



# Biotech Daily

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*Daily news on ASX-listed biotechnology companies*

## Dr Boreham's Crucible: Heramed

**By TIM BOREHAM**

**ASX code:** HMD

**Share price:** 23 cents

**Market cap:** \$20.1 million

**Shares on issue:** 87,528,841

**Chief executive officer:** David Groberman (co-founder)

**Board:** Dr Ron Weinberger (chair), Mr Groberman, Tal Slonim, David Hinton, Doron Birger

**Financials (March quarter 2019):** receipts \$88,000, cash burn \$680,000, cash of \$3.3 million, estimated current quarter cash burn \$1.34 million.

**Identifiable major shareholders:** Holley Pharma Company 10.81%, David Groberman 9.14%, Ted Slonin 9.14%, The Mayo Clinic 0.85%

As the saying goes, behind every great man there has to be a great woman; and in the case of Israeli biomechanical engineer David Groberman it's his wife Odelia.

During her third pregnancy, Odelia pondered why she had to make frequent hospital visits for a routine ultrasound to monitor the baby's heartbeat. Surely this could be done in the comfort of one's own home?

"We found ourselves going to the doctor over and over again just to see that everything was okay. It was considered a higher-risk pregnancy," Mr Groberman says.

At the time, Mr Groberman and business partner Tal Slonim were consulting to health giants such as Medtronic, Philips and Bayer, as well smaller Israeli start-ups.

“After doing that for 15 years we decided we wanted to cross the road and bring something unique ourselves to the market, not just provide services to others,” he says.

The duo ran with the idea of developing an app-linked device to enable just that and - yada yada yada – Heramed was born (pardon the pun).

Heramed listed on the ASX in December last year, following a well-worn path of other Israeli start-ups drawn by Australian investors’ receptive attitude towards riskier shares (such as two-bit explorers and a plethora of marijuana companies).

## **About Heramed**

The philosophy underpinning Heramed and its initial Herabeat device is that pregnancy is the ultimate expression of “wellness”, or what we more commonly call “health”, yet expectant mothers are treated as sick patients.

According to Heramed’s research partner, the Rochester, Minnesota head-quartered Mayo Clinic, on average, 14 “clinical sessions” are required during a pregnancy; and most are for a regular ultrasound.

In contrast, Melbourne’s Royal Women’s Hospital says that healthy pregnancies require three to five visits.

By the time the gravid mum has found a parking spot, argued with her spouse and queued for the consultation, stress levels are raised and that can result in a false reading. Not to mention the danger of coming into contact with germ patients - er other expectant mums.

“All they do is hook you up to professional, big ultrasound monitors and take the baby’s heartbeat and you then have to go back in line and wait for the doctor,” Mr Groberman says.

The Herabeat hardware consists of a round sensor (which goes on the belly) and is linked to a smart phone application.

Based on hundreds of tests to date, the company claims the results are the same as those of an ultrasound clinic machine, give or take one heart beat per minute, of about 110 to 160 beats per minute.

The device reflects the quantum advances in electronics, in terms of miniaturization, battery quality and longevity and sensor development.

“We are leveraging the immense progression of the electronics industry,” Mr Groberman says.

“The micro-controller is 10 times more intense than a full laptop computer from four years ago.”

### **Heramed’s commercialization path**

So far, Heramed is approved to sell its \$US299 a pop Herabeats in Mexico, Israel, Australia, Europe and India (locally, they sell for \$450).

In Israel, the product is distributed by big pharma Teva. In Australia, the company plans to launch this month in cahoots with the infant supplies mob Dale Group and marketer Meerkats.

The company also has distribution tie-ups in the UK, Brazil, Mexico and Turkey.

In the US, the company last month submitted an application to the Food and Drug Administration (FDA) for section 510k device approval.

“We expect the FDA to come back before the end of this year with a view to a launch next year,” Mr Groberman says.

But measuring heartbeats is one thing; interpreting them is another. “The real impact comes when you have a service where the data is uploaded to the cloud and can be reviewed by a professional (a midwife or a nurse),” he says.

Hence Heramed is also rolling out Heracare, a \$US69 a month subscription-based pregnancy management service, by which mums have 24-hour telephone access to clinical professionals.

Heramed intends to partner with third parties that have relevant call centres in place, such as tele-medicine providers or health management organizations (combining insurers and hospitals).

Over time, this ‘care manager platform’ is also expected to be extended to monitor the mum’s blood pressure, weight and temperature.

Step three is an artificial intelligence (AI) product called Orion AI, being developed with the Mayo Clinic.

By crunching millions of data records over time, Orion AI will be ‘trained’ to detect factors that indicate potential pregnancy complications before they become a problem.

This one is still in the lab, but is expected to come to market in 2021 with an indicative price of \$US4.90 a month for home users, or \$US1.90 per session for professionals.

Of course, some expectant mothers might not fancy being advised by a robot. The truth is, the human experts are said to be wrong up to 40 percent of the time.

Heramed is fortunate enough to have the esteemed Mayo Clinic as a shareholder and “research and development collaborator”.

The Minnesota-based institution has a long interest in fostering at-home prenatal monitoring, if only to reduce the burden of face-to-face hospital health costs.

Mayo’s head of cardiovascular medicine Prof Paul Friedman is on Heramed’s advisory board.

Also, a global expert in artificial intelligence for medical applications, Prof Friedman reckons Orion AI will “potentially enable the healthcare community ... to develop preventative and personalized healthcare models”.

### **No market is the same**

Mr Groberman says Heramed’s sales approach will differ from geography to geography. In Brazil, for instance, the company has dealt directly with health giant Hapvida, which has 100 hospitals and 1000 clinics.

In a pilot program, the company is working with the hospitals to ensure the patient data goes seamlessly to their electronic medical records, ready for midwives or physicians to review.

If there’s a problem, the patient - and by that stage she is one - can be taken to hospital.

In Mexico, the company has an entirely different alliance with IBL Group, which has 50 Apple electronics shops.

“They decided to establish a store-within-a-store for digital health and chose our device to be the first one to be featured,” Mr Groberman said. “The consumer aspect of being featured in an Apple store is unbelievable.”

### **Finances and performance**

In the March quarter, Heramed reported receipts of \$88,000 and cash outflows of \$680,000, with cash on hand of \$3.33 million and no debt.

The December ASX-listing was accompanied by an oversubscribed \$6 million raising, at 20 cents a share.

The raising was supported by Perth paediatrician Dr Paul Porter, who is an advisor to Resapp (see below).

Heramed chairman Dr Ron Weinberger was a mover and shaker behind the highly successful probe disinfection play, Nanosonics.

Messrs Groberman and Slonim each account for just over nine percent of the register. The biggest holder is China's Holley Pharma, on 10.8 percent.

Mr Groberman is coy on revenue projections, but volunteers the company expects to sell "at least several thousand devices this year and much more than that next year".

In their short-listed life, Heramed shares have wavered between 15 cents (early January this year) and 33 cents (mid-March).

### **For the worried well?**

One worry for us is the device might feed on the parents' natural anxiety about what can go wrong in pregnancy.

The truth is the overwhelming majority of pregnancies and childbirths in Western countries are normal: according to Emory University School of Medicine's genetics department, 96 percent to 97 percent are born healthy (that is, without any birth defects).

According to the UK pregnancy support organization Tommy's, one in four pregnancies miscarry, but 85 percent of these are within one to 12 weeks. Late term miscarriages are very rare.

Mr Groberman agrees there will always be a cohort of "extremely anxious people" but implies the benefits of early detection of problems outweigh the risks.

Besides, he says, at-home monitoring fosters bonding with the unborn child. "Listening daily and sharing with husband and kids is an amazing experience," he says.

"On the medical aspect, any obstetrician will say two to three times a week is good enough."

### **Dr Boreham's diagnosis:**

Heramed must be doing something right in the eyes of investors, because the remuneration report attracted a 'no' vote of nil, yada and zip at the company's May 29 AGM in Melbourne.

The company evokes comparisons with the Resapp and the former Isona, which found the app-based respiratory diagnosis game to be not such a wheeze.

There's another direct link with Resapp in that the Porter family's investment advisor, Chris Ntoumenopoulos of Twenty 1 Corporate, is a Resapp director.

"There are similarities but there are differences," Mr Ntoumenopoulos says of Heramed and Resapp.

Both are [internet] cloud plays but Resapp has the advantage of no hardware and therefore no cost of goods sold (COGS). Heramed has a higher COGS, but pregnant woman make for a more fertile target.

Excuse the pun yet again.

“They are both very good stories and very commercial from a consumer and a medical point of view which is very important and why we invested in it,” Mr Ntoumenopoulos says.

With 45 million infants born every year - including 310,000 in Australia - Heramed is addressing a vast and fecund market. But, of course, it's a quantum leap between being preppers and buying the product.

Another issue is that mums tend to donate maternity paraphernalia to the next expectant mum when the need has passed. Conceivably - and excuse the pun yet yet again - these hand-me-downs will include Heramed.

But the company is onto this potential problem: each device has a serial number enabling the application connection, which means that after a short period of grace the new mum can be prompted to pay a licence fee.

No, Luther Vandross and Janet Jackson - the best things in life aren't free.

***Disclosure: Dr Boreham is not a qualified medical practitioner and does not possess a doctorate of any sort. The father of two accepts that pregnancy is a wonderful expression of wellness, but as for childbirth itself ...***