviced and marketed too of 23,000 systems worldwide.
- Regulatory approval for many of the devices it sells – barrier to entry for others to enter the market

Management profile

Directors

Dr David Burton – Executive Chair – founder of Compumedics. Dr Burton has a background in sound engineering, radar and electronic equipment and has previously worked at the Bureau of Meteorology prior to establishing Compumedics. Dr Burton originally noted that sleep studies were done on paper print outs and contrast this fact to sound engineering and recording, that was using electronics. Dr Burton essentially invented a better way to record sleep studies using recording and electronics for both collection and analysis of the results. Dr Burton holds a series of patents.

Mr David Lawson – Executive Director – CFO for over 19 years and has been involved in the overall growth and development of the business. Mr Lawson comes across as a highly knowledgeable and a prudent executive.

Mr Tucson Dunn- Mr Dunn works at JLM Investment as CEO of Healthcare and is responsible for healthcare ventures. Mr Dunn has a background in international healthcare (including hospitals, clinics and related businesses leaderships including in China.

Senior executives within the business include Mr Warwick Freeman – CTO and Mr Christoph Witte – GM Germany.

Risks (may include but is not limited to)

- Failure to gain FDA approval, for new products that have been developed.
- Project delays.
- Competition from others -major player exist within the sleep market including Fisher and Paykel (FPH, not covered), Philips and Resmed (RMD, not covered). There are also rival therapies emerging such as the use of Sonomed mouth device and potentially drugs that can help with muscle tone at the back of the throat.
- Patent expiration – Compumedics has been in business for well over 30 years and may suffer from patent expiration for some of its key products.
- Product failure and recall – other players in the past have had to recall faulty products. This can be time consuming and expensive. It is rare.
- Trading in markets market such as China. Problems with distribution arrangements and control for example can be problematic.
- Bad debts – failure to be paid for equipment that has been installed and/or software that is being used. It is a low risk given the nature of the customer base and historically been very extremely low.
- IP theft
- Cyber security problems – privacy breaches or straight theft of patient data can be costly and harm reputation and incur legal costs – apart from the concerns of patients of lost private data.
- New technology reducing the need for sleep testing and other devices and systems that Compumedics has developed.

Financial model/analysis

Table 1 - Balance sheet analysis

Item in \$m	2019	Comment
<u>Current assets</u>		
Cash	4.6	
Trade receivables	17.8	\$16.4m trade \$1.8m prepayments
Inventory	7.8	Finished goods, WIP, raw materials - include prov
Total assets	30.2	
<u>Non current assets</u>		
PP and E	1.7	seems conservative
Intangible assets	6.7	seems low, some capitalisation occurring
Total non current assets	8.4	
Total assets	38.6	
<u>Current liabilities</u>		
Trade payables	4.4	Normal payables
Borrowings	1.6	Includes some invoice financing, capacity available
Provisions	2.8	employee benefits/ warranties
Deferred income tax	1.4	
Total current liabilities	10.2	
<u>Non current liabilities</u>		
Borrowings	0.0	Undrawn facility access, lowly geared
Deferred tax liabilities	1.0	
Deferred income	0.1	yet to be installed , post trade obligations
Total non-current liabilities	1.1	
Total liabilities	11.3	
<u>Equity</u>		
Contributed equity	35.7	
Reserves	-0.3	
Accumulated losses	-8.1	Losses reduce future cash tax
Total Equity	27.3	

(source – Compumedics and Taylor Collison analysis)

Cash flow analysis

Cash conversion has improved, and we expect management to continue to focus on cash flow conversion. There are quite long payment terms within Asian distribution partners – but this is common in Asia and the partners are very long-term supportive business partners. Bad debt levels are very low due to the nature of the end customer (hospitals, universities).

Table 2 – cash flow conversion

Item	FY16A	FY17A	FY18A	FY19A
Cash from operating activities	1.9	0.4	0.1	5.0
EBITDA /reported	5.0	2.7	4.2	5.9
% conversion cash /EBITDA	38%	15%	2%	85%

(source Taylor Collison analysis)

Cost analysis

The business has been investing further in the sales force and in new products (heavily in recent times). As these products reach the market and the sales force mature and hits quota – the cost base should show some operating leverage.

Table 3

Cost analysis	FY19A	FY18A	% change	Comment
Revenue	41.5	37.0	12.2%	Growth in APAC and US
Other income	0.4	0.6	-33.3%	
Total	41.9	37.6	11.4%	
Cost of sales	16.8	15.8	6.3%	Investment in sales force
Administration	6.0	5.4	11.1%	
Sales/marketing	8.5	7.5	13.3%	
R&D	5.3	5.1	3.9%	Ongoing high levels of investment
Finance costs	0.3	0.2	30.0%	
Total	36.9	34.0	8.4%	
<u>Additional breakdown</u>				
Rental	1.0	0.9	11.1%	
Depreciation	0.2	0.3	-23.1%	
Amortisation	0.2	0.2	0.0%	
Payroll	15.6	14.2	9.9%	
AASB 16 - will result in rental expenses being re-categorised into FY20.				

(source Compumedics and Taylor Collison)

Model assumptions

Sales

Continued 10% sales growth rates in the core markets with forecasts and emergence of sales from both MEG and Somfit market into the later years.

Table 4 – sales assumptions

Divisional analysis	FY19A	FY20F	FY21F
USA	13.8	14.9	17.1
APAC	18.6	20.1	23.1
Europe	9.1	10.2	11.7
MEG		1.0	2.0
Somfit			1.0
Other			
Corporate			
Total sales	41.5	46.2	55.0

(source – Taylor Collison)

EBITDA margins

Margins (based on guidance) should improve into FY20 as new initiatives feed through to operating leverage. New products have similar margins to the overall group blend. We have not adjusted for the AASB16 right of asset use change at the moment.

Capex – some going requirements. The main spend is in R&D which is expected to remain high.

Interest costs/debt – net cash / no gearing

Tax rate – 20% similar to the past. Compumedics operates in lower tax jurisdictions than in Australia, it has some past tax losses to use in the US and some tax benefits from R&D activity.

Comparable valuation

The larger comparable businesses are highly valued. The smaller players are generally less profitable than Compumedics but can have very high growth rates. Some may also have less cash on the balance sheet and sometimes less established businesses. We have left out Catapult (CAT, not covered) but note its devices and profile has some similarity to Compumedics. Alphabet recently acquired Fitbit for US\$2.1bn. Fit turned over US\$1.5bn and reported an operating loss of US\$189m in FY18.

Compumedics looks good value compared to its comparable companies EV/EBITDA valuation.

Table 5 – Comparable valuation

Name	code	Last price	Market cap	PE	EV/EBIDA	EV/sales
				FY20E	FY20E	FY20E
Bigger players						
Resmed*	RMD.USD	145.23	20,870	35.3	23.6	7.6
Fisher and Paykel	FPH.NZ	20.87	11,986	46.4	30.1	10.1
Sonic	SHL	29.85	14,176	24.5	13.8	2.4
Smaller players						
Ellex	ELX	0.60	85			0.9
SomnoMed	SOM	2.81	176	49.3	27.2	2.5
			Average	38.9	23.7	4.7
			Median	40.9	25.4	2.5
CMP	CMP	0.85	151	28.2	19.7	3.2
P/E Small Ords (PERXSO)				19.0		
P/E ASX 200 Ind (PERXNJ)				23.0		

source - Bloomberg estimates/ Yahoo Finance - Iress PERXSO Oct
Might be a week out of date

Summary

The business is well positioned to grow: -

1. Has a sound balance sheet
2. Past investment set to deliver returns
3. Core markets expected to continue to grow
4. New product releases
5. Sales staff added to key geographies
6. Enhanced distribution relationships
7. Upcoming regulatory approvals (if forthcoming)
8. Operational improvements (24 support, better online shopping chart, outsourcing some manufacturing)

These factors should combine to underpin a solid year for FY20. Compumedics has provided guidance of sales between \$42-\$44m and EBITDA of \$6.5-\$7.5m. It is a solid way to play the sleep trend in the business with good growth prospects and financial resources to execute carefully considered growth plans.

Appendix 1 - History

1987 - Compumedics established by Dr David Burton – to design and manufacture medical electronics

“It has been a long journey having started Compumedics in 1987 after a visit to my local doctor with a sore throat. As it turned out, my doctor had specialised in sleep medicine and enquired due to my background in electronics, designing and manufacturing equipment for sound recording studios, whether it would be possible to use computers to automate the monitoring of a person during sleep. With the challenge set, the Company proceeded to design, construct and install the first fully computerised sleep clinic in Australia at the Epworth Medical Clinic and, along the way, became an expert in sleep technology.” David Burton – Prospectus

1988 - Epworth Hospital in Melbourne installs first system. Sleep problems features in Time Magazine (Global coverage) – sleep problem becomes better known

1991 - first portable sleep monitoring system is released

1993 - \$1.7m in sales revenue

1994 - supplies portable sleep monitoring system to NASA

1995 chosen by US government to supply equipment to world largest sleep study (6,000) people. Won this contract against 22 other players. Realisation of heart problems related to poor sleep starts to emerge

2000 - lists on the ASX – IP price 50 cents per share to raise \$15m – performs well when first listed

2001 - world leading wireless sleep and EEG device receives FDA clearance

2002- 05 completes acquisition of Neuroscan, blood flow doppler technology established

2009 - Graef released first high definition PSF/EEG graef (Amplifier). Starts selling in Germany

2010 - Somnilink receives CE and TGA clearance

2011 - Curry 7 neuroscan suite is released with software. Starts selling in France

2012 - 512 channel – long term sleep monitoring system

2013 -Beijing based Bestmed becomes Chinese distributor and invest \$500k in CMP stock

2013 - 512 channel EEG released

2014 – new contract signed with Bestmed new EEG software released

2015 - further contracts with Bestmed in China

2016 - Somfit is developed, KRISS relationship set up to develop MEG, raises \$6.5m in fresh capital

2017 – wins MEG contract with BNI

2018 – new Japanese distribution relationship announced

2019 – Announces successful installation of MEG at BNI

Appendix 2 – Resmed commentary – 10k – 30 June 2019

*“A long-term epidemiology study published in 2013 estimated that 26% of adults age 30-70 have some form of obstructive sleep apnea. In the United States alone, this represents approximately 46 million people. Another study published in 2019 estimated that mild to severe sleep apnea impacts more than 936 million people worldwide, of which, it was estimated that more than 424 million would have moderate to severe sleep apnea. Despite the high prevalence of OSA, there is a general lack of awareness of OSA among both the medical community and the general public. It is **estimated that less than 20% of those with OSA have been diagnosed or treated**. Many healthcare professionals are often unable to diagnose OSA because they are unaware that such non-specific symptoms as excessive daytime sleepiness, snoring, hypertension and irritability are characteristic of OSA. While OSA has been diagnosed in a broad cross-section of the population, until recently, it has typically been diagnosed among middle aged men who are obese. However, we believe the importance of OSA in women is **increasingly being recognized, with nearly 40% of new PAP patients being female**. **A strong association has been discovered between OSA and a number of cardiovascular and metabolic diseases**. Studies have shown that SDB is present in approximately 83% of patients with drug-resistant hypertension, approximately 72% of patients with type 2 diabetes, approximately 77% of patients with obesity and approximately 76% of patients with chronic heart failure.*

*Sleep-disordered breathing encompasses all disease processes that cause abnormal breathing patterns during sleep. Manifestations include OSA, central sleep apnea, or CSA, and hypoventilation syndromes that occur during sleep. Hypoventilation syndromes are generally associated with obesity, chronic obstructive lung disease and neuromuscular disease. OSA is the most common form of SDB. Sleep fragmentation and the loss of the deeper levels of sleep caused by OSA can lead to excessive daytime sleepiness, reduced cognitive function, including memory loss and lack of concentration, depression and irritability. OSA sufferers also experience an increase in heart rate and an elevation of blood pressure during the cycle of apneas. Several studies indicate that the oxygen desaturation, increased heart rate and elevated blood pressure caused by OSA may be associated with increased risk of cardiovascular morbidity and mortality due to angina, stroke and heart attack. Patients with OSA have been shown to have impaired daytime performance in a variety of cognitive functions including problem solving, response speed and visual motor coordination, and studies have linked OSA to increased occurrences of traffic and workplace accidents. Generally, an individual seeking treatment for the symptoms of OSA is referred by a general practitioner to a sleep specialist for further evaluation. **The diagnosis of OSA typically requires monitoring the patient during sleep at either a sleep clinic or the patient’s home. During overnight testing, respiratory parameters and sleep patterns may be monitored, along with other vital signs such as heart rate and blood oxygen levels”.***

(source Resmed 10K commentary pg 3)

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