



Via E-mail: rule-comments@sec.gov Securities and Exchange Commission, 100 F Street, N.E., Washington, DC 20549-1090. Attention: Vanessa Countryman, Secretary

March 10, 2021

Re: Rule 144 Holding Period and Form 144 Filings - File No. S7-24-20

Ladies and Gentlemen:

We applaud the Commission for putting forth the Proposed Rule 144 Holding Period and Form 144 Filings ("Proposal") and appreciate the opportunity to comment. Our comments and analysis relate primarily to the request for comments in Sections I.C.2, II.D, and III.D of the Proposal.

The Proposal would meaningfully alter the reporting requirements surrounding the trades of corporate insiders reported on Form 144 and Form 4. Having studied the trading of corporate insiders for over a decade, written numerous academic studies on the topic, and consulted with multiple companies, counsels, and enforcement agencies, we believe that the Proposal will substantially benefit the public interest with minimal or no cost to filers.

We support the modernization of Form 144. Under the current rule, 99.3% of Form 144s are filed on paper every year (over 700,000 from 2001 to 2020). The Commission's current practice is to retain hard copies of these paper filings for 90 days in the Commission's Public Reading Room in Washington DC and not post them on EDGAR (see Exhibit 1 for an example of a Form 144). This arcane practice would be of little consequence if the information contained in Form 144s was of no interest to investors; on the contrary, the demand for information on these Form 144s is sufficiently high that data providers regularly visit the Reading Room to scan, digitize, and disseminate Form 144s to corporate clients. As a result, data on over 700,000 Form 144s is available from third-party data providers (e.g., The Washington Service and Thomson/Refinitiv) but not EDGAR. In effect, the Commission has created a two-tiered disclosure system that makes "public disclosure" accessible to large institutional clients, but inaccessible to individual investors. The Proposal would end this practice by mandating Form 144 be filed electronically on EDGAR.

We support the proposed changes to Form 4 filings and urge the Commission to (i) make the proposed Rule 10B5-1 check box on Form 4 mandatory, and (ii) add a required field for the respective 10B5-1 plan adoption date. These two features are already part of Form 144 and would harmonize reporting requirements across the two forms. The cost to the filer of such a requirement is negligible: if a trade is triggered by a 10B5-1 plan, then the adoption date is already on hand at the time of filing the Form 4, because said plan triggered the trade. The plan adoption date is of considerable value to investors, because it can be used to monitor insiders' trading behavior.

In a recent <u>study</u> we use data on plan adoption dates scraped from digitized Form 144s to study over 20,000 10B5-1 plans. We find that more than 38% of plans adopted in a given quarter execute

a trade before that quarter's earnings announcement; 82% have cooling off periods less than six months; and that the trades of these plans systematically avoid large losses. We attribute the apparent abuse to the comparatively opaque reporting requirements surrounding 10B5-1 plans. Filers are not required to disclose this information on Form 4s, and while the information is reported on Form 144, the Commission is not digitizing or retaining the forms. Consequently, the Commission's ability to study and police 10B5-1 plans is severely limited. Requiring electronic filing of Form 144, and disclosure of 10B5-1 trades and adoption dates on Form 4 would provide the Commission and the public with the data necessary to conduct meaningful large-sample studies, risk assessments, and surveillance of 10B5-1 plans.

All evidence suggests that both the public and the Commission would benefit from these changes. Failure to adopt the Proposal means that more than 30,000 Form 144s would continue to be filed on paper each year, not posted to EDGAR, shielded from public scrutiny, and that the Commission would continue to have a meaningful deficiency in its ability to study and assess the risk of 10B5-1 plans. Paper filings do not protect investors, do not promote efficient and fair markets, and do not promote capital formation. Electronic reporting does all three—it ensures the public, capital providers, and the Commission have timely access to information about officers' and directors' transactions and data on their associated 10B5-1 plans.

The remainder of our letter proceeds as follows. Part I provides background and institutional details on the reporting requirements for Form 4 and 144. Part II comments on the value of the information reported on Form 144. Part III discusses the potential implications of current practices and proposed changes on the Commission's enforcement function. Part IV discusses the proposed changes to the design of Form 4.

Please feel free to contact Professor Daniel Taylor (dtayl@wharton.upenn.edu) if you have any questions about this letter. We welcome the opportunity to speak to the Commission concerning the proposal.

Sincerely,

David F. Lorda

David Larcker Graduate School of Business Stanford University Director, Stanford Corporate Governance Research Initiative

Bradford Lynch The Wharton School University of Pennsylvania

Daniel Taylor The Wharton School University of Pennsylvania Director, Wharton Forensic Analytics Lab

Part I. Background on Current Reporting Requirements on Form 4 and Form 144.

In this section, we describe the institutional details surrounding Form 4 and Form 144. These institutional details provide the economic baseline we use to assess the costs and benefits of the proposed changes.

Form 4

Section 16 of the Exchange Act requires that officers, directors, and all 10% beneficial owners disclose their transactions in the company's securities on Form 4. Transactions can include option vesting, option exercises, stock sales, stock purchases, etc. The form contains information on the number of securities transacted and the transaction price. The filer is *not required* to indicate whether the transaction was pursuant to a Rule 10B5-1 trading plan and is *not required* to disclose the adoption date of such a plan (if used). Filers may, at their option, voluntarily disclose such information.

Current rules require the Form 4 be filed electronically on EDGAR within two business days of the transaction. Anyone wishing to look at the filing or gather information from it, need only download it from EDGAR.

Form 144

Under Securities Act Rule 144(h), an affiliate who intends to sell restricted securities of the company (e.g., restricted shares) during any three-month period that exceeds 5,000 shares or has an aggregate value of more than \$50,000, must file Form 144. In addition to disclosing the number of securities and transaction price, the filer is also *required* to disclose (i) the name of the broker executing the trade, and (ii) the adoption date of the 10B5-1 plan (if used). These requirements are unique to Form 144.

Unlike Form 4s, Form 144s can be filed electronically or on paper. When paper filings are received by the Commission, they are neither scanned nor uploaded to EDGAR. Rather, hard copies are retained in the Commission's Public Reading Room in Washington D.C. for 90 days. As the Proposal indicates, anyone wishing to read the filing needs to physically visit the Reading Room within 90 days of the filing or pay a third party to visit the Reading Room on their behalf. See Exhibit 1 for an example of a paper-filed, hand-written Form 144 for a sale of \$91 million on Sept 22, 2017 made pursuant to a 10B5-1 plan adopted Sept 18, 2017.

Given the difficulty with accessing these forms, commercial data providers send couriers to the Reading Room every few days to scan the forms, digitize them, and sell the data to corporate clients. For example, data on Form 144s is available from The Washington Service and Thomson/Refinitiv. Using data provided by these vendors, we independently replicated the Commission's analysis—over 99.3% of Form 144s in 2019 were filed on paper and not available on EDGAR. From 2001 to 2020, we find a total of over 700,000 paper-filed Form 144s detailing the planned trades of corporate insiders that do *not* appear on EDGAR.

Part II. Comments on the Value of Information Reported on Form 144

In this section, we respond to the request for comments in Sections I.C.2 and II.D of the Proposal concerning the value of the information reported on Form 144. The fact that commercial data providers send couriers to the Reading Room every few days to scan the forms, digitize them, and sell the data to corporate clients speaks to the considerable value of the information contained on these forms. There are four unique aspects of Form 144 that provide value to users:

- (1) Mandatory disclosure of the 10B5-1 plan adoption date. Form 144 requires the filer to provide the date of 10B5-1 plan adoption. Exhibit 2 shows two paper Form 144s for ProQR Therapeutics. From the first form, the user learns that JDG adopted a 10B5-1 plan on Feb 16, 2018, and the plan executed a \$490,000 sale the same day it was adopted.¹ From the second form, the user learns JDG adopted a 10B5-1 plan on Oct 30, 2018, and the plan executed a \$6.6 million sale the next week, on Nov 6.² Form 144 is the only form where 10B5-1 plan adoption date is required disclosure.
- (2) **Required for foreign issuers.** Form 144 is required to be filed by individuals affiliated with foreign entities listed on US exchanges. Because ProQR is a Dutch company listed on the NYSE, its affiliates are not subject to Form 4 reporting. Thus, Form 144s are the only source of public trade data on these individuals.
- (3) **Mandatory for all insiders.** Form 144s are required to be filed by individuals other than Section 16 insiders. For example, a lower level manager or staff member compensated with restricted shares (perhaps as a result of pre-IPO compensation) would be required to report the transaction on Form 144, but are not required to report on Form 4. Indeed, two months after Google's IPO, over 400 individuals filed Form 144 to sell restricted shares. Form 144 is the only data on the trades of these individuals.
- (4) **Broker disclosure.** Form 144 requires the filer to list the broker executing a trade. Our understanding is that this provides considerable information to stock brokers interested in prospecting for wealthy clients. For example, Exhibit 2 indicates JDG used Raymond James as its broker.

Because all of the above information is only available on Form 144, and 99.3% of such forms are filed on paper and not disseminated via EDGAR, the Commission's current practices have created a two-tiered disclosure system—where the information is available to large institutional clients of the data providers but inaccessible to investors who are unable to pay for access to the filings. To the best of our knowledge, this has been the status quo for more than two decades.

As the Commission noted in 1995 (SEC Release 33-7233, p. 2), "Access to information through electronic means permits small investors to communicate quickly and efficiently with companies as well as with each other." In the intervening two decades, the cost of electronic communication

¹ ProQR subsequently announced earnings 12 days later on Feb 28, 2018 and prices declined by -4% over the subsequent two days.

² ProQR subsequently announced earnings the next day, on Nov 7, 2018 and prices declined by -10% over the subsequent two days.

has decreased to the point where maintaining paper filing is more costly than electronic filing. To that end, we urge the Commission to adopt the Proposal, and require electronic reporting of Form 144 on EDGAR.

Part III. Comments on the Potential Implications for Enforcement

In this section, we respond to the request for comments in Sections III.D of the Proposal, specifically "whether the proposed collection of information is necessary for the proper performance of the functions of the agency. (p. 65)."

One of the critical functions of the Commission is to enforce securities laws. The Proposal did not consider how the proposed changes would affect the performance of this function. Such a consideration is of paramount importance in light of considerable public outcry on corporate insiders' use of Rule 10B5-1 trading plans, multiple academic papers suggesting widespread abuse, and multiple letters from Congressional leaders calling for scrutiny of these plans.³

Large-scale risk assessment and policing of 10B5-1 plans requires electronic data on plan adoption dates. However, the Commission currently *does not require* electronic disclosure of any of the details of 10B5-1 plans and associated trades. Even the current <u>bluesheet</u> specification used by the Commission for enforcement investigations does not track 10B5-1 trades. Thus, the data available to the Commission on these plans is extremely limited. If the current Proposal is *not* adopted, the Commission would be forced to rely on either filers' voluntary disclosure (which prior research has shown is incomplete and strategic) and/or external data providers for digitized Form 144s.⁴

In a recent <u>paper</u> we studied the details of over 20,000 10B5-1 plans using data from digitized Form 144s obtained from The Washington Service. In contrast to conventional wisdom that these plans are benign, we found 82% have cooling off periods less than former chair Clayton's recommended six month period, 49% cover only a single trade (not multiple trades spread out over time), and 38% executed a trade in the same quarter the plan was adopted, prior to the earnings announcement. Trades of these plans *systematically* avoided economically meaningful losses.⁵ Our conclusion was that these plans are subject to considerable abuse—presumably because the Commission is limited in its ability to conduct large-scale risk assessment and policing.

The findings of our study underscore that electronic disclosure of Form 144 should be a priority. Mandatory electronic filing of Form 144 would provide the Commission and the public with the machine-readable data necessary to meaningfully scrutinize these plans, conduct large-scale risk assessments, and allow for proactive surveillance—something critical to the healthy functioning of the agency. In the words of Justice Brandeis: "Sunlight is the best disinfectant."

³ See Exhibit 3 for a list of academic studies providing empirical evidence, and the February 12, 2021 <u>letter</u> to Acting Chair Lee from Senators Warren, Brown, and Van Hollen for an example of letters from members of Congress.

⁴ See M. Todd Henderson, Alan Jagolinzer & Karl Muller, "Offensive Disclosure: How Voluntary Disclosure Can Increase Returns from Insider Trading," 103 *Georgetown Law Journal* 1275 (2015).

⁵ Single-trade plans with short cooling-off periods exhibit the highest average loss avoidance. On average, stock prices decline by more than -4% (relative to industry peers) after the trades of such plans.

Part IV. Comments on the Proposed Changes to the Design of Form 4

In this section, we respond to the request for comments in Sections I.C.2 and II.D of the Proposal concerning proposed changes to Form 4 and specifically questions 28, 29, and 38.

"28. Should we instead require Form 4 and Form 5 to indicate via check box whether any of their reported transaction were made pursuant to 10b5-1(c) rather than provide it as an option for the filer"

Yes. We urge the Commission to make the check box mandatory. The benefits to investors and filers from mandatory reporting of 10B5-1 trades outweighs the minimal cost to filers. With respect to the costs, reporting such information in a check box is not burdensome to filers. Filers are aware at the time of filing whether the trade is pursuant to a 10B5-1 plan. With respect to the benefits to filers, mandatory disclosure would shield otherwise well-intentioned filers from allegations of selective reporting of 10B5-1 trades.⁶ With respect to the benefits to the public, see our response to question 29 below.

"29. Would a Rule 10b5-1(c) checkbox on Form 4 or Form 5 provide meaningful information to investors and market participants."

Yes, but only to the extent the checkbox is mandatory. Numerous academic papers show that the return patterns following 10B5-1 trades are materially different from those following non-10B5-1 trades (see footnote 3 for examples of such studies). These patterns reflect differences in how corporate insiders use 10B5-1 plans. On the one hand, if insiders use 10B5-1 plans as intended—for diversification and liquidity needs—then such trades should not predict subsequent stock returns to the same extent as non-10B5-1 trades. Alternatively, if 10B5-1 plans are being used opportunistically, then such trades should predict subsequent stock returns to a greater extent than non-10B5-1 trades. In either case, there is informational value to the public in being able to distinguish 10B5-1 trades from non-10B5-1 trades.

"38. Are there any other alternative approach we should consider and what are their economic benefits."

We urge the Commission to require disclosure of the adoption date of the respective 10B5-1 plan on the Form 4. The cost to the filer of such a requirement is negligible: if a trade is triggered by a 10B5-1 plan, then the adoption date is already on hand at the time of filing the Form 4, because said plan triggered the trade. This change would harmonize Form 4 and Form 144 reporting requirements (concerning 10B5-1 plans). As a result, the type of securities being sold (e.g., restricted shares) would not dictate whether 10B5-1 related disclosure is needed. While the cost of disclosing the adoption date is negligible, the informational benefits (to the Commission and the public) are high. Both the Commission and public would have access to the adoption dates of *all* 10B5-1 plans used by Section 16 insiders. This data, in turn, would allow the public (and the Commission) to better scrutinize whether such plans are being used as intended and identify any outliers.

⁶ See M. Todd Henderson, Alan Jagolinzer & Karl Muller, "Offensive Disclosure: How Voluntary Disclosure Can Increase Returns from Insider Trading," 103 *Georgetown Law Journal* 1275 (2015).

							CO	PY
		SECUR		n, D.C. 20549	MISSION		OMB Nun Expires: Estimated	June 30, 2020
		NOTICE C PURSUANT TO RUI	FOR F PROPOSE LE 144 UNDE	M 144 D SALE OF SECU R THE SECU	ECURITIES RITIES ACT	OF 1933	SE	USE ONLY T SEQUENCE NO.
	or exe	mit for filing 3 copies of this form conc culing a sale directly with a market ma	urrently with eit ker.	her placing an o	rder with a bro	ker to execute		
Me	SUER (Please op	Corporation			3207296	(JS.E.C. FILE NO	2. WORK LO	
ONE	- Po		B.SAN	FRANCA	CALCO	CA- 94	AREA CODE	83-830
John	Hom	Weigreen N: The person filing this notice should	OSC.	CER DA)E B24		FRANCISCO	CA 9404
3 (a) Title of the Class of	rbs		SEC USE ONLY Breiter-Dealer File Number	(c) Number of Shares or Other Units	(d) Aggregate Market	(e) Number of Share or Other Units	10	(2) Name of Koch Securities
Securiales To De Sold	N Mer	es and Adderson of Each Broker Through Whom the carifies are to be Offered or Each Market Maker who is Acquiring the Secontifies	File Number	To Be Sold (See Instr. 3(c))	Value (See Instr. 3(d))	Outstanding (See Instr. 3(e))	(See Junr. 3(f)) (MO. DAY YR.	Eschange (See inue, 3(g))
commo	SATA	Alifornia St Francisco CA 9411/		599,000	91,048,000	210,260,53	1 9/22/17	NY
	_							
								2
INSTRUCTIO I. (a) Name of (b) Issuer's I (c) Issuer's S (d) Issuer's S	NS: R.S. Identificatio .B.C. file number	a Number if any zip code scielolang area code	3. (a) Title of the cla (b) Name and adds (c) Number of sha (d) Aggregate mar	as of securities to be a reas of each broker thro rea or other units to be ket value of the securit	aid righ whom the securit sold (if debt securities the to be sold as of a s	ies are intended to b A, give the aggregate pecified date within	a sold face amount) 10 days prior to the fill face emount thereof or a be sold	ng of this sotice
		zip ouer nictuding area code account the securities are to be sold to the issuer (e.g., officer, director, 16% mendiate family of any of the foregoing) lading zip code	 (c) Number of the by the most res (f) Approximate d (g) Name of each s 	res or other solls of the soil report or statemen iste on which the neuer securities exchange, if	s sham cutstanding, or a published by the issu ities are to be sold any, or which the seco	if debi scourities the ar wittes are insended a	shee emount thereof or be sold	tatanding, as shown
stockhold (c) Such pen	ier, or member of i ion's address, inc	mmediate family of any of the foregoing) loding zip code Potential persons who are required to respond unless	to respond to the the form displa	e collection of in ys a currently v	formation contain alid OMB contro	sed in this form of number,	n are not	SEC 1147 (08-07)
			- SECURITI					
Title of the Class	Date you Accessing	Furnish the following information and with respect to the payment of all or Nutreal Acquisition Transaction	any part of the	the acquisition of purchase price to Punos Ban Whom A f. also give done done of f. also give done done of	or other consid	to be sold eration therefo Amountof Securities Acquired	Desaf	Vision of Payment
Common	5/21/11	Stock.	Issu			301,000		
Com	5/12/12	Option Exercise	F			198,000		
INSTRUCTION	the tim conside or if pa	contribes were purchased and full payment therefore e of purchase, explain in the table of in a motel ration given. If the consideration consisted of any greats was made in installments describe the arr	thereto the asture o mote or other obligations and state to	f the Lion, when				
Furnish the	the not	or other obligation was discharged in full or th TABLE II — SECURITI formation as to all accurities of the issuer	ES SOLD DU	IN.			e securities are la	be sold.
		Name and Address of Solier		Title of Securities Se	1		uneent of writtles Sold	Graw Proceeds
		•						
REMARKS:]
INSTRUCTIO	INS:	paragraph (a) of Rule 144. Information is to be	riven to a star	TRENTION: 7	e person for whose do	count the securities to	vekich this notice relate r material advarse info	n are to be rold
to the person for	whose account (the socurities are to be sold but also as to all other formation shall be given as to sales by all person unit of the source of	persona include	di such prospec di such perso Per Ine Each	ctive sperations of the in has advanted a write	Issuer of the securit ten trading plan or s	es to be sold which has doen trading instruction g the date that the plan plan adaption or instr	not been publicly
		9/22/2017			The	CALONETTIN	5	
ATTE	NTION: I	A ADDITION ON DIVISIO OF INSTRUCTION.	The notice shall the notice shall be SSION OF reactor	to be signed by the manufally signed.	person for whose iny copies not ma ederal Crimin	account the secu multy signed shi al Violation	ll bear typed or p	At least one copy rinted signatures. C. 1001)
								SEC 1147 (02-08)
	_		01	1.				
			1/22	120	17			
		9	187	2010	7			
		DATE OF PLAN	ADOPTION			RUCTION	01	
	L				•			.

Exhibit 2. Example of Two Form 144s by a Foreign Private Issuer

											O	1147
			SECURI		UNITED AND EXC ashington	HANGE		ISSION		OMB N Expires	lumber	PPROVAL 3235-0101 June 30, 2020 rerage burden
		PURSUA	NOTICE O			SALE			OF 1933	hours p	SEC U	
ATTENTIO	N: Tra or e	nsmit for filing 3 copies of xecuting a sale directly wit	this form concu th a market mak	rrenti er.	ly with eith	er placin	g an or	der with a bro	ker to execute sa		NUMBR 1542	
ProQR Th							TRS ID	I/A	(C) S.E.C. FILE NO.	WORK	LOCAT	NON
(d) ADDRESS OF 1			IREET		i				STATE ZIP (ODE () TEL	T PILONI	1 10
Darwinw	eg 24	2333 CR Leiden			·		e Ne	therlands		310	-	4894932
ARE TO BE SO	LD	whose account the securities	Boer)		RELATION ISSUER CEO	ON SHIP TO		winweg 24	مى 2333 CR Le		ie N	22P CODE etherlands
INST	RUCT	ION: The person filing the	s notice should a	conta	ct the issue	r to obtai	n the I.	R.S. Identificat	tion Number and	the S.E.C. 1	File N	umber,
3 (o) Title of the Class of Securities To Be Sold	(1)	Name and Address of Each Broker Thro Serbjilles are to be Offered or Each N who is Acquiring the Securi	wiet Maker	Bre	USE ONLY	(c) Number of or Other Tu Bel (See instr	Units iold	(d) Aggregate Market Valat (See instr. 3(d))	(e) Number of Shores or Other Units Outstanding (See units, 3(e))	D Apprexim Date of Se (See instr.) (MO. DAY	ule NGN	(g) Pauna of Luch Securities Exchange (See instr. 3(g))
Common	88	aymond James & Associ 60 Carillon Parkway . Petersburg, FL 33716	ates, Inc.			140,2		490,931	31.9mm	2/16/2		NASDAG
INSTRUCTIONS 1. (4) Nease of im (b) Lauger's 1,R. (c) Lauger's 2,E (d) Lauger's 2,E	ner .S. Identifi .C. file sur	mber, if any		(b) (c) (d)	Humber of she Aggregate mu	ress of each b tres or other t cket value of	naker thro mits to be the securit	ugh whom the secur sold (if debt securiti lies to be sold as of a	itien are intended to be a ca, give the aggregate fa appeldted date within 1	sce amount) I days prior to t		
 (e) Issuer's tele (s) Name of per (b) Such person slock bolder. 	rphone pun rson for wi h's relation , or membe	abar, including area code nose account the securities are to be a ship to the insuer (s.g., officer, direct r of immediate family of any of the for , including zip code Potential p	or, 1044 going)	(1) (12) 14) Ter	by the most ra Approximate Name of each	cont report of date on which socuritize ex-	the secur the secur change, if	i published by the is, illes are to be sold any, on which the se formation conto	curities are intended to t	be sold	eer euli	Aladış, U showa
147 DCT		required i	ø respond unles:	the	form displi	ays a cur	rently v	rziid OMB cont	trol number.			SEC 1147 (0
		Furnish the following	ABLE I	ith re	spect to ti	he acquis	ition o	f the securitie	s to be sold			
itle of D	ar Ne you	id with respect to the pays	nent of all or a	ny po	irt of the p	ourchase	price o	or other consi	deration therefo	r: Date of		
	rquired	Nature of Acquisition Tr	ensection		Name of Person from Whom Acquired Amount of I (If gift, also give dole donor acquired) Securities Acquired D						1	Nature of Paymon

	t quired	Nature of Acquisition Transaction	Nume of Person from Whom Acquired ((f gift, also give date donor scquired)	Amonator Securities Acquired	Date of Payment	Nature of Paymoni
1 1	1/14/)17	Acquired in the public offering	Issuer	134,936	11/14/ 2017	cash
INSTRUCTIONS:	If the sec	curities were purchased and full payment therefor wa	s not made in cash at			

If the securities were purchase and using symmetric therefore was not made in exist at the time of purchase, capitain in the table or in a note thereto the nature of the consideration given. If the consideration consisted of any note or other obligation, or if pyment was made in installments descripte the arrangement and state when the note or other obligation was discharged in full or the last installment paid.

TABLE II — SECURITIES SOLD DURING THE PAST 3 MONTHS ure to be sold. Furnish the following infor

Nume and Address of Seller	Title of Securities Sold	Date of Sale	A mount of Securities Sold	Gross Proceeds
JDG B V LLC Zernikedreefg Leiden 2333CK Netherlands	Lommon	2/16/ 2018	5,330	18,328.81

REMARKS: Sales made pursuant to a 10b5-1 plan dated 2/16/2018. The proceeds of this sale are intended for private

INSTRUCTIONS: See the definition of "preson" in purgraph (s) of Rule 144. Information is to 1 to the person (for whose secount the securities are to be sold built also as to all ofth in that definition. In addition, information shall be given as to sales by all pers required by paragraph (c) of Rule 144 to be aggregated withsales for the secount this notice. 2/20/2016	her persons included the current and prospective operations of the lesser of the securities to be sold which has not been publicly sons whose sales are disclosed. If such person has adapted a persiter trading plan or given trading instructions to soluty Rule
	The solice shall be signed by the perior for whose account the securities are to be sold. At least one copy of the notice shall be manually signed hay copies not manually signed shall bear typed or printed signatures. mission of facts constitute Federal Criminal Violations (See 18 U.S.C. 1001)

13A 01147 DCT

CI	EC			UNITE	D STATES					г	OMB	orm #	
Mail Pro]	SECUR	ITIES AND EX Washingto	CHANGE	COM	MISSION			E	MB Numb xpires: stimated ours per re	ber: 3235 June 30, 2 average burd sponse	02 en
-	5 2018		UANT TO RU	OF PROPOSE LE 144 UNDE	D SALE	SECU	RITIES A	CT OF 19				USE ONLY	Ö
- 4		asmit for filing 3 copies xecuting a sale directly	of this form conc with a market ma	urrently with ei ker.						1	N71542	109	
	nerapeutics		STREET			N/A	DENT. NO.	STATE	. FILE NO.		() TELEPHO		-
		CK Leiden The Netherlar		151	iheriands	6140	DRESS STREET		CITY	AR.	STATE	HINGER 854894933 ZIP CODE	
JDG BV L	LC (affiliate	of Daniel de Boer)		CEO		Zemi	kødreef 9, 2:		den The N		ands		
	VSTRUCTI	ON: The person filing t	his notice should			n the I	.R.S. Identif	cation Nu	nber and	the S.E	C.C. File	Number.	
3 (a) Title of th Cinus of Securidies To Be Sol		iane and Address of Lack Broker Ti Securifies are to be Offered or Each who is Acquiring the Secu	Market Maker	SEC USE ONLY Broker-Dealer FUe Namber	(c) Number of er Other To Be 5 (See instr.	Units	(d) Aggregate Market Value (See instr. 3(d	er O Oe	er of Shares ther Units tatending instr. 3(s))	Dai (See	testmate test Sale insis. 3()) DAY YR.)	(2) Name of E Securitie Exchang (See instr. 3	
Common	880	mond James & Assoc Carillon Parkway Petersburg, FL 33716			300,000	. 3(6)/	3,900,000	38.7m		11/6/2		NASDAQ	
		, a											
INSTRUCTIO	ONS:			3. (a) Tills of the ci (b) Nume and add	ass of securitie	es to be s	l			-I			
(d) 1ssuer's	S.E.C. file num? address, includi telephone numb			by the most re	ares of other us acept report of a	aits of the statement	e class outstandin t published by the ities are to be sol	g, or if debt se issuer	late within 10 curities the fa	ice smoup	or to the filin it thereof out	ng of this notice Istanding, as sho	ra .
2. (a) Name of (b) Such per stockhol (c) Such per	rson's relationsh Ider, or member o	se account the securities are to be lp to the iaruer (a.g., officer, dire of immediate family of any of the fo including zip code Potential required	ctar, 10%	(g) Nume of such to respond to th	securities exch	hange, if a of in:	any, on which the	accurities are	this form		t -	SEC 1147	08-
2. (4) Name of (b) Such per stockhol (c) Such per	reon's relationsk ider, or member rrson's eddress, i	ip to the insuer (s.g., officer, direc of immediate family of any of the fo including zip code Potential	tor; 10% regoing) persons who are to respond unless TABLE I — ing information w	(g) Nume of such to respond to the the form displa SECURITIE vith respect to th ony part of the p	securities exchange collection ays a current of the securities of	a of int entiy v ESO tion of rice or	any, on which the formation con alid OMB co LD the securitie r other const	securities are stained in a ntrol num	this form ber. Id		t.	SEC 1147	08
2. (s) Name of (b) Such per storkhal (c) Such per 147 DCT Title of the Class	reon's relationsh Ider, or member d reon's eddress, d Data you Acquired	ip to the invest (ag., officer, direc filmediate faulty) of any of the fo- lachuding zip code Potential required Furnish the followi und with respect to the pu Natured Acquisitia	ctor, 10% regoing) persons who are to respond unless TABLE I	(g) Nume of such to respond to the the form displa SECURITIE with respect to th uny part of the p Nume (Ket).	es collection ays a curre STOBI he acquisit	a of lui ently v ESO tion of rice on	any, on which the formation cou alid OMB co LD the securition rother const paired	securities are ntained in : ntrol num es to be so deration t Securites A	this form ber. Id herefor:	are not	Natu	SEC 1147	08
2. (a) Name of (b) Such per stockhol (c) Such per 147 DCT 1140 of	reon's relationsk ider, or member reon's eddress, i galance galo galo galo galo galo galo galo galo	ip to the invore (a.g., officer, dires formadistriantially of any of the for including tip code Potential required Furnish the followi and with respect to the po	ctor, 10% regoing) persons who are to respond unless TABLE I	(g) Nume of such to respond to th the form displa SECURITIE SECURITIE with respect to th tomy part of the p	securities exch as collection ays a curre LS TO BI he acquisit burchass pu of Person from W	a of lui ently v ESO tion of rice on	any, on which the formation cou alid OMB co LD the securition rother const paired	securities are ntained in ntroi num as to be so deration t	this form ber. Id herefor:	are not			08
2. (a) Name of (b) Soch pri- rectable rectable (c) Boch yes (c) Bo	a Despond read a sector of a sector of Acquired 02/21/ 2012 S: If the the the tim consided or if py the not	is to the invest (e.g., officer, dired inmediate faulty of any of the iso isolution at the other Furnish the following and with respect to the po- Network and the following acquired at incorporation ecurities were purchased and fi o of purchase, explain in the restion given. The considerul ymeat was made in instillance or other obligation was dired.	etter, 10% persons who are to respond unless TABLE I — ng information w symeni of all or o dramatics on of company ettipsyment therefor table on a note the table on a note the table of a way to table of a synt table of a s	(b) New of each to respond to th the form disple SECURITIE Visit respect to d my part of the p New issuer issuer was not made in cast crete the failure of set instituted pairs	securities exch as collection ays a curre is TO Bi he acquisit he	a of in: entry v E SO tion of <i>rice of</i> <i>vice of</i>	ay, ay which the	scutture are astained in introl num	this form ber. herefor: of 2 Quired 2	are not Present 2/21/ 0/12	Natu Cash	ure of Payment	08
2. (a) Name of (b) Soch pri- rectable rectable (c) Boch yes (c) Bo	a Despond read a sector of a sector of Acquired 02/21/ 2012 S: If the the the tim consided or if py the not	ip to the invest (e.g., officer, dired) offinanciate funity of any of the following required Furnish the following ind with respect to the parameter Nature eLoquisida Acquired at incorporati ecturities were purchased and fa of purchase, explain in the restingtion. If the consideration e or other obligation was dired TABLE II — formation as to all security	etter, 10% persons who are to respond unless TABLE I — ng information w symeni of all or o dramatics on of company ettipsyment therefor table on a note the table on a note the table of a way to table of a synt table of a s	(b) New of each to respond to th the form disple SECURITIE Visit respect to d my part of the p New issuer issuer was not made in cast crete the failure of set instituted pairs	h at the collection ays a curre 25 TO Bi the acquisit purchase pr af Person from W af Person fr	HE P.	ay, ay which the	seculties are stained in un introl num is to be so deration t souther. 300,000	this form ber.	Det of Pyrment 2/21/ 0/12 	Natu Cash	e sold.	0.8
2. (a) Name of (b) Soch pri- rectable rectable (c) Boch yes (c) Bo	a Despond read a sector of a sector of Acquired 02/21/ 2012 S: If the the the tim consided or if py the not	ip to the invest (e.g., officer, dired inmediate faulty of any of the in- lastuding zip code Furnish the following and with respect to the po- Network and the following acquired at incorporation acquired at incorporation ectivities were purchased and fi e of purchase, explain in the ration given. The considerul yaneat was made in instillance e or other obligation was dired.	etter, 10% persons who are to respond unless TABLE I — ng information w symeni of all or o dramatics on of company ettipsyment therefor table on a note the table on a note the table of a way to table of a synt table of a s	(b) New of each to respond to th the form disple SECURITIE Visit respect to d my part of the p New issuer issuer was not made in cast crete the failure of set instituted pairs	securities exch as collection ays a curre is TO Bi he acquisit he	HE P.	ay, ay which the	scutture are astained in introl num	this form ber. Id herefor: copiesd 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Det of Pyrment 2/21/ 0/12 	Natu Cash	ure of Payment	80
2. (a) Name of (b) Soch pri- rectable rectable (c) Boch yes (c) Bo	a Despond read a sector of a sector of Acquired 02/21/ 2012 S: If the the the tim consided or if py the not	ip to the invest (e.g., officer, dired) offinanciate funity of any of the following required Furnish the following ind with respect to the parameter Nature eLoquisida Acquired at incorporati ecturities were purchased and fa of purchase, explain in the restingtion. If the consideration e or other obligation was dired TABLE II — formation as to all security	etter, 10% persons who are to respond unless TABLE I — ng information w symeni of all or o dramatics on of company ettipsyment therefor table on a note the table on a note the table of a way to table of a synt table of a s	(b) New of each to respond to th the form disple SECURITIE Visit respect to d my part of the p New issuer issuer was not made in cast crete the failure of set instituted pairs	h at the collection ays a curre 25 TO Bi the acquisit purchase pr af Person from W af Person fr	HE P.	ay, ay which the	seculties are stained in un introl num is to be so deration t souther. 300,000	this form ber.	Det of Pyrment 2/21/ 0/12 	Natu Cash	e sold.	
1. (a) Name of (b) Soch pri received rec	a d d d d d d d d d d d d d	ip to the issues (e.g., officer, dired inmediate fung) of any of the issue intervention of the second of the second Furnish the following the second of the second Numer Acquired at incorporal Acquired at incorporal Acquired at incorporal intervention given. If the considerum years were purchased and fi e of purchase, explain in the restriction given. If the considerum years was made in installance is or other obligation was dired TABLE II formation as to all securiti Nume and Address of Selier is paragraph (a) of Rule 144. In the securities are to be sold but the securities are the secur	eter, 194 persons who are to respond unless TABLE I — ing information w symenic of all or or transition on of company all payment therefor table or in a note the is describe the arran is describe the arran is describe the arran strated in a strate the SECURITIE feet of the issuer sco under the strate state of the issuer sco and the issuer sco field is to be given by the state of the issuer sco and the is	(b) Numer of each to respond to the the form displic difference of the second second my part of the p issuer issue	ATTENTIO	HEP. HEP. Solution of first our first ou	ergas for where a series of the security of th	securities are statuated in introl num introl num statuated in introl securities securities what acco Deta of Sele count the sec the does not i statuated for and the form and the form and	this form ber.	are not	Statu Cash are to be ore created and created and creat	e sold e sold m Treesch m Treesch inn in regard in sers public r rategy fuls	
2. (a) Name of (b) Soch pri received r	a Despect (the pressed of the second Acquired 02/21/ 2012 S: If the set the tim consided of following inf following inf NS: of "person" in visce account in addition; in addition; in the second NS:	ip to the issues (e.g., officer, dired inmediate fung) of any of the issue intervention of the second of the second Furnish the following the second of the second Numer Acquired at incorporal Acquired at incorporal Acquired at incorporal intervention given. If the considerum years were purchased and fi e of purchase, explain in the restriction given. If the considerum years was made in installance is or other obligation was dired TABLE II formation as to all securiti Nume and Address of Selier is paragraph (a) of Rule 144. In the securities are to be sold but the securities are the secur	eter, 194 persons who are to respond unless TABLE I — ing information w symenic of all or or transition on of company all payment therefor table or in a note the is describe the arran is describe the arran is describe the arran strated in a strate the SECURITIE feet of the issuer sco under the strate state of the issuer sco and the issuer sco field is to be given by the state of the issuer sco and the is	(b) Numer of each to respond to the the form displic difference of the second second my part of the p issuer issue	ATTENTIO	HEP. HEP. Solution of first our first ou	say, as which has formation coal alid OMB co LD the securiti other const pand event	securities are statuated in introl num introl num statuated in introl securities securities what acco Deta of Sele count the sec the does not i statuated for and the form and the form and	this form ber.	are not	Statu Cash are to be ore created and created and creat	e sold e sold m Treesch m Treesch inn in regard in sers public r rategy fuls	
1. (a) Name of (b) Such pri rectable rectable rectable (c) Buck pri rectable (c) Buck p	a d d d d d d d d d d d d d	ip to the issues (e.g., officer, dired inmediate fung) of any of the issue intervention of the second of the second Furnish the following the second of the second Numer Acquired at incorporal Acquired at incorporal Acquired at incorporal intervention given. If the considerum years were purchased and fi e of purchase, explain in the restriction given. If the considerum years was made in installance is or other obligation was dired TABLE II formation as to all securiti Nume and Address of Selier is paragraph (a) of Rule 144. In the securities are to be sold but the securities are the secur	eter, 194 persons who are to respond unless TABLE I — ing information w symenic of all or or transition on of company all payment therefor table or in a note the is describe the arran is describe the arran is describe the arran strated in a strate the SECURITIE feet of the issuer sco under the strate state of the issuer sco and the issuer sco field is to be given by the state of the issuer sco and the is	(b) Numer of each to respond to the the form displic difference of the second second my part of the p issuer issue	Securities exchange as collection as a current les TO Bi he acquisiti the acquisiti at reasons for we all reasons for w	HE P. s by the HE Solo HE Solo HE P. s by the HE Solo HE SOLO	AST 3 MCC parts for where the part of the securities the securities part of the securities part o	securities are stabled in introl num introl num is to be so deration to South and the south south and the south period to south and the period to south and the period to south and the count the south and the period to south and the south and the south and the count the south and the period to south and the south and the south and the count the south and the south and the south and the south and the south and the south and the south and the south and the south and the south and the south and the south and the south and the south and the south and the south	this form ber.	are not	Cash Cash care to be c	e sold r is be sold r is the sold r	

14A 01147 DCT

Exhibit 3. Examples of Academic Studies offering Empirical Evidence on Rule 10B5-1 Plan and Associated Trades

- Henderson, M.T., Jagolinzer, A., & Muller, M. (2015). Offensive Disclosure: How Voluntary Disclosure Can Increase Returns from Insider Trading. *Georgetown Law Journal*, 103, 1275-1306.
- Jagolinzer, A. (2009). SEC Rule 10b5-1 and Insiders' Strategic Trade. *Management Science*, 55, 224-239.
- Larcker, D., Lynch, B., Quinn, P., Tayan, B., & Taylor, D., (2021). Gaming the System: Three Red Flags of Potential 10b5-1 Abuse" *Stanford Closer Look Series*, 1-17.
- Lee Y-J., (2020). Insiders' Foreknowledge of Earnings Results and Rule 10b5-1 Sales Trades. *Journal of Accounting, Auditing & Finance*. forthcoming.
- Mitts, J., (2020). Insider Trading and Strategic Disclosure. *Columbia Law and Economics Working Paper No.* 636.
- Shon, J., & Veliotis, V., (2013). Insiders' Sales Under 10b5-1 Plans and Meeting or Beating Earnings Expectations. *Management Science* 59, 1988-2002.