

Disclaimer

By downloading from or viewing material on this website you agree to the following Terms of Service. Use of Culper Research's ("Culper") research is at your own risk. In no event should Culper or any affiliated party be liable for any direct or indirect trading losses caused by any information on this site. You further agree to do your own research and due diligence, consult your own financial, legal, and tax advisors before making any investment decision with respect to transacting in any securities covered herein. You should assume that Culper (possibly along with or through our members, partners, affiliates, employees, and/or consultants) along with our clients and/or investors has a position in any securities covered herein. Following publication of any research, we intend to continue transacting in the securities covered herein, and we may be long, short, or neutral at any time hereafter regardless of our initial recommendation, conclusions, or opinions. Research is not investment advice nor a recommendation or solicitation to buy securities. To the best of our ability and belief, all information contained herein is accurate and reliable, and has been obtained from public sources we believe to be accurate and reliable, and who are not insiders or connected persons of the securities covered herein or who may otherwise owe any fiduciary duty or duty of confidentiality to the issuer. However, such information is presented "as is," without warranty of any kind – whether express or implied. Culper makes no representation, express or implied, as to the accuracy, timeliness, or completeness of any such information or with regard to the results to be obtained from its use. Research may contain forward-looking statements, estimates, projections, and opinions with respect to among other things, certain accounting, legal, and regulatory issues the issuer faces and the potential impact of those issues on its future business, financial condition and results of operations, as well as more generally, the issuer's anticipated operating performance, access to capital markets, market conditions, assets and liabilities. Such statements, estimates, projections and opinions may prove to be substantially inaccurate and are inherently subject to significant risks and uncertainties beyond Culper's control. All expressions of opinion are subject to change without notice, and Culper does not undertake to update or supplement this report or any of the information contained herein. You agree that the information on this website is copyrighted, and you therefore agree not to distribute this information (whether the downloaded file, copies / images / reproductions, or the link to these files) in any manner other than by providing the following link — http://www.culperresearch.com The failure of Culper to exercise or enforce any right or provision of these Terms of Service shall not constitute a waiver of this right or provision. If any provision of these Terms of Service is found by a court of competent jurisdiction to be invalid, the parties nevertheless agree that the court should endeavor to give effect to the parties' intentions as reflected in the provision and rule that the other provisions of these Terms of Service remain in full force and effect, in particular as to this governing law and jurisdiction provision. You agree that regardless of any statute or law to the contrary, any claim or cause of action arising out of or related to use of this website or the material herein must be filed within one (1) year after such claim or cause of action arose or be forever barred.

VBI Vaccines Inc (VBIV): If at First You Don't Succeed, Try a COVID-19 Vaccine

"There's never enough time to do all the nothing you want."

— Bill Watterson, Calvin & Hobbes

We are short VBI Vaccines Inc. ("VBI", "VBIV", "the Company") as we believe that the Company is effectively an "empty box" stock promotion and shares are worthless. We believe the Company's claim to a revolutionary hepatitis B vaccine (Sci-B-Vac) has fallen flat on its face. VBI's Sci-B-Vac acquisition traces to a paltry \$2 million transaction in 2012, orchestrated by long-time stock promoter Phillip Frost. Investors now cheer on prospects for US and European approvals, but the Company's feeble clinical data package and consequent inability to secure a 2-dose label renders the drug practically worthless, in our view. Moreover, the vaccine has already been approved in at least 15 countries where hepatitis B prevalence is multiples higher than the US or Europe, yet VBI generated just \$536,000 in product revenues in 2019.

In what we believe is most damning both to Sci-B-Vac's commercial prospects and to management's credibility, on March 23, 2020, the European Medicines Agency (EMA) revealed it had refused Sci-B-Vac's pediatric investigation plan (PIP), stating that Sci-B-Vac "does not represent a significant therapeutic benefit over existing treatments." This is a rare action, as only 11 of 1,109 drugs reviewed since 2016 received this ruling. In the interim, VBI has raised over \$54 million in equity, issued new debt, and issued multiple press releases, yet we find no disclosures of this EMA refusal by the Company.

We find it especially telling that a mere 8 days after the EMA refusal was made public, the Company issued a press release claiming a "collaboration" with the National Research Council of Canada (NRC) on a COVID-19 vaccine. This is the third time that VBI has prostituted the NRC nameplate for its benefit. Notably, one of prior these promotions took advantage of the 2016 Zika outbreak, which has still not left preclinical study four years later. We believe the NRC COVID-19 announcement is a convenient ploy that served both to distract investors from Sci-B-Vac's dire outlook and to ward off NASDAQ delisting, as VBI shares had once again fallen below \$1.00 after the Company already received a warning letter in August 2019. Even 7 weeks after this COVID-19 "collaboration" began, VBI CEO Jeff Baxter admitted in a promotional interview that the Company still has not even started preclinical studies that would seek to identify the best vaccine candidate.

The Company also promotes its eVLP platform, a 15+ year old technology that VBI acquired for just \$450,000 in 2011, and since that time, the Company hasn't gotten a single candidate to Phase III trials; we believe the results speak for themselves and the technology is practically worthless.

Our view is that VBI's real business model is not vaccine development, but stock promotion which serves insiders. VBI is a reverse merger orchestrated by Phillip Frost, and VBI has continued to pay Frost's lieutenants as consultants as recently as 2019. VBI has consistently utilized paid promoters, with at least 75 paid promotions through March 2018, and VBI is even referred to in securities lawsuits against Frost as a pump-and-dump scheme. Since 2016, executives have taken home \$9.9 million, while the average board member earned \$381,913 in 2019 – higher than Johnson & Johnson, Merck, and Eli Lilly. Share count has exploded from 12.6 million in 2015 to 230.5 million today, and the Company just took out an increased line of punitive high-cost debt, putting its balance sheet in an even more precarious position. We believe that as the VBI's COVID-19 and Sci-B-Vac efforts continue to fall flat and the promotion's grim realities set in, shares will be found worthless.

We also note that as part of our research, we reached out to 12 former employees in the Company's clinical operations, none of whom would speak formally with us, citing an inability or unwillingness to corroborate even basic tenets of VBI's vaccine platform. We found this unusual culture of silence highly concerning.

We believe VBI is a stock promotion through and through

VBI refers to itself as "leveraging significant immunology expertise to address unmet medical needs in both infectious disease and immuno-oncology." Namely, this includes (1) Sci-B-Vac, a third generation hepatitis B vaccine, and (2) eVLP, a "proprietary platform technology to develop next-generation vaccines." While the Company and its numerous paid promoters tout these assets as revolutionary, we believe they are unimpressive and basically worthless. As such, we believe that VBI's core business is insider enrichment via promotion, and the Company's origins are emblematic of this.

The Sci-B-Vac promotion began in February 2012, when FDS Pharma <u>acquired</u> the vaccine and Israeli operations for the paltry sum of just \$2 million. These assets were then <u>purchased</u> in June 2012 by <u>the now SEC-charged</u> Phil Frost / OPKO Health, and placed into what is now VBI. The financial terms of these latter transactions were never disclosed, yet we find the \$2 million original purchase price indicative of the vaccine's lack of promise.

Similarly, VBI purchased its enveloped virus-like particle (eVLP) technology for a pittance from ePixis SA. ePixis was founded in 2003, and over the following 8 years, it failed to generate meaningful clinical, let alone commercial progress. In July 2011, VBI <u>in-licensed</u> ePixis's IP for a mere \$450,000, plus various contingent payments should any products be approved, commercialized, and sold.

In May 2016, VBI conducted a reverse merger and NASDAQ uplisting, architected by Philip Frost, whose OPKO lieutenants remained on the board and were still paid handsomely to serve as <u>consultants</u> to VBI even in 2019. Thus started the promotion tour. In March 2018, Chris Carey of Sharesleuth exposed Frost's <u>extensive promotion network</u>, where hundreds of promotional articles were posted across the internet supporting stocks such as VBI. Carey noted, as of March 2018, <u>at least 75</u> stealth promotion stories on VBI. Indeed, VBI is further referred to in <u>securities lawsuits</u> filed against Frost and Honig as a pump-and-dump scheme:

216. Frost's scienter is further supported by his longstanding association with Honig, Brauser, Groussman, and Stetson in numerous penny-stock investments that bear indicia of pumpand-dump schemes, including VBI (invested in by Opko, Honig, and Brauser), ChromaDex

This VBI promotion has taken varying forms. We begin with the decade-old Hep B vaccine, Sci-B-Vac.

We believe Sci-B-Vac is worthless: clinical and commercial case falls short

We believe Sci-B-Vac is worthless: the vaccine has never generated substantial revenues in the 15 countries where it has already been approved; VBI has stated it will not seek a 2-dose label, leaving Sci-B-Vac at a severe disadvantage to Heplisav-B; Sci-B-Vac competes with GlaxoSmithKline's (GSK) Engerix-B, which boasts a 30-plus year record as "one of the safest and most effective vaccines ever made"; and the European Medicine Agency (EMA) itself stated that Sci-B-Vac "does not represent a significant therapeutic benefit over existing treatments." While VBI has promoted the prospect of flying cars, we feel they've merely reinvented the wheel.

VBI has said it is "prepar[ing] for submissions of regulatory approval applications in the U.S., Europe, and Canada, beginning in the fourth quarter of 2020." The clinical portion of this application includes its two Phase III studies, PROTECT and CONSTANT. The primary efficacy measures include seroprotection rates (SPRs) after 2 doses and 3 doses. Engerix-B consistently boasts over 90% SPRs after 3 doses, but a portion of patients do not return for the third dose (move cities, change doctors, forget, etc.), so estimates of SPRs are lower in the real world vs. clinical trials. Thus, if Sci-B-Vac were able to demonstrate non-inferiority to Engerix-B after just 2 doses, it would improve outcomes. However, Sci-B-Vac was not able to do so: in PROTECT, two doses of Sci-B-Vac achieved just 87.2% seroconversion, lower than the 91.1% achieved in 3 doses of Engerix-B.

In CONSTANT, the Company excluded patients older than 45, which we view as a problematic in light of the Company's original supposed focus on reaching the elderly and diabetic/high-risk populations (82% of PROTECT subjects were over the age of 45). Nevertheless, after 2 doses, Sci-B-Vac achieved SPRs of 90.4%, again below the 94.8% achieved by Engerix-B after 3 doses. Thus, per the Company, "The two vs. three dose comparison is not part of the regulatory approval process and would not be included in the expected indication the company will seek..." As such, should Sci-B-Vac be approved, its label would only place it on par with Engerix-B, at best. However, these Phase III studies also excluded pediatric populations, elderly and at-risk populations, and pregnant women. Taking these results together, we believe physicians have virtually no incentive to switch from Engerix-B — which has been the gold standard of care, proven safe and effective for decades — to Sci-B-Vac, which comes with no substantive clinical advantages after 3 doses.

To that end, investors ought to look no further than the 15 countries where Sci-B-Vac has already been approved. In these countries, Sci-B-Vac competes against longstanding, ubiquitous vaccines: GSK's Engerix-B and Merck's Recombivax HB. These have been proven safe and effective since the 1980's and are <u>named</u> "one of the safest and most effective vaccines ever made." Head to head, Sci-B-Vac generated just \$536,000 in product revenues in 2019 – in our view, an abject failure. Nevertheless, analysts' notes we reviewed now call for upwards of \$1.5 billion in total Sci-B-Vac revenues, while paid promoters have similarly <u>conjured up</u> pie in the sky assertions that "Sci-B-Vac has the potential to create a \$2.5 billion hepatitis B therapeutic market." We find such projections farcical not only in light of (1) ex-US and Europe precedent, but (2) the Company's feeble clinical data package, and (3) the European Medicine Agency's (EMA) recent PIP refusal.

If approved in the US and in Europe, we believe Sci-B-Vac will be forced to compete with GSK on price, a herculean task which it's incapable of. GSK has not only incumbency advantage – as doctors have prescribed Engerix-B for decades – but a massive sales and marketing force to defend it. Moreover, GSK's vaccine sells for just ~\$75 per 3 doses in the US. We believe that even if VBI were to match this price, it would be untenable and unsustainable as a business case, given the Company's substantial cash burn and sky-high investor expectations.

Even as VBI has stated that "The two vs. three dose comparison is not part of the regulatory approval process and would not be included in the expected indication the company will seek", it has continued to talk out of both sides of its mouth, implying that bodies such as the Advisory Committee on Immunization Practices (ACIP) would rule that 2 doses are sufficient:

"There's actually some publications around the number of exceptions granted by the ACIP over what the label says. And probably the most significant of those is the recent recommendation from the ACIP that although GARDASIL, the HPV vaccination for adolescent boys and girls, is very clearly a 3-dose label. The recommendation is for adolescents aged 14 and below that 2 doses are sufficient."

However, in direct contrast to this suggestion, on March 23, 2020, the European Medicines Agency (EMA), where VBI seeks approval, released its <u>refusal of Sci-B-Vac's</u> pediatric investigation plan (PIP), "on the grounds that [Sci-B-Vac] does not represent a significant therapeutic benefit over existing treatments":

Prevention of Hepatitis B virus infection

The waiver applies to:

- all subsets of the paediatric population from birth to less than 18 years of age;
- solution for injection, intramuscular use;
- on the grounds that the specific medicinal product does not represent a significant therapeutic benefit over existing treatments.

For context, a PIP is required by the EMA (European governing body) in all new drug applications. From 2016 to the present, the EMA made 1,109 PIP rulings. In only 11 cases (a 0.99% rate) did the EMA refuse the applicant's request for waiver in all age groups, as was the case for VBI's Sci-B-Vac. In our view, this is especially damning for VBI's commercial prospects given that the European healthcare system relies on a tender market which assigns "lowest price [as] the prevailing award criterion." We also find it particularly concerning that despite the Company's numerous press releases, \$54 million equity raise, and debt offering since this EMA refusal was made public, it doesn't appear that this has been disclosed by the Company.

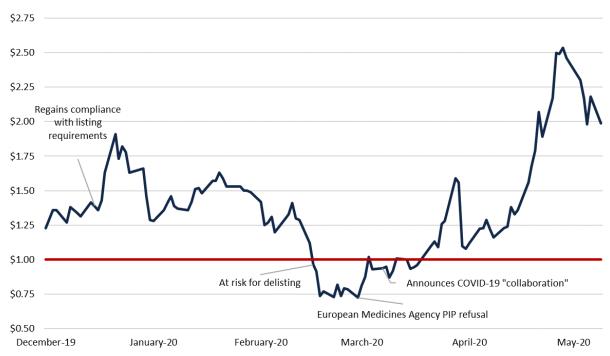
Notwithstanding GSK's longstanding dominance, Dynavax Technologies Corporation (DVAX) has also sought to carve out a high-end niche with Heplisav-B, which has a 2-dose label. The vaccine was approved in November 2017, launched in February 2018, and has already been <u>recommended</u> by the ACIP. In every comparison we can find, Sci-B-Vac falls flat on its face vs. Heplisav-B. In people aged 18 to 55, Heplisav-B produced 95.0% protective immunity after 3 months and 98.2% immunity after 6 months, utilizing just 2 doses. Heplisav-B also bests VBI's Sci-B-Vac in the elderly and diabetic/high-risk population, where it appears VBI initially intended to market. In those aged 40 to 70, Heplisav-B achieved 90.1% immunity after 3 months and 95.1% immunity after 6 months. Nevertheless, Heplisav-B has struggled, with revenues plateauing around \$10 million over the last 3 quarters, and the stock down over 50% since the February 2018 launch.

In summary, we believe that VBI poses a threat neither to the established market giants, nor to new entrants, each of whom have significant advantages over Sci-B-Vac. In our view, these dismal commercial prospects have led VBI to take advantage of investor hope for a COVID-19 vaccine.

We believe VBIV's empty COVID-19 promotion is a ploy to avoid delisting and insolvency

Against the backdrop of the Company's EMA refusal just days earlier and a share price below \$1.00 per share which placed it at risk of NASDAQ delisting, VBI <u>announced</u> a "collaboration" with the National Research Council of Canada (NRC) to develop a COVID-19 vaccine on March 31, 2020:

VBI's COVID-19 Promotion Narrowly Avoids Delisting



For reasons we enumerate below, we believe that shares reflect COVID-19 related optimism that is totally unwarranted. We find the March 31 press release conspicuously devoid of tangible steps taken by the Company or the NRC to actually develop the vaccine, as it admits that VBI has not yet even identified or selected "the optimal vaccine candidate": "Under the terms of the agreement, the NRC and VBI will collaborate to evaluate and select the optimal vaccine candidate ... VBI believes that clinical study materials could be available in Q4 2020."

Five weeks later, on May 6, the Company stated that, "Our candidate, VBI-2901, co-expresses SARS-CoV-2, SARS-CoV, and MERS-CoV spike proteins in a multivalent construct ... we are evaluating and selecting the optimal vaccine candidate, with the goal of having clinical study material available in Q4 2020." Another two weeks later, CEO Jeff Baxter stated in a promotional <u>interview</u> that the pre-clinical mouse study that the Company hopes will produce a potential vaccine candidate would begin "in weeks."

First, we find it inexplicable as to why the Company claimed that it had a candidate (VBI-2901) prior to even starting pre-clinical studies. Second, the Company has stated that it has "the goal of having [human] clinical study material available in Q4 2020." Similarly, this hope to have "clinical study material" is, we believe, intentionally vague and practically meaningless. Perhaps "material" refers to a Phase I protocol, but investors are offered no assurances of such, while the Company never claims to begin Phase I trials by year-end. The press release also made no mention of funding or commercialization partners, signposts that might indicate that VBI is serious about developing a vaccine. We compared VBI's "efforts" to just a few of the 100+ vaccine candidates now in development. Our table below is by no means a comprehensive list, but demonstrates the vast disparity between these organizations and VBI's vague, lame "me too" assertions:

Organization(s)	Stage of Development
AstraZeneca	Announced \$1 billion of BARDA funding, currently recruiting 10,000 patients for advanced studies, plans to run a 30,000 participant Phase III trial in the fall.

CanSino	Ran a trial of 108 adults recruited from Wuhan that was safe and demonstrated an immune response after 28 days.
GSK & Sanofi	On April 14, 2020, announced a collaboration that would test on humans in the second half of 2020.
Johnson & Johnson	Began development in January and plans to begin human testing in September. On March 30, 2020, announced commitment to 1 billion vaccines worldwide.
Moderna	Dosed first patients on March 16, 2020, and reported that its vaccine induced neutralizing antibodies in humans.
Pfizer & BioNTech	On May 5, 2020, dosed first human participants in Phase 1/2 trial that will enroll up to 360 individuals. Pfizer has said it could distribute up to 20 million doses.
VBI Vaccines	On March 31, announced a "collaboration" yet has not begun pre-clinical studies or identified a vaccine. Hopes to have "materials" by the end of 2020.

On May 22, 2020, the World Health Organization <u>published</u> a draft landscape of vaccine candidates, profiling 10 candidates in clinical evaluation and another 114 in preclinical development. VBI's supposed candidate is not even listed. In the context of a global pandemic where the importance of vaccine development is measured in days, if not hours, VBI's lackadaisical approach speaks volumes. We don't believe the Company has any serious plans to develop a vaccine, and any such plans would be too little, too late.

We find it worthwhile to note that this is not VBI's first time promoting itself in the midst of a global crisis; the Company also claimed to be developing a Zika vaccine in 2016.

VBI shamelessly promoted a Zika vaccine in 2016, just as it now does COVID-19

Just as VBI now touts a collaboration with the NRC to develop a COVID-19 vaccine, it did the same amid the Zika virus in 2016. Spoiler alert: VBI never advanced a Zika vaccine candidate even to Phase I trials. Notably, the Company's Zika promotion coincided with the pinnacle of public interest, as VBI touted in July 2016 that it had "applied its clinical-stage eVLP Platform to the development of a novel vaccine candidate to prevent Zika virus ("Zika") infection." The Company partnered with the NRC that time too, with the NRC stating that it "leveraged its business relationship with VBI to bring the company's proprietary vaccine platform into this global effort to fight the emerging Zika epidemic." Various promotional outfits such as "CapitalEquity REVIEW" then proclaimed that the Company was "Going After Zika", while at the same time disclosing that they were accessories to – in their very own words – a pump-and-dump campaign:

"Third Parties paying us to market the Profiled Issuer we believe intend to sell their shares they hold while we tell investors to purchase during the Campaign ... investors should consider the Information to be one-sided and not balanced, complete, accurate, truthful and / or reliable ... If an investor relies solely on the Information in making an investment decision it is highly probable that the investor will lose most, if not all, of his or her investment."

Nothing came from this NRC partnership for the supposed Zika effort: VBI's May 2020 presentation now shows that the Zika vaccine remains in preclinical development, a euphemistic concession of abject failure, in our view.

VBI has also prostituted the NRC nameplate to tout a Cytomegalovirus (CMV) vaccine, which was <u>characterized</u> by the NRC as "a potential breakthrough solution" which "injects hope into [the] battle against [the] global virus" in December 2015. VBI started Phase I <u>trials</u>; per VBI Co-Founder Adam Buckley, "Being able to meet the global demand for the CMV vaccine, which is predicted to reach 7.6M doses by 2030, will have a profound impact on the health of both mothers and babies." However, the results were once again highly disappointing, as the Company has yet to move past Phase I despite <u>results</u> announced over 2 years ago.

	Cytomegalovirus (CMV)	Zika Virus	COVID-19	
NRC Partnership?	YES	YES	YES	
VBIV Cash Burn	\$29 million burned in 2015 and 2016	\$103 million burned in 2016 through 2018	???	
Vaccine Developed?	NO – company has not progressed past Phase I	NO – remains in preclinical stage	???	

We believe that investors who look to the NRC to legitimize VBI's COVID-19 promotion will once again be sorely disappointed. In the absence of public crises for VBI to coattail, the Company has also promoted its lackluster eVLP and LPV platforms.

We believe VBI's enveloped Virus-Like Particle (eVLP) platform is worthless

VBI has also touted its eVLP platform, <u>acquired</u> for just \$450,000 in 2011. After acquisition, the Company's chief priority was to develop an eVLP-based vaccine for Cytomegalovirus (CMV):

"VBI and Epixis forged a VLP research collaboration focused on cytomegalovirus (CMV) in June 2010. That successful program made significant research advances in the past year that led to this acquisition and will now be VBI's priority VLP vaccine candidate."

As noted above, an entire seven years after acquisition, in May 2018, VBI announced Phase I data for its CMV candidate. At the time, CEO Jeff Baxter stated that, "As I said, we are really excited about the future of this candidate and are looking forward to discussions with the regulatory bodies in the second half of this year to move the program into Phase II." Today, another two years later, the Company hasn't started Phase II trials.

The Company has also touted this platform for Glioblastoma (GBM), dangling the possibility of commercial production all the way back in October 2015:

"...in the case of GBM, we believe could be capable of mobilizing a broad and robust anti-tumor immune response against GBM. Further, we have demonstrated the ability to manufacture eVLP-derived vaccine candidates with yields and purity that are expected to be suitable for production at a commercial scale."

However, almost 5 years later after these statements, Clinicaltrials.gov shows that VBI's GBM candidate (VBI-1901) Phase I/IIa trial remains in recruitment, and the Company has only reported interim data on 18 patients against the intended total of 38, a far cry from commercialization or production. We think the Company's inability to produce results after nearly a decade speaks for itself: eVLP is worthless.

Fruits of VBI's liquid particle vaccine (LPV) platform are nowhere to be found

In addition to the Company's eVLP and Sci-B-Vac promotions, VBI once touted its lipid particle vaccine (LPV) platform. The technology claimed to "allow the increase of thermo-stabilization of vaccines through a proprietary formulation and freeze-drying process." In simple terms, it would allow vaccines to withstand varying temperatures, rather than having to be kept in temperature-controlled storage. VBI completed proof of concept studies, and again took to a promotional tour, with paid promotors stating for example that:

"The global vaccine market is now \$24 billion a year ... with stable vaccines, it could grow to \$100B by 2025. Imagine how large the market could be for VBI's LPV technology..."

The Company signed initial "collaboration" agreements with Sanofi and GSK, but didn't disclose terms of either:

In April 2015, the Company <u>announced</u> an LPV collaboration with Sanofi Pasteur, "to provide a more stable formulation of one of its key pipeline assets ... Our LPV™ technology has shown great promise ... This collaboration reinforces the potential of our technology."

In February 2016, the Company <u>announced</u> a collaboration with GlaxoSmithKline (GSK), "to explore the potential of the LPV technology to their pipeline. This collaboration further validates the significant potential of our LPV Platform."

We believe this "significant potential" was never realized, given that four and five years later, the Company appears to be no longer working with either group. Nevertheless, LPV remains listed on the VBI website, which continues to characterize the apparent failed experiment as a "proprietary platform", "next generation" and "novel." We believe it's dead in the water.

We believe the VBI promotion is designed to enrich insiders

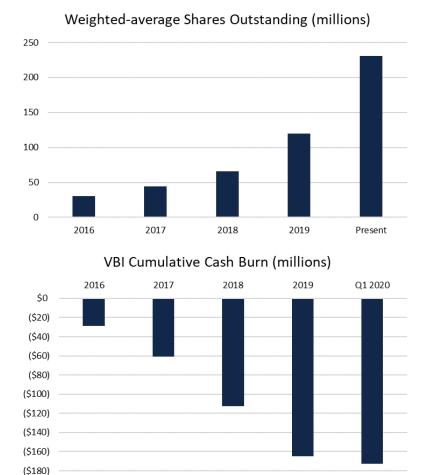
In our opinion, VBI exists primarily to serve insiders. This began with Phil Frost's involvement in the very formation of the Company, yet the same ethos continues unabated today. In 2019, the average VBI director took home \$381,913 in total compensation, which we view as egregious sums in light of the Company's zero product approvals, \$2.2 million in revenues, and \$52.4 million in cash burn. For reference, VBI's directors were paid even more on average than board members at pharmaceutical bellwethers Eli Lilly, Merck, and Johnson & Johnson:

Company	Average Director Compensation	Operational & financial accomplishments		
Eli Lilly (LLY)	\$313,250	2 new drug approvals; 15 additional approvals; 16 Phase I study starts. \$22 billion in total revenues.		
Merck (MRK)	\$330,305	80 transactions completed in 2019; 13% revenue growth to \$47 billion in total revenues.		
Johnson & Johnson (JNJ)	\$334,979	Exceeded operational sales growth, adj. EPS, and FCF goals; \$82 billion in total revenues.		
VBI Vaccines (VBIV)	\$381,913	Zero products approved; \$2.2 million in total revenues; \$52.4 million in total cash burned.		

The Company's C-suite has taken home increasingly generous paychecks each year. We also fail to find where the Company discloses the compensation of CFO, Director, and Head of Business Development Christopher McNulty.

Total compensation	2016	2017	2018	2019	Total
CEO Jeffrey R. Baxter	\$995,658	\$826,044	\$1,393,269	\$1,379,628	\$4,594,599
CMO Francisco Diaz-Mitoma	\$0	\$648,955	\$889,371	\$917,198	\$2,455,524
CSO David E. Anderson	\$639,088	\$520,860	\$855,890	\$881,700	\$2,897,538
Total	\$1,634,746	\$1,995,859	\$3,138,530	\$3,178,526	\$9,947,661

Given the self-enrichment continually at stake, we understand the Company's motivation for keep the stock promotion alive for as long as possible. However, the Company's grim financial realities will be difficult to ignore. Since 2015, VBI has burned \$173 million in cash, while share count has exploded from 12.6 million to over 230.4 million, as of most recent disclosures:



On the back of the Company's COVID-19 promotion, it raised an additional 52.3 million shares for net proceeds of \$54 million. We note that the lead bookrunner was National Holdings (NHLD), which itself only holds a \$27 million market capitalization and has been the subject of controversy related to its CEO's possible insider trading in biotech stocks, among other things.

(\$200)

Just days ago, on May 27, 2020, the Company announced up to \$50 million in debt financing. The 8.25% rate is punitive alone, in our view. Yet, to add insult to interest payments, the lender has the right to convert up to \$4 million of debt to equity at \$1.46 per share, a steep 37% discount to the \$2.30 per share closing price the day prior, while VBI also gave up warrants at a price of \$1.12 per share. To us, this appears a punitive set of financing terms that signals distress.

On May 28, VBI announced the formation of a commercial advisory board, which we believe would normally signal intent to "go it alone" in commercializing Sci-B-Vac. We find this possibility perplexing in light of the Company's prior assurances that VBI would instead rely on a partner. See management's comments in January 2020:

"To answer your second question regarding commercialization, we are in a number of discussions, which are obviously CDA bound with a number of potential partners from global pharma companies, to regional potential partners, to more straightforward commercialization partners in the markets. We will commercialize Sci-B-Vac with a partner. We will not be doing ourselves. I have said this publicly many times before. And we will not be recruiting 100 people and suffering the financial burden of \$50 million in a commercial ramp up."

We believe the rush to secure debt funding coupled with the poorly communicated advisory board formation and VBI's COVID-19 "pivot" cast serious doubts on both VBI's governance and ability to generate any value from Sci-B-Vac. We think VBI's assets are virtually worthless in light of the Company's near-\$500 million valuation, and as investors wake up to the Company's dire clinical and commercial realities, shares will be found worthless.