



Biotech Daily

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Daily news on ASX-listed biotechnology companies

Dr Boreham's Crucible: Telix Pharmaceuticals

By **TIM BOREHAM**

ASX Code: TLX

Share price: \$6.33; **Shares on issue:** 312,916,341; **Market cap:** \$1.98 billion

Chief executive officer: Dr Christian Behrenbruch

Board: Kevin McCann (chair), Dr Behrenbruch, Dr Andreas Kluge (co-founder), Dr Mark Nelson, Oliver Buck, Jann Skinner, Tiffany Olson

Financials (six months to June 30, 2022): revenue \$24.05 million (up \$21.1 million), loss \$70.6 million (up 111%), cash of \$122.6 million

Major shareholders: Gnosis Verwaltungsgesellschaft (Dr Kluge) 7.39%, Elk River Holdings (Dr Behrenbruch) 7.2%, Grand Decade (China Grand Pharmaceuticals)* 3.49%

To those unfamiliar with nuclear medicine - and we would hazard a guess that's 99.9999 percent of the population (recurring) - one isotope sounds pretty much like the other.

Cancer radiotherapy dates back more than a century and English radiotherapist Frederick Soddy 'discovered' isotopes - radioactive versions of an element - in 1913.

So, to layfolk it seems puzzling that Telix has made such a splash entering the US market with a new isotope for prostate imaging, called Illuccix.

In its early days since approval, Illuccix is selling its pants off, even though there's one established competitor in the market and another in the offing.

Improved efficacy aside, Telix chief and co-founder Dr Chris Behrenbruch says it's all about more convenient access to the invisible, short-lived rays.

While rival isotopes are produced in costly cyclotrons, Telix's can be generated at any of the 150 or so 'nuclear pharmacies' scattered across the US (including in hospitals and cancer centres).

"You make it when you need it," Dr Behrenbruch says.

"[Fast food outlet] Subway is successful because it's on every street corner. We're on every corner, which is really important when you are talking about a product with a couple of hours street life."

In any event, Illuccix has captured a foot-long market share, having only been launched in the US in early May.

Telix is now eyeing broader geographies, as well as its follow-up isotope to detect renal cancer. Beyond that, Telix is developing therapeutic - as opposed to diagnostic - products and is confident of having a glioblastoma treatment to market in about three years' time.

History

Telix is developing both imaging (diagnostic) and cancer therapies on its molecularly targeted radiation (MTR) platform.

A relatively new discipline, molecularly targeted radiation allows radioactive isotopes to be delivered to biological targets expressed by the cancers. As a result, healthy cells are not irradiated in the process.

Telix was founded in November 2015 by Dr Behrenbruch and Dr Andreas Kluge.

Telix listed in November 2017 after raising \$50 million at 65 cents apiece. Dr Kluge founded the Dresden-based radio-pharmaceutical outfit Therapeia, acquired by Telix for a nominal cash sum and the assumption of about \$1 million of debt.

Dr Behrenbruch was also the executive director of Factor Therapeutics, which is now known as Dominion Minerals and fossicks for lime and lithium in the US. 'Nuff said.

He was also on the board of Amplia Therapeutics.

Chief business officer Dr David Cade joined Telix in October 2019, having been chief medical officer at Cochlear. Before that, he held senior roles at targeted radiation house Sirtex Medical.

Based in Melbourne, Dr Behrenbruch has been running the US operations for several months, but hopes to revert to his normal duties after the company recently appointed a "cracking" new Americas head, Kevin Richardson.

Making it big in the USA ...

Telix's breakthrough moment came in mid-December last year when the US Food and Drug Administration (FDA) approved Illuccix for prostate cancer imaging.

Australia's Therapeutic Goods Administration (TGA) approved the product in early November, so we would like to think the FDA bigwigs took their cue from their antipodean colleagues.

Technically, Illuccix is a kit for preparing gallium-68 gozetotide - more commonly known as a PSMA-11 injection - for positron emission tomography (PET) scans. Illuccix is indicated for prostate cancer patients suspected of having either metastasized growths or a recurrence based on elevated PSA (prostate specific antigen) levels.

In the US, Telix competes with Lantheus's prostate imaging agent Pylarify. In March, the FDA approved Novartis's lutetium-based imaging product, Locametz (PSMA-617).

Dr Behrenbruch estimates the US Illuccix market opportunity at \$US1 billion to \$US1.5 billion annually. "There's room for plenty of players."

... and taking on the world

Illuccix is under regulatory review in 17 countries, notably 13 European jurisdictions and the UK. The company has temporary authorization in Brazil and has submitted a new drug application in South Korea.

Illuccix is approved for sale in Australia and New Zealand, while assent is expected in Canada - Dr Behrenbruch's birthplace - any day.

"The aim is to get as much global coverage as we can, which is something only we are doing," Dr Behrenbruch says.

Europe is a bigger market in volume terms than the US, but not so much in value because of lower reimbursement. As a rule of thumb, whatever Telix makes in the US, the rest-of-the-world sales should add 40 to 50 percent more.

"The numbers quickly add up," he says. "There are probably 20 markets where we can do \$5 million to \$20 million of revenue a year."

China included ...

In 2020, Telix Pharmaceuticals struck an initial 10-year deal with China Grand Pharmaceutical, by which the Hong Kong-based entity became the exclusive partner to Telix in mainland China, Hong Kong, Macau and Taiwan.

(The region used to be called 'greater China' but there are a few sensitivities around that nomenclature at the moment).

The China Grand partnership is for an initial 10-year term for any therapies, with the clock to start ticking after marketing authorization.

The 10-year deal is worth "up to" \$445 million, with ongoing royalties possibly exceeding this number.

China Grand has submitted an investigational new drug application for Illuccix to China's medical regulator, the National Medical Products Administration (NMPA).

It's also lobbed an application for TLX250-CDx, Telix's imaging product for renal (kidney) cancer.

This will clear the way for local bridging studies - probably enrolling 100 patients each - to confirm the FDA-guided trials.

Annually, 115,000 Chinese men are diagnosed with prostate cancer and 75,000 people with renal cancer.

Renal cancer

The company expects TLX250-CDx to be the first imaging agent specifically intended for the non-invasive assessment of patients with clear cell renal carcinoma, the most common form of kidney cancer. TLX250-CDx is subject to a phase III registration trial.

Dr Behrenbruch describes kidney cancer imaging as a \$US1 billion opportunity in the US.

The global trial, called Zircon, has enrolled around 300 patients scheduled for a partial nephrectomy (that is, the kidney lump is removed by a surgical urologist).

Dr Behrenbruch says the renal imaging market is about the same size as for prostate cancer, with a similar customer base of clinicians and an "equal unmet medical need".

In the US, 155,000 kidney cancers are found from abdominal scans targeting other conditions, with a further 55,000 kidney scans at surgical stage. He says the renal product could be sold by Telix's existing US Illuccix sales team.

Finances and performance

In the June quarter Telix generated revenue of \$22.5 million – 10 times the March quarter. Of this \$US13.6m (\$A19.3 million) derived from maiden Illuccix sales in the US

A key point is that the company had not yet won reimbursement, so sales should rise sharply in the current quarter.

Pylarify notches up quarterly sales of around \$US100 million, and broker Taylor Collison reckons Telix is on track to snare 30 percent of the market. Management won't hazard any forecasts until the sales pattern with full reimbursement is established.

"Certainty in the first quarter demand exceeded analysts' estimates and certainly our expectations as well," Dr Behrenbruch says.

As of June 30, Telix had \$122 million in cash, having moved quickly to raise \$175 million in a placement in January 2022, shortly after the FDA approval.

Dr Behrenbruch admits it was fortunate the company moved when it did, given the ensuing "brutal" funding conditions for the biotech sector globally. Indeed, the \$25 million share purchase plan component of the raising was cancelled, after the market soured.

Over the last 12 months Telix shares have traded between \$3.55 (mid-May this year) and a record \$8.67 (mid-January this year). The shares traded at a low of 43 cents in early 2018 and no one rang the bell, sadly.

On Monday, the shares dived as much as 9.5 percent after China Grand said it had sold 10 million of its Telix shares - just under half its holding - for a \$56 million profit.

The line from both parties is that China Grand is still very much in love with Telix, but wanted to free some funds for its clinical programs - some of which are in collaboration with Telix.

Coming up

All up, Telix has more than 20 trials underway, mainly as academic and commercial collaborations the company does not have to fund directly.

Dr Behrenbruch says he's "most jazzed up" about a glioblastoma trial, which is entering phase II stage

Another exciting one is a collaboration with Merck, combining targeted radiation with DNA damage repair inhibitor cells.

While there's a lot bubbling in the Telix pot, investor attention now focuses on the Zircon results read-out this year. Given it's almost September, we shouldn't have to wait much longer.

Dr Boreham's diagnosis:

With Illuccix, Telix went from academic proof-of-concept to a commercially-proven product and reimbursement in the space of three short years.

Without the pandemic the pace might have been even quicker.

Dr Behrenbruch describes Illuccix as a “warm-up act, a way to build capability and relationships with neurological oncologists”.

The last rock concert he recalls was the Red Hot Chili Peppers at London’s Hyde Park in 2015. But he was more enamored with the warm-up act: godfather of soul James Brown.

Similarly, Illuccix makes for an impressive preliminary gig and one that recently-listed ASX rivals Clarity Pharmaceuticals and Radiopharm Theranostics could struggle to emulate.

“There are a lot of small companies appearing out of the woodwork that are trying to do what we do,” Dr Behrenbruch says by way of general observation.

“But it’s really hard to build a global supply chain, which has cost us \$100 million to develop.”

If the main act - yet to come - is even better, Telix should assume superstar status. Ultimately, the biggest prize lies in therapeutics rather than diagnostics.

“The company has a lot of momentum and is well capitalized and well and truly on the way to becoming a cash generative business,” Dr Behrenbruch says.

“The next 18 to 24 months are going to be commercially critical for the company.”

Disclosure: Dr Boreham is not a qualified medical practitioner and does not possess a doctorate of any sort. He vaguely recalls seeing Cold Chisel in the 1980s as a support act to the touring super-band named ... er ... sorry, he can’t remember.