

Reconstitution

Russell 3000® Index - Additions

Company	Symbol	Industry
374WATER INC	SCWO	Energy
89BIO	ETNB	Health Care
ACACIA RESEARCH CORP	ACTG	Industrials
ACCURAY INC	ARAY	Health Care
ACTINIUM PHARMACEUTICALS	ATNM	Health Care
AEHR TEST SYSTEMS	AEHR	Technology
ALDEYRA THERAPEUTICS INC	ALDX	Health Care
ALLAKOS INC	ALLK	Health Care
ALPINE INCOME PROPERTY T	PINE	Real Estate
ALTI GLOBAL INC	ALTI	Financials
ALTIMMUNE INC	ALT	Health Care
AMES NATL CORP	ATLO	Financials
AMPRIUS TECHNOLOGIES	AMPX	Industrials
ANNEXON	ANNX	Health Care
ARDELYX INC	ARDX	Health Care
ARS PHARMACEUTICALS INC	SPRY	Health Care
ASSERTIO HOLDINGS INC	ASRT	Health Care
AST SPACEMOBILE INC (A)	ASTS	Telecommunications
ASTRIA THERAPEUTICS INC	ATXS	Health Care
ASURE SOFTWARE INC	ASUR	Technology
ATLAS ENERGY SOLUTIONS I	AESI	Energy
AURORA INNOVATION (A)	AUR	Industrials
AVITA MEDICAL INC	RCEL	Health Care
BANK7 CORP	BSVN	Financials
BEL FUSE INC	BELFB	Telecommunications
BERKE & HERBERT BANK & T	BHRB	Financials
BEYOND AIR INC	XAIR	Health Care
BIGBEAR AI HOLDINGS CORP	BBAI	Technology
BIOATLA	BCAB	Health Care
BIOMEA FUSION	BMEA	Health Care
BIOVIE	BIVI	Health Care
BIT DIGITAL INC	BTBT	Technology
BLACKSKY TECHNOLOGY (A)	BKSY	Industrials
BOWMAN CONSULTING GROUP	BWMN	Industrials
BRAZE	BRZE	Technology
BRIGHT GREEN	BGXX	Health Care
C & F FINANCIAL CORP	CFFI	Financials
CABALETTA BIO	CABA	Health Care
CADIZ INC	CDZI	Utilities
CALEDONIA MINING CORP	CMCL	Basic Materials
CARISMA THERAPEUTICS INC	CARM	Health Care
CARROLS RESTAURANT GRP	TAST	Consumer Discretionary
CECO ENVIRONMENTAL CORP	CECO	Industrials
CELCUITY	CELC	Health Care
CENTRAL VALLEY CMNTY	CVCY	Financials
CHEMUNG FINL CORP	CHMG	Financials
CHOICEONE FINANCIAL SERV	COFS	Financials
CITIUS PHARMACEUTICALS	CTXR	Health Care
CITIZENS FINANCIAL S	CZFS	Financials

Reconstitution

Russell 3000® Index - Additions

Company	Symbol	Industry
CLEARPOINT NEURO INC	CLPT	Health Care
CLIMB GLOBAL SOLUTIONS	CLMB	Consumer Discretionary
CNH INDUSTRIAL N.V.	CNHI	Industrials
CODORUS VY BANCORP INC	CVLY	Financials
COHEN AND COMPANY	COHN	Financials
COMMERCIAL VEH GROUP INC	CVGI	Industrials
COMMUNITY FINL CORP MD	TCFC	Financials
COMPASS THERAPEUTICS	CMPX	Health Care
CONSOLIDATED WATER CO	CWCO	Utilities
CONTANGO ORE INC	CTGO	Basic Materials
COOPER STD HLDGS INC	CPS	Consumer Discretionary
CORE LABORATORIES	CLB	Energy
CORE MOLDING TECHN	CMT	Industrials
CORECARD CORP	CCRD	Technology
CORMEDIX INC	CRMD	Health Care
COUPANG	CPNG	Consumer Discretionary
CPI CARD GROUP INC	PMTS	Industrials
CRICUT	CRCT	Consumer Discretionary
CUE BIOPHARMA INC	CUE	Health Care
CVRX	CVRX	Health Care
CXAPP INC	CXAI	Technology
CYMABAY THERAPEUTICS INC	CBAY	Health Care
DAKTRONICS INC	DAKT	Technology
DISC MEDICINE INC	IRON	Health Care
DOLE PLC	DOLE	Consumer Staples
DRAGONFLY ENERGY (A)	DFLI	Industrials
EMERALD HOLDING INC	EEX	Consumer Discretionary
ENCORE ENERGY SYSTEM	EU	Industrials
ENLIVEN THERAPEUTICS INC	ELVN	Health Care
ENTRADA THERAPEUTICS	TRDA	Health Care
ENVELA	ELA	Consumer Discretionary
EOS ENERGY (A)	EOSE	Industrials
ESCALADE INC	ESCA	Consumer Discretionary
ESSA BANCORP INC	ESSA	Financials
EVANS BANCORP INC	EVBN	Financials
EVE HOLDING INC (A)	EVEX	Industrials
EVI INDUSTRIES	EVI	Industrials
EVOLUTION PETROLEUM CORP	EPM	Energy
EXPENSIFY	EXFY	Technology
EYENOVIA INC	EYEN	Health Care
FENNEC PHARMACEUTICALS	FENC	Health Care
FERGUSON PLC	FERG	Industrials
FIDELITY D&D BANCORP INC	FDBC	Financials
FIESTA RESTAURANT GROUP	FRGI	Consumer Discretionary
FIRST CMNTY CORP SC	FCCO	Financials
FISCAL NOTE HOLDINGS (A)	NOTE	Technology
FORAFRIC GLOBAL PLC	AFRI	Consumer Staples
FORGE GLOBAL HOLDING (A)	FRGE	Financials
FORUM ENERGY TECH	FET	Energy

Reconstitution

Russell 3000® Index - Additions

Company	Symbol	Industry
FRESHWORKS	FRSH	Technology
FS BANCORP INC	FSBW	Financials
FTAI AVIATION	FTAI	Industrials
FTAI INFRASTRUCTURE INC	FIP	Industrials
GENCOR INDUSTRIES INC	GENC	Industrials
GENELUX CORP	GNLX	Health Care
GENIE ENERGY LTD	GNE	Utilities
GITLAB	GTLB	Technology
GLOBAL BUSINESS TRAVEL	GBTG	Industrials
GOHEALTH	GOCO	Financials
GRANITE RIDGE RESOUR (A)	GRNT	Energy
GRAPHITE BIO	GRPH	Health Care
GRINDR INC	GRND	Technology
GRITSTONE BIO INC	GRTS	Health Care
HALLADOR ENERGY CO	HNRG	Energy
HARROW HEALTH INC.	HROW	Health Care
HARVARD BIOSCIENCE INC	HBIO	Health Care
HASHICORP	HCP	Technology
HIMALAYA SHIPPING LTD	HSHP	Industrials
HIREQUEST INC.	HQI	Industrials
HOOKE FURNISHINGS CORP	HOFT	Consumer Discretionary
I-80 GOLD CORP (NYSE AME	IAUX	Basic Materials
ICON PLC	ICLR	Health Care
IKENA ONCOLOGY	IKNA	Health Care
IMMERSION CORP	IMMR	Technology
IMMUNEERING	IMRX	Health Care
INFUSYSTEM HLDGS INC	INFU	Health Care
INMODE	INMD	Health Care
INNODATA INC	INOD	Technology
INNOVATE CORP	VATE	Industrials
INOZYME PHARMA	INZY	Health Care
INTEST CORP	INTT	Technology
INTEVAC INC	IVAC	Technology
ISPIRE TECHNOLOGY INC	ISPR	Industrials
ITERIS INC	ITI	Industrials
JAKKS PACIFIC INC	JAKK	Consumer Discretionary
JJILL INC	JILL	Consumer Discretionary
KALTURA	KLTR	Telecommunications
KINGSWAY FINANCIAL SERV	KFS	Financials
KLX ENERGY SERVICES	KLXE	Energy
KORU MEDICAL SYSTEMS INC	KRMD	Health Care
KVH INDUSTRIES INC	KVHI	Telecommunications
LANZATECH GLOBAL	LNZA	Financials
LARIMAR THERAPEUTICS INC	LRMR	Health Care
LCNB CORP	LCNB	Financials
LEONARDO DRS INC	DRS	Industrials
LIBERTY TRIPADVISOR HOLD	LTRPB	Consumer Discretionary
LIMBACH HOLDINGS INC	LMB	Industrials
LIMONEIRA CO	LMNR	Consumer Staples

Reconstitution



An LSEG Business

Russell 3000® Index - Additions

Company	Symbol	Industry
LINCOLN EDUCATIONAL SVS	LINC	Consumer Discretionary
LINEAGE CELL THERAPEUTIC	LCTX	Health Care
LIVEWIRE GROUP INC	LVWR	Consumer Discretionary
LONGBOARD PHARMACEUTICAL	LBPH	Health Care
LOOP MEDIA INC	LPTV	Consumer Discretionary
LSI INDUSTRIES INC	LYTS	Industrials
LUNA INNOVATIONS INC	LUNA	Industrials
MAIDEN HOLDINGS LTD	MHLD	Financials
MAINSTREET BANCSHARES	MNSB	Financials
MAMMOTH ENERGY SERVICES	TUSK	Energy
MARINUS PHARMACEUTICALS	MRNS	Health Care
MAUI LAND & PINEAPPLE CO	MLP	Real Estate
MAXEON SOLAR TECHNOLOGIE	MAXN	Energy
MAYVILLE ENGINEERING	MEC	Industrials
MERRIMACK PHARMACEUTICAL	MACK	Health Care
MIDDLEFIELD BANC CORP	MBCN	Financials
MISTRAS GROUP INC	MG	Industrials
MONDEE HOLDINGS INC (A)	MOND	Consumer Discretionary
NATHANS FAMOUS INC	NATH	Consumer Discretionary
NATIONAL BANKSHARES INC	NKSH	Financials
NAVITAS SEMI CORP (A)	NVTS	Technology
NEWTEKONE INC	NEWT	Financials
NEXPOINT DIVERSIFIED REA	NXDT	Financials
NEXTDOOR HOLDINGS INC	KIND	Technology
NIOCORP DEVELOPMENTS LTD	NB	Basic Materials
NORTHEAST COMMUNITY BANC	NECB	Financials
NORTHRIM BANCORP INC	NRIM	Financials
NORWOOD FINANCIAL CORP	NWFL	Financials
NU HOLDINGS	NU	Industrials
NUVECTIS PHARMA	NVCT	Health Care
NVE CORP	NVEC	Technology
OAK VALLEY BANCORP	OVLY	Financials
OCEAN BIOMEDICAL INC	OCEA	Financials
OCWEN FINANCIAL CORP	OCN	Financials
OIL DRI CORP OF AMERICA	ODC	Consumer Staples
OLEMA PHARMACEUTICALS	OLMA	Health Care
OMEGA THERAPEUTICS	OMGA	Health Care
OMEROS CORP	OMER	Health Care
OPTINOSE INC	OPTN	Health Care
ORANGE COUNTY BANCORP	OBT	Financials
ORCHESTRA BIOMED HOLDING	OBIO	Financials
ORIC PHARMACEUTICALS	ORIC	Health Care
OVERSEAS SHIPHOLDING INC	OSG	Industrials
OVID THERAPEUTICS INC	OVID	Health Care
P10	PX	Financials
PAGSEGURO DIGITAL LTD	PAGS	Industrials
PANGAEA LOGS SOLUTIONS	PANL	Industrials
PARK OHIO HOLDINGS CORP	PKOH	Industrials
PATRIA INVESTMENTS	PAX	Financials

Reconstitution



An LSEG Business

Russell 3000® Index - Additions

Company	Symbol	Industry
PAYSIGN INC	PAYS	Industrials
PDS BIOTECHNOLOGY CORP	PDSB	Health Care
PEAKSTONE REALTY TRUST	PKST	Real Estate
PENNS WOODS BANCORP INC	PWOD	Financials
PERFORMANT FINANCIAL COR	PFMT	Industrials
PERPETUA RESOURCES	PPTA	Basic Materials
PLAYAGS INC	AGS	Consumer Discretionary
PLIANT THERAPEUTICS	PLRX	Health Care
PLUMAS BANCORP	PLBC	Financials
PONCE FINANCIAL GROUP	PDLB	Financials
POSEIDA THERAPEUTICS	PSTX	Health Care
POTBELLY CORPORATION	PBPB	Consumer Discretionary
PRELUDE THERAPEUTICS	PRLD	Health Care
PRESTO AUTOMATIONS INC	PRST	Technology
PRIMEENERGY RESOURCES	PNRG	Energy
PRINCETON BANCORP INC	BPRN	Financials
PROKIDNEY CORP (A)	PROK	Health Care
PROTALIX BIO THERA	PLX	Health Care
PULSE BIOSCIENCES INC	PLSE	Health Care
QUIPT HOME MEDICAL CORP	QUIPT	Health Care
QURATE RETAIL INC	QRTEB	Consumer Discretionary
RAIN ONCOLOGY INC	RAIN	Health Care
RANGER ENERGY SERVICES	RNGR	Energy
RED ROBIN GOURMET BURGER	RRGB	Consumer Discretionary
RENEO PHARMACEUTICALS	RPHM	Health Care
RGCO RES INC	RGCO	Utilities
RHYTHM PHARMACEUTICALS	RYTM	Health Care
RICHARDSON ELECTRONICS	RELL	Technology
ROIVANT SCIENCES LTD (A)	ROIV	Health Care
SANARA MEDTECH	SMTI	Health Care
SAVARA INC	SVRA	Health Care
SCHOLAR ROCK HOLDING	SRRK	Health Care
SCPHARMACEUTICALS INC	SCPH	Health Care
SEACOR MARINE HOLDINGS	SMHI	Energy
SEADRILL LTD NYSE	SDRL	Energy
SECURITY NATL FINL CORP	SNFCA	Financials
SELECTA BIOSCIENCES INC	SELB	Health Care
SEMLER SCIENTIFIC INC	SMLR	Health Care
SEMRUSH HOLDINGS	SEMR	Technology
SES AI CORPORATION	SES	Consumer Discretionary
SKYX PLATFORMS CORP	SKYX	Industrials
SOUNDHOUND AI INC	SOUN	Technology
SOUTHERN STATES BANCSTAR	SSBK	Financials
SOUTHLAND HOLDINGS INC	SLND	Financials
SPOK HOLDINGS INC	SPOK	Telecommunications
SPRINKLR	CXM	Technology
SUMMIT THERAPEUTICS INC	SMMT	Health Care
SUPER GROUP SGHC LTD	SGHC	Consumer Discretionary
SYSTEM1 INC (A)	SST	Technology

Reconstitution

Russell 3000® Index - Additions

Company	Symbol	Industry
TARO PHARM INDS	TARO	Health Care
TECHNIPFMC	FTI	Energy
TELA BIO	TELA	Health Care
TERNS PHARMACEUTICALS	TERN	Health Care
TIMBERLAND BANCORP INC	TSBK	Financials
TINGO GROUP INC	TIO	Industrials
TOWNSQUARE MEDIA INC	TSQ	Consumer Discretionary
TPG PARTNERS LLC	TPG	Financials
TREVI THERAPEUTICS	TRVI	Health Care
UNITED INS HLDGS CORP	UIHC	Financials
UROGEN PHARMA	URGN	Health Care
US XPRESS ENTERPRISES	USX	Industrials
VAXXINITY	VAXX	Health Care
VERA BRADLEY INC	VRA	Consumer Discretionary
VERDE CLEAN FUELS INC	VGAS	Financials
VERRICA PHARMACEUTICALS	VRCA	Health Care
VIEMED HEALTHCARE	VMD	Health Care
VIGIL NEUROSCIENCE	VIGL	Health Care
VIKING THERAPEUTICS INC	VKTX	Health Care
VIRGINIA NATIONAL BANKSH	VABK	Financials
VOR BIOPHARMA	VOR	Health Care
VOXX INTERNATIONAL CORP	VOXX	Consumer Discretionary
VOYAGER THERAPEUTICS INC	VYGR	Health Care
WALDENCAST PLC (A)	WALD	Consumer Staples
WAVE LIFE SCIENCES LTD	WVE	Health Care
WESTROCK COFFEE CO (A)	WEST	Consumer Staples
WILLIS LEASE FINANCE	WLFC	Industrials
X4 PHARMACEUTICALS INC	XFOR	Health Care
XOMA CORP	XOMA	Health Care
XP	XP	Financials
ZEVIA PBC	ZVIA	Consumer Staples
ZEVRA THERAPEUTICS INC	ZVRA	Health Care
ZURA BIO LTD	ZURA	Financials
ZYMEWORKS	ZYME	Health Care

Reconstitution



An LSEG Business

For more information about our indexes, please visit ftserussell.com.

© 2023 London Stock Exchange Group plc and its applicable group undertakings (the "LSE Group"). The LSE Group 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) The Yield Book Inc ("YB") and (7) 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, YB and BR. "FTSE®", "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "The Yield Book®", "Beyond Ratings®" 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 the LSE Group or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB or BR. FTSE International 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 the LSE Group, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical error as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of the LSE Group 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 of results to be obtained from the use of FTSE Russell products, including but not limited to indexes, data and analytics, or the fitness or suitability of the FTSE Russell products for any particular purpose to which they might be put. Any representation of historical data accessible through FTSE Russell products is provided for information purposes only and is not a reliable indicator of future performance.

No responsibility or liability can be accepted by any member of the LSE Group 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 error (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 the LSE Group is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

No member of the LSE Group 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 the LSE Group 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. Indexes cannot be invested in directly. Inclusion of an asset in an index 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 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 returns shown may not represent the results of the actual trading of investable assets.

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 the LSE Group 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 the LSE Group. Use and distribution of the LSE Group data requires a licence from FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, YB, BR and/or their respective licensors.