



Reconstitution

Russell 3000® Index - Deletions

Company	Symbol	Industry
23ANDME HOLDING CO	ME	Health Care
2U INC	TWOU	Consumer Discretionary
5E ADVANCED MATERIALS IN	FEAM	Basic Materials
AADI BIOSCIENCE INC	AADI	Health Care
ACLARIS THERAPEUTICS	ACRS	Health Care
ADICET BIO INC	ACET	Health Care
AKOUSTIS TECHNOLOGIES	AKTS	Telecommunications
ALLAKOS INC	ALLK	Health Care
ALLBIRDS	BIRD	Consumer Discretionary
ALLOVIR	ALVR	Health Care
AMERICAN WELL	AMWL	Health Care
AMLYX PHARMACEUTICALS	AMLX	Health Care
ARTESIAN RESOURCES CORP	ARTNA	Utilities
ASSERTIO HOLDINGS INC	ASRT	Health Care
ATARA BIOTHERAPEUTICS	ATRA	Health Care
ATOMERA LIMITED	ATOM	Technology
BABCOCK & WILCOX ENT	BW	Industrials
BAKKT HOLDINGS INC (A)	BKKT	Financials
BENSON HILL INC	BHIL	Consumer Staples
BEYOND AIR INC	XAIR	Health Care
BIG 5 SPORTING GOODS	BGFV	Consumer Discretionary
BIG LOTS INC	BIG	Consumer Discretionary
BIOATLA	BCAB	Health Care
BIOVIE	BIVI	Health Care
BIOXCEL THERAPEUTICS	BTAI	Health Care
BLUE RIDGE BANKSHARES	BRBS	Financials
BOWLERO CORP (A)	BOWL	Consumer Discretionary
BRIGHT GREEN	BGXX	Health Care
BRIGHTCOVE INC	BCOV	Technology
BUTTERFLY NETWORK IN (A)	BFLY	Health Care
C & F FINANCIAL CORP	CFFI	Financials
CAMBIUM NETWORKS CORP	CMBM	Telecommunications
CARA THERAPEUTICS INC	CARA	Health Care
CAREMAX INC (A)	CMAX	Health Care
CARISMA THERAPEUTICS INC	CARM	Health Care
CARPARTS COM	PRTS	Consumer Discretionary
CATO CORP	CATO	Consumer Discretionary
CENTURY CASINOS INC	CNTY	Consumer Discretionary
CHILDRENS PLACE INC	PLCE	Consumer Discretionary
CITIUS PHARMACEUTICALS	CTXR	Health Care
CLEARPOINT NEURO INC	CLPT	Health Care
COMTECH TELECOMM	CMTL	Telecommunications
CONTEXTLOGIC INC	LOGC	Consumer Discretionary
CORECARD CORP	CCRD	Technology
CUE BIOPHARMA INC	CUE	Health Care
CUTERA INC	CUTR	Health Care
CXAPP INC	CXAI	Technology
DANIMER SCI INC (A)	DNMR	Industrials
DESKTOP METAL INC (A)	DM	Industrials



Reconstitution

Russell 3000® Index - Deletions

Company	Symbol	Industry
DHI GROUP INC	DHX	Industrials
DOUGLAS ELLIMAN INC	DOUG	Real Estate
DRAGONFLY ENERGY (A)	DFLI	Industrials
DULUTH HOLDINGS INC	DLTH	Consumer Discretionary
DZS INC	DZSI	Telecommunications
EAGLE PHARMACEUTICALS	EGRX	Health Care
EHEALTH INC	EHTH	Financials
EMERGENT BIOSOLUTIONS	EBS	Health Care
ENVELA	ELA	Consumer Discretionary
EOS ENERGY (A)	EOSE	Industrials
ESS TECH INC (A)	GWH	Energy
EVANS BANCORP INC	EVBN	Financials
EXPENSIFY	EXFY	Technology
EYENOVIA INC	EYEN	Health Care
FIBROGEN INC	FGEN	Health Care
FINANCE OF AMERICAS COMP	FOA	Financials
FIRST CMNTY CORP SC	FCCO	Financials
FOSSIL GROUP INC	FOSL	Consumer Discretionary
FTC SOLAR	FTCI	Energy
GENELUX CORP	GNLX	Health Care
GEVO INC	GEVO	Energy
GINKGO BIOWORKS INC (A)	DNA	Health Care
GLATFELTER CORPORATION	GLT	Basic Materials
GRITSTONE BIO INC	GRTS	Health Care
GUESS INC	GES	Consumer Discretionary
ICON PLC	ICLR	Health Care
IKENA ONCOLOGY	IKNA	Health Care
IMMUNEERING	IMRX	Health Care
INNOVATE CORP	VATE	Industrials
INTEST CORP	INTT	Technology
INTEVAC INC	IVAC	Technology
KARYOPHARM THERAPEUTICS	KPTI	Health Care
KEZAR LIFE SCIENCES	KZR	Health Care
KLX ENERGY SERVICES	KLXE	Energy
KORU MEDICAL SYSTEMS INC	KRMD	Health Care
KVH INDUSTRIES INC	KVHI	Telecommunications
LAZYDAYS HOLDINGS INC	GORV	Consumer Discretionary
LI CYCLE HOLDINGS (A)	LICY	Utilities
LIVEPERSON INC	LPSN	Technology
LOOP MEDIA INC	LPTV	Consumer Discretionary
LUNA INNOVATIONS INC	LUNA	Industrials
MAINSTREET BANCSHARES	MNSB	Financials
MARINUS PHARMACEUTICALS	MRNS	Health Care
MAXEON SOLAR TECHNOLOGIE	MAXN	Energy
MICROVAST HOLDINGS INC	MVST	Industrials
MULTIPLAN CORP (A)	MPLN	Health Care
MURAL ONCOLOGY	MURA	Health Care
NIKOLA CORPORATION	NKLA	Industrials
NIOCORP DEVELOPMENTS LTD	NB	Basic Materials



Reconstitution

Russell 3000® Index - Deletions

Company	Symbol	Industry
NOODLES & COMPANY	NDLS	Consumer Discretionary
NUVECTIS PHARMA	NVCT	Health Care
OCEAN BIOMEDICAL INC	OCEA	Health Care
OFFICE PPTY INCOME TRUST	OPI	Real Estate
OMEGA THERAPEUTICS	OMGA	Health Care
OPTINOSE INC	OPTN	Health Care
ORIGIN MATERIALS INC (A)	ORGN	Basic Materials
OUTSET MEDICAL	OM	Health Care
P3 HEALTH PARTNERS (A)	PIII	Health Care
PDS BIOTECHNOLOGY CORP	PDSB	Health Care
PENNS WOODS BANCORP INC	PWOD	Financials
PETMED EXPRESS INC	PETS	Consumer Staples
PMV PHARMACEUTICALS	PMVP	Health Care
PRESTO AUTOMATIONS INC	PRST	Technology
PROTALIX BIO THERA	PLX	Health Care
RALLYBIO	RLYB	Health Care
RED ROBIN GOURMET BURGER	RRGB	Consumer Discretionary
RENEO PHARMACEUTICALS	RPHM	Health Care
RENT THE RUNWAY	RENT	Consumer Discretionary
SAGIMET BIOSCIENCES INC	SGMT	Health Care
SANGAMO THERAPEUTICS INC	SGMO	Health Care
SECURITY NATL FINL CORP	SNFCA	Financials
SEER	SEER	Health Care
SERES THERAPEUTICS INC	MCRB	Health Care
SHARECARE INC	SHCR	Health Care
SKILLSOFT CORP (A)	SKIL	Industrials
SKYX PLATFORMS CORP	SKYX	Industrials
SPORTSMANS WHSE HLDGS	SPWH	Consumer Discretionary
TELA BIO	TELA	Health Care
TELLURIAN INC	TELL	Energy
TRINSEO PLC	TSE	Industrials
TRUBRIDGE INC	TBRG	Health Care
TURNSTONE BIOLOGICS CORP	TSBX	Health Care
URBAN ONE	UONE	Consumer Discretionary
URBAN ONE INC	UONEK	Consumer Discretionary
VELO3D INC (A)	VLD	Industrials
VERITONE INC	VERI	Technology
VERTEX ENERGY INC	VTNR	Utilities
VICARIOUS SURGICAL (A)	RBOT	Health Care
VIGIL NEUROSCIENCE	VIGL	Health Care
VOR BIOPHARMA	VOR	Health Care
VOXX INTERNATIONAL CORP	VOXX	Consumer Discretionary
VUZIX CORP	VUZI	Consumer Discretionary
WORKHORSE GROUP INC	WKHS	Industrials
WW INTERNATIONAL INC	WW	Consumer Discretionary
ZEVIA PBC	ZVIA	Consumer Staples



Reconstitution

For more information about our indexes, please visit lseg.com/ftse-russell.

© 2024 London Stock Exchange Group plc and its applicable group undertakings ("LSEG"). LSEG includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) FTSE Fixed Income Europe Limited ("FTSE FI Europe"), (5) FTSE Fixed Income LLC ("FTSE FI"), (6) FTSE (Beijing) Consulting Limited ("WOFE") (7) Refinitiv Benchmark Services (UK) Limited ("RBSL"), (8) Refinitiv Limited ("RL") and (9) Beyond Ratings S.A.S. ("BR"). All rights reserved.

FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL, and BR. "FTSE®" "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "Refinitiv", "Beyond Ratings®", "WMRTM", "FRTM" and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of LSEG or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL or BR. FTSE International Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator. Refinitiv Benchmark Services (UK) Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator.

All information is provided for information purposes only. All information and data contained in this publication is obtained by LSEG, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical inaccuracy as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or LSEG Products, or of results to be obtained from the use of LSEG products, including but not limited to indices, rates, data and analytics, or the fitness or suitability of the LSEG products for any particular purpose to which they might be put. The user of the information assumes the entire risk of any use it may make or permit to be made of the information.

No responsibility or liability can be accepted by any member of LSEG nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any inaccuracy (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of LSEG is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

No member of LSEG nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indices and rates cannot be invested in directly. Inclusion of an asset in an index or rate is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index or rate containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index and/or rate returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index or rate inception date is back-tested performance. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index or rate was officially launched. However, back-tested data may reflect the application of the index or rate methodology with the benefit of hindsight, and the historic calculations of an index or rate may change from month to month based on revisions to the underlying economic data used in the calculation of the index or rate.

This document may contain forward-looking assessments. These are based upon a number of assumptions concerning future conditions that ultimately may prove to be inaccurate. Such forward-looking assessments are subject to risks and uncertainties and may be affected by various factors that may cause actual results to differ materially. No member of LSEG nor their licensors assume any duty to and do not undertake to update forward-looking assessments.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of LSEG. Use and distribution of LSEG data requires a licence from LSEG and/or its licensors.