

Biotech Daily



Thursday December 17, 2020

Daily news on ASX-listed biotechnology companies

2020 - The Year In Review

The year started well with the Biotech Daily Top 40 Index (BDI-40) closing 2019 up 118 percent

Reva Medical failed to commercialize its bioresorbable stents and, like its US compatriot Airxpanders, departed the ASX boards, later followed by GI Dynamics.

At the end of a quiet January, the sector was a little excited by Resmed paying \$60 million to resolve US “kickback” allegations, the TGA cancelled Neurotech’s Mente Autism product sending the company onto the grassy knoll of medical marijuana and the BDI-40 hit an all-time high with a collective market capitalization of \$16,788 million – up 13.1 percent on January and 125.1 percent on the previous year.

The Virus

All was good with the world, but bubbling away in Wuhan, China, and being transmitted across the globe by travellers of all descriptions was a small microbe then known as 2019-nCov, later to change its name and take centre stage as severe acute respiratory syndrome coronavirus-2 (Sars-Cov-2) before shortening the moniker to just Covid-19.

From hoax, to bad ‘flu, the world slowly woke up to the fact that it was a virulent little bug with spikes perfectly designed for graphic representations and much-loved by cartoonists. David Rowe in the Australian Financial Review uses it with aplomb.

We believe the Peter Doherty Institute was the first Australian organization with news that it had something to do with what would become a global pandemic, growing the virus in a laboratory. But it didn’t take long for the Coronavirus Bandwagon to roll.

By mid-February, Uscom was answering ASX questions about cardiac monitor sales in China and in March, Cellmid caught the ASX’s attention for claims about importing Chinese tests for The Virus, while TBG Diagnostics (formerly Progen) said a subsidiary had been approved by China as a coronavirus testing laboratory. The company jumped 92.9 percent to 27 cents in mid-March before requesting a trading halt, and remains suspended at 27 cents, despite CE mark and FDA approvals.

This was when media reports became horrifyingly confused about the difference between a test for the Sars-Cov-2 virus living up one's nose (antigen test) and a person's immune response to the virus (Covid-19 antibody test). Most helpfully, a large number of would-be diagnostic companies confused the two, saying that investors just wanted to know whether they had a test for ... you know ... THAT bug.

Pity the poor ASX advisers (the ASX-company contact) trying to sift the chaff from the grain. Luckily, the ASX had a re-organization two years ago with advisers covering industries rather than geographies. Nevertheless, some biotechs have become very adept at saying things that Normie Rowe wouldn't find in a bible.

In March, the Doherty Institute joined global Covid-19 trials looking for a cure and as global markets fell amid concerns that the hoax wasn't, Cochlear boldly went where no biotech had gone before: a \$1.1 billion, heavily discounted placement and rights issue to make sure it survived. Meanwhile Resmed turned its technology from pumped air face masks to ventilators, to be well and prosper ... and the announcements took off.

The Plague

By April Fool's Day, all indices had fallen significantly and Noxopharm became the first Australian company to make a link between its Idronoxil (Veyonda or NOX66) and suppression of "the cytokine storm" immune reaction to Covid-19. Noxopharm was followed by Cynata (which had shown this in mice in 2018) and Mesoblast, with Mesoblast the only one to date to have (limited) trial data to back the claim – and awaiting definitive data, any time soon.

The number of companies claiming to have something useful for The Virus multiplied ... like a virus ... with diagnostics, drugs for prevention, treatment, suppression or something, being touted by a large number of the usual suspects.

Rubbing marijuana on coronavirus became a near daily sport with some understanding that once the punters had come on board and pushed the price from 5.0 cents to north of 20 cents it was a good time for a 15 percent discounted placement and share plan.

It was difficult for the novices to discern which were the serious players and which were the spruikers and Biotech Daily called on the latter to just stop. But we weren't helped by the Doherty and WEHI lending their names to "testing" compounds on a pay-to-play basis.

Oncosil finally won long-awaited Conformité Européenne (CE) mark approval, as well as US and EU breakthrough device designation, for its radiation treatment for pancreatic cancer (co-invented by director Dr Roger Aston), followed by Malaysia, New Zealand and Switzerland approvals and applications to the FDA, but nothing seemed to help the share price, so Oncosil resolved the problem by "terminating" the chief executive officer who did all the work, Daniel Kenny. When in doubt, sack a CEO.

Atomo listed on the ASX having raised \$30 million and announced it had orders for millions of rapid Covid-19 tests, based on its rapid HIV test.

Benitec bit the dust, or in the terms of last year's press release, migrated to the Nasdaq to reduce costs and "provide access to a broader range of US investors" following multiple trial successes showing its drugs didn't work for HIV, hepatitis C and oculo-pharyngeal muscular dystrophy. At one time a promising drug developer with a market capitalization of \$162 million (Mar 30, 2014), Benitec left Australia worth \$8 million, with the better valuations of the Nasdaq putting it at \$16 million, roughly its 15-year ASX average.

Bard1 acquired Sienna, which didn't make a lot of sense other than reducing two struggling companies down to one, and we await the next great leap forward.

Mesoblast showed that its stem cells – or at least the ones acquired from Osiris for graft-versus-host disease - showed efficacy in a small trial of ventilator-dependent Covid-19 patients and won FDA approval for a 300-patient phase III trial. Depending on their technologies, companies began either warning that trials would be delayed by The Virus or that revenue was up.

Following the February and March falls, biotech bounced back in April recovering most of its losses and companies continued making announcements about actual work other than the Covid-19 bandwagon. This was greatly assisted by the ASX clampdown on anything Covid-related. It caused concern for a number of serious companies who were collateral damage to the spruikers. We were grateful to Recce for showing that R-327 reduced gonorrhoeae in mice.

CSL took a 15-year, \$1.2 billion loan, at rates ranging from 2.38 percent to 2.83 percent, Pharmast claimed "success" in its trial of Elanco's sheep worm treatment Monapantel with one dog of seven having a tumor reduced and later claimed the drug had potential for Covid-19. Mesoblast raised \$139 million, Cyclopharm sold Technegas to Russia and Cynata said it was "pleased" with \$11 million in bids for a \$2 million share plan.

By June 1, we could see that biotech was flavor of the year and said the BDI-40 was "fully recovered" at a collective value of \$16,106 million, the second best after the February all-time high. The public unlisted Clarity had made several promising announcements about its copper-based diagnostic and therapeutic radiation technology for cancer – a similar aim to the ASX-listed Telix – and won FDA rare disease designation for neuroblastoma.

In less good news, former Sirtex chief executive officer Gilman Wong was lucky to score a three-year good behavior bond following a conviction for insider trading. The maximum penalty was 10 years of Her Majesty's porridge.

Opthea disappointed with OPT-302's non-significant success for diabetic macular oedema, which contrasted to last year's clearly significant success for wet aged-related macular degeneration. The share price jumped from 87 cents to \$2.25 last year, climbing to \$3.74 before the bad news, and currently trading above \$2 means the market believes in the company.

The Victoria Government unveiled a \$250 million Business Growth Fund for small to medium enterprises, the day after MTP Connect claimed the sector had been hit hard by the coronavirus shut down. But it was a curate's egg, as they say. The impact was primarily on donations to research institutes and with some clinical trials delayed.

But there was also the upside of a much greater focus on the sector. Cynata surprised by turning a small phase II trial of Cymerus stem cells for arthritis into a 440-patient, phase III trial at the University of Sydney, and Kazia said its 30-patient phase II trial of paxalisib for glioblastoma showed it was superior to the FDA-approved temozolomide. Ellex prepared to sell off its major revenue earning laser and ultrasound business, for a tidy \$100 million, leaving it with a clear focus on glaucoma treatment.

More and more companies – including ones from which we had never previously heard – claimed “potent activity” for Sars-Cov-2 or Covid-19 or The Virus, and uniformly “in-vitro” – that is, in a Petri dish in a laboratory. From interesting early studies, they became a daily annoyance (see below). We were grateful to Starpharma showing that multiple DEP-cancer-drug-combinations showed efficacy in mice.

June 30 heralded the 14-year data that the BDI-40 was up 450 percent, compared to the bottom bumping ASX200 up 16 percent in 14 years. The collective market capitalization for the three Big Caps of Cochlear, CSL and Resmed was up 963 percent.

Sydney clinical research organization Greenlight Clinical said that despite the coronavirus pandemic “Australia is already showing signs of recovery from the perspective of studies on clinical therapeutics” and while 360 clinical trials were expected to begin in the six months to June 30, 2020, 18.2 percent below the previous year, Australia had returned to the monthly count of study initiations in January, before The Virus.

Distracting from coronavirus claims, Micro-X won FDA approval for its 95kg mobile x-ray system for military medical facilities for trauma imaging, while the unlisted Queensland Qbiotics dosed its first Australian patient in a phase I/II trial of tigilanol tiglate for head and neck cancer, and Impedimed finally launched its Sozo diagnostic for heart failure.

New Zealand’s Aroa raised \$30 million to list on the ASX to commercialize its Endoform sheep gut wound treatment and opened up 86.7 percent at \$1.40. On the same day Immuron raised \$28 million and Emvision \$9 million.

The Vaccine

Biotech Daily finally spat the dummy and called the Doherty Institute to find out what all this nonsense was about it “selecting” every molecule under the Sun as a “tier 1” candidate for curing coronavirus. The Doherty, CSIRO and the University of Melbourne produced something of a distancing from the claims made by a plethora (we choose the word, wisely) of companies that their molecule had been “selected by the Doherty as a tier 1 compound”. The CSIRO and Doherty Institute said that tier 1 status did not mean a compound would show anti-viral activity against Sars-Cov-2, but it did mean they could pay the Doherty and CSIRO to have their technology tested.

What that meant in plain English was the tier 1 compounds did not include cat vomit, dog faeces or rocks. We thought the nonsense claims would end there, but they didn’t. Serious companies do the development work first and then announce it. Please, no more coronavirus news until you have run a large, randomized, controlled trial, and preferably won FDA or EU approval.

August began with good news. After 19 short biotech years Hatchtech won FDA approval for its Xeglyze (formerly Deovo) single treatment for headlice – or more specifically – their eggs, and 4D Medical opened up 98 percent in an oversubscribed \$56 million IPO for its four-dimensional (3-D over time) lung imaging, while the TGA approved Atomo's Covid-19 antibodies test.

Mesoblast had an FDA rollercoaster ride, tumbling on hard questions about remestemcel-L (the Osiris product for graft-versus-host disease), soaring on good answers and a nine-to-one vote, and later tumbling again on an FDA nyetski. Qbiotics announced a collaboration with Merck & Co for its EB46 tigilanol tiglate with Keytruda for unresectable melanoma, and the rest of the month was financial reporting.

Your R&D Tax Incentive Is Not Income

While it is not actually illegal to claim your Federal Government Research and Development Tax Incentive as revenue it is totally dishonest to do it. Your RDTI is NOT income, no matter what your highly-paid accountant or auditor says. So, stop doing it, or next year we shall start naming and shaming. It wastes our time and energy ploughing through the notes to an Appendix 4E to find that all the “revenue” is taxpayers' money. Just because ASIC and the ASX let you get away with it doesn't mean you are not deliberately misleading your shareholders. So, stop it.

And it would also be good if the ASX and ASIC made Australian companies listed on the Australian stock exchange report in Australian dollars, instead of pretending they are “global corporate entities” reporting in US dollars, Euros, Yuan or Shekels. That said, overall revenue was up on the previous year, as were the August BDI-40 and the ASX200.

Spring sprung with Opyl AI touting its artificial intelligence algorithm for Covid-19 results, which accurately predicted what Endpoints had been saying for months – that the lead vaccines were Moderna, Pfizer and Oxford-Astrazeneca, with the CSL-University of Queensland candidate not in its top 10, nor the Russian Gamaleya Sputnik V – despite President Vladimir Putin trying it out on his daughter.

Endpoints had Sputnik V at number six at the time and the UQ-CSL vaccine at 23 of 28. Zelira announced a collaboration for marijuana toothpaste, Clarity won an FDA rare paediatric disease status for 64-copper Sartate for neuroblastoma, Elanco dropped its option with Pharmaust for Monepantel for cancer and Dimerix missed its primary endpoint for diabetic kidney disease.

Cyclopharm had its 240-patient phase III Technegas lung imaging trial halted early ... but it was good news: with just 200 patients it had met its primary endpoint and was on its way to FDA approval, expected any time around or after April 2021.

Emerald changed its name to the less pronounceable Emyria, the TGA approved Starpharma's Vivagel for bacterial vaginosis and the company raised \$49 million, and the long-suffering Mark Diamond and Antisense won FDA rare paediatric disease status with the possibility of a “priority review voucher” (worth around \$100 million) for ATL1102 for Duchenne muscular dystrophy.

Mesoblast tumbled 45 percent on the FDA requiring another trial for GvHD despite the nine-to-one vote in favor. Most observers thought the company would be pinged on its ability to manufacture large consistent quantities of its stem cells, rather than the efficacy based on a single open label trial after Osiris had run large randomized controlled trials not showing efficacy.

MTP Connect released its second Covid-19 Impact Report saying the sector was recovering but faced “challenges”. The US BARDA paid the privately owned Vaxxas \$31 million for its needle-free vaccine delivery system and Federal Treasurer Joshua Frydenberg dropped a plan to further diminish the widely approved Research and Development Tax Incentive, which would have cut funds to some of the most promising biotechs just when they needed it most.

On Monday October 12, the ASX went ‘live’ – or should we say ‘dead’ - with its “upgrade”. Yes, a brand-new look with no way of accessing information or announcements. A truly brilliant feat by Marketing, which might have been better performed if IT was allowed to confer with what we call “users”. The site is not as hopeless today as it was then, but it is still a pain in the proverbial and not user-friendly. And they were warned. Like the painter Arthur Boyd once said: “You can’t tell anyone anything. They won’t listen.”

Well, not in marketing anyway. We are told that the ASX does pay attention to our comments and we have seen some very positive changes over the years. Basing the ASX advisers on industry rather than geography means they gain a much deeper understanding of the people and technologies.

The company formerly known as Phosphagenics, which changed its name to Avecho so we would forget that CEO Dr Esra Ogru stole \$6 million, reported that its tocopherol phosphate mixture version of vitamin E, mixed with marijuana made the cannabidiol more bio-available in rats. Lucky rats. Biotech Daily thought the powerhouse board of Dr Greg Collier, Dr Ross Murdoch and Matt McNamara meant that something very big would happen at Avecho and just after we gave up waiting the share price doubled from 0.7 cents to 1.4 cents. And for no reason we can fathom, it hit 2.0 cents in December.

The ever-sharp TGA approved Clinuvel’s Scenesse for erythropoietic protoporphyria (EPP) just four years after the EU and a year after the FDA, which finally, after a decade or more approved Pharmaxis Bronchitol for cystic fibrosis. Telix claimed a \$450 million deal with China Grand for radiotherapy. Let’s hope that the Federal Anti-Trade Minister Simon Birmingham doesn’t hear about it. Micro-X has a foot in both biotech and military/defence industries and won two US airport scanning contracts worth \$5.6 million – and a lot more if the pilot concept is successful.

CSIRO’s Dr Cathy Foley was named as Dr Alan Finkel’s successor as chief scientist and Victoria pledged \$155 million towards a \$550 million infectious diseases institute, while CSL set aside \$800 million for an influenza vaccine manufacturing facility. Impedimed scored a big win with Astrazeneca leasing 200 Sozos for bio-impedance measurement of body fluids including cardiac and Qbiotics won FDA approval for Stelfonta, or tigilanol toglate, for dog skin cancer. Paul Hopper planned a \$30 million Chimeric IPO for Car-T glioblastoma therapies. Auscann said it would acquire Cannpal and like the Bard1-Sienna acquisition we weren’t sure why. Time will tell.

In late November, Imugene presented the strangest trial results we have ever seen, claiming statistical significance in a one-tailed p-value which came in at 0.08 which translates to a proper two-tailed p-value of 0.16 which is not actually significant even if “alpha” the predicted p-value is set at 0.10 instead of the usual 0.05 - meaning a 10 percent chance that luck or extraneous variables were at play. One can only use a one-tailed p-value if one is reasonably certain that the results can only be in one direction. That is, the compound will help not harm. And in cancer trials that is never certain.

December refused to go gently into the good night, much preferring a big bang theory than a weak Welsh whimper. The November BDI-40 entered record territory up \$2,303 million or 15 percent to a collective market capitalization of \$18,049 million.

Telix won an FDA “academic use” prostate cancer imaging approval and a TGA trial green light, Mesoblast’s Remestemcel-L was fast-tracked in the US for Covid Ards, Hexima returned to the ASX, Control Bionics jumped 87 percent on its IPO for a muscle sensor that translates into computerized actions for the severely disabled, Resonance won FDA approval for its liver fat artificial intelligence diagnostic and Incannex graduated from marijuana to psychedelics for anxiety.

While the CSL-University of Queensland vaccine program was halted last Friday, it had significant successes along the way, as have all the serious vaccine and treatment developers. It’s truly amazing what happens when you feed scientists.

The public unlisted Ellume struck marketing heaven, having applied for FDA approval some weeks ago for emergency use of its single-use, rapid, home test for Sars-Cov-2 and announcing 96 percent accuracy last week, to shocking the tabloids with Wednesday’s FDA emergency use approval. It was such good news that no one stopped to think about the implications and the ABC even chastened Australia’s regulators for providing a free service. While we applaud Ellume and CEO Dr Sean Parsons, who is actually going to buy a \$30 single use coronavirus test when the State provides it for free? Americans, and they will need to be wealthy ones, at that.

Then Mesoblast announced the results of its seven year, 537-patient phase III trial of Revascor mesenchymal precursor cells for chronic heart failure saying the stem cells reduced cardiac events, but did not meet the primary endpoint of reducing hospital visits. It is possible that if Mesoblast had published actual data instead of demanding we trust their statistical analyses, the reaction might not have been so negative. But the basic data was not there despite the good news that the stem cells reduced mortality. Percentages and “p” values are fine but we need to see the number of patients in each arm to validate the conclusions. Were they quoting the per-protocol or intent-to-treat numbers? Was it a subset or the total enrolled?

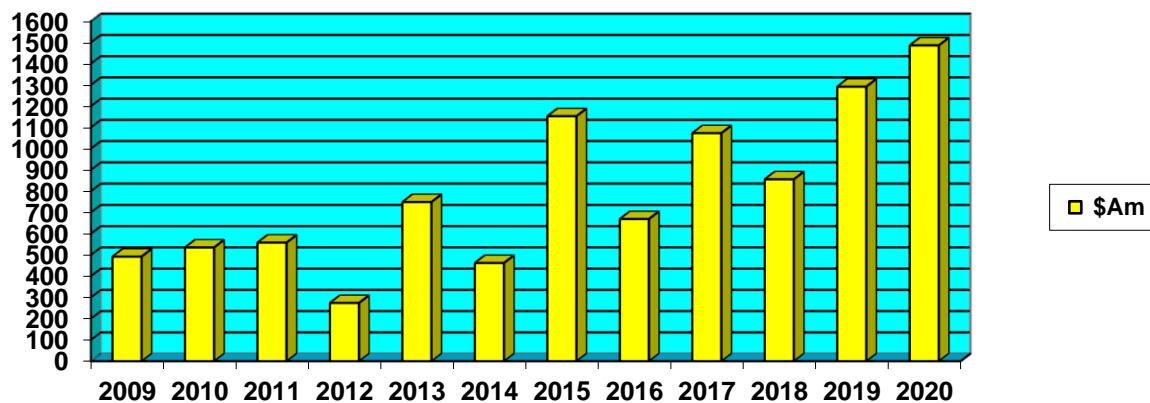
What we can say, unequivocally, is that seven years ago Mesoblast set a primary endpoint and on Tuesday said they had not met it. It’s not for us to instruct a multi-billion dollar company on how to do their public relations but try Launcelot Gobbo (there’s a name with which to conjure) for size: “Truth will out” (MoV; 2.2.78).

And that pretty much summarizes the year. In the end, the truth will come out.

IPOs

Nyrada won a mention in last year's initial public offer list but technically it happened on January 16. Emerald (now Emyria) followed the next week, with Little Green Pharma, Atomo, Aroa, 4D Medical, Chimeric and Control Bionics all joining the ASX lists.

Capital Raisings 2009 -2020



Ending what many called a terrible and disastrous year for biotechs, not only is the BDI-40 at an all-time record high, so are capital raisings, up a healthy 15.0 percent on last year to \$1,486 million by the close of business today, not including Cochlear's \$1.1 billion.

2020 AWARDS

(Judges: David Langsam, Marc Sinatra)

Chairman of the Year

This award is for those admirals of the fleet who give strategic directions to the captains of their ships. If the objective is unclear, the mission will fail.

We are concerned with the gender-bias of the title, but have not found a neutral term for boss of the board. Suggestions are most welcome.

The Board Boss of the Year has been withheld this year, as the contenders are the winners from the past three years: David Williams, Paul Hopper and Sue MacLeman.

CEO of the Year

For the first year in a long time, the final selection was easy. Despite the very long short-list, we took no time to make the judgement.

There were many excellent runners-up, including Alcidion's Kate Quirk, Antisense's Mark Diamond, Atomo's John Kelly, Avita's Dr Mike Perry, Genetic Signatures' Dr John Melki, Next Science's Judith Mitchell, Polynovo's Paul Brennan, Pro Medicus's Dr Sam Hupert, Proteomics' Dr Richard Lipscombe and Volpara's Dr Ralph Highnam. Cochlear's Dig Howitt, CSL's Paul Perreault and Resmed's Mick Farrell all deserve special mentions.

But the 2020 CEO of the Year is unequivocally Telix's Dr Christian Behrenbruch for dancing on the double-edged sword of so many announcements that we were confused about which was the imaging agent and which was the treatment and unlike some companies we won't name, didn't need a trading halt for each and every one.

Telix has doubled in market capitalization in 2020 because it has the runs on the board. The company has struck deals and conducted research and development that make it the rising star of Australian biotech. Hell, it even has revenue!

Congratulations, Dr Behrenbruch. That will be a glass of shiraz, please.

Kamikaze of the Year

The competition in this space – primarily due to Covid-19 claims - has been terrific.

Both the Doherty Institute and the Walter and Eliza Hall Institute were in danger of damaging their credibility by selling their expertise to biotechs of variable quality, but that's just business, as the Corleones would say. The real culprits were those claiming to have cures or tests for The Virus and then failed to produce the goods. And there were many. But who actually crashed and burned this year?

A sliding share price is a warning sign but not definitive as we've seen with both Botanix and Osprey facing mortal danger but recovering, while Top 20 stock Avita went to the Nasdaq and had its market capitalization halved – which we said would happen – but the company is pretty much the same as before the dual listing.

Anteris' 100-to-one consolidation, following the then Admedus previous 10-to-one consolidation, hasn't held up its market capitalization which was down 58.5 percent in the year to November 30 to \$22 million. Cellmid started the year at \$26 million fell to \$15 million in February, mentioned Covid-19 and tripled its value, raised \$6.3 million to a market capitalization of \$31 million but was back down to \$12 million at November 30 with negligible sales of its Chinese Covid-19 tests. Bluchiip slid from \$97 million to \$33 million and Cronos from \$32 million to \$6 million. But that's just the vagaries of biotech

The ASX lost Benitec to the Nasdaq, with GI Dynamics and Reva departing entirely. OBJ became 'Wellfully' and Genera was finally removed from the lists, but it was G Medical that promised big revenue and not a lot of delivery, but a huge pile of stock to founder Dr Yakov Geva. We think that was the best example of flying oneself into the ground.

Accounts department

Biotech Daily will have a small increase in the base rate for subscriptions in the New Year from \$1500 to \$1600. We have added staff to cope with the increased workload and have welcomed a rolled-gold guest columnist for the medical marijuana beat. Unfortunately, they want to be paid in money, not just glory. Or as the Legendary Jay Jerilderie McRoach once told me: "You can't eat prestige."

Summer holiday publishing schedule

Biotech Daily will shut down for the long, hot, Australian Summer tomorrow, December 18 and be back on deck refreshed and recharged on Monday January 18, 2021.

Australia is on holidays, so DO NOT put out any announcements - that no-one will read anyway - for the next month. Go to the beach. That said, we monitor all announcements and publish a Summer Holiday Catch-Up edition, highlighting any companies posting bad news after the market closes on Christmas Eve and New Year's Eve.

Biotech Daily would like to thank its team of advisers: Prof George Fink, Dr Stuart Garrow, Marc Sinatra and Michael Ibbott for invaluable wisdom, insights and cautions throughout the year.

Biotech Daily thanks its staff: Tim Boreham, Rebekah Andrews, Rosann Anthony, Alice Lynch and Alex Langsam for all their superb work this year, not to mention the aforementioned rolled-gold guest columnist Peter Olszewski.

All errors through the year were the fault of the sacked sub-editors and none of the above.

We wish everyone an excellent Southern Hemisphere Summer break, a Merry Christmas, Summer Solstice and Hogmanay/New Year and see you all in 2021.

David Langsam
Editor