

DATE: June 15, 2018

TO: MIAX PEARL Members

FROM: MIAX PEARL Regulatory Department

RE: Market for Underlying Security Used for Openings on MIAX PEARL for Newly Listed Option Classes Effective Monday, June 18, 2018

The following symbols will start trading on MIAX PEARL beginning Monday, June 18, 2018, and, as set forth in MIAX PEARL Rule 503(a)(3), MIAX PEARL shall use the exchange identified below as the “market for the underlying security” for purposes of Openings on the Exchange.

Option Symbol	Security Name	Underlying Symbol	Exchange for Opening
ACET	Aceto Corporation	ACET	NASDAQ
ACGL	Arch Capital Group Ltd.	ACGL	NASDAQ
ADAP	Adaptimmune Therapeutics PLC	ADAP	NASDAQ
ADT	ADT, Inc.	ADT	NYSE
AGRX	Agile Therapeutics, Inc.	AGRX	NASDAQ
AMR	Alta Mesa Resources, Inc.	AMR	NASDAQ
AMRS	Amyris, Inc.	AMRS	NASDAQ
AMX	America Movil SAB de CV	AMX	NYSE
ANAB	AnaptysBio, Inc.	ANAB	NASDAQ
APTI	Apptio, Inc.	APTI	NASDAQ
ARQL	ArQule, Inc.	ARQL	NASDAQ
ASMB	Assembly Biosciences, Inc.	ASMB	NASDAQ
ASND	Ascendis Pharma A/S	ASND	NASDAQ
ASUR	Asure Software, Inc.	ASUR	NASDAQ
AXGN	AxoGen, Inc.	AXGN	NASDAQ
BCEI	Bonanza Creek Energy, Inc.	BCEI	NYSE
BHVN	Biohaven Pharmaceutical Holding Company Ltd.	BHVN	NYSE
BJO	Barclays Bank PLC iPATH B Coffee	BJO	NYSE Arca
BLD	TopBuild Corp.	BLD	NYSE
BOLD	Audentes Therapeutics, Inc.	BOLD	NASDAQ
BPY	Brookfield Property Partners L.P.	BPY	NASDAQ
BSTI	BEST, Inc.	BSTI	NYSE
CALL	magicJack VocalTec Ltd.	CALL	NASDAQ

CARG	CarGurus, Inc.	CARG	NASDAQ
CBAY	CymaBay Therapeutics, Inc.	CBAY	NASDAQ
CBB	Cincinnati Bell, Inc.	CBB	NYSE
CBIO	Catalyst Biosciences, Inc.	CBIO	NASDAQ
CGC	Canopy Growth Corporation	CGC	NYSE
CLSD	Clearside Biomedical, Inc.	CLSD	NASDAQ
CLW	Clearwater Paper Corporation	CLW	NYSE
CNET	Chinnet Online Holdings, Inc.	CNET	NASDAQ
CNHI	CNH Industrial N.V.	CNHI	NYSE
COLL	Collegium Pharmaceutical, Inc.	COLL	NASDAQ
CPLA	Capella Education Company	CPLA	NASDAQ
CRL	Charles River Laboratories International, Inc.	CRL	NYSE
CRON	Cronos Group, Inc.	CRON	NASDAQ
CRSP	CRISPR Therapeutics AG	CRSP	NASDAQ
CTG	Computer Task Group Incorporated	CTG	NASDAQ
CWH	Camping World Holdings, Inc.	CWH	NYSE
CYS	CYS Investments, Inc.	CYS	NYSE
DLPH	Delphi Technologies PLC	DLPH	NYSE
DMLP	Dorchester Minerals, L.P.	DMLP	NASDAQ
DQ	Daqo New Energy Corp.	DQ	NYSE
EGOV	NIC, Inc.	EGOV	NASDAQ
ENTA	Enanta Pharmaceuticals, Inc.	ENTA	NASDAQ
ESIO	Electro Scientific Industries, Inc.	ESIO	NASDAQ
FATE	Fate Therapeutics, Inc.	FATE	NASDAQ
FINL	The Finish Line, Inc.	FINL	NASDAQ
FNG	AdvisorShares New Tech and Media ETF	FNG	NYSE Arca
FWONK	Liberty Media Corporation Series C Liberty Formula One	FWONK	NASDAQ
GDEN	Golden Entertainment, Inc.	GDEN	NASDAQ
GDS	GDS Holdings Limited	GDS	NASDAQ
GGP	GGP, Inc.	GGP	NYSE
GSUM	Gridsum Holding, Inc.	GSUM	NASDAQ
GTES	Gates Industrial Corporation PLC	GTES	NYSE
HCC	Warrior Met Coal, Inc.	HCC	NYSE
HGV	Hilton Grand Vacations, Inc.	HGV	NYSE
HIVE	Aerohive Networks, Inc.	HIVE	NYSE
HMNY	Helios and Matheson Analytics, Inc.	HMNY	NASDAQ
IBKC	IBERIABANK Corporation	IBKC	NASDAQ

ICHR	Ichor Holdings Ltd.	ICHR	NASDAQ
IO	ION Geophysical Corporation	IO	NYSE
IQ	iQIYI, Inc.	IQ	NASDAQ
ITA	iShares US Aerospace and Defense ETF	ITA	BATS
JAG	Jagged Peak Energy, Inc.	JAG	NYSE
JILL	J.Jill, Inc.	JILL	NYSE
JNCE	Jounce Therapeutics, Inc.	JNCE	NASDAQ
KANG	iKang Healthcare Group, Inc.	KANG	NASDAQ
KIRK	Kirkland's, Inc.	KIRK	NASDAQ
KRNT	Kornit Digital Ltd.	KRNT	NASDAQ
LADR	Ladder Capital Corp	LADR	NYSE
LIT	Global X Lithium & Battery ETF	LIT	NYSE Arca
LNT	Alliant Energy Corp	LNT	NYSE
LSXMA	The Liberty SiriusXM Group	LSXMA	NASDAQ
MARK	Remark Holdings, Inc.	MARK	NASDAQ
MDR	McDermott International, Inc.	MDR	NYSE
MFGP	Micro Focus International PLC	MFGP	NYSE
MJ	ETFMG Alternative Harvest ETF	MJ	NYSE Arca
MRNS	Marinus Pharmaceuticals, Inc.	MRNS	NASDAQ
NATI	National Instruments Corporation	NATI	NASDAQ
NBRV	Nabriva Therapeutics PLC	NBRV	NASDAQ
NDSN	Nordson Corporation	NDSN	NASDAQ
NSH	NuStar GP Holdings, LLC	NSH	NYSE
OMI	Owens & Minor, Inc.	OMI	NYSE
ORIG	Ocean RIG UDW, Inc.	ORIG	NASDAQ
PAGS	PagSeguro Digital Ltd.	PAGS	NYSE
PCH	PotlatchDeltic Corporation	PCH	NASDAQ
PHH	PHH Corporation	PHH	NYSE
PNFP	Pinnacle Financial Partners, Inc.	PNFP	NASDAQ
PTI	Proteostasis Therapeutics, Inc.	PTI	NASDAQ
QCP	Quality Care Properties, Inc.	QCP	NYSE
QD	Qudian, Inc.	QD	NYSE
QNST	Quinstreet, Inc.	QNST	NASDAQ
RESN	Resonant, Inc.	RESN	NASDAQ
RRR	Red Rock Resorts, Inc.	RRR	NASDAQ
SAIL	SailPoint Technologies Holdings, Inc.	SAIL	NYSE
SEIC	SEI Investments Co.	SEIC	NASDAQ
SEND	SendGrid, Inc.	SEND	NYSE
SESN	Sesen Bio, Inc.	SESN	NASDAQ

SFIX	Stitch Fix, Inc.	SFIX	NASDAQ
SND	Smart Sand, Inc.	SND	NASDAQ
SOGO	Sogou, Inc.	SOGO	NYSE
SRI	Stoneridge, Inc.	SRI	NYSE
SSC	Seven Stars Cloud Group, Inc.	SSC	NASDAQ
SWCH	Switch, Inc.	SWCH	NYSE
TECS	Direxion Daily Technology Bear 3X ETF	TECS	NYSE Arca
TERP	TerraForm Power, Inc.	TERP	NASDAQ
TNDM	Tandem Diabetes Care, Inc.	TNDM	NASDAQ
TRNC	tronc, Inc.	TRNC	NASDAQ
TTEK	Tetra Tech, Inc.	TTEK	NASDAQ
USD	ProShares Ultra Semiconductors	USD	NYSE Arca
USFD	US Foods Holding Corp.	USFD	NYSE
VICR	Vicor Corporation	VICR	NASDAQ
VKTX	Viking Therapeutics, Inc.	VKTX	NASDAQ
VNTR	Venator Materials PLC	VNTR	NYSE
VOE	Vanguard Mid-Cap Value ETF	VOE	NYSE Arca
VRAY	ViewRay, Inc.	VRAY	NASDAQ
VRNS	Varonis Systems, Inc.	VRNS	NASDAQ
WRD	Wildhorse Resource Development Corporation	WRD	NYSE
XL	XL Group Ltd.	XL	NYSE
XOG	Extraction Oil & Gas, Inc.	XOG	NASDAQ
XRM	Xerium Technologies, Inc.	XRM	NYSE
YEXT	Yext, Inc.	YEXT	NYSE

Please direct questions to the Regulatory Department at Regulatory@MIAXOptions.com or (609) 897-7309.