

March 20, 2018

Brent J. Fields Secretary U.S. Securities and Exchange Commission 100 F Street, NE Washington DC 20549-1090

RE: Notice of Filing of a Proposed Rule Change to Adopt BZX Rule 14.11(k) to Permit the Listing and Trading of Managed Portfolio Shares and to List and Trade Shares of the ClearBridge Appreciation ETF, ClearBridge Large Cap ETF, ClearBridge MidCap Growth ETF, ClearBridge Select ETF, and ClearBridge All Cap Value ETF (Release No. 34-82705; File No. SR-CboeBZX-2018-010)

Dear Mr. Fields,

On behalf of Blue Tractor Group, LLC ("Blue Tractor") I am pleased to provide the U.S. Securities and Exchange Commission (the "Commission") with updated comments regarding the Commission's February 13, 2018 notice (the "Notice") whether to approve or disapprove the rule change application submitted on February 5, 2018 by Cboe BZX Exchange, Inc. (the "Exchange").¹

My comments are focused primarily on the intellectual property from Precidian Investments LLC ("Precidian") that underpin the proposed exchange traded funds (the "ETF Funds") sub-advised by ClearBridge Investments, LLC ("ClearBridge") that the Exchange proposes to list and trade.

The Commission is well aware that Blue Tractor has long been critical of the assertions made over many years by Precidian that their ETF structure was immune to reverse engineering and resulting predatory front-running. Additionally, Blue Tractor continues to wholly disagree with Precidian's continued representations of efficient primary and secondary market trading under their ETF structure.

Blue Tractor's previous objections are available in two (2) comment letters and accompanying statistical studies submitted to the Commission on August 1, 2017 and December 5, 2017 in relation to the Exchange's June 1, 2017 rule change application to list and trade ClearBridge ETF shares using Precidian's ETF structure (Release No.34-80911; File No.SR-BatsBZX-2017-30).

We respectfully request that these two (2) comment letters be included in the Commission's review of the Exchange's February 5, 2018 application since many concerns Blue Tractor raised in the comment letters remain unaddressed and/or unanswered by Precidian.²

¹ <u>https://www.sec.gov/rules/sro/cboebzx/2018/34-82705.pdf</u> (Release No. 34-82549; File No. SR-CboeBZX-2018-010)

² https://www.sec.gov/comments/sr-batsbzx-2017-30/batsbzx201730.htm (See letters from Terence Norman)



Additionally, independent confirmatory evidence demonstrating that reverse engineering the Precidian ETF structure was eminently feasible was published by the Commission's Division of Economic and Risk Analysis ("DERA") on November 16, 2017. ³

On December 4, 2017 Precidian filed with the Commission a fifth amended and restated application for exemptive relief that fully backtracked on the key spurious representations Precidian had been making for years to the Commission and to their current and potential intellectual property licensees, their investors, the exchanges who have applied to list and trade ETFs using the Precidian structure, the market making community, the custodial banks and trustees, equity analysts, the press, institutional and retail investors and the ETF market in general.⁴

After years of denials, Precidian acknowledged in their December 4, 2017 filing that:

- 1. Predatory traders may reverse engineer the Precidian ETF structure;
- 2. As a result, the Precidian ETF structure is susceptible to front-running; and
- 3. Using the Precidian ETF structure, authorized participants will not be able to undertake bona fide arbitrage.

It is instructive to compare disclosure between Precidians' fourth and fifth filings, just 66 days apart, to illustrate the 180-degree differences on these three crucial points:

	Filing #4: September 29, 2017	Filing #5: December 4, 2017
Predatory Traders' Ability to Reverse Engineer the ETF Funds	No risk disclosure provided.	On Page 22: "Each Fund will prominently disclose in its prospectus and on its website that market participants may attempt to use the VIIV to calculate with a high degree of certainty ("reverse engineer") a Fund's trading strategy, which if successful, could increase opportunities for certain predatory trading practices, such as front-running [emphasis added], that may have the potential to harm Fund shareholders"
Resulting Risk of Front-Running Due to Reverse Engineering	On Page 7: "Applicants further believe that the proposed operational structure of the Funds will permit an Adviser to manage the Funds using proprietary investment strategies without being susceptible [emphasis added] to "front running" and "free riding" by other investors and/or managers	On Page 6: "Applicants further believe that the proposed operational structure of the Funds will permit an Adviser to manage the Funds using proprietary investment strategies with significantly less susceptibility [emphasis added] to "front running" and "free riding" by other investors

³ https://www.sec.gov/comments/sr-nysearca-2017-36/nysearca201736.htm (See SEC Staff Studies and Reports)

⁴ <u>https://www.sec.gov/Archives/edgar/data/1396289/000114420417062140/tv480576_40appa.htm</u> (File No. 812-14405)



	which could otherwise harm, and result in substantial costs to, the Funds."	and/or managers which could otherwise harm, and result in substantial costs to, the Funds."
Ability of an Authorized Participant to Conduct Bona Fide Arbitrage Under the Precidian ETF Structure	On Page 6: "Applicants believe that the availability of a verified intraday indicative value throughout the day, the ability of Authorized Participants to purchase and redeem Creation Units on any Business Day, and the ability of market participants, including Authorized Participants, to engage in Bona Fide Arbitrage between Shares and portfolio securities [emphasis added] will permit the intraday trading of Shares to be at or near the Funds' NAV per Share without the need for daily disclosure of the Funds' portfolio securities."	On Page 5: "Applicants believe that the availability of a VIIV throughout the day, the ability of Authorized Participants to purchase and redeem Creation Units on any Business Day, and, as with all existing ETFs, the ability of market participants, transacting through an Authorized Participant, to purchase and redeem Creation Units [emphasis added] on any Business Day, will permit the intraday trading of Shares to be at or near the Funds' NAV without the need for daily disclosure of the Funds' portfolio securities."

Precidian filed an initial application for exemptive relief for their current ETF structure in January 2013. After almost five (5) years of denials and objections, on December 4, 2017 Precidian finally admits to the major structural flaws inherent in their ETF structure. Precidian's striking admissions are of fundamental importance to the efficient operation of an actively managed ETF without daily portfolio disclosure and it therefore behooves the Commission to disapprove the Exchange's current rule change application.

The ETF market already has fully transparent actively managed ETFs. Why would there be any need for a structure that purports to be non-transparent, but actually is fully transparent to predatory traders? Moreover, the structure cannot offer an effective bona fide arbitrage mechanism like all approved ETFs. How will this result in efficient primary and secondary markets?

The Division of Investment Management on page 4 of its April 17, 2015 letter to Precidian's counsel clearly stated the Commission's position should it be demonstrated that the Precidian ETF structure could be reverse engineering, 5

"Should that be the case, one of the goals of the proposed ETFs – namely, maintain portfolio confidentiality – would be foiled. In light of that possibility, we find it difficult to reach the conclusion that the proposed ETFs would be "necessary or appropriate in the public interest," one of the statutory standards for exemptive relief."

As it is now (a) indisputable that the Precidian ETF structure can be reverse engineered and (b) Precidian is now telling the Commission that it proposes prominent risk disclosure language stating this fact, then how could the ETFs in the Exchange's rule change application be "necessary or appropriate in the public interest"?

⁵ funds.eatonvance.com/includes/loadDocument.php?fn=19309.pdf&dt=FundPDFs



Amazingly, even despite the acknowledgement by Precidian that their ETF structure can be reverse engineered, they continue in their December 4, 2017 filing to reference the wholly discredited studies by Drs. Cooper and Glosten that purport to demonstrate that it was 'highly unlikely' that their structure could be reverse engineered. One can only wonder why Precidian would put any further credence to these studies when they have told the Commission that they will now add risk language to any fund prospectus using their ETF structure that it is at risk of reverse engineering and predatory front-running.

Finally, Precidian puts it all out there on page 3 of the December 4, 2017 application when they summarize that,

"The **primary difference** [emphasis added] between the Funds and other ETFs is that (1) the constituents of the Creation Basket (defined below) and the Funds' portfolio securities will not be publically disclosed each day, and (2) in connection with the creation and redemption of Creation Units (defined below), the delivery or receipt of any portfolio securities in-kind will be required to be effected through a confidential brokerage account ("Confidential Account")..."

This is an wholly misleading statement to make in an application for exemptive relief to the Commission.

What Precidian neglects to mention are the other "primary differences", including:

- 1. The Precidian structure results in asymmetric portfolio disclosure;
- 2. The Precidian structure does not allow for bona fide arbitrage like every other approved ETF;
- 3. Market participants cannot hedge using optimized tracking portfolios; and
- 4. Market participants cannot undertake sub-second pricing, hedging and arbitrage transactions unlike with every other approved ETF.

JPMAM – a Potential Licensee

J.P. Morgan Asset Management ("JPMAM") has figured prominently in Precidian's previous emphatic assertions that their ETF structure was unable to be reverse engineered. Indeed, a January 22, 2017 story in the *Wall Street Journal* about JPMAM's letter of intent to licence Precidian's intellectual property has this quote, ⁶

"We hear from advisers that they want our best capabilities in ETF vehicles," said Bob Deutsch, head of ETFs for J.P. Morgan's asset-management unit. "It will be no less transparent than a traditional mutual fund, and there **won't be the risk of front-running or reverse engineering** [emphasis added]."

⁶ https://www.wsj.com/articles/j-p-morgan-joins-push-for-nontransparent-active-etfs-1485104401



Later, in a letter sent July 7, 2017 to the Commission's Division of Investment Management in support of the Exchange's April 14, 2017 rule change application, Christopher Willcox, CEO of Asset Management at JPMAM unequivocally outlines their concern about predatory front running and free-riding, ⁷

"A key impediment holding JPMAM back from offering more actively managed ETFs is concern about the potential negative consequences associated with daily ETF portfolio disclosure...Daily portfolio disclosure presents two potential risks for active strategies that could negatively impact both investors and managers...**Until these risks are effectively addressed and mitigated, it will be difficult for JPMAM, and indeed most active managers** [emphasis added], to deliver actively managed strategies more broadly in an ETF format."

And then in his October 12, 2017 letter to the Commission, Precidian's Mr. McCabe notes that, ⁸

"...Precidian has confirmed with some of the largest most sophisticated asset managers [and references JPMAM in a footnote] in the world that they believe that the proposed Precidian ETF structure would effectively protect their proprietary trading strategies from being reverse engineered [emphasis added]."

Mr. McCabe's letter then references a meeting held at the Commission in the summer of 2017 where JPMAM was present,

"As recently as two months ago, we brought a team of experts from KCG (Virtu), NYSE/Arca, **JP Morgan** [emphasis added], Legg Mason, State Street Bank, Columbia Graduate School of Business, Morgan Lewis and Precidian Investments...while affording both the Staff and Commission the opportunity to verify the opinions of these experts."

So how is the Commission supposed to square all these supporting assertions by JPMAM with the eleventh hour admission by Precidian in their December 4, 2017 filing that their structure is susceptible to reverse engineering?

Precidian has been claiming for years that their structure couldn't be reverse engineered and had JPMAM (a potential licensee) affirming Precidian's hopeful conjecture to the press and to the Commission.

The only logical conclusion is that since assertions made in the past by Precidian have been shown to be wholly suspect, then their new claims should also be viewed with skepticism.

Legg Mason – an Investor

Precidian's investors also believed in Precidian's hopeful conjecture that the structure was unable to be reverse engineered.

In a June 15, 2017 PowerPoint presentation to Wall Street analysts, Legg Mason, Inc. ("Legg Mason") positioned their 2016 investment in Precidian as an important strategic initiative and had Mr. McCabe present the Precidian ETF structure.⁹

⁷ https://www.sec.gov/comments/sr-nysearca.../nysearca201736-2636844-161243.pdf

⁸ <u>https://www.sec.gov/comments/sr-nysearca-2017-36/nysearca201736.htm</u> (see letter from Daniel McCabe)

⁹ ir.leggmason.com/file/102761/Index?KeyFile=1500100703 (Note that Legg Mason, Inc. owns 19.9% of Precidian)



LEGG MASON



Investor Call June 15, 2017 Brandywine Global Clarion Partners ClearBridge Investments BarTrustPermal Martin Currie QS Investors RARE Infrastructure Royce & Associates Western Associates Financial Guard VEZT Precidian Investments The Power of Choice: Diversified by Design

Agenda

Topics	<u>Speaker</u>
Providing Client Choice	Joe Sullivan
Choice through Products & Vehicles	Tom Hoops
Leveraging ETF Vehicles in Active Management	Rick Genoni
Innovative Vehicle & Product Design (Precidian)	Dan McCabe





Richard Genoni, Head of ETF Product Management noted on slide 18 that the Precidian structure was designed for an active management strategy "...where full transparency is a concern."



But now that DERA and Blue Tractor have demonstrated that the Precidian structure can be readily reverse engineered, one needs to ask Mr. Genoni just what active strategies he now thinks the Precidian ETF structure is best suited for.

On the one hand, there are a minority of active managers like Davis Advisors who embrace full transparency and issue transparent actively managed ETFs ¹⁰. They aren't going to need the Precidian structure. But for the vast majority of active equity managers "...where full transparency is a concern", why are they going to use the Precidian structure when it can be reverse engineered?

Indeed, as noted above in JPMAM's letter to the Commission, the CEO of Asset Management at JPMAM, Christopher Willcox, was adamant that until a fund manager can be assured that their strategy cannot be reverse engineered, "...**it will be difficult for JPMAM, and indeed most active managers** [emphasis added], to deliver actively managed strategies more broadly in an ETF format."

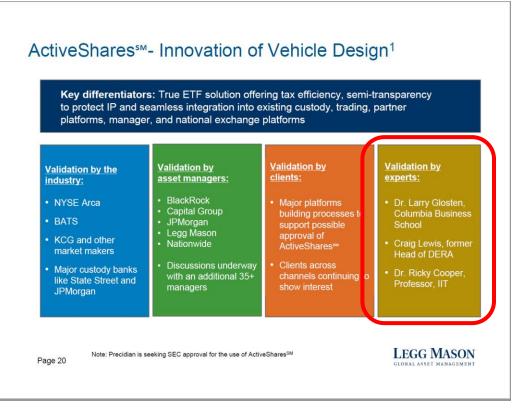
Then on page 20 of the Wall Street analyst presentation Mr. McCabe shares a slide on their ETF structure. He focused on "Validation by Experts" concerning inability of reverse engineering. In this presentation

¹⁰ http://www.barrons.com/articles/davis-funds-unconventional-wisdom-1483767205



just nine months ago he claims that the Precidian ETF structure was immune from reverse engineering and resulting predatory front-running based upon the statistical studies from Drs. Cooper and Glosten.

He even points out in the slide heading some key differentiators for their ETF structure, including offering *"…semi-transparency to protect IP…"* (in this case "IP" is the fund manager's active strategy).



Fast forward and the Dr. Cooper and Dr. Glosten studies have been fully discredited and Precidian is now telling the Commission in its December 4, 2017 filing that it will highlight both reverse engineering and front-running as important risk factors in fund prospectuses that use their structure.

So how does this square with Mr. McCabe's statement to analysts on June 15, 2017 of "...semitransparency to protect IP..."?

Unsurprisingly, Legg Mason's June 15, 2017 presentation is not the only occasion of when they recounted to Wall Street analysts their confidence in the Precidian ETF structure.

Following Legg Mason's investment in Precidian in early 2016, senior management began to make mention of Precidian in presentations and on their quarterly calls with the analyst community. Below is a slide from Legg Mason's April 2016 analyst presentation highlighting the strategic rationale to invest in



Precidian. Note the emphasis on protecting a fund from reverse engineering; how ironic now considering Precidian's admission regarding reverse engineering in their December 4, 2017 filing.¹¹

Overview of Announced Transactions

	ENTRUST	CLARION PARTNERS	Precidian Investments
Total Assets	\$12B	\$40B	ActiveShares awaiting SEC approval
Location	New York, NY	New York, NY	Bedminster, NJ
Description	 Leading Hedge Funds Solutions provider Investment Capabilities across Core Funds, Strategic Partnerships and Special Opportunities 	 Leading Real Estate investment manager Broad Real Estate investment capabilities across Core, Core-plus and Value-Add / Opportunistic themes 	 Innovative ETF product and market structure solutions Relatively easy integration into existing broker dealer systems and capability to mask daily holdings from threat of reverse engineering
Themes Addressed	Alternative Solutions	Illiquid Alternatives (Real Estate)	Specialized ETFs
Strategic Rationale	 Leading Alternative Asset Management brand Platform to grow multi-alternative capabilities Consistent AUM growth through market cycles; approx. 18% CAGR since 2007 Combined firm will be #3 in the industry 	 Well known historical brand Fills gap in Real Estate capabilities Demonstrated ability to grow: AUM up 50% since 2010 High quality earnings attributes New product potential in LM Global Distribution 	 Address ETF product gap Proprietary technology and expertise in creation of innovative financial products Specialization in ETF and mutual fund development, and associated trading and pricing techniques

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It is also instructive to review a few of Legg Mason's quarterly calls with Wall Street analysts during 2017 to illustrate how Legg Mason's representations to the Street align with what Precidian has been erroneously telling the Commission for years.

On an April 25, 2017 analyst call to present 4Q 2017 earnings, Chairman and CEO Joe Sullivan makes reference to the rationale for investing in Precidian in his opening comments: ¹²

"Now, obviously, our mutual fund business is a large and very important business for our clients and for Legg Mason, but investor vehicle preferences are evolving and expanding. They demand more choice in their investment vehicles and this demand drives our vehicle innovation and development agenda. As an example last year of all the products we launched in the U.S. only about 10% were in the traditional mutual fund vehicle. And as we look ahead to a robust pipeline of new products in multiple vehicles planned in U.S. this coming year most will be in ETFs and SMAs and none are expected to be in the mutual fund format...We also had a very active year

¹¹ http://ir.leggmason.com/Cache/1500085546.PDF?O=PDF&T=&Y=&D=&FID=1500085546&iid=102761

¹² https://seekingalpha.com/article/4065826-legg-mason-Im-ceo-joe-sullivan-q4-2016-results-earnings-call-transcript?part=single



with Precidian following our investment in the Company in 2016 [emphasis added]. NYSE Arca and Precidian have filed a 19b-4 for new ETF products, utilizing their active shares technology that will be sub-advised by ClearBridge and Royce."

Later in the call Mr. Sullivan replies to a question from Macrae Sykes with Gabelli, specifically noting that the Precidian ETF structure is "non-transparent":

"...we have mentioned **Precidian filed for non-transparent ETFs along with NYSE Arca** [emphasis added], and we are in the process and working with the SEC on that. We are hopeful. We are very pleased that we signed a licensing agreement most recently with JP Morgan. We continue to see that the industry validates by virtue of the licensing agreements that Precidian is signing, validates the technology that Precidian has with respect to non-transparent activity."

Then in his opening remarks during Legg Mason's 1Q 2018 earnings call with analysts on July 26, 2017 Mr. Sullivan again references Precidian in detail, emphasizing their strategic importance to drive future growth at Legg Mason and that Precidian's structure protects the fund manager's proprietary strategy: ¹³

"...And finally, we've meaningfully expanded our vehicle creation capabilities both internally and with our investment in Precidian [emphasis added]. This has repositioned Legg Mason as a far more compelling platform for growth. To be clear, changing industry dynamics continue. Investor demand for passive over active strategies is increasing...As I mentioned, we strategically expanded client choice in recent years by building out an internal vehicle team and making an investment in Precidian [emphasis added]. This represents another plank in our platform of choice for our distribution partners, as investor demand across investment vehicles ebbs and flows...Next, we've discussed that the industry needs a solution to bring actively managed strategies to market in a semi-transparent ETF vehicle that protects the confidential nature of a manager's IP and avoids the front running issue. That capability exists within Precidian Investments [emphasis added]. And with significant industry support for this technology, we are hopeful that the SEC will approve the application for their ActiveShares vehicle."

We also notice that Mr. Sullivan now shifts to using the term "semi-transparent" rather than "non-transparent" in his comments, aligning with the terminology change made by Precidian in their May 3, 2017 application for exemptive relief.

Later in the call, Patrick Davitt with Autonomous Research U.S. LLP asks Mr. Sullivan on the status of Precidian:

"...and then my quick follow-up is on the **Precidian non-transparent ETF products** [emphasis added]. Do you think we need all or more of the SEC commissioners in place for that to move forward? Or do you think progress is happening despite it's still in D.C.?"

Mr. Sullivan replies at length and makes the case that the Precidian ETF structure's sole purpose is to obfuscate a fund's alpha generation strategy:

¹³ https://seekingalpha.com/article/4091055-legg-mason-lm-q1-2018-results-earnings-call-transcript?part=single



"So we've continue to have good dialog with the Commission and with the staff even very recently. I feel pretty good about our opportunity there but – I mean, I don't have any more insight than you do. But the dialog has been, I think, constructive. I think it's, as more and more industry participants sign up for it and kind of put their hand up behind it, as I mentioned, Nationwide this past quarter joined us in terms of a licensing agreement, JPMorgan before that. Precidian's got something on the order of 20 or 25 different managers that are at various stages of looking at or negotiating licensing agreement. So it's clearly got the endorsement and support of the industry...Look, I don't know if it's going to happen. I can't predict what the Commission's going to do. But I'm hopeful. And I'm encouraged by the fact that we've been able to have some ongoing dialog with them. So, we'll see. But clearly, we believe it to be an industry solution and a lot of people agree with us. So – and it's something the industry needs, right? I mean we need the ability to have a semi-transparent, active ETF methodology in the marketplace. There's a lot of active strategies that would come to market, but for the fact that we have this issue of transparency and risk of the investor IP and front-running. So we need a solution, we've got a solution. The industry believes we have one [emphasis added]. And hopefully, we can convince the Commission that it's time to move."

Mr. Sullivan again states that JPMorgan (i.e. JPMAM) has licensed the Precidian structure, along with Nationwide. This is an inaccurate claim as neither firm has publicly announced a definitive licensing agreement with Precidian.

Then, during Legg Mason's 2Q 2018 earning call on October 25, 2017 Mr. Sullivan again makes mention of Precidian in his opening remarks and states that their ETF structure is semi-transparent (a.k.a. non-transparent or in other words, no daily disclosure of the actual portfolio): ¹⁴

"...Additionally, we are hopeful that ActiveShares, **Precidian's technology for semi transparent active ETFs** [emphasis added], will be approved by the SEC, further adding to our ability to expand the vehicle choice for investors."

Mr. Sullivan later fields a question from William Katz with Citigroup Global Markets about Legg Mason's passive and active ETF strategy and responds in part with:

"That's the strategy as it relates to passive, how we're going to kind of come back passive. The other side of it is as you know, not a strategy, but a vehicle. ETF is a big focus for us. So while we have 6 smart beta ETFs we have all 11 in total. In the last 3, 4 months we've introduced 5 full transparent active ETFs. **And there is Precidian...And we do think Precidian is in a good spot** [emphasis added]. We've been working very, very closely with the SEC both at the investment management and trading market divisions and we're actually very hopeful to have an answer for them by the mid-end of the year. We've got Precidian filed for exemptive relief back in May, that's filed and they updated it, refilled in September...We've got the NYSE having filed. We've got Bat's having filed. We actually because of that rules need to hear for them trading in markets is required to respond within 240 day's which would kind of get us to that year end time frame. And our level of dialogue with the SEC on Precidian has increased as a result of that kind of that shot clock...So we feel very good. The conversations have been good. We've been supplying all the information.

¹⁴ https://seekingalpha.com/article/4116611-legg-mason-Im-ceo-joseph-sullivan-q2-2018-results-earnings-call-transcript?part=single



So we've kind of built out smart beta to deal with the passive and that is just going to take time and then we continue to build out our ETF vehicles to compliment SMAs and the 40 ACT."

So up until October 2017 Legg Mason was keen to discuss Precidian with the analyst community in the context of both its strategic importance to Legg Mason and that the Precidian ETF structure was semi or non-transparent (e.g. could not be reverse engineered), therefore protecting a fund's alpha generation strategy.

What is most interesting however is Legg Mason's change of tone and lack of detail when speaking to the analyst community following Precidian's filing of their December 4, 2017 application for exemptive relief.

During Legg Mason's 3Q 2018 analyst call on January 24, 2018 when asked about Precidian again by William Katz from Citigroup Global Markets, Chairman and CEO Joe Sullivan skirts around the December 4, 2017 admission by Precidian that their ETF structure was at risk of reverse engineering and instead offered up generalities and made no effort to inform the Wall Street analysts of this wholly material change.

Mr. Sullivan even specifically mentions Precidian's December 4, 2017 filing (the "fifth amended exemptive application") but omits any mention of the Precidian disclosure. One can believe that perhaps none of these analysts are even aware of the Precidian's admission about reverse engineering and continue to rely on the earlier statements made by Mr. Sullivan and others on the executive team about the rationale for Legg Mason's investment in Precidian: ¹⁵

"I think as it relates to Precidian what I would tell you is nothing especially new to report at the moment we've got we're continue to have very constructive dialogue with the SEC staff on our exempted relief application we are hopeful that we are going to hear an answer soon we did recently re-file our fifth amended exempted application with the investment management side of the SEC. The dialogue has been frequent it's been what I characterize is constructive we appreciate their willingness to engage with us on this. So we obviously know that this is a much needed industry solution we're hopeful that they see that as well. **So leave it at that, nothing is especially new** [emphasis added]."

So, when will Legg Mason inform the Street about what has changed with Precidian? It was rah-rah regarding Precidian for 18 months and now its "crickets".

Vanguard Meetings

Precidian in their December 4, 2017 filing references meetings held in early 2014 between the Commission and Vanguard Group Inc. ("Vanguard"). ¹⁶ Incredibly, Precidian presents the contentions made by Vanguard in 2014 as supportive of their current application for exemptive relief.

¹⁵ https://seekingalpha.com/article/4139922-legg-masons-lm-ceo-joseph-sullivan-q3-2018-results-earnings-call-transcript?part=single ¹⁶ <u>https://www.sec.gov/comments/s7-07-08/s70708-27.pdf</u>





Vanguard meeting with SEC staff Wednesday, January 29, 2014

Vanguard Participants

Tim Buckley	Managing Director and Chief Investment Officer
Joe Brennan	Principal, Equity Investment Group
Greg Davis	Principal, Fixed Income Group
John Hollyer	Principal, Risk Management Group
Natalie Bej	Principal, Legal Department
Barry Mendelson	Principal, Legal Department

The Vanguard presentation to the Commission on January 29, 2014 is focused solely on Vanguard's indexbased ETFs.

As the Commission is well aware, Vanguard's index-based ETFs do not disclose their actual portfolio daily but rather do so monthly with a 15-day lag. However, Vanguard's index-based ETFs are not nontransparent because prior to the market open on a daily basis they disclose a 'sampled' basket of securities with significant overlap to the actual portfolio or underlying index. Market makers can price, hedge, create and redeem and conduct arbitrage using the published basket just like they would with a fully transparent ETF.

The Precidian ETF structure offers no such feature so the parallel Precidian is making to align Vanguard's approach to their own fully non-transparent structure is completely specious. Equating Vanguard's published basket with Precidian's concept of accessing an AP Representative through a Confidential Account is utter nonsense.

Moreover, Vanguard in 2014 did not operate active equity ETFs and the statements made in the Vanguard presentation materials that Precidian references have nothing to do with actively managed ETFs that operate without daily portfolio disclosure. Vanguard's assertions in 2014 are solely for their index-based ETFs.

Precidian in their December 4, 2017 filing on page 26, footnote 46 states,

"See Vanguard (2014) Meeting with the US Securities and Exchange Commission on January 29, 2014 to discuss portfolio transparency and basket composition requirements in potential Commission rulemakings regarding exchange-traded funds. https://www.sec.gov/comments/s7-07-08/s70708-27.pdf . ("Vanguard Meeting"). Here Vanguard argued that "front running by professional traders" hurts ETF performance [emphasis added]."



This is what Vanguard says on page 5 of their January 29, 2014 presentation about "...front running by professional traders...":

Front running: Holdings disclosure can hurt index funds

- Professional traders know that index funds have to buy and sell securities in response to publicly announced index reconstitutions and corporate actions.
- Vanguard's index portfolio managers work hard to trade securities in a manner that will thwart the efforts of professional traders to front-run the funds' trades.
- If ETFs were required to disclose holdings daily, professional traders would know precisely how much of a security the fund still has to buy or sell, leaving the funds significantly exposed to front running.

Well, that is of course correct and common knowledge and frankly one is perplexed as to why Precidian would reference Vanguard's thoughts on their index funds when Precidian has an application for exemptive relief for an actively managed non-transparent structure.

Vanguard's concern about predatory trading only affirms that this is of major concern even with index funds. ¹⁷ Now that Precidian is acknowledging that their ETF structure is at risk of reverse engineering perhaps they are referencing this Vanguard statement to calibrate why now they will be adding risk language concerning the risk of front-running.

But then Precidian on page 27 on the December 4, 2017 application states,

"Applicants believe that, while the level of information provided will not permit market participants to reverse engineer a Fund's investment strategy, market participants will, as they do with existing ETFs, be able to construct a hedging portfolio that will allow such market participants to **take market making positions in Shares while remaining adequately hedged**⁴⁸ [emphasis added]. "

And footnote 48 says,

"See Vanguard Meeting, supra note 46, "Efficient pricing, arbitrage, and hedging can all be achieved without daily holdings disclosure." [emphasis added]

¹⁷ https://www.investopedia.com/articles/active-trading/083115/how-hedge-funds-frontrun-index-funds-profit.asp



Looking at page 10 of the Vanguard presentation, the slide heading does indeed state that *"Efficient pricing, arbitrage, and hedging do not require daily holdings disclosure"*:

Efficient pricing, arbitrage, and hedging do not require daily holdings disclosure

- ETF market makers contend that daily holdings disclosure promotes efficient pricing, arbitrage, and hedging, which in turn promotes smaller premiums and discounts and narrower bid-ask spreads.
- Efficient pricing, arbitrage, and hedging can all be achieved without daily holdings disclosure. The experience of Vanguard ETFs proves this.
- Vanguard ETFs do not disclose their portfolio holdings daily, yet have discounts/premiums [Slide 11] and spreads [Slide 12] that in most cases are as good or better than comparable competitor ETFs.

However, Vanguard's accurate contention is based upon their experience with their portfolio of indexbased ETFs and their statements and supporting evidence in the presentation had nothing to do with an actively managed strategy or a fully non-transparent ETF structure like Precidian disingenuously implies in their filing with the Commission.

Then on page 13 of their presentation, Vanguard explains how this works for their index-based ETFs:

How can market makers price, arbitrage, and hedge efficiently without daily holdings disclosure?

 An ETF's creation/redemption basket can be used as a proxy for its portfolio, so long as the basket is constructed to track the portfolio closely.

- A market maker can efficiently price and arbitrage the ETF by calculating intra-day NAVs based on the contents of the basket.
- A market maker can efficiently hedge any long exposure to the ETF by hedging the contents of the basket.
- Vanguard's baskets typically track the fund within a few basis points per day.
- The same results can be obtained by using the ETF's target index as the proxy for its portfolio.

- Vanguard index funds typically track their index within a few basis point per day.



This is absolutely incredible. Vanguard's presentation is referring to their index ETFs and Precidian is using this to bolster claims that market makers will be able to efficiently hedge and conduct arbitrage under their fully non-transparent ETF structure that doesn't track an index, that will disseminate a pricing signal only on a 1-second basis and where market makers will have no direct daily visibility into the creation baskets.

And then finally on page 31 of the December 4, 2017 application Precidian schools the Commission with,

"The Applicants do not believe that the requested relief raises certain special issues raised in the Concept Release on Actively-Managed Exchange-Traded Funds (the "Concept Release").⁵⁴ The Concept Release highlighted several issues that could impact the Commission's willingness to authorize the operation of an actively-managed ETF, including whether effective arbitrage of the ETF shares exists. The Concept Release identifies the transparency of a fund's portfolio and the liquidity of the securities in a fund's portfolio as central to effective arbitrage.

Daily disclosure of a fund's portfolio is not warranted if the value of a fund is fully transparent by providing a highly accurate VIIV, based on verified mid-point pricing and Authorized Participants can take advantage of arbitrage opportunities, through a Confidential Account, by creating or redeeming Creation Units of Shares. Market professionals are not performing fundamental research when trading ETFs, but rather trading based on the current market price of the portfolio. *If market participants are assured that the VIIV is timely and accurate and they can use a good hedging portfolio, knowledge of the actual portfolio is not essential* [emphasis added].⁵⁵ "

And footnote 55 says,

"See Vanguard Meeting [emphasis added], supra note 48."

This again is beyond the pale. Precidian is using Vanguard's assertions about hedging and conducting arbitrage for index-based ETFs as evidence why market participants will be able to do exactly the same for their actively managed non-transparent ETF structure.

Unlike an ETF under the Precidian structure, with Vanguard's index-based ETFs market participants have:

- 1. Daily knowledge of the creation basket;
- 2. Daily knowledge of the constituent stocks in the underlying index;
- 3. Ability to undertake bona fide arbitrage;
- 4. Able to transact between the market price and basket price contemporaneously and in subsecond intervals;
- 5. Unimpeded statistical arbitrage; and
- 6. Full knowledge of stock price behaviour in the ETF portfolio.



The Importance of Bona Fide Arbitrage

The importance of effective bona fide arbitrage to the efficient operation of an ETF can best be evidenced by referencing a few of the important benefits Precidian asserted their September 29, 2017 application for exemptive relief, but that have now been redacted from their December 4, 2017 filing.

Bona fide arbitrage is important for ETFs in relation to (1) arbitrage opportunities *per se*, (2) efficient markets and (3) price deviations. The Commission has not approved any ETF to date that does not offer market participants bona fide arbitrage. We count no less than nine instances of bona fide arbitrage being redacted from Precidian's December 4, 2017 filing.

	Filing #4: September 29, 2017 Precidian says that Bona Fide Arbitrage is possible	Filing #5: December 4, 2017 Precidian says that only Market Arbitrage is now possible
Arbitrage Opportunities	On Page 29: "By disclosing the identity of securities comprising a Creation Unit and a Fund's portfolio to the AP Representative of each Confidential Account, Authorized Participants and other market participants will be able to instruct the AP Representative to buy or sell portfolio securities during the day and thereby hedge positions taken in Shares of a Fund and engage in Bona Fide Arbitrage [emphasis added] throughout the trading day."	Previous disclosure now omitted.
	And:	And:
	On Page 29: "Daily disclosure of a fund's portfolio is not warranted if the value of a fund is fully transparent by providing a highly accurate VIIV, based on verified mid-point pricing and market participants can engage, through a Confidential Account, in Bona Fide Arbitrage [emphasis added]."	On Page 31: "Daily disclosure of a fund's portfolio is not warranted if the value of a fund is fully transparent by providing a highly accurate VIIV, based on verified mid-point pricing and Authorized Participants can take advantage of arbitrage opportunities [emphasis added], through a Confidential Account, by creating or redeeming Creation Units of Shares."
Efficient Markets	On Page 29: "Applicants believe that this reliable VIIV disseminated at one second intervals, as well as the ability of Authorized Participants and other market participants to engage in Bona Fide Arbitrage, will enable them to make efficient	On Page 30: "Applicants believe that this reliable VIIV disseminated at one second intervals, as well as the ability of Authorized Participants to create and redeem Shares in Creation Units, will permit Authorized Participants to take



	<i>markets</i> [emphasis added] without knowledge of the Fund's portfolio."	advantage of arbitrage opportunities that will minimize any divergence between the secondary market price of the Shares and the value of a Fund's portfolio. [emphasis added]"
Price Deviations	On Page 29: "The ability of Authorized Participants to buy and sell portfolio securities through their Confidential Accounts will give them the ability to precisely hedge their positions and engage in Bona Fide Arbitrage thereby serving to minimize any divergence between the secondary market price of the Shares and the value of a Fund's portfolio [emphasis added."	On Page 30: "Applicants believe that this reliable VIIV disseminated at one second intervals, as well as the ability of Authorized Participants to create and redeem Shares in Creation Units, will permit Authorized Participants to take advantage of arbitrage opportunities that will minimize any divergence between the secondary market price of the Shares and the value of a Fund's portfolio [emphasis added].
	And: On Page 30: "However, as discussed above, the Applicants believe that dissemination of a reliable and timely VIIV as well as the ability of Authorized Participants and other market participants to engage in Bona Fide Arbitrage, will cause any deviation to be similar to deviations found in existing ETFs [emphasis added]."	And: On Page 31: "However, as discussed above, the Applicants believe that dissemination of a reliable and timely VIIV will cause any deviation to be similar to deviations found in existing ETFs. [emphasis added]"

The Commission has previously detailed its concerns that under the Precidian ETF structure there is asymmetric disclosure of 'confidential portfolio information' to selected parties. ¹⁸ Interestingly, under the Precidian structure the only party who would be able to identify bona fide arbitrage opportunities is the AP Representative who under the auspices of the Confidential Account would have complete portfolio knowledge. Again, no ETF to date has been approved with this type of asymmetry inherent in its structure.

The Risk Management Technique of Statistical Arbitrage

Precidian has now acknowledged that bona fide arbitrage is not possible under their structure and as noted above, have removed reference to it in their updated December 4, 2017 filing.

¹⁸ funds.eatonvance.com/includes/loadDocument.php?fn=19309.pdf&dt=FundPDFs



Instead, they now state that statistical arbitrage will be the primary methods used by authorized participants and market makers. On page 23 of the updated filing they state,

"Applicants also believe that market makers and other liquidity providers will **employ riskmanagement techniques such as "statistical arbitrage," including correlation hedging, beta hedging, and dispersion trading,**⁴¹ [emphasis added] which is currently used throughout the *financial services industry, to make efficient markets in exchange-traded products."*

Precidian's footnote 41 describing in detail statistical arbitrage is worthy of an entry in Investopedia.com. But all kidding aside, although we concur with the description, what is obfuscated by Precidian is that statistical arbitrage opportunities do not occur only at discrete 1-second intervals. In the 'real world' they of course present themselves continuously and at any frequency.

Precidian however is implicitly telling the Commission that statistical arbitrage can only occur on a 1second basis when the VIIV is disseminated. This is an artificial constraint that does not fit whatsoever with the reality of the high frequency capital markets.

Moreover, statistical arbitrage is a computationally intensive approach to algorithmically trading assets. For statistical arbitrage to occur with the proposed Precidian ETFs, existing trading systems will undoubtedly require adaptation to accommodate the abnormality that one asset (stocks) is priced in 'real time' while the other (the ETF) is priced only every second. Precidian's latest U-turn that statistical arbitrage, rather than bona fide arbitrage, will keep secondary market pricing close to the true NAV cannot be viewed as efficient.

Hedging Using Tracking Portfolios

My colleague Simon Goulet commented at length in his November 22, 2017 letter to the Commission with respect to a rule change application by NYSE Arca, Inc. and the erroneous assertion made by Precidian that market makers can construct optimized tracking portfolios using Precidian's non-transparent ETF structure.¹⁹

Precidian continues to assert this mistaken premise in their December 4, 2017 filing where on page 23 they state,

"Because arbitrageurs are expected to be **able to construct a very good hedge portfolio for any position they take in Shares,**³⁹ [emphasis added] and evaluate profit and loss on their position, Applicants believe that there will be many Authorized Participants and Non-Authorized Participant Market Makers that will seek to make a market in Shares.⁴⁰ "

Footnote 39 then references the thoroughly discredited statistical analysis by Dr. Glosten,

"Given the one second VIIV, a sophisticated regression analysis allows for "the construction of very good hedge portfolios." Lawrence R. Glosten [emphasis added], PhD, Analysis of the Ability to determine the Portfolio Underlying an Actively Managed ETF (June 2017) (Attached as Exhibit F)."

¹⁹ <u>https://www.sec.gov/comments/sr-nysearca-2017-36/nysearca201736.htm</u> (See letter from Simon Goulet)



Please also refer to my October 31, 2017 comment letter regarding NYSE Arca, Inc.'s rule change application where I analyze in mathematical detail Dr. Glosten's erroneous assertion that a high R² value is indicative of an ability to construct hedging portfolios. ²⁰

Calculation Engine Pricing

Precidian tries to address concerns about the veracity of their Calculation Engine pricing through a refreshed 'trip wire' procedure that is described on page 12 of the December 4, 2017 filing,

"In the event that the prices from the Calculation Engines diverge by more than 25 basis points for 60 seconds, the Pricing Verification Agent will notify the Adviser of the Fund who will in turn request that the listing Exchange halt trading until such time as the prices come back in line. Applicants believe that a **conservative threshold of 25 basis points**,¹³ **over a period of 60 seconds** [emphasis added],¹⁴ strikes the right balance between the protection of investors from price distortions, and avoiding unnecessary disruptions to trading in order to ensure orderly markets.¹⁵ "

One can model any number of scenarios where prices from the two Calculation Engines differ in excess of 25 basis points over a minimum 60 seconds. This could be from a minimum 25.1 basis points over 60.1 seconds to 500+ basis points over 6.5 hours and innumerable values in excess and in between. The point is not the absolute values but rather that if any 'trip wire' procedures are to be implemented to protect investors from possible price distortions then they must be logical and consistent. For example, why would a price divergence of 25 basis point for 60 seconds indicate 'an error in the feed or Calculation Engine' but a price divergence oscillating around 25 basis points over the same 60 second period, not?

Precidian's described 'trip wire' procedures are incomplete in detail and seemingly *ad hoc*. For example, there is no definition as to what constitutes the phrase '*prices coming back in line*' and exactly who is going to determine that and when. As well:

- 1. How can market participants have any confidence in the VIIV when they have absolutely no idea if price distortions are currently occurring and if they are, what is their magnitude; and
- 2. How will market makers price this uncertainty into their spreads and since this risk can never disappear due to the 'Black Box' nature of the VIIV generation process, it must be the case that any increase in spread will be persistent in nature.

An ETF Fund's Investment Strategy

Precidian notes on page 30, footnote 53 of their most recent filing that,

"Cooper, <u>supra</u> note 22. Applicants would not, and believe that any Adviser, would not utilize an investment strategy in a Fund that **it believed could be reverse engineered** [emphasis added] based on the dissemination of the VIIV to the detriment of the Fund."

²⁰ <u>https://www.sec.gov/comments/sr-nysearca-2017-36/nysearca201736.htm</u> (See letter from Terence Norman)



Precidian apparently believes that fund managers sit around a table assessing alpha generation strategies through the lens of whether they can be reverse engineered. That is nonsensical since in theory every investment strategy is arguably completely obfuscated provided the trading strategy remains opaque.

However, the Achilles Heel under the Precidian structure is the information provided to the market through dissemination of the VIIV. Since the VIIV is based upon actual portfolio holdings and weightings it can be reverse engineered as has been ably demonstrated by DERA and Blue Tractor leaving the managers investment strategy vulnerable.

Value Transparency

Precidian's December 4, 2017 application on page 13, footnote 17 introduces a new term to the ETF market lexicon – "value transparency",

"Applicants recognize that, for existing ETFs, professional traders at a broker-dealer, investment banker, or other institution can calculate their own indicative intraday value at fractions of a second. Applicants also recognize that most retail investors do not have the capability to make such calculations and so, for existing ETFs, those retail investors rely on the indicative intraday value disseminated every 15 seconds. Applicants believe that the dissemination of VIIV at one second intervals strikes a balance of providing all investors with useable information at a rate that can be processed by retail investors, does not provide so much information so as to allow market participants to accurately determine the constituents, and their weightings, of the portfolio, can be accurately calculated and disseminated, and still provides professional traders with per second data. Applicants believe that dissemination of the VIIV at one second intervals levels the informational playing field between institutional and retail investors. This effectively creates a level of **"value transparency"** [emphasis added] to all investors that is currently unavailable for existing ETFs."

This turns out to be an amateurish attempt by Precidian to gloss over glaring problems with their ETF structure. First, unlike with a transparent ETF, under the Precidian ETF structure authorized participants and market makers will not be able to undertake their own pricing of the actual portfolio constituents. They will instead have to rely on the VIIV disseminated on a 1-second basis. Reliance on 1-second pricing flies in the face of the high frequency capital markets that they normally operate in. And second, the VIIV on a 1-second basis can be reverse engineered by predatory traders to reveal the actual portfolio weights and holdings.

So Precidian soft peddles these problems by trying to say that retail investors will somehow be empowered with 1-second pricing rather than 15-second pricing as is currently the case with transparent ETFs. How pray tell does pricing 14 seconds faster help the typical "buy and hold" retail investor?

All the term "value transparency" does is signal that both retail and institutional investors are to be put on the same page – namely receiving pricing information on a 1-second basis out of a 'Black Box' that doesn't allow institutional investors to operate efficiently, allows for reverse engineering and that provides retail investors with a higher frequency information feed that doesn't provide them with additional information of value.



Inherent Trading Friction Within the Confidential Account

Precidian has significantly updated the disclosure in the December 4, 2017 filing to describe the creation and redemption process. On page 11 they state,

"In the case of a creation, the Authorized Participant would enter into an irrevocable creation order with the Fund and then direct the AP Representative to purchase the necessary basket of portfolio securities. The AP Representative would then purchase the necessary securities in the Confidential Account. In purchasing the necessary securities, the AP Representative would be required, by the terms of the Confidential Account Agreement, **to obfuscate the purchase by use of tactics such as breaking the purchase into multiple purchases and transacting in multiple marketplaces**. [emphasis added] Once the necessary basket of securities has been acquired, the purchased securities held in the Confidential Account would be contributed in-kind to the Fund.

Similarly, in the case of a redemption, the Authorized Participant would enter into an irrevocable redemption order, and then immediately instruct the AP Representative to sell the underlying basket of securities that it will receive in the redemption. As with the purchase of securities, the AP Representative would be required to obfuscate the sale of the portfolio securities it will receive as redemption proceeds using similar tactics [emphasis added]. The positions in the underlying portfolio securities sold from the Confidential Account would be covered by the in-kind redemption proceeds received by the Confidential Account from the Fund."

Clearly this new disclosure by Precidian is in response to concerns by the Commission that market participants could glean the contents of the actual portfolio securities by observing trades undertaken by the AP Representative (totally ignoring the fact that the ETF structure can be readily reverse engineered by analysis of the disseminated verified intra-day indicative value).

However, what they have also done by requiring the AP Representative to undertake multiple trades in multiple marketplaces is to add additional friction into an already cumbersome process for creation and redemption that will further delay execution and increase costs to the authorized participant.

Indeed, Gary Gastineau in his May 24, 2017 comment letter regarding NYSE Arca, Inc.'s rule change application details on pages 16 and 17 concerns about the creation and redemption process through a third party under the Confidential Account structure.²¹

With the additional inefficiencies detailed in Precidian's latest application Mr. Gastineau's concerns are even more germane.

These included:

- 1. Slower trade execution:
 - a. Precidian's new terms can only add to the delay in trade execution; and
- 2. Little or no ability for market makers to monitor trade performance in Confidential Accounts to ensure best execution or to evaluate trading performance:

²¹ <u>https://www.sec.gov/comments/sr-nysearca-2017-36/nysearca201736.htm</u> (see letter from Gary Gastineau)



a. Given the imposition of these new terms on the AP Representative, it would be even more important for a market maker to evaluate both trading performance and execution levels being undertaken on their behalf. Without such analysis the market maker will undoubtedly look to pass these further, yet unquantified, additional hidden costs on.

Conclusion

Precidian's December 4, 2017 application for exemptive relief again demonstrates an ill-conceived ETF structure in a filing that is full of contradictory and incorrect statements.

After years of denials, Precidian now acknowledges that:

- 1. Predatory traders may reverse engineer the Precidian ETF structure;
- 2. As a result, the Precidian ETF structure is susceptible to front-running; and
- 3. Using the Precidian ETF structure, authorized participants will not be able to undertake bona fide arbitrage.

No ETF to date that does not offer effective bona fide arbitrage has been granted exemptive relief by the Commission and because it has been shown by DERA and Blue Tractor that Precidian's ETF structure can be reverse engineered it is clearly not "necessary or appropriate in the public interest".

And given that the Precidian ETF structure can be reverse engineered, it must be the case that funds operating under their intellectual property are more susceptible to being manipulated for the benefit of one group over another.

What has become apparent is that the purported non-transparent Precidian ETF structure actually turns out to be a fully transparent structure to predatory traders and is therefore little different then today's approved transparent actively managed ETFs. However, as a result of its complicated structure of having to operate using a third party via a Confidential Account it is much less efficient in terms of primary and secondary markets then today's approved transparent actively managed ETFs.

For these reasons, along with the other important issues raised by Blue Tractor and others in many earlier comment letters, the Commission should disapprove the Exchange's rule change application.

Thank you in advance for your consideration of my commentary. I welcome any questions the Commission may have as a result and can be reached at the second s

Sincerely,

Terence W. Norman Founder Blue Tractor Group, LLC