



# Biotech Daily

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*Daily news on ASX-listed biotechnology companies*

## Dr Boreham's Crucible: Clinuvel Pharmaceuticals

By **TIM BOREHAM**

**ASX code:** CUV

**Share price:** \$19.50; **Shares on issue:** 49,410,338; **Market cap:** \$963.5 million

**Chief executive officer:** Dr Philippe Wolgen

**Board:** Willem Blijdorp (chairman), Dr Wolgen, Brenda Shanahan, Dr Karen Agersborg, Susan Smith, Prof Jeffrey Rosenfeld, Prof Andrew Likierman

**Financials (year to June 30, 2022):** revenue \$67.0 million (up 38%), net profit after tax \$20.9 million (down 16%), dividend 4.0 cents a share (up 60%), cash balance \$121.5 million (up 47%)

**September quarter 2022:** sales receipts \$25.5 million, net operating expenses \$8.27 million, net cash from operating activities \$17.3 million, net cash \$137.65 million.

**Major identifiable holders:** BNY Mellor 8.7%, Dr Wolgen 6.3%, Ender1 LLC (Sean Parker) 4.7%.

Move over Chairman Mao or - if you dare - China's increasingly permanent current Paramount Leader Xi Jinping. That's because Clinuvel is outdoing China in terms of the nation's famed manifestos, such as the Great Leap Forward, the Five-Year plan or - more recently - the enigmatic One Belt One Road initiative.

The skin disorders specialist has just unveiled its Strategic Update V, which follows Strategic Update I (October 2020), Strategic Update II (April 2021), Strategic Update III (November 2021) and Strategic Update IV (May 2022).

Dubbed “Clinuvel coming full circle”, Strategic Update V is all about “facilitating access to [the company’s] technologies and expertise in the form of healthcare solutions provided to target audiences”.

This refers to the pending launch of a range of over-the-counter topical products, including one for “pigmentation stabilization” – a.k.a. safe tanning.

Clinuvel historians will know that when the company was known as Epitan it developed a safe tanning product, before changing tack with its now-approved prescription drug for a rare skin condition.

CEO Philippe Wolgen says the pending OTC launch “finalizes the sanctified journey we started 42 years ago”.

But hang on!

Dr Wolgen says that safe tanning is all about skin cancer protection for vulnerable audiences, rather than body beautiful types bronzing up ahead of the bikini season (see below).

### **The long march to approval**

Clinuvel’s core product Scenesse evolved from laboratory work by four scientists at the University of Arizona in 1987. In 1995, the owners applied for investigational new drug status with the US Food and Drug Administration (FDA), based on marketing claims of a “tanning solution by chemical induction”.

The FDA demurred. Epitan was incorporated in 1999 and back-door listed on the ASX in 2000, before changing its name to Clinuvel in 2006. In 2003, the FDA knocked back the drug again, claiming it looked w-a-aay too much like Botox.

The molecule was out licenced to an Australian team, which fronted the FDA again.

A former facio-cranial surgeon and almost professional soccer player, Dr Wolgen joined the company in 2005 and instilled a strict medical agenda.

Spurred by Swiss studies showing an 11-fold improvement in sunlight tolerability, Clinuvel honed its commercial strategy to focus on the rare skin intolerance condition erythropoietic protoporphyria (EPP).

The first EPP patients were treated in Italy after the government agreed to subsidize part of the cost to users.

European regulators approved the drug for adult EPP use in 2014 and the company launched the drug there in 2016. The FDA approved the drug in 2019.

In 2014, the company rejected a \$2.17 a share, \$95 million takeover offer from Retrophin.

## **About Scenesse**

A sub-cutaneous formulation of the peptide afamelanotide, Scenesse as an adult treatment for EPP, an inherited metabolic disorder that causes a severe reaction to sunlight because of a dearth of the compound protoporphyrin nine (PPIX) in blood and tissues.

EPP is activated by visible light and ultraviolet radiation, causing tissue damage and howling pain. Scenesse binds to the melanocortin-1 receptor on skin cells and sets in motion a “cascade of cellular events” to activate melanin and create a prophylactic barrier.

About the size of a rice grain, the Scenesse shots are injected sub-cutaneously in a 16mg dose and ooze their goodness for two months (after which the patients have another one). EPP affects about one in 140,000 people, equating to about 5,000 to 10,000 sufferers.

Globally, 12,000 Scenesse doses have been administered to date. The drug is now widely reimbursed, including in the US where the treatment costs an average \$90,000 to \$140,000 annually, depending on the number of injections required.

Dr Wolgen says the US experience with Scenesse has been “well beyond our expectations”.

While the company won't reveal its EPP market penetration - rivals are lurking – Dr Wolgen alludes to industry analysis suggesting a two to three percent share.

## **A topical opportunity**

Clinuvel's over-the counter (OTC) strategy involves online-only sales of three photomedicine (dermato-cosmetic) products.

The website goes live on March 1, 2023 under different branding.

The products target those most prone to skin cancers because they already have had a melanoma, or are immune compromised or otherwise genetically predisposed.

One is an ultra-high ultra-violet (UV) light protection sun cream called Cyacelle, targeting immune-compromised people or those otherwise vulnerable to skin cancer.

The 'fake tanning' product is an unguent to assist with cellular DNA skin repair.

When someone gets sun burn, the redness, in effect, reflects a strand of damaged DNA, which the enzymes repair in about 40 minutes.

But the next time the damage occurs, the chance of the cells being replicated into pre-cancerous cells is higher.

“If you are able to fortify the enzymes that repair one single strand, you can make a claim that you assist DNA repair and that is what these enzymes do,” Dr Wolgen says.

Organ transplant recipients are of special interest: an underappreciated fact is that 80 percent of fair-colored patients will develop skin cancer within 10 years, the result of the anti-rejection (immune suppressing) drugs.

About 150,000 organ transplants are carried out in the US and Europe a year.

“We started off with a dream of making a cream and making it topical, and we are coming back to a cream,” Dr Wolgen says.

“But [we] can only justify that position because [we] have gone into medical areas, not injected thousands of people with a hormone.”

### **The beauty myth**

In straying into the over-the-counter market, Clinuvel is going where the beauty product purveyors dare not go.

As Dr Wolgen puts it, the beauty giants “don’t want to be associated with a melanoma or a horrible disease because you can’t put that on a billboard ... it’s not sexy”.

That’s not to say the tanning product can’t - or won’t - be used off-label by healthy people. Indeed, stockbroker Wilsons cites the tanning product as a “unicorn opportunity” in a \$US1.4 billion a year global market for sunless tanning products. Not that Dr Wolgen is buying that line.

“In our view the skin cancer prevention market is much bigger than the lifestyle tanning market.”

A key factor is that at around EUR200 (\$AUD305) for a 125-milligram tube, the product is priced as a serious pharmaceutical.

### **Under the influence**

Clinuvel is adopting an influencer strategy to market its OTC unguents, but it’s not about using those young girls who earn hundreds and thousands of dollars by shameless flogging beauty products to adoring followers.

Instead, the company has appointed about 60 paid ‘ambassadors’ across the three patient groups, some with terminal skin cancer.

“They talk about their ordeal,” Dr Wolgen says. “They talk about the mission of reducing and preventing skin cancer because no one else wants to give them the air time.”

The company also plans to recruit about 10 A-list celebrities “with some association with skin cancer or organ transplants”. They must have one million followers or more and will be paid in Clinuvel shares.

## **Finances and performance**

Clinuvel recorded sales receipts of \$25.5 million in the September quarter 2022, the best quarterly result to date. The numbers reflect the peak treatment season for EPP sufferers in the US and Europe.

Net cash flows were a healthy \$17.3 million, and with \$137 million in the bank, the company won't be tapping the market for funds any time soon.

Being profitable, the company doesn't have to report quarterly, but does so in order to keep shareholders informed.

In the full year to June 30, 2022, the company generated \$67 million of revenue (also from Scenesse sales, as well as a \$20.9 million net profit. These reported earnings were 16 percent lower, but management (not surprisingly) prefers the tax loss adjusted, pre-tax number of \$34.3 million (34 percent higher).

Expenses during the year rose 44 percent to \$32.6 million, but chief finance officer Darren Keamy said costs grew in a "controlled manner" to support the growth initiatives.

Dr Wolgen says Clinuvel's research and development budget of \$175 million over five years will be funded by the cash on hand, as well as expected ongoing profits. The company also intends to pay out 10 percent of earnings as dividends.

Over the last 12 months Clinuvel shares have traded between \$40.56 (early November last year) and just over \$13 (mid-June this year). The stock peaked at \$43 in October 2021 and five years ago were trading at a mere \$7.60 a share.

## **The 'Michael Jackson disease': can Scenesse Beat It?**

Meanwhile, Clinuvel is in the clinic with a pigmentation disorder called vitiligo, which affects about 45 million people. Known as the 'Michael Jackson disease' in some circles, vitiligo causes the skin to go pale, generally in blotches. Trials have taken place since 2010 and are ongoing.

Clinuvel is also eyeing Scenesse for Xeroderma pigmentosum, or XP - not a spicy Chinese seafood sauce but an hereditary condition characterized by extreme sun sensitivity - leading to a very high risk of skin cancer and other medical problems.

Meanwhile, Clinuvel is working on a fast-acting afamelanotide variant called Prenumbra, for strokes and vascular disorders.

The company undertook a six-patient, proof-of-concept program for arterial ischaemic strokes and plans to expand this to a 12-patient effort by the end of 2022.

In case you're wondering, the nexus with strokes is that afamelanotide is thought to improve blood flow and increase the delivery of oxygen and nutrients to deprived brain cells.

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

Dr Wolgen notes that the richest cuisines in the world have the least amount of ingredients - and the same applies to the life science sector.

In Clinuvel's case, the company is now cooking up multiple dishes with Scenesse and - as discussed - they're not all about skin protection.

Clinuvel is a remarkable ASX biotech success story, but ironically Dr Wolgen says the company has learnt much from failed businesses such as Pan Am, Enron and Lehmann Brothers.

"We are not unique or better executors but we are very good scholars at understanding what doesn't work," he says.

When we last covered the stock in October 2019, Dr Wolgen made it clear that the company would be targeting other indications and that investors expected it to do so.

Well - there's some truth in advertising!

In the meantime, there looks to be further growth with Scenesse and EPP, while the OTC stuff could well be a case of the side dish usurping the main course.

***Disclosure: Dr Boreham is not a qualified medical practitioner and does not possess a doctorate of any sort. Unlike in his youth, he now realizes that using Reef Oil as a tanning aid is not the sun smart thing to do.***