

New York, November 13, 2018

MSCI US Equity Indexes

The following are changes in constituents for the MSCI US Equity Indexes which will take place as of the close of November 30, 2018.

SUMMARY OF THE CHANGES INCLUDED IN THIS ANNOUNCEMENT:

Index	Nb of Securities Added	Nb of Securities Deleted
MSCI US PRIME MARKET 750 INDEX	16	11
MSCI US SMALL CAP 1750 INDEX	79	58
MSCI US INVESTABLE MARKET 2500 INDEX	69	43
MSCI US MICRO CAP INDEX	40	33

MSCI US PRIME MARKET 750 INDEX

Additions

KKR & CO  
SAREPTA THERAPEUTICS  
MOLINA HEALTHCARE  
PAYCOM SOFTWARE  
CREDIT ACCEPTANCE CORP  
EXACT SCIENCES CORP  
WPX ENERGY  
ENCOMPASS HEALTH CORP  
GUIDEWIRE SOFTWARE  
BOOZ ALLEN HAMILTON A  
ASPEN TECHNOLOGY  
TWILIO A  
BIO-TECHNE CORP  
MADISON SQUARE A (NEW)  
NEW RESIDENTIAL INV  
LINCOLN ELECTRIC HLDGS

Deletions

CUBESMART  
WR GRACE & CO  
VALVOLINE  
FNB CORP  
AUTONATION  
LIBERTY LATIN AMERICA A  
LIBERTY LATIN AMERICA C  
ADIANT  
MICHAELS COS  
PREMIER A  
VIRTU FINANCIAL A

MSCI US SMALL CAP 1750 INDEX

Additions

CUBESMART  
CERIDIAN HCM HOLDING  
GRAFTECH INTL  
ZSCALER  
WR GRACE & CO  
VALVOLINE  
FNB CORP  
AMERICOLD REALTY  
AUTONATION  
LIBERTY LATIN AMERICA A  
LIBERTY LATIN AMERICA C  
BJS WHOLESALE CLUB HLDGS  
ADIANT  
MICHAELS COS  
PREMIER A  
VIRTU FINANCIAL A  
MIMECAST  
TANDEM DIABETES CARE  
ARES MANAGEMENT  
AVAYA HOLDINGS  
ENDOCYTE  
COLUMBIA FINANCIAL  
INDUSTRIAL LOGIS PPTYS  
BRIGHTVIEW HOLDINGS  
FTS INTERNATIONAL  
SKYLINE CHAMPION CORP  
TRICIDA  
SOLID BIOSCIENCES INC  
CASA SYSTEMS  
NORTHERN OIL AND GAS  
VIKING THERAPEUTICS  
COMSCORE

Deletions

SAREPTA THERAPEUTICS  
MOLINA HEALTHCARE  
PAYCOM SOFTWARE  
CREDIT ACCEPTANCE CORP  
EXACT SCIENCES CORP  
WPX ENERGY  
ENCOMPASS HEALTH CORP  
GUIDEWIRE SOFTWARE  
BOOZ ALLEN HAMILTON A  
ASPEN TECHNOLOGY  
TWILIO A  
BIO-TECHNE CORP  
MADISON SQUARE A (NEW)  
NEW RESIDENTIAL INV  
LINCOLN ELECTRIC HLDGS  
ARATANA THERAPEUTICS  
GLOBAL EAGLE ENTMT  
CORVUS PHARMACEUTICALS  
SPORTSMANS WAREHOUSE  
RUBICON PROJECT  
AAC HOLDINGS INC  
MERSANA THERAPEUTICS  
MELINTA THERAPEUTICS  
CLEARSIDE BIOMEDICAL  
PULSE BIOSCIENCES  
LIBBEY  
VERITONE  
MDC PARTNERS A  
LANNETT CO  
PIER 1 IMPORTS  
ENDOLOGIX  
XBIOTECH

PLAYAGS  
 NINE ENERGY SERVICE  
 CAREDX  
 INVITAE  
 INSPIRE MEDICAL SYSTEMS  
 APTINYX  
 COHU  
 CBTX  
 ORIGIN BANCORP  
 CONTROL4 CORP  
 HOMOLOGY MEDICINES  
 AVROBIO  
 NLIGHT  
 ESSENTIAL PROP RLTY TR  
 SCHOLAR ROCK HOLDING  
 CARE.COM  
 ARCUS BIOSCIENCES  
 ANTARES PHARMA  
 EQUITY BANCSHARES  
 KEZAR LIFE SCIENCES  
 RIGEL PHARMACEUTICALS  
 AKEBIA THERAPEUTICS  
 FORTY SEVEN  
 NVE CORP  
 DUCOMMUN  
 HINGHAM INSTITUTION  
 NEURONETICS  
 SHOTSPOTTER  
 COREENERGY INFRASTRUCTURE  
 XERIS PHARMACEUTICALS  
 ELOXX PHARMACEUTICALS  
 OLD SECOND BANCORP  
 CARDLYTICS  
 ORTHOPEDIATRICS  
 GENERAL FINANCE CORP  
 CNB FINANCIAL CORP  
 SIERRA BANCORP  
 REPUBLIC FIRST BANCORP  
 MARKER THERAPEUTICS  
 FARMERS NATL BANC CORP  
 BAR HARBOR BANKSHARES  
 INNOVATIVE INDL PPTYS A  
 JERNIGAN CAPITAL  
 CAPITAL CITY BANK GROUP  
 HOOKER FURNITURE CORP  
 SIMULATIONS PLUS  
 CONCERT PHARMACEUTICALS

SMART SAND  
 ORGANOVO HOLDINGS  
 FLOTEK INDUSTRIES  
 FREDs  
 FRANCESCAS HOLDINGS CORP  
 EASTMAN KODAK  
 SEQUENTIAL BRANDS GRP  
 ONCOMED PHARMACEUTICALS  
 NEWLINK GENETICS CORP  
 OTONOMY  
 FTD COMPANIES  
 ACETO CORP  
 CELLDEx THERAPEUTICS  
 CONFORMIS  
 MERRIMACK PHARMACEUTICAL  
 ADVAXIS  
 ARAVIVE  
 ROADRUNNER TRANSPORT SYS  
 JONES ENERGY A  
 ICONIX BRAND GROUP  
 EMC INSURANCE GROUP  
 ENTERPRISE BANCORP  
 FBL FINANCIAL GROUP A  
 MITEL NETWORKS CORP  
 SPEEDWAY MOTORSPORTS  
 STATE AUTO FINANCIAL

#### MSCI US INVESTABLE MARKET 2500 INDEX

##### Additions

KKR & CO  
 CERIDIAN HCM HOLDING  
 GRAFTECH INTL  
 ZSCALER  
 AMERICOLD REALTY  
 BJS WHOLESALE CLUB HLDGS  
 MIMECAST  
 TANDEM DIABETES CARE  
 ARES MANAGEMENT  
 AVAYA HOLDINGS  
 ENDOCYTE  
 COLUMBIA FINANCIAL  
 INDUSTRIAL LOGIS PPTYS  
 BRIGHTVIEW HOLDINGS  
 FTS INTERNATIONAL  
 SKYLINE CHAMPION CORP  
 TRICIDA  
 SOLID BIOSCIENCES INC  
 CASA SYSTEMS  
 NORTHERN OIL AND GAS  
 VIKING THERAPEUTICS  
 COMSCORE  
 PLAYAGS  
 NINE ENERGY SERVICE

##### Deletions

ARATANA THERAPEUTICS  
 GLOBAL EAGLE ENTMT  
 CORVUS PHARMACEUTICALS  
 SPORTSMANS WAREHOUSE  
 RUBICON PROJECT  
 AAC HOLDINGS INC  
 MERSANA THERAPEUTICS  
 MELINTA THERAPEUTICS  
 CLEARSIDE BIOMEDICAL  
 PULSE BIOSCIENCES  
 LIBBEY  
 VERITONE  
 MDC PARTNERS A  
 LANNETT CO  
 PIER 1 IMPORTS  
 ENDOLOGIX  
 XBIOTECH  
 SMART SAND  
 ORGANOVO HOLDINGS  
 FLOTEK INDUSTRIES  
 FREDs  
 FRANCESCAS HOLDINGS CORP  
 EASTMAN KODAK  
 SEQUENTIAL BRANDS GRP

CAREDX  
 INVITAE  
 INSPIRE MEDICAL SYSTEMS  
 APTINYX  
 COHU  
 CBTX  
 ORIGIN BANCORP  
 CONTROL4 CORP  
 HOMOLOGY MEDICINES  
 AVROBIO  
 NLIGHT  
 ESSENTIAL PROP RLTY TR  
 SCHOLAR ROCK HOLDING  
 CARE.COM  
 ARCUS BIOSCIENCES  
 ANTARES PHARMA  
 EQUITY BANCSHARES  
 KEZAR LIFE SCIENCES  
 RIGEL PHARMACEUTICALS  
 AKEBIA THERAPEUTICS  
 FORTY SEVEN  
 NVE CORP  
 DUCOMMUN  
 HINGHAM INSTITUTION  
 NEURONETICS  
 SHOTSPOTTER  
 COREENERGY INFRASTRUCTURE  
 XERIS PHARMACEUTICALS  
 ELOXX PHARMACEUTICALS  
 OLD SECOND BANCORP  
 CARDLYTICS  
 ORTHOPEDIATRICS  
 GENERAL FINANCE CORP  
 CNB FINANCIAL CORP  
 SIERRA BANCORP  
 REPUBLIC FIRST BANCORP  
 MARKER THERAPEUTICS  
 FARMERS NATL BANC CORP  
 BAR HARBOR BANKSHARES  
 INNOVATIVE INDL PTYS A  
 JERNIGAN CAPITAL  
 CAPITAL CITY BANK GROUP  
 HOOKER FURNITURE CORP  
 SIMULATIONS PLUS  
 CONCERT PHARMACEUTICALS

#### MSCI US MICRO CAP INDEX

##### Additions

MAGENTA THERAPEUTICS  
 ARATANA THERAPEUTICS  
 GLOBAL EAGLE ENTMT  
 CORVUS PHARMACEUTICALS  
 SPORTSMANS WAREHOUSE  
 RUBICON PROJECT  
 AAC HOLDINGS INC  
 MERSANA THERAPEUTICS  
 MELINTA THERAPEUTICS  
 CLEARSIDE BIOMEDICAL  
 PULSE BIOSCIENCES  
 LIBBEY  
 VERITONE  
 MDC PARTNERS A  
 LANNETT CO  
 PIER 1 IMPORTS  
 ENDOLOGIX  
 XBIOTECH  
 SMART SAND  
 ORGANOVO HOLDINGS  
 FLOTEK INDUSTRIES  
 FRED'S  
 FRANCESCAS HOLDINGS CORP  
 EASTMAN KODAK  
 SEQUENTIAL BRANDS GRP  
 ONCOMED PHARMACEUTICALS

ONCOMED PHARMACEUTICALS  
 NEWLINK GENETICS CORP  
 OTONOMY  
 FTD COMPANIES  
 ACETO CORP  
 CELLDEX THERAPEUTICS  
 CONFORMIS  
 MERRIMACK PHARMACEUTICAL  
 ADVAXIS  
 ARAVIVE  
 ROADRUNNER TRANSPORT SYS  
 JONES ENERGY A  
 ICONIX BRAND GROUP  
 EMC INSURANCE GROUP  
 ENTERPRISE BANCORP  
 FBL FINANCIAL GROUP A  
 MITEL NETWORKS CORP  
 SPEEDWAY MOTORSPORTS  
 STATE AUTO FINANCIAL

##### Deletions

TANDEM DIABETES CARE  
 ENDOCYTE  
 SKYLINE CHAMPION CORP  
 NORTHERN OIL AND GAS  
 MALIBU BOATS A  
 INVITAE  
 COHU  
 CONTROL4 CORP  
 CARE.COM  
 ANTARES PHARMA  
 RIGEL PHARMACEUTICALS  
 AKEBIA THERAPEUTICS  
 NVE CORP  
 DUCOMMUN  
 HINGHAM INSTITUTION  
 COREENERGY INFRASTRUCTURE  
 OLD SECOND BANCORP  
 CENTURY BANCORP A  
 CNB FINANCIAL CORP  
 SIERRA BANCORP  
 REPUBLIC FIRST BANCORP  
 FARMERS NATL BANC CORP  
 BAR HARBOR BANKSHARES  
 CAPITAL CITY BANK GROUP  
 HOOKER FURNITURE CORP  
 CONCERT PHARMACEUTICALS

NEWLINK GENETICS CORP  
OTONOMY  
FTD COMPANIES  
ACETO CORP  
CELLDEX THERAPEUTICS  
CONFORMIS  
MERRIMACK PHARMACEUTICAL  
ADVAXIS  
ARAVIVE  
ROADRUNNER TRANSPORT SYS  
JONES ENERGY A  
ICONIX BRAND GROUP  
ENTERPRISE BANCORP  
GREENPRO CAPITAL

CHEROKEE  
DETERMINE  
YUMA ENERGY  
CDTI ADVANCED MATERIALS  
CYTORI THERAPEUTICS  
XPRESSPA GROUP  
COMSTOCK RESOURCES

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