EXECUTIVE SUMMARY

Ellen Medical

Affordable dialysis for the developing world

The Ellen Medical Team

Ellen Medical was formed to make dialysis affordable and accessible to millions of people who currently die prematurely from chronic kidney disease.



John Knight Managing Director MBBS MA MBA FRACP FASN GAICD Nephrologist with a strong mix of clinical, research and commercial experience



Vince Garvey Director of Enginerring BA BAI CEng Eur Ing FIMeche Mechanical and electrical engineer, entrepreneur and inventor with over 100 patents



Scott Featherston Chief Financial Officer BEng, MEngSc, MA (Int. Broad corporate finance experience



Navneet Kaur Company Secretary BA, Dip Arch, Dip Accounting Broad corporate and financial administrative experience



Arthur Brandwood BSc PhD MIMMM CEng FRAC GAICD Highly experienced MedTech professional with multiple leadership roles over 40-year career history



Problem

16 million people need dialysis treatment for kidney failure today. Only four million can afford it. The other 12 million die prematurely. Dialysis has been a safe and effective treatment for kidney failure for over 70 years, but it is very expensive: over US\$50,000 per patient per year.

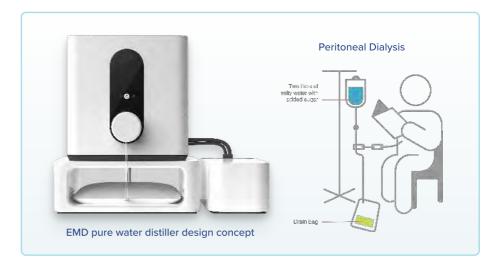
There are two forms of dialysis. The best known is haemodialysis (HD) in which blood is pumped through an external filtration system three times a week. A growing alternative is peritoneal dialysis (PD) in which a cleansing fluid is infused into the abdomen and changed four times a day.

The global dialysis market in 2022 is US\$95B with CAGR of 5.7%. Reduction of cost to US \$10,000 would increase access and double market size to \$200B.

Solution

Ellen Medical

Our disruptive technology generates a sterile solution of salt and sugar for PD at the point of care, using local potable water.



The patient or a carer fills the bag with 2 litres of pure water to create conventional PD fluid. Ellen Medical bags are ten times lighter and half the cost of standard PD bags and offer substantial savings in manufacture, transport, storage and carbon footprint.

We have built a great management team and board with the skills required – medical, engineering, clinical, commercial and regulatory – to get to market. We plan to strengthen the team as we enter the next phase of growth

Plan to Market

Product design to ISO 13485 standard

GMP manufacture for PD bags

Region-specific clinical evidence

Regulatory submission in target markets "The unmet need for dialysis treatment in the developing world has continued to grow, so it is exciting to see EMD finalise the design of its low cost dialysis system and start to plan for clinical trials and regulatory approvals in countries such as India and Thailand. Two opportunities are coming together: a market opportunity and the opportunity to save lives."

Vlado Perkovic - Dean, Faculty of Medicine, UNSW

"As a practising kidney specialist in India, I look forward to offering EMD's Affordable Dialysis System to Indian kidney patients, especially those who find current treatments beyond their means."

Vivek Jha - Immediate Past President of the International Society of Nephrology (ISN)



Partners











haemologic

International Advisors



Prof Siribha Changsirikulchai Kidney specialist Thailand



Prof Guillermo Garcia Garcia Kidney specialist Mexico



Prof Simon Davies Kidney specialist, UK Chair, ISN Dialysis Committee

Opportunity

Ellen Medical's first clinical trial of its dialysis system with human subjects has received ethics approval and will commence in 2022. Our mission is to make our product available globally. We will start with inital launches in a number of beach head markets including India, Thailand, Hong Kong and Mexico.

Competition

Dialysis is delivered by HD and PD, with government policy and historical clinical preferences determining which is more prevalent in a given country. PD is increasingly preferred as it is cheaper and more easily scalable. The PD market in Western countries is dominated by Baxter, a global manufacturer and distributor of pre-filled PD bags. Our key market is those millions of patients who are not getting any dialysis at all.

Regulatory Strategy & IP

Ellen Medical has a family of patents protecting the IP in the distiller and the bags in 10 key countries. Patents have been granted in China, France, Germany, Ireland, Japan, South Africa, USA, UK and Hong Kong and are pending in India, Mexico and Malaysia. We work with leading Australian patent attorneys Phillips Ormonde Fitzpatrick

The regulatory hurdles are clearly understood. The regulatory burden is relatively light: meeting a known pharmacopoiea standard with a generic medicine. Our regulatory advisors are the leading international firm Pharmalex.

Financial Forecast

	FY24	FY25	FY26	FY27	FY28
Patient numbers	0	2000	15000	37000	70000
Gross sales revenue A\$M	0	12.2	94.8	231.0	426.9
Licensing revenue	0	0.7	5.5	13.0	23.5
Net income (Loss) A\$M	(5.5)	(1.5)	2.8	6.9	13.9

Investment

Ellen Medical has raised \$6.2M to date via early grants, an equity investment, loans and convertible notes.

Closing date: **Funding target: Equity:** \$12M 33% Series A July 2022

Use of funds: product design and manufacture to ISO13485 and GMP standards, region specific clinical evidence creation, regulatory filings, new hires.

Timeline



