

Russell 3000[®] Index – Additions

Company	Symbol	Industry
22ND CENTURY GROUP INC	XXII	Consumer Staples
9 METERS BIOPHARMA INC	NMTR	Health Care
ACLARIS THERAPEUTICS	ACRS	Health Care
ADICET BIO INC	ACET	Health Care
ADV SOLUTIONS INC (A)	ADV	Industrials
ADVENT TECHNOLOGIES (A)	ADN	Energy
AEMETIS	AMTX	Energy
AERSALE CORPORATION	ASLE	Industrials
AEVA TECHNOLOGIES INC	AEVA	Technology
AFC GAMMA	AFCG	Financials
AGEAGLE AERIAL SYSTEMS	UAVS	Industrials
AGILITI	AGTI	Health Care
AGILON HEALTH	AGL	Health Care
AKOYA BIOSCIENCES	AKYA	Health Care
ALDEYRA THERAPEUTICS INC	ALDX	Health Care
ALIGNMENT HEALTHCARE	ALHC	Health Care
ALKAMI TECHNOLOGY	ALKT	Technology
ALPINE IMMUNE SCIENCES	ALPN	Health Care
ALTIMMUNE INC	ALT	Health Care
ALTO INGREDIENTS INC	ALTO	Basic Materials
ALTUS MIDSTREAM CO	ALTM	Energy
AMMO INC	POWW	Consumer Discretionary

AMPIO PHARMACEUTICALS	AMPE	Health Care
APPHARVEST INC	APPH	Consumer Staples
AQUABOUNTY TECHNOLOGIES	AQB	Consumer Staples
ARBUTUS BIOPHARMA CORP	ABUS	Health Care
ARCIMOTO	FUV	Consumer Discretionary
ARKO CORP (A)	ARKO	Consumer Discretionary
ASANA	ASAN	Technology
ASENSUS SURGICAL INC	ASXC	Health Care
ASHFORD HOSPITALITY	AHT	Real Estate
ATERIAN INC	ATER	Consumer Discretionary
ATLAS TECHNICAL CONS (A)	ATCX	Industrials
ATOSSA THERAPEUTICS INC	ATOS	Health Care
AVEANNA HEALTHCARE HOLDI	AVAH	Health Care
AVIAT NETWORKS INC	AVNW	Telecommunications
AVITA Medical	RCEL	Health Care
BABCOCK & WILCOX ENT	BW	Industrials
BARNES & NOBLE EDUCATION	BNED	Consumer Discretionary
BASSETT FURNITURE INDS	BSET	Consumer Discretionary
BEAM GLOBAL	BEEM	Energy
BEAUTY HEALTH CO	SKIN	Consumer Staples
BENTLEY SYSTEMS	BSY	Technology
BIG 5 SPORTING GOODS	BGFV	Consumer Discretionary
BIOMEA FUSION	BMEA	Health Care
BIONANO GENOMICS INC	BNGO	Health Care
BLINK CHARGING CO	BLNK	Consumer Discretionary
BLUE RIDGE BANKSHARES	BRBS	Financials
BLUELINX HOLDINGS INC	BXC	Industrials
BRAEMAR HOTELS & RESORTS	BHR	Real Estate
BROOKLYN IMMUNO THERAPEU	BTX	Health Care
BTRS HOLDINGS INC (A)	BTRS	Industrials
BUTTERFLY NETWORK IN (A)	BFLY	Health Care
BYRNA TECHNOLOGIES	BYRN	Industrials
CALIFORNIA RESOURCES	CRC	Energy
CALLON PETROLEUM CO	CPE	Energy
CANOO INC (A)	GOEV	Consumer Discretionary

CANTALOUPE INC	CTLP	Industrials
CARDIFF ONCOLOGY INC	CRDF	Health Care
CARLOTZ INC (A)	LOTZ	Consumer Discretionary
CASTLIGHT HEALTH INC	CSLT	Health Care
CELCUITY	CELC	Health Care
CELLDEX THERAPEUTICS INC	CLDX	Health Care
CENTENNIAL RESOURCE DEV	CDEV	Energy
CENTRUS ENERGY CORP	LEU	Energy
CEREVEL THERAPEUTICS (A)	CERE	Health Care
CHARGEPOINT HOLDINGS (A)	CHPT	Energy
CHESAPEAKE ENERGY	CHK	Energy
CITIUS PHARMACEUTICALS	CTXR	Health Care
CLARIVATE PLC (A)	CLVT	Technology
CLEANSARK	CLSK	Technology
CLEAR CHANNEL OUTDOOR	CCO	Consumer Discretionary
CLEARPOINT NEURO INC	CLPT	Health Care
CLENE INC	CLNN	Health Care
CLOVER HEALTH INVEST (A)	CLOV	Health Care
COGENT BIOSCIENCES INC	COGT	Health Care
COMMERCIAL VEH GROUP INC	CVGI	Industrials
CONSTELLIUM SE	CSTM	Basic Materials
COURSERA	COUR	Consumer Discretionary
CUREVAC NV	CVAC	Health Care
CURIOSITYSTREAM INC (A)	CURI	Consumer Discretionary
CURIS INC	CRIS	Health Care
DANIMER SCI INC (A)	DNMR	Industrials
DARIOHEALTH	DRIO	Health Care
DENBURY	DEN	Energy
DESIGN THERAPEUTICS	DSGN	Health Care
DESKTOP METAL INC (A)	DM	Industrials
DIGITALOCEAN HOLDINGS	DOCN	Technology
DIVERSEY HOLDINGS	DSEY	Industrials
DONNELLEY R R & SONS CO	RRD	Industrials
DOORDASH	DASH	Technology
DOUBLEVERIFY HOLDINGS	DV	Technology

DraftKings Inc (A)	DKNG	Consumer Discretionary
DREAM FINDERS HOMES	DFH	Consumer Discretionary
DRIVE SHACK	DS	Consumer Discretionary
DUCKHORN PORTFOLIO	NAPA	Consumer Staples
E2OPEN PARENT HOLDIN (A)	ETWO	Technology
EDGEWISE THERAPEUTICS	EWTX	Health Care
EMCORE CORP	EMKR	Technology
EOS ENERGY (A)	EOSE	Industrials
ESPORTS TECHNOLOGIES	EBET	Consumer Discretionary
EXTRACTION OIL & GAS INC	XOGAQ	Energy
EYEPOINT PHARMACEUTICALS	EYPT	Health Care
FINANCE OF AMERICAS COMP	FOA	Financials
FINCH THERAPEUTICS GROUP	FNCH	Health Care
FISKER INC (A)	FSR	Consumer Discretionary
FIVE STAR BANCORP	FSBC	Financials
FLEXSTEEL INDUSTRIES INC	FLXS	Consumer Discretionary
FORIAN	FORA	Health Care
FORTE BIOSCIENCES INC	FBRX	Health Care
FRONTIER GROUP HOLDINGS	ULCC	Consumer Discretionary
FTC SOLAR	FTCI	Energy
FTS INTERNATIONAL INC	FTSI	Energy
FUBOTV	FUBO	Telecommunications
FULL HOUSE RESORTS INC	FLL	Consumer Discretionary
GCM GROSVENOR INC (A)	GCMG	Financials
GEMINI THERAPEUTICS INC	GMTX	Health Care
GENIUS BRANDS INTL	GNUS	Consumer Discretionary
GEVO INC	GEVO	Energy
GLOBALSTAR INC	GSAT	Telecommunications
GOLDEN NUGGET ON GAM (A)	GNOG	Consumer Discretionary
GREENBOX POS	GBOX	Industrials
GREENWICH LIFESCIENCES	GLSI	Health Care
GT Biopharma	GTBP	Health Care
HAYWARD HOLDINGS	HAYW	Industrials
HIGHPEAK ENERGY INC (A)	HPK	Energy
HIMS AND HERS HEALTH (A)	HIMS	Health Care

HIREQUEST INC.	HQI	Industrials
HOF RSRT AND ENT COM (A)	HOFV	Consumer Discretionary
HONEST COMPANY	HNST	Consumer Staples
HOVNANIAN ENTERPRISES	HOV	Consumer Discretionary
HUMANIGEN	HGEN	Health Care
HYLIION HOLDINGS COR (A)	HYLN	Industrials
HYRECAR INC	HYRE	Consumer Discretionary
IDEANOMICS INC	IDEX	Industrials
IDENTIV INC	INVE	Technology
IKENA ONCOLOGY	IKNA	Health Care
IMPEL NEUROPHARMA	IMPL	Health Care
INFINITY PHARMACEUTICALS	INFI	Health Care
INFRASTRUCTURE & ENERGY	IEA	Industrials
INNOVAGE HOLDING	INNV	Health Care
INOTIV INC	NOTV	Health Care
INSTIL BIO	TIL	Health Care
JANUS HENDERSON GROUP	JHG	Financials
JOANN	JOAN	Consumer Discretionary
KARAT PACKAGING	KRT	Industrials
KEMPHARM	KMPH	Health Care
KIRKLANDS INC	KIRK	Consumer Discretionary
KOPIN CORP	KOPN	Technology
KULICKE SOFFA	KLIC	Technology
LANDSEA HOMES CORP (A)	LSEA	Consumer Discretionary
LAREDO PETROLEUM INC	LPI	Energy
LATHAM GROUP	SWIM	Consumer Discretionary
LAZYDAYS HOLDINGS INC	LAZY	Consumer Discretionary
LEAF GROUP LTD	LEAF	Consumer Discretionary
LINEAGE CELL THERAPEUTIC	LCTX	Health Care
LORDSTOWN MOTORS CRP (A)	RIDE	Consumer Discretionary
LUMINAR TECHNOLOGIES (A)	LAZR	Consumer Discretionary
MAIDEN HOLDINGS LTD	MHLD	Financials
MARATHON DIGITAL HOLDING	MARA	Financials
MDC CORP	MDCA	Consumer Discretionary
MEDAVAIL HOLDINGS INC	MDVL	Consumer Staples

METROMILE INC (A)	MILE	Financials
MICROVISION INC	MVIS	Technology
MIMEDX GROUP	MDXG	Health Care
MIND MEDICINE MINDMED	MNMD	Health Care
MP MATERIALS CORP (A)	MP	Basic Materials
MULTIPLAN CORP (A)	MPLN	Health Care
NEURONETICS INC	STIM	Health Care
NEUROPACE	NPCE	Health Care
NEW FORTRESS ENERGY	NFE	Energy
NIKOLA CORPORATION	NKLA	Industrials
NORTHERN OIL & GAS INC	NOG	Energy
NUVATION BIO INC (A)	NUVB	Health Care
NXP SEMICONDUCTORS NV	NXPI	Technology
OASIS PETE INC	OAS	Energy
OCUGEN INC	OCGN	Health Care
OCWEN FINANCIAL CORP	OCN	Financials
ONCTERNAL THERAPEUTICS	ONCT	Health Care
ONE GROUP HOSPITALITY	STKS	Consumer Discretionary
OPEN LENDING CORP (A)	LPRO	Financials
OPENDOOR TECHNOLOGIE (A)	OPEN	Real Estate
ORAMED PHARMACEUTICALS	ORMP	Health Care
OSCAR HEALTH	OSCR	Financials
OUSTER INC (A)	OUST	Technology
OUTLOOK THERAPEUTICS INC	OTLK	Health Care
PALANTIR TECHNOLOGIES	PLTR	Technology
PARTY CITY HOLDCO INC	PRTY	Consumer Discretionary
PAYA HOLDINGS INC (A)	PAYA	Industrials
PAYSAFE LIMITED (A)	PSFE	Industrials
PERPETUA RESOURCES	PPTA	Basic Materials
PLBY GROUP INC	PLBY	Consumer Staples
PORCH GROUP INC (A)	PRCH	Technology
PORTAGE BIOTECH	PRTG	Health Care
POSTAL REALTY TRUST	PSTL	Real Estate
PRIVIA HEALTH GROUP	PRVA	Health Care
PROMETHEUS BIOSCIENCES	RXDX	Health Care

PURECYCLE TECHNOLOGIES	PCT	Industrials
QUANTUMSCAPE	QS	Consumer Discretionary
RADIUS GLOBAL INFRASTRUC	RADI	Real Estate
RAIN THERAPEUTICS	RAIN	Health Care
RECURSION PHARMACEUTICAL	RXRX	Health Care
REKOR SYSTEMS INC	REKR	Industrials
RENEO PHARMACEUTICALS	RPHM	Health Care
RILEY EXPLORATION PERMIA	REPX	Energy
RIOT BLOCKCHAIN INC	RIOT	Financials
ROMEO POWER INC (A)	RMO	Consumer Discretionary
RUSH STREET INTACT (A)	RSI	Consumer Discretionary
SEELOS THERAPEUTICS INC	SEEL	Health Care
SENSEONICS HOLDINGS INC	SENS	Health Care
SESEN BIO INC	SESN	Health Care
SHIFT TECHNOLOGIES (A)	SFT	Consumer Discretionary
SHIFT4 PAYMENTS	FOUR	Industrials
SKILLZ INC (A)	SKLZ	Technology
SKYWATER TECHNOLOGY	SKYT	Technology
SNOWFLAKE	SNOW	Technology
SOC TELEMED INC (A)	TLMD	Health Care
STEM INC (A)	STEM	Energy
STONEMOR	STON	Consumer Discretionary
SUMMIT THERAPEUTICS INC	SMMT	Health Care
SUN COUNTRY AIRLINES HOL	SNCY	Consumer Discretionary
SURFACE ONCOLOGY	SURF	Health Care
TALARIS THERAPEUTICS	TALS	Health Care
TATTOOED CHEF INC (A)	TTCF	Consumer Staples
TEEKAY CORP	TK	Industrials
TEEKAY TANKERS LTD	TNK	Industrials
TETRA TECHNOLOGIES INC	TTI	Energy
TEXAS PACIFIC LAND CORP	TPL	Energy
THE BLACKSTONE GROUP INC	BX	Financials
THRYV HOLDINGS	THRY	Consumer Discretionary
TITAN INTERNATIONAL INC	TWI	Industrials
TONIX PHARMACEUTICALS	TNXP	Health Care

TORCHLIGHT ENERGY	TRCH	Energy
TRAVELCENTERS OF AMERICA	TA	Consumer Discretionary
TREACE MEDICAL CONCEPTS	TMCI	Health Care
TREVENA INC	TRVN	Health Care
TRILLIUM THERAPEUTICS	TRIL	Health Care
TUSIMPLE HOLDINGS	TSP	Industrials
UR ENERGY	URG	Basic Materials
UTZ BRANDS INC (A)	UTZ	Consumer Staples
VALHI INC	VHI	Basic Materials
Velocity Financial Inc	VEL	Financials
VELOCITYNE LIDAR INC	VLDR	Industrials
VIEW INC (A)	VIEW	Industrials
VINCERX INC	VINC	Health Care
VINE ENERGY	VEI	Energy
VIRACTA THERAPEUTICS INC	VIRX	Health Care
VISTAGEN THERAPEUTICS	VTGN	Health Care
VUZIX CORP	VUZI	Consumer Discretionary
WEREWOLF THERAPEUTICS	HOWL	Health Care
WHOLE EARTH BRANDS (A)	FREE	Consumer Staples
WIX LTD	WIX	Technology
XL FLEET CORP (A)	XL	Consumer Discretionary
YELLOW CORPORATION	YELL	Industrials
ZYMERGEN	ZY	Basic Materials

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