



# Biotech Daily

Tuesday November 1, 2022

*Daily news on ASX-listed biotechnology companies*

- \* OCTOBER BDI-40 UP 11.5%, ASX200 UP 6%, BIG CAPS DOWN 1.6%, NBI UP 9%
- \* TODAY: ASX, BIOTECH UP: IMUGENE UP 11%; UNIVERSAL BIO DOWN 11%
- \* VICTORIA \$3m BURNET GRANT FOR mRNA VACCINE
- \* ORTHOCELL WINS REMPLIR REIMBURSEMENT
- \* CRESO 'COMMITMENTS' FOR \$7.6m CONVERTIBLE NOTES
- \* FIREBRICK PAUSES PIVOTAL NASODINE COLD TRIAL FOR SUMMER
- \* MICROBA RECEIVES \$2.6m FEDERAL R&D TAX INCENTIVE
- \* NEUROTECH RECEIVES \$1.2m FEDERAL R&D TAX INCENTIVE
- \* INVEX RECEIVES \$455k UK R&D TAX REBATE
- \* NEUROTECH: 30m DIRECTORS' OPTIONS AGM
- \* CARDIEX 6.75m RIGHTS, 1m OPTIONS, 118k SHARES AGM
- \* TOTAL BRAIN COMPLETES SALE TO SONDERMIND
- \* IQ DEED PROPONENTS REQUEST 3rd EXTENSION
- \* TIGA, THORNEY INCREASE, DILUTED TO 7.8% OF ANATARA
- \* XIAO CUI REPLACES EPSILON CHAIR STEVEN XU, ALAN BEASLEY DEPUTY

## MARKET REPORT

The Australian stock market was up 1.65 percent on Tuesday November 1, with the ASX200 up 113.4 points to 6,976.9 points. Nineteen of the Biotech Daily Top 40 stocks were up, eight fell, 11 traded unchanged and two were untraded. All three Big Caps rose.

Imugene was the best, up two cents or 11.4 percent to 19.5 cents, with 31.8 million shares traded. Antisense climbed 7.5 percent; Actinogen, Impedimed, Nanosonics, Neuren and Opthea were up three percent or more; Next Science, Patrys, Polynovo, Pro Medicus and Resmed rose two percent or more; Amplia, CSL, Mesoblast, Paradigm, Resonance and Telix were up one percent or more; with Avita, Cochlear, Medical Developments and Volpara up by less than one percent.

Universal Biosensors led the falls, down three cents or 10.7 percent to 25 cents, with 50,569 shares traded. Genetic Signatures lost 9.35 percent; Cynata and Emvision fell more than four percent; Uscom was down 3.9 percent; Immutep shed 1.7 percent; with Clinuvel and Starpharma down by less than one percent.

## BIOTECH DAILY TOP 40 INDEX (BDI-40)

The Biotech Daily Top 40 Index (BDI-40) climbed 11.5 percent in October to \$18,025 million, its highest since December 31, 2021, and 7.4 percent above the pre-Covid high.

The first chart (below) shows the BDI-40 versus the ASX200 from January 31, 2020, just before the Covid-19 global epidemic; and the recent downturn caused by the Russian invasion of Ukraine, with its consequential increased costs of fuel and the potentially inflationary impact of both events.

The ASX200 was up 6.0 percent for the month of October but remained 2.2 percent below the start of the Covid-19 pandemic in January 31, 2020.

The collective value of the three Big Caps of Cochlear, CSL and Resmed (which are not included in the BDI-40) slipped 1.6 percent in October, and was down 3.65 percent for the year.

Cochlear fell 4.2 percent to \$13,137 million, CSL shed 2.2 percent to \$135,252 million, with Resmed resilient again, edging up 0.7 percent to \$49,869 million.

For the month of October, 19 of the BDI-40 companies were up, with 12 up by more than 10 percent and four up by more than 40 percent; while 18 companies fell, with just five down by 10 percent or more.

For a change, the numerical best was also the percentage best, with Telix climbing \$708 million or 48.4 percent to \$2,170 million – its highest end-of-month market capitalization.

Actinogen improved \$73 million or 45.6 percent to \$233 million, followed by: Polynovo (43.3%), Impedimed (42.0%), Volpara (21.3%), Nova Eye (21.05%), Immutep (20.3%), Resonance (19.2%), Nanosonics (17.4%), Mesoblast (17.2%), Paradigm (13.9%) and Alcidion (13.6%).

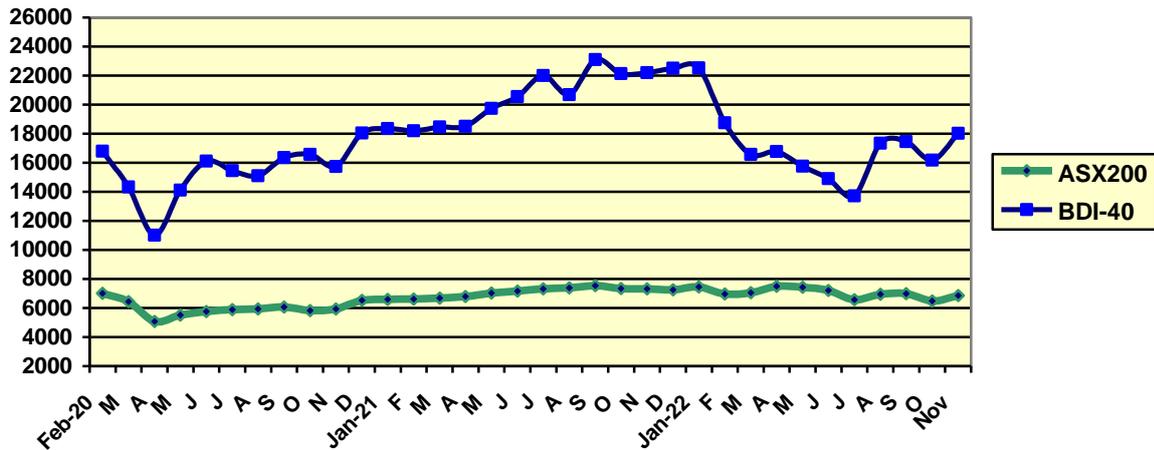
Uscom had the deepest percentage fall, down \$5 million or 33.3 percent to \$10 million, while Imugene lost the most - \$58 million – but just 5.0 percent to \$1,102 million. Kazia fell \$7 million or 25.9 percent to \$20 million, followed by: Micro-X (21.25%), Genetic Signatures (20.6%) and Starpharma (14.1%), with Proteomics down 9.5 percent.

Cronos held up the 11 companies in Cannabis Corner, climbing \$100 million or 26.1 percent to \$483 million in the month, on record sales of its marijuana products and despite a director spill threat, compensating for smaller losses and two of the 11 companies unchanged.

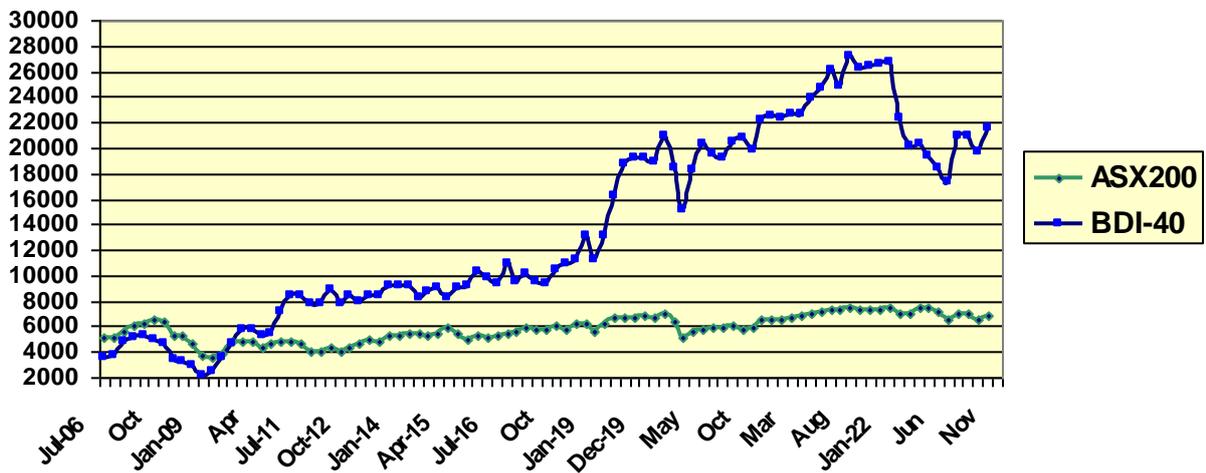
Epsilon was the percentage best, up \$2 million or 28.6 percent to \$9 million, while Cann Group eclipsed Incannex, down \$9 million or 10.1 percent to \$80 million, while Incannex fell \$38 million or 9.1 percent to \$381 million.

The Nasdaq Biotechnology Index (NBI) was up 8.9 percent in October, but down 17.8 percent for the year to October 31, 2022.

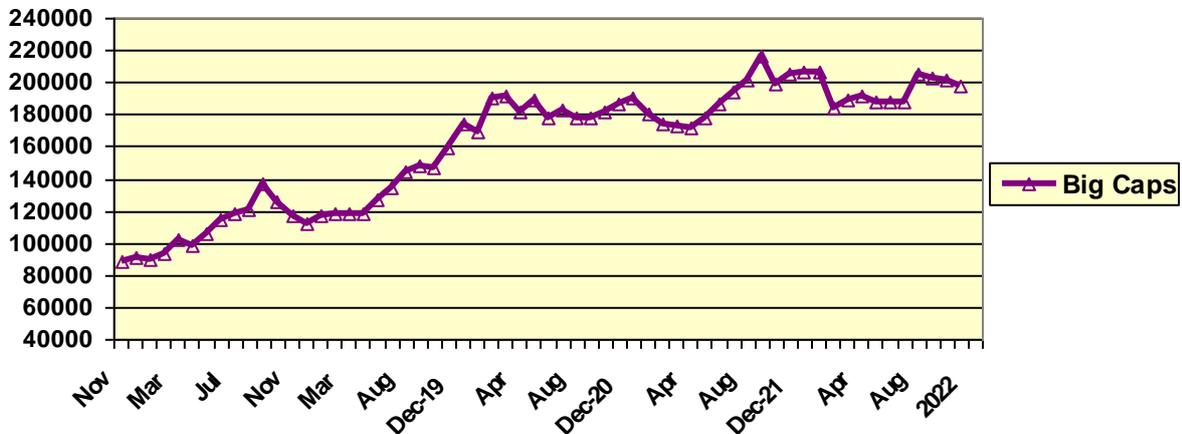
**BDI-40 (\$m) v S&P ASX 200 – Jan 31, 2020 – Oct 31, 2022 (current, raw data)**



**BDI-40 v ASX200 Jun 30, 2006 to Oct 31, 2022- Adjusted**



**Big Caps \$m (Cochlear, CSL, Resmed) Oct 31, 2017 – Oct 31, 2022**



## BURNET INSTITUTE

The Burnet Institute says Victoria has awarded \$3,082,122 to its Vaccine Initiative “to accelerate the development of next generation mRNA vaccines”.

The Burnet said that the Burnet Vaccine Initiative would take its lead vaccine candidates for Covid-19, hepatitis C and malaria through pre-clinical validation to first trials in humans in collaboration with mRNA vaccine pioneers, Moderna.

The Institute said the Victoria Government funding allowed the expansion of the program in collaboration with the Monash Institute for Pharmaceutical Sciences.

The Burnet said the next generation of mRNA vaccines to be developed in Victoria included multi-antigen vaccines with “the potential to produce more potent and long-lasting immune responses and greater protection”.

Burnet’s co-head of viral entry and vaccines group Dr Andy Pombourios said the Institute was “delighted to be recognized by mRNA Victoria through this new funding”.

“We are hopeful that this will establish Burnet as a leader in vaccine design and development and contribute to Burnet’s mission of health equity,” Dr Pombourios said.

The Institute said that Monash Institute for Pharmaceutical Sciences Prof Colin Pouton had led the development of Australia’s first Covid-19 mRNA vaccine, which was currently in phase I trials.

Prof Pouton said that the collaborative work of the Victoria Government, Burnet Institute, Monash University and industry “to drive forward the development of mRNA vaccines is a testament to the state’s commitment to exploring this area of therapeutics”.

“This funding will enable us to work together to build on Victoria’s mRNA ecosystem and progress this enormously promising new field of medicine, which has the potential to transform the way we treat a range of global health issues,” Prof Pouton said.

The Burnet Institute said that during the next three years, the collaboration would develop vaccines against Covid-19, hepatitis C and malaria, and other infectious diseases, including those that have been identified as having pandemic potential.

The Institute said the project would “contribute to the aim to develop an end-to-end, research-to-manufacture ecosystem within Australia to ensure rapid vaccine access to all Australians in times of need, establish Australia as a leader in vaccine production in the Asia-Pacific region and contribute to reducing the burden of infectious diseases in our region and globally”.

## ORTHOCELL

Orthocell says its Celgro-based Remplir for peripheral nerve repair has been included on the Australian Protheses List, allowing for reimbursement from private insurers.

Orthocell said that inclusion to the Protheses List followed Australian Therapeutic Goods Administration approval for Remplir for use in peripheral nerve repair procedures and the last month’s appointment of Sydney’s Device Technologies as its exclusive distributor (BD: Mar 21; Sep 7, 2022).

The company said that the Australia had a “significant” addressable market, with 11,780 surgical repairs of peripheral nerves completed in public and private hospitals in 2019-’20. Orthocell managing-director Paul Anderson said “inclusion of Remplir on the Protheses List is the culmination of translational research and a regulatory program to bring this product to the Australian market”.

“I am delighted that patients now have access to a premium nerve repair device that has been designed, manufactured and now reimbursed in Australia,” Mr Anderson said.

Orthocell was unchanged at 42 cents.

### CRESO PHARMA

Creso says it has “commitments” to raise up to \$7.6 million through two separate issues of convertible notes.

Creso said it had an agreement with New York asset and fund manager Obsidian Global GP LLC to raise up to \$5 million through the issue of convertible notes.

The company said it had commitments to raise \$2.6 million through the issue of convertible notes, with former chair and director Adam Blumenthal committing for \$500,000.

Creso said that Everblu Capital Corporate Pty Ltd, for which Mr Blumenthal was chair, was lead manager of both convertible note raisings, and would receive a six percent cash fee and up to 304,000,000 broker options exercisable at eight cents each, within four years.

The company said the funds would be used for marketing and sales of its marijuana products in Canada, Europe and the US, to advance its phase II trial, complete potential merger and acquisition opportunities and provide general working capital.

Creso fell 0.2 cents or 6.45 percent to 2.9 cents with 14.5 million shares traded.

### FIREBRICK PHARMA

Firebrick says it has recruited 224 of up-to 450 adults into its confirmatory phase III trial for Nasodine nasal spray for the common cold, but will pause until March 2023.

In May, Firebrick said it had recruited the first patient in its randomized, controlled trial of up to 450 subjects with early cold symptoms, to achieve a target treatment population of 196 subjects, who were confirmed to have a viral cold by a polymerase chain reaction (PCR) test (BD: May 3, 2022).

Today, the company said it had recruited 224 subjects with early-stage colds into the intent-to-treat cohort, with an estimated 100 people, or 51 percent of the 196-subject target, qualifying for the primary endpoints’ population of those with confirmed viral infection, based on PCR of a throat and nasal swap.

Firebrick said that “with summer approaching and to avoid unnecessary trial running costs, [it] intends to pause recruitment at all sites from November 1, 2022 and restart in March 2023, with expected completion of recruitment by mid-year”.

Firebrick was unchanged at 26 cents.

### MICROBA LIFE SCIENCES

Microba says it has received \$2,626,329 from the Australian Tax Office under the Federal Government Research and Development Tax Incentive program.

Microba said the rebate related to research and development expenditure for the year to June 30, 2022.

Microba was up one cent or 5.6 percent to 19 cents.

### NEUROTECH INTERNATIONAL

Neurotech says it has received \$1,188,525 from the Australian Tax Office under the Federal Government Research and Development Tax Incentive program.

Neurotech said the rebate related to research and development expenditure for the year to June 30, 2022.

Neurotech was up 0.2 cent or 2.1 percent to 9.9 cents.

### INVEX THERAPEUTICS

Invex says it has received GBP254,412 (\$A454,840) in a research and development tax rebate from the United Kingdom Government.

Invex said the rebate related to expenditure in the UK for the year to June 30, 2022.

Invex was up one cent or 1.8 percent to 57 cents.

### NEUROTECH INTERNATIONAL

Neurotech says its annual general meeting will vote to issue 30,000,000 options to directors Dr Thomas Duthy, Prof Allan Cripps and Gerald Quigley.

Neurotech said shareholders would vote to issue executive director Dr Duthy 10,000,000 options, exercisable at 10 cents an option, and 10,000,000 options exercisable at 15 cents an option, expiring five years from issue.

The company said the meeting proposed to issue 5,000,000 options each to Prof Cripps and Mr Quigley, exercisable at 10 cents, within three years of issue.

Neurotech said shareholders would vote to elect Dr Duthy, Mr Quigley and Winton Willesee as directors, ratify the issue of options and shares regarding prior agreements, approve the 10 percent placement facility and adopt the remuneration report.

The meeting will be held at BDO Australia, Level 9, Mia Yellagonga Tower 2, 5 Spring Street, Perth, on November 30, 2022 at 3:30pm (AWST).

### CARDIEX

Cardiex says its annual general meeting will vote to issue directors with 6,750,000 performance rights, 1,000,000 options and 117,998 shares.

Cardiex said shareholders would vote to issue 3,000,000 performance rights each to chair Niall Cairns and managing-director Craig Cooper and 750,000 performance rights to chief financial officer Jarrod White, as long-term incentives, for nil consideration, vesting in three equal tranches on performance milestones and expiring on November 30, 2027.

The company said the meeting would vote to issue 500,000 options to director Randall Nelson and 350,000 options to Lesa Musatto, exercisable at 50 cents each, vesting on achieving a secondary listing on a US securities exchange and expiring in five years.

Cardiex said that shareholders would vote to issue Mr White 117,998 shares, in lieu of \$35,000 in director fees, and 150,000 options to Ms Musatto, exercisable at 50 cents each by April 26, 2027, in lieu of \$US40,000 (\$A62,226) in director fees.

Cardiex said the meeting would vote to elect Ms Musatto and Mr Cairns as directors, ratify the issue of shares and options for prior placements, including directors' participation, approve the 10 percent placement facility and adopt the remuneration report.

The meeting will be held at BDO, Level 11, 1 Margaret Street, Sydney on November 30, 2022 at 9:30am (AEDT).

Cardiex fell two cents or 6.35 percent to 29.5 cents.

### TOTAL BRAIN

Total Brain says it has completed the sale of "substantially all of the assets of the business of the company and its subsidiaries" to the Denver, Colorado Sondermind Inc.

Yesterday, Total Brain said its annual general meeting approved the acquisition with a 92.97 percent vote (BD: Sep 5, Oct 31, 2022).

Total Brain was up 0.2 cents or 5.3 percent to four cents with 14.5 million shares traded.

### [IQ GROUP \(IQ3 CORP\)](#)

IQ Group administrators De Vries Tayeh (DVT) say that lawyers for the deed of company arrangement proponents have requested a third extension.

In March, IQ said it had entered voluntary administration with Sydney's DVT "to restructure", and in April, DVT said it would seek court orders to extend the time required to sort out the financial affairs of IQ Group (BD: Mar 11, Apr 4, 2022).

In August, DVT said creditors accepted a proposed deed of company arrangement, and in September, it said lawyers representing the deed proponent advised of delays in completing due diligence and raising funds and, as a result, requested an extension until October 1, 2022 (BD: Aug 1, 2022; Sep 6, 2022).

Today, DVT said it had obtained evidence of the funds raised and commitments received from investors.

The administrators said that they had granted the extension on the condition that if the proponents had not completed their due diligence and raised sufficient funds by December 5, 2022, it would convene a meeting to obtain the views of creditors and detail the proponents' progress, no later than December 22, 2022.

### [ANATARA LIFESCIENCES](#)

Tiga Trading Pty Ltd and Thorney Technologies says they increased and been diluted in Anantara from 5,328,514 shares (9.28%) to 6,371,106 shares (7.76%).

The Melbourne-based Tiga and Thorney said on February 11, 2021 they bought 250,000 shares for \$50,000 or 20 cents a share.

The two companies said that on December 2, 2020 they participated in a placement, buying 792,592 shares for \$118,889 or 15 cents a share.

In 2020, Anantara said it had commitments to raise \$1.67 million through a placement at 15 cents a share (BD: Oct 21, 2020).

Anantara fell half a cent or 12.8 percent to 3.4 cents.

### [EPSILON HEALTHCARE \(FORMERLY THE HYDROPONICS COMPANY\)](#)

Epsilon says Xiao (Josh) Cui will replace Steven Xu as non-executive chair, with Alan Beasley appointed non-executive deputy chair, effective from November 1, 2022.

Epsilon said that Mr Xu had resigned as a director.

Yesterday, the company said it had appointed 8.98 percent substantial shareholder Mr Cui as a director, effective from October 28, 2022 (BD: Oct 31, 2022).

In September, Epsilon said it had appointed Mr Beasley as a director, replacing Patrick Xu (BD: Sep 23, 2022).

In July, the company said that chief executive officer Jarrod White had resigned and Steven Xu was appointed executive chair (BD: July 22, 2022).

Last year, The Hydroponics Company founder Mr Beasley and director Lou Cattelan were voted off the board by more than 64.3 percent of the votes at the annual general meeting (BD: Jul 29, 2021).

In 2018, Mr Beasley called an extraordinary general meeting and spilled the board, with chief executive officer David Radford resigning before the meeting (BD: Mar 15, 2018).

Epsilon was unchanged at three cents.

## BIOTECH DAILY TOP 40 WITH MARKET CAPITALIZATION AT OCT 31, 2022

| <b>Company \$Am</b>  | <b>Nov-21</b> | <b>Oct-22</b> | <b>Nov-22</b> |
|----------------------|---------------|---------------|---------------|
| Cochlear             | 14,987        | 13,706        | 13,137        |
| CSL                  | 136,629       | 138,271       | 135,252       |
| Resmed               | 54,157        | 49,538        | 49,869        |
| <b>BDI-20</b>        |               |               |               |
| Avita                | 548           | 208           | 192           |
| Clinuvel             | 1,905         | 901           | 966           |
| Compumedics          | 67            | 43            | 41            |
| Cyclopharm           | 186           | 133           | 126           |
| Cynata               | 88            | 45            | 45            |
| Genetic Signatures   | 199           | 126           | 100           |
| Immutep              | 487           | 212           | 255           |
| Kazia                | 192           | 27            | 20            |
| Medical Developments | 351           | 145           | 136           |
| Mesoblast            | 1,031         | 582           | 682           |
| Nanosonics           | 1,792         | 1,057         | 1,241         |
| Neuren               | 238           | 853           | 923           |
| Nova Eye             | 60            | 31            | 39            |
| Opthea               | 448           | 475           | 451           |
| Pharmaxis            | 57            | 43            | 40            |
| Polynovo             | 1,247         | 923           | 1,323         |
| Pro Medicus          | 5,705         | 5,552         | 5,829         |
| Starpharma           | 435           | 255           | 219           |
| Telix                | 1,693         | 1,462         | 2,170         |
| Volpara              | 300           | 140           | 170           |
| <b>Second 20</b>     |               |               |               |
| Actinogen            | 243           | 160           | 233           |
| Alcidion             | 404           | 162           | 184           |
| Amplia               | 25            | 20            | 19            |
| Antisense            | 169           | 57            | 54            |
| Atomo                | 164           | 34            | 34            |
| Dimerix              | 82            | 51            | 51            |
| Emvision             | 215           | 108           | 112           |
| Impedimed            | 277           | 112           | 159           |
| Imugene              | 2,733         | 1,160         | 1,102         |
| Micro-X              | 143           | 80            | 63            |
| Next Science         | 247           | 163           | 154           |
| Oncosil              | 38            | 46            | 49            |
| Orthocell            | 103           | 82            | 83            |
| Paradigm             | 444           | 352           | 401           |
| Patrys               | 77            | 41            | 39            |
| Prescient            | 180           | 118           | 115           |
| Proteomics           | 101           | 116           | 105           |
| Resonance            | 48            | 26            | 31            |
| Universal Biosensors | 132           | 55            | 59            |
| Uscom                | 21            | 15            | 10            |

\* Biotech Daily editor, David Langsam, owns shares in Acrux, Actinogen, Alcidion, Alterity, Amplia, BTC Health, Clarity, Cochlear, Control Bionics, Cynata, Nanosonics, Neuren, Patrys, Polynovo, Telix, Volpara and non-biotech stocks. Through Australian Ethical Superannuation he has an indirect interest in other companies: <https://www.australianethical.com.au/personal/ethical-investing/companies-we-invest-in/>. These holdings are liable to change.

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