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*General Information*

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Jonathan Moreland

**INSIDE THE MARKET**

*Our Interpretation of Insiders' Top-Down Sentiment.*

Oh well, I guess we were wrong. We bad. The world is coming to an end. Sell the house. Sell the kids. Go to cash and a fetal position, and forget about ever trying to pick a stock for your investment account again. Been nice doing this for the past 30 years, but I'm off to sell ice cream on the beach.

**I DON'T THINK SO!!**

This sell off is stupid. Yeah, yeah, we said as much weeks ago...but really? We just casually had our second worst weekly performance ever (with a certain week in the fall of 2008 being the worst). And for what? The global financial system isn't on the brink of collapse like a decade ago. And there is nothing in the present metrics of this economic cycle that make the extent of this sell off in equities fundamentally justifiable.

That doesn't mean "stupid" can't continue to continue. Heck, our own Insider-Based Market Indicator is now so strongly negative after last week that it would take a couple weeks of reverse action to flip it bullish again. But when this market does turn, it is highly likely to be in a v-shaped pattern that will turn the present indiscriminate selling of stocks into panic buying. And if you think you have a system that will allow you sit out this pain and alert you to get back in just before the melt-up, you're fooling yourself even more than those who think trade wars are easy to win.

Most of the clientele for this newsletter are professionals who have been around the block as much or more than we have, and who are champing at the bit for more client money to put to work in this stupidly over-done sell off. I've talked with several over the past week alone who are earning their money by holding their clients' hands through this turmoil, reminding them that their 401K account will be just fine when they finally retire a decade or more from now. And, if anything, now is the time to buy, not sell.

But what the heck is going on, and what the heck is going to spur the eventual rebound? President Trump repeated recently that he thinks the Fed is "the only problem our economy has". No sir. Disagree.

There was nothing so awful in the Fed interest rate raise and statement last week. It was telegraphed up the wazoo, and no one believes the fed will continue to raise rates even twice next year if present GDP growth forecasts don't improve, and especially if they moderate further.

But why would GDP growth moderate further anyway? Well, THAT's the issue here.

You can't be disappointed that GDP didn't continue to run as high as it did in the first half of this year. It was so obvious that last year's tax cut

was a short-term stimulus, that even we were writing months ago in this space about being "very concerned" that the market hadn't priced in the "ramifications of the higher U.S. debt and rising interest rates expected in the next year—exacerbated by a tax cut that merely pushed forward stock returns that would have occurred more normally if an already strong economy wasn't so supercharged for short-term political purposes."

But the global economy now risks falling below GDP growth from the more normal year of 2017, and the primary cause we see for that concern is the unnecessarily contentious trade wars, and, more specifically, the stupid-ass concept of using tariffs as the main weapon. If you disagree, just listen to the recent conference calls of FedEx (FDX), or our own recently added Spartan Motors (SPAR). "Tariffs" and general "trade uncertainties" are voiced as causes of both increases in costs and decreases in end demand.

These same reasons are why a bunch of the companies on our Recommended List are a shoo in to miss their Q4 numbers and lower guidance for next year—unless the trade war at least becomes more rational. Our continuing (losing) bet is that trade concerns are now way over priced into our eviscerated stocks. And that even if a certain someone doesn't personally come to see that his negotiating methods are bad for his own political health—others with some clout will see that they have to (finally) start being more forceful to make him see for their own political life.

We can all agree that the forced technology transfer the Chinese government forces on foreign firms that set up shop there is wrong, and domestic manufacturing needs to be rebuilt. We can also all probably agree that it's good to teach our children to swim. But just how one goes about making these things happen counts. Forget about equating the present tariffs to throwing your kid in the deep end of the pool. They way tariffs are being yielded by President Trump is more like boating them out a mile off shore in choppy waters and kicking them overboard. The means defeat the end goal.

Defense policy may seem disconnected with economic outcomes, but a world that is in chaos is no good for business either. So while we can all agree that it's a good thing to bring troops home as soon as possible, here too that end can only be a positive if executed properly.

Only an end to the chaotic policies emanating from the current U.S. administration can end the chaos in the stock market. Recently reduced GDP growth expectations are not part of the natu-

*(Continued on page 3)*

**RECOMMENDED LIST**

Independent research opinions on stocks I have invested in, after using insider data as a first screen to determine where to focus our fundamental research. The weekly performance of my Recommended List is calculated by averaging the weekly performances of all the positions on the List. Buy and Short-rated stocks are counted as full positions. Hold-rated stocks are counted as half positions. The weekly performance of our List is then further adjusted for the percentage of Cash we are recommending.

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## INSIDE THE MARKET

Our Interpretation of Insiders' Top-Down Sentiment.

(Continued from page 1)

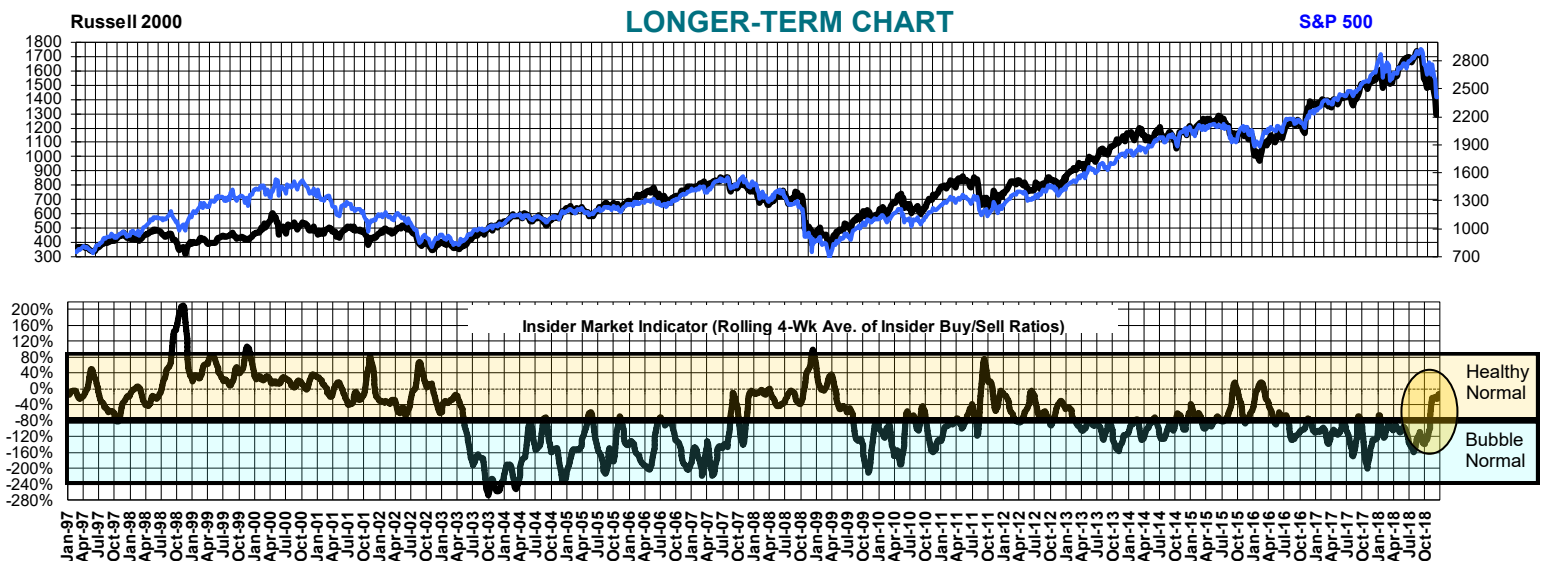
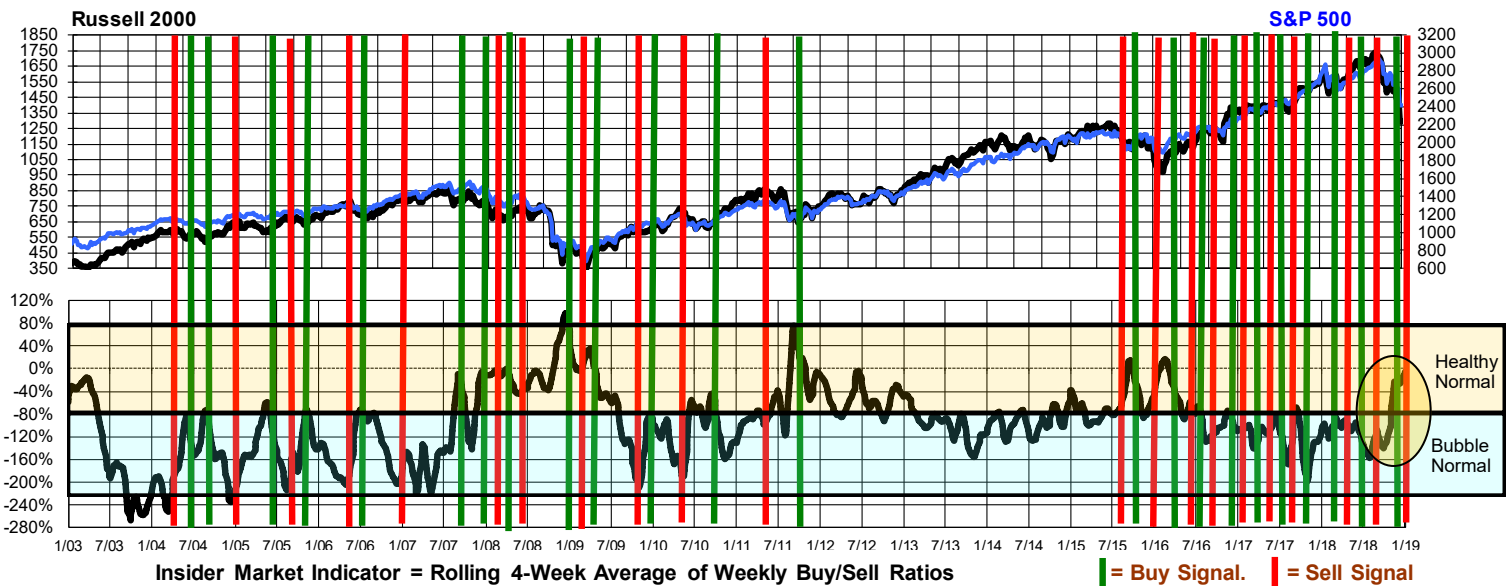
ral economic cycle. If not for the trade wars dampening GDP growth expectations, there would not have been such a negative reaction in the market to the Fed rate raise. The Fed has no mandate to make it easier for stupid economic policies to appear innocuous to all our economic realities. The bad policy would have tanked the market soon enough no matter what the Fed did in its last meeting. And the only reason the policies didn't tank the market sooner is that GDP growth was so strong that it could take some abuse.

Like most people, my political views tend to fall in the center of the extremes. Also like most people, I like being able to apply my

trade without government interference. InsiderInsights has the best insider data and Ratings methodology in the world. And **using insider data in the equity research process hasn't suddenly and uniquely stopped working. But the advantage our research offers—and the very role of fundamental analysis itself—cannot add value when markets are thrown into a frenzy by bad government policy that makes all stocks move together.**

We look forward to a more rational New Year. And to looking back on this truly historical period of political chaos as the buying opportunity we expect it will prove to be.

Time Period	# Firms With Open-Market Purchases	# Firms With Open-Market Sales	Buy/Sell Ratio	Rolling 4-Week Average
Week Ending 12/21/18	433	338	28%	-3%
Month Ending 11/30/18	518	1,108	-114%	



### InsiderInsights Bullish Universe

Companies with Active, Significantly Bullish InsiderInsights Company Ratings

Generated with Special Screens tool at InsiderInsights.com using Pre-Programmed Screen: "InsiderInsights Bullish Universe"

Insider Rating*	Rating Date	Company	Ticker	Insider Rating*	Rating Date	Company	Ticker	Insider Rating*	Rating Date	Company	Ticker			
●○○○	+1	12/21/18	W R Grace	GRA	●○○○	+0.5	12/19/18	HV Banc	HVBC	●○○○	+1	12/13/18	Intrepid Potash	IPI
●●○○	+2	12/21/18	:Lions Gate Ent	LGF.A	●●○○	+2	12/18/18	Howard Hughes	HHC	●●●○	+3	12/13/18	At Home	HOME
●○○○	+1	12/21/18	Reata Pharm	RETA	●○○○	+0.5	12/18/18	Global Medical Reit	GMRE	●●○○	+2	12/13/18	QCR	QCRH
●○○○	+0.5	12/21/18	AllianceBernstein LP	AB	●○○○	+0.5	12/18/18	VBI Vaccines	VBIV	●●○○	+2	12/13/18	United Natural Foods	UNFI
●●○○	+3	12/21/18	CorMedix	CRMD	●○○○	+1	12/18/18	E W Scripps Co	SSP	●○○○	+1	12/13/18	RTI Surgical	RTIX
●○○○	+1	12/21/18	Caesars Ent	CZR	●○○○	+0.5	12/18/18	PVH	PVH	●○○○	+0.5	12/13/18	Daseke	DSKE
●●○○	+2	12/21/18	Dova Pharm	DOVA	●○○○	+0.5	12/18/18	Mustang Bio	MBIO	●○○○	+0.5	12/13/18	Majesco	MUCO
●○○○	+0.5	12/21/18	Natl HealthCare	NHC	●○○○	+0.5	12/18/18	South Jersey Ind	SJI	●○○○	+0.5	12/13/18	IRIDEX	IRIX
●○○○	+0.5	12/21/18	Schlumberger Limited	SLB	●○○○	+1	12/18/18	Catchmark Timber Tr	CTT	●○○○	+1	12/13/18	Natl Bank	NKSH
●○○○	+0.5	12/21/18	Limestone Banc	LMST	●○○○	+1	12/18/18	Huttig Building Prod	HBP	●○○○	+0.5	12/13/18	PB Banc	PBBI
●○○○	+1	12/21/18	Mistras	MG	●○○○	+0.5	12/18/18	Cue Biopharma	CUE	●○○○	+0.5	12/13/18	General Amer Inv	GAM
●○○○	+0.5	12/21/18	TPG RE Finance Tr	TRTX	●○○○	+0.5	12/18/18	Akorn	AKRX	●○○○	+0.5	12/13/18	MusclePharm	MSLP
●○○○	+0.5	12/21/18	SEACOR Marine	SMHI	●●○○	+2	12/17/18	Johnson & Johnson	JNJ	●○○○	+1	12/12/18	Newmark	NMRK
●○○○	+0.5	12/21/18	Harvest Cap Credit	HCAP	●○○○	+1	12/17/18	Barings BDC	BBDC	●○○○	+1	12/12/18	Spark Energy	SPKE
●○○○	+1	12/21/18	Washington Prime	WPG	●○○○	+0.5	12/17/18	Hyster-Yale Materials	HY	●○○○	+0.5	12/12/18	Archrock	AROC
●○○○	+0.5	12/21/18	Central Securities	CET	●○○○	+0.5	12/17/18	HD Supply	HDS	●○○○	+1	12/12/18	Thor Ind	THO
●○○○	+0.5	12/21/18	Delta Air Lines	DAL	●○○○	+1	12/17/18	Medicines	MDCO	●○○○	+0.5	12/12/18	Penn Natl Gaming	PENN
●○○○	+0.5	12/21/18	Acacia Research	ACTG	●○○○	+1	12/17/18	Ligand Pharm	LGND	●○○○	+0.5	12/12/18	Achaogen	AKAO
●○○○	+0.5	12/21/18	Savara	SVRA	●○○○	+1	12/17/18	Sprott Focus Tr	FUND	●○○○	+1	12/12/18	Sequential Brands	SQBG
●○○○	+1	12/21/18	Terra Tech	TRTC	●○○○	+1	12/17/18	Magnachip Semi	MX	●○○○	+0.5	12/12/18	Talos Energy	TALO
●○○○	+1	12/20/18	Enterprise Prod LP	EPD	●○○○	+0.5	12/17/18	Libbey	LBY	●○○○	+0.5	12/12/18	HCI	HCI
●○○○	+1	12/20/18	Axovant Sciences	AXON	●○○○	+1	12/17/18	HighPoint Res	HPR	●○○○	+1	12/12/18	TCG BDC	CGBD
●○○○	+1	12/20/18	lovance BioTherap	IOVA	●○○○	+1	12/17/18	Fluent	FLNT	●○○○	+1	12/11/18	Huntsman	HUN
●○○○	+0.5	12/20/18	Scientific Games	SGMS	●○○○	+1	12/17/18	Corp office Pr Tr	OFC	●○○○	+1	12/11/18	Century Banc	CNBKA
●○○○	+1	12/20/18	Champions Oncology	CSBR	●○○○	+1	12/17/18	Lannett	LCI	●○○○	+0.5	12/11/18	Synergy CHC	SNYR
●○○○	+1	12/20/18	Cedar Fair LP	FUN	●○○○	+1	12/17/18	Magnolia Oil & Gas	MGY	●○○○	+1	12/11/18	Lixte Biotechnology	LIXT
●○○○	+1	12/20/18	Synalloy	SYNL	●○○○	+0.5	12/17/18	Investors RE Tr	IRET	●○○○	+1	12/11/18	Royce Global Value Tr	RGT
●○○○	+1	12/20/18	Tailored Brands	TLRD	●○○○	+0.5	12/17/18	electroCore	ECOR	●○○○	+0.5	12/11/18	Amers Car-Mart	CRMT
●○○○	+0.5	12/20/18	Worthington Ind	WOR	●○○○	+1	12/14/18	Ra Pharm	RARX	●○○○	+0.5	12/11/18	B Riley Finl	RILY
●○○○	+0.5	12/20/18	Stellus Cap Inv	SCM	●○○○	+1	12/14/18	Fluidigm	FLDM	●○○○	+1	12/11/18	Autoweb	AUTO
●○○○	+0.5	12/20/18	Encision	ECIA	●○○○	+0.5	12/14/18	Berry Petrol	BRY	●○○○	+1	12/10/18	Quotient	QTNT
●○○○	+1	12/20/18	Open Bank	OPBK	●●○○	+2	12/14/18	Compass Diversified	CODI	●○○○	+0.5	12/10/18	Trinity Ind	TRN
●○○○	+1	12/20/18	Berkshire Hills Banc	BHLB	●○○○	+0.5	12/14/18	KLX Energy Svs	KLXE	●○○○	+1	12/10/18	Meta Finl	CASH
●○○○	+0.5	12/20/18	PIMCO Inc Op Fd	PKO	●○○○	+2	12/14/18	Koppers	KOP	●○○○	+1	12/10/18	United Continental	UAL
●○○○	+0.5	12/20/18	NN	NNBR	●○○○	+0.5	12/14/18	Gaming & Leisure Pr	GLPI	●○○○	+1	12/10/18	Cerecor	CERC
●○○○	+0.5	12/20/18	NEWTEK Bus Svs	NEWT	●●○○	+2	12/14/18	Superior Energy Svs	SPN	●○○○	+1	12/10/18	Trinseo SA	TSE
●○○○	+1	12/20/18	OptimizeRx	OPRX	●○○○	+0.5	12/14/18	Alcentra Cap	ABDC	●○○○	+0.5	12/10/18	Black Stone Minrls LP	BSM
●○○○	+0.5	12/19/18	Eaton Vance	EV	●○○○	+0.5	12/14/18	Bank of Commerce	BOCH	●○○○	+0.5	12/10/18	Aeglea Bio Therap	AGLE
●○○○	+1	12/19/18	Repro-Med Sys	REPR	●●○○	+2	12/14/18	Lands End	LE	●○○○	+0.5	12/10/18	Vectrus	VEC
●○○○	+0.5	12/19/18	Esperion Therap	ESPR	●○○○	+1	12/14/18	Alamo	ALG	●○○○	+1	12/10/18	Tronox	TROX
●●○○	+2	12/19/18	New Mtn Finance	NMFC	●○○○	+1	12/14/18	Bay Banks of Virginia	BAYK	●○○○	+0.5	12/10/18	Tyson Foods	TSN
●○○○	+0.5	12/19/18	Astrotech	ASTC	●○○○	+0.5	12/14/18	Randolph Banc	RNDB	●○○○	+1	12/10/18	Centerstate Bank	CSFL
●○○○	+0.5	12/19/18	Dynasil of Amer	DYSL	●○○○	+0.5	12/14/18	OptiNose	OPTN	●○○○	+1	12/10/18	Summit Materials	SUM
●○○○	+0.5	12/19/18	Quanta Svs	PWR	●○○○	+0.5	12/14/18	WideOpenWest	WOW	●○○○	+0.5	12/10/18	Ocular Therapeutix	OCUL
●○○○	+1	12/19/18	H&E Equipment Svs	HEES	●○○○	+0.5	12/14/18	Full House Resorts	FLL	●○○○	+0.5	12/10/18	Equity Banc	EQBK
●○○○	+1	12/19/18	Forestar	FOR	●○○○	+1	12/13/18	Mohawk Ind	MHK	●○○○	+1	12/7/18	Apollo Global Mgt	APO
●●○○	+2	12/19/18	Flaherty & Crumrine Dy	DFP	●●○○	+2	12/13/18	Aramark	ARMK	●○○○	+1	12/7/18	Clearone	CLRO
●○○○	+1	12/19/18	Catalyst Pharm	CPRX	●●○○	+2	12/13/18	Live Oak Banc	LOB	●○○○	+1	12/7/18	US Auto Parts	PRTS
●○○○	+1	12/19/18	First Commonwealth	FCF	●○○○	+1	12/13/18	Chesapeake Energy	CHK	●○○○	+1	12/7/18	Telenav	TNAV
●○○○	+0.5	12/19/18	Nuveen AMT-Free Muni	NVG	●○○○	+0.5	12/13/18	Hartford Finl Svs	HIG	●○○○	+0.5	12/7/18	Horizon Banc	HBNC

See last page for the Key to Ratings, Titles & Transaction Type codes.

Continued on Next Page

**InsiderInsights Bullish Universe (Continued)**

Companies with Active, Significantly Bullish InsiderInsights Company Ratings

Generated with Special Screens tool at InsiderInsights.com using Pre-Programmed Screen: "InsiderInsights Bullish Universe"

Insider Rating*	Rating Date	Company	Ticker	Insider Rating*	Rating Date	Company	Ticker	Insider Rating*	Rating Date	Company	Ticker			
1	+0.5	12/6/18	Enanta Pharm	ENTA	1	+1	11/20/18	Lazydays	LAZY	1	+1	11/14/18	Golden Ent	GDEN
2	+1	12/6/18	Kura Oncology	KURA	1	+0.5	11/20/18	Cannae	CNNE	1	+1	11/13/18	Front Yard Res	RESI
2	+1	12/6/18	Griffon	GFF	1	+1	11/20/18	Liberty Braves	BATRA	1	+1	11/13/18	Accelerate Diagn	AXDX
2	+1	12/6/18	Evoqua Water Tech	AQUA	1	+0.5	11/20/18	CBTX	CBTX	1	+1	11/13/18	Amer Assets Tr	AAT
2	+1	12/6/18	Lifetime Brands	LCUT	1	+1	11/20/18	Oasis Midstream LP	OMP	1	+1	11/13/18	Eldorado Resorts	ERI
2	+1	12/6/18	Parsley Energy	PE	2	+2	11/20/18	Mueller Ind	MLI	3	+3	11/13/18	Versum Materials	VSM
2	+1	12/6/18	Ion Geophysical	IO	1	+1	11/20/18	Delphi Tech PLC	DLPH	1	+1	11/13/18	Landmark Infra LP	LMRK
1	+0.5	12/6/18	Pacific Prem Banc	PPBI	2	+2	11/20/18	Arotech	ARTX	1	+0.5	11/13/18	Natl CineMedia	NCMI
2	+2	12/4/18	Keurig Dr Pepper	KDP	1	+0.5	11/19/18	Lilis Energy	LLEX	1	+1	11/13/18	Commscope	COMM
1	+0.5	12/4/18	Wells Fargo	WFC	1	+1	11/19/18	AVEO Pharm	AVEO	1	+1	11/13/18	Basic Energy Svs	BAS
1	+0.5	12/4/18	First Internet Banc	INBK	1	+0.5	11/19/18	Westlake Chemical	WLK	1	+1	11/13/18	Marriott Vacations	VAC
1	+0.5	12/3/18	Entercom Comms	ETM	1	+0.5	11/19/18	NexPoint Res Tr	NXRT	1	+1	11/13/18	Encore Cap	ECPG
1	+0.5	12/3/18	Brunswick	BC	1	+1	11/19/18	XOMA	XOMA	1	+0.5	11/13/18	Medley Mgt	MDLY
2	+2	12/3/18	Matador Res Co	MTDR	1	+1	11/19/18	Tile Shop	TTS	1	+1	11/13/18	CDK Global	CDK
1	+0.5	12/3/18	Rosehill Res	ROSE	2	+2	11/19/18	EQT	EQT	1	+1	11/13/18	Viewray	VRAY
1	+0.5	12/3/18	NB Hi Yld Str Fd	NHS	2	+2	11/19/18	SS&C Tech	SSNC	1	+0.5	11/13/18	WP Carey	WPC
1	+0.5	12/3/18	Plumas Banc	PLBC	1	+1	11/19/18	Apple Hospitality Reit	APLE	1	+1	11/13/18	Flexion Therap	FLXN
1	+0.5	11/30/18	Allegiance Banc	ABTX	1	+0.5	11/19/18	Spirit of Texas Banc	STXB	1	+0.5	11/13/18	Red Violet	RDVT
2	+2	11/29/18	PacWest Banc	PACW	1	+1	11/19/18	Realogy	RLGY	1	+1	11/13/18	BlueLinx	BXC
1	+0.5	11/29/18	FAT Brands	FAT	2	+2	11/19/18	AcelRx Pharm	ACRX	1	+0.5	11/13/18	Ichor	ICHR
1	+0.5	11/29/18	Sothebys	BID	1	+0.5	11/19/18	Allergan plc	AGN	1	+1	11/13/18	Horizon Global	HZN
1	+1	11/29/18	Avanos Medical	AVNS	1	+0.5	11/19/18	Aegion	AEGN	1	+0.5	11/13/18	Ampco-Pittsburgh	AP
1	+0.5	11/29/18	Phillips 66 LP	PSXP	1	+1	11/19/18	Invacare	IVC	1	+0.5	11/13/18	Townsquare Media	TSQ
1	+1	11/29/18	Tallgrass Energy LP	TGE	1	+1	11/16/18	Coty	COTY	1	+0.5	11/13/18	West Bancoraton	WTBA
3	+3	11/29/18	Core Molding Tech	CMT	1	+1	11/16/18	Aqua Amer	WTR	1	+1	11/9/18	Fiesta Restaurant	FRGI
1	+1	11/28/18	Macquarie Infra	MIC	2	+2	11/16/18	Superior Ind Intl	SUP	1	+0.5	11/9/18	StealthGas	GASS
1	+1	11/28/18	Otelco	OTEL	1	+1	11/16/18	Innodata	INOD	1	+1	11/9/18	Perrigo PLC	PRGO
1	+1	11/28/18	Celgene	CELG	1	+1	11/16/18	Main Street Cap	MAIN	1	+1	11/9/18	Camping World	CWH
1	+1	11/28/18	Welbilt	WBT	2	+2	11/16/18	Roadrunner Trans	RRTS	1	+1	11/9/18	Infinera	INFN
1	+1	11/28/18	Kimball Royalty LP	KRP	1	+0.5	11/16/18	Overseas Shipholding	OSG	2	+2	11/9/18	Stifel Finl	SF
1	+0.5	11/28/18	NGL Energy LP	NGL	1	+1	11/16/18	Chembio Diagn	CEMI	1	+1	11/9/18	Deluxe	DLX
1	+0.5	11/27/18	Amyris	AMRS	1	+0.5	11/16/18	Presidio	PSDO	1	+1	11/9/18	SmartFinancial	SMBK
1	+1	11/27/18	Contango Oil & Gas	MCF	1	+1	11/15/18	Cheniere Energy	LNG	1	+1	11/8/18	LyondellBasell Ind NV	LYB
1	+0.5	11/27/18	Prevention Bio	PRVB	1	+1	11/15/18	Greenhill	GHL	1	+1	11/8/18	Unifi	UFI
1	+1	11/26/18	Sunrun	RUN	1	+1	11/15/18	Infinity Pharm	INFI	1	+1	11/8/18	Nabors Ind	NBR
2	+2	11/26/18	Beacon Roofing Supply	BECN	1	+1	11/15/18	General Electric	GE	1	+1	11/8/18	Cooper-Standard	CPS
1	+1	11/26/18	Aquestive Therap	AQST	1	+1	11/15/18	Westlake Chemical LP	WLKP	1	+1	11/8/18	Univar	UNVR
1	+0.5	11/26/18	CNB Finl	CCNE	1	+1	11/15/18	Ellington Res Mort Reit	EARN	2	+2	11/8/18	PRGX Global	PRGX
1	+1	11/23/18	US Concrete	USCR	1	+1	11/15/18	Usa Compression LP	USAC	1	+1	11/8/18	Internap	INAP
1	+1	11/23/18	Citizens Finl	CFG	1	+1	11/15/18	Houston Wire & Cable	HWCC	1	+0.5	11/8/18	German AMER Banc	GABC
1	+0.5	11/23/18	Ryerson	RYI	1	+0.5	11/15/18	Arcus Biosciences	RCUS	1	+1	11/8/18	US Xpress Enterprises	USX
1	+1	11/21/18	Fidelity Natl Finl	FNF	1	+1	11/14/18	Air Prod & Chemicals	APD	1	+0.5	11/8/18	Vulcan Materials	VMC
1	+0.5	11/21/18	Phillips 66	PSX	1	+1	11/14/18	DISH Network	DISH	1	+1	11/8/18	Eagle Banc Montana	EBMT
1	+1	11/21/18	Hill Intl	HIL	1	+1	11/14/18	GEO	GEO	1	+1	11/7/18	Heritage Insurance	HRTG
1	+1	11/21/18	Apollo Endosurgery	APEN	1	+1	11/14/18	GreenSky	GSKY	1	+1	11/7/18	Hudson Pacific Prop	HPP
2	+2	11/21/18	Olin	OLN	1	+0.5	11/14/18	CASI Pharm	CASI	1	+0.5	11/7/18	AdvanSix	ASIX
1	+1	11/21/18	Arcimoto	FUV	1	+1	11/14/18	RiceBran Tech	RIBT	1	+1	11/7/18	Kaman	KAMN
3	+3	11/20/18	Platform Specialty Prod	PAH	1	+1	11/14/18	Kingstone	KINS	2	+2	11/7/18	CB Finl Svs	CBFV
2	+2	11/20/18	ASGN	ASGN	1	+0.5	11/14/18	Houghton Mifflin	HMHC	1	+0.5	11/7/18	ImmunoGen	IMGN
1	+1	11/20/18	Amer Airlines	AAL	1	+1	11/14/18	Ellington Finl	EFC	1	+1	11/6/18	Bunge	BG

See last page for the Key to Ratings, Titles & Transaction Type codes

### InsiderInsights Bullish Universe (Continued)

Companies with Active, Significantly Bullish InsiderInsights Company Ratings

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Insider Rating*	Rating Date	Company	Ticker	Insider Rating*	Rating Date	Company	Ticker	Insider Rating*	Rating Date	Company	Ticker
	+0.5 11/6/18	Pfizer	PFE		+1 10/31/18	GMS	GMS		+1 10/25/18	Sensient Tech	SXT
	+1 11/6/18	Churchill Downs	CHDN		+0.5 10/31/18	StoneMor LP	STON		+1 10/25/18	Orrstown Finl Svs	ORRF
	+0.5 11/6/18	Altra Industrial Motion	AIMC		+1 10/31/18	Capstead Mort	CMO		+1 10/24/18	Crown Castle Intl	CCI
	+2 11/6/18	McDermott Intl	MDR		+3 10/31/18	Visteon	VC		+2 10/24/18	First Finl Banc	FFBC
	+0.5 11/6/18	Principal Finl	PFG		+1 10/31/18	Sherwin-Williams Co	SHW		+1 10/23/18	Freds	FRED
	+0.5 11/6/18	Teradata	TDC		+0.5 10/31/18	Century Aluminum Co	CENX		+0.5 10/23/18	Aclaris Therap	ACRS
	+0.5 11/6/18	City office Reit	CIO		+0.5 10/30/18	Caterpillar	CAT		+1 10/22/18	First Horizon Natl	FHN
	+1 11/6/18	Essential Prop Rlty Tr	EPRT		+1 10/30/18	Lakeland Finl	LKFN		+1 10/22/18	Krystal Biotech	KRYS
	+0.5 11/6/18	Timken Co	TKR		+1 10/30/18	Stock Yards Banc	SYBT		+2 10/22/18	AZZ	AZZ
	+0.5 11/6/18	Peapack-Gladstone Fin	PGC		+2 10/30/18	Investar	ISTR		+1 10/19/18	Texas Cap Banc	TCBI
	+1 11/6/18	Amarillo Biosciences	AMAR		+2 10/30/18	Hubbell	HUBB		+1 10/18/18	Intl Flavors & Frag	IFF
	+3 11/5/18	Encana	ECA		+0.5 10/30/18	Two Rivers Banc	TRCB		+0.5 10/18/18	Planet Green	PLAG
	+2 11/5/18	IBM	IBM		+1 10/29/18	Ballantyne Strong	BTN		+0.5 10/18/18	FedEx	FDX
	+1 11/5/18	Amer Axle & Manufact	AXL		+1 10/29/18	AT&T	T		+2 10/17/18	Ladenburg Thalmann	LTS
	+2 11/5/18	E*TRADE Finl	ETFC		+1 10/29/18	FNB	FNB		+1 10/17/18	Bridge Banc	BDGE
	+0.5 11/5/18	Capstar Finl	CSTR		+1 10/26/18	Cadence Banc	CADE		+1 10/17/18	RPM Intl	RPM
	+1 11/5/18	Spartan Motors	SPAR		+0.5 10/26/18	FleetCor Tech	FLT		+1 10/17/18	FS Banc	FSBW
	+1 11/5/18	QTS Rlty Tr	QTS		+0.5 10/26/18	United Rentals	URI		+0.5 10/16/18	Bassett Furniture Ind	BSET
	+1 11/5/18	Hersha Hospitality Tr	HT		+2 10/26/18	PolyOne	POL		+0.5 10/15/18	PIMCO Dynamic Inc Fd	PDI
	+0.5 11/5/18	Severn Banc	SVBI		+1 10/26/18	Amer Natl Bank	AMNB		+2 10/11/18	Malvern Banc	MLVF
	+0.5 11/5/18	SB One Banc	SBBX		+0.5 10/26/18	Proteostasis Therap	PTI		+1 10/9/18	Kala Pharm	KALA
	+0.5 11/5/18	Summit Hotel Prop	INN		+1 10/26/18	Paychex	PAYX		+1 10/9/18	Meet	MEET
	+1 11/2/18	Insmed	INSM		+0.5 10/26/18	Sterling Banc	SBT		+1 10/9/18	KemPharm	KMPH
	+1 11/2/18	Columbia Finl	CLBK		+0.5 10/26/18	MGIC Inv	MTG		+1 10/2/18	Verastem	VSTM
	+1 11/2/18	Mid Penn Banc	MPB		+0.5 10/25/18	Odonate Therap	ODT		+0.5 10/1/18	Encore Wire	WIRE
	+0.5 11/2/18	Southern Natl Banc	SONA		+1 10/25/18	JMP	JMP		+0.5 10/1/18	Novan	NOVN
	+0.5 11/1/18	Nuverra Environ	NES		+1 10/25/18	VF	VFC		+1 9/28/18	Dollar Tree	DLTR
	+1 11/1/18	RumbleON	RMBL		+0.5 10/25/18	Sterling Banc	STL		+0.5 9/28/18	RegeneRx Biopharm	RGRX
	+1 11/1/18	Riverview Banc	RVSB		+2 10/25/18	Synovus Finl	SNV		+0.5 9/24/18	ACADIA Pharm	ACAD
	+0.5 11/1/18	ACCO Brands	ACCO		+0.5 10/25/18	Home Banc	HOMB				

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## InsiderInsights Bearish Universe

Companies with Active, Significantly Bearish InsiderInsights Company Ratings

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Insider Rating*	Rating Date	Company	Ticker	Insider Rating*	Rating Date	Company	Ticker	Insider Rating*	Rating Date	Company	Ticker			
●○○○	-0.5	12/21/18	Bankwell Finl	BWFG	●○○○	-0.5	12/4/18	AnaptysBio	ANAB	●○○○	-1	11/9/18	Antero Res	AR
●○○○	-0.5	12/20/18	Peoples United Finl	PBCT	●○○○	-1	12/4/18	Redfin	RDFN	●○○○	-0.5	11/9/18	Blue Apron	APRN
●○○○	-0.5	12/19/18	Roku	ROKU	●○○○	-1	12/3/18	Forescout Tech	FSCT	●○○○	-0.5	11/8/18	Alliance Data Sys	ADS
●○○○	-0.5	12/19/18	Vera Bradley	VRA	●○○○	-0.5	11/29/18	Noodles	NDLS	●○○○	-1	11/8/18	Fitbit	FIT
●●○○	-2	12/19/18	Stitch Fix	SFIX	●○○○	-1	11/29/18	Nantkwest	NK	●●○○	-2	11/5/18	Snap	SNAP
●○○○	-1	12/19/18	SiteOne Landscape	SITE	●○○○	-0.5	11/21/18	elf Beauty	ELF	●○○○	-1	11/2/18	Ditech	DHCP
●○○○	-0.5	12/19/18	Carbon Black	CBLK	●○○○	-0.5	11/21/18	eBay	EBAY	●○○○	-0.5	11/1/18	Freeport-McMoRan	FCX
●○○○	-0.5	12/19/18	Citi Trends	CTRN	●○○○	-0.5	11/21/18	Oasis Petrol	OAS	●○○○	-0.5	10/22/18	China Com Credit	GLG
●○○○	-1	12/17/18	Cognizant Tech	CTSH	●○○○	-1	11/20/18	Castlight Health	CSLT	●○○○	-1	10/18/18	Flex Pharma	FLKS
●○○○	-1	12/14/18	TherapMD	TXMD	●○○○	-0.5	11/20/18	Ameri	AMRH	●○○○	-0.5	10/17/18	Genco Shipping	GNK
●○○○	-0.5	12/13/18	Veritone	VERI	●○○○	-1	11/19/18	Facebook	FB	●○○○	-0.5	10/16/18	Iteris	ITI
●○○○	-0.5	12/11/18	Applied Minerals	AMNL	●○○○	-0.5	11/19/18	Lear	LEA	●○○○	-0.5	10/9/18	Fortune Brands	FBHS
●○○○	-0.5	12/10/18	Keane	FRAC	●○○○	-0.5	11/16/18	ICU Medical	ICUI	●○○○	-1	10/4/18	Acorda Therap	ACOR
●○○○	-0.5	12/6/18	Arista Networks	ANET	●○○○	-0.5	11/14/18	Qorvo	QRVO	●○○○	-0.5	10/2/18	Lennar	LEN
●○○○	-1	12/6/18	Ocwen Finl	OCN	●○○○	-0.5	11/14/18	Buckeye LP	BPL					

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## InsiderInsights Ratings of Latest Insider Purchases

InsiderInsights Ratings of Companies with Form 4 Purchases and Accumulations Filed at the SEC in the Past Week

Sorted by: Insider Rating, then Total Transaction Value.

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Insider Rating*	Rating Date	Company	Ticker	Trans Type(s)*	Total Purch Value	Shares Bought	# Insiders - Title(s)*	Latest Trans Date	Ave. Purch Price	Recent Price	Mkt Cap (mm)	10-Day Ave Vol (m)		
●●●	+3	11/20/18	Platform Specialty Prod	PAH	B	\$3,225,400	300,000	2	BO,DIR,GC,SEC,VP	12/20/18	\$10.75	\$9.78	2,820	2,230
●●●	+3	12/21/18	CorMedix	CRMD	B	\$221,210	170,000	3	DIR	12/20/18	\$1.30	\$1.14	120	2,190
●●●	+3	11/5/18	Encana	ECA	B	\$98,921	17,500	3	CEO,DIR,PR	12/20/18	\$5.65	\$5.38	5,106	19,010
●●○	+2	12/21/18	Lions Gate Ent	LGFA	B	\$11,100,981	779,900	1	BO,DIR	12/21/18	\$14.23	\$14.00	2,909	1,880
●●○	+2	12/21/18	Dova Pharm	DOVA	B	\$2,934,259	468,631	5	BO,CEO,CFO,DIR,PR	12/21/18	\$6.26	\$6.80	192	870
●●○	+2	12/19/18	New Mtn Finance	NMFC	B	\$2,517,671	200,805	3	COO,DIR,PR	12/17/18	\$12.54	\$12.25	932	570
●●○	+2	12/14/18	Compass Diversified	CODI	B,JB*	\$1,428,188	96,175	3	BO,O	12/17/18	\$14.85	\$12.39	742	370
●●○	+2	12/14/18	Koppers	KOP	B,OE*	\$1,254,144	73,748	4	CFO,OO,TR,VP	12/20/18	\$17.01	\$16.80	345	420
●●○	+2	12/18/18	Howard Hughes	HHC	B	\$699,715	7,161	2	PR	12/17/18	\$97.71	\$92.16	3,966	280
●●○	+2	12/17/18	Johnson & Johnson	JNJ	B	\$502,691	3,748	3	DIR	12/14/18	\$134.12	\$128.09	343,535	20,890
●●○	+2	12/19/18	Flaherty & Crumrine Dy	DFP	B	\$199,690	10,000	2	A,CEO,CFO,DIR,PR	12/20/18	\$19.97	\$19.47	373	180
●●○	+2	11/7/18	CB Finl Svs	CBFV	B	\$69,073	2,750	2	DIR	12/20/18	\$25.12	\$23.13	125	10
●○○	+1	12/21/18	W R Grace	GRA	B	\$101,731,584	1,672,968	1	BO	12/21/18	\$60.81	\$60.72	4,068	900
●○○	+1	12/20/18	Axovant Sciences	AXON	JB*	\$80,000,000	80,000,000	8	BO	12/18/18	\$1.00	\$0.99	154	2,050
●○○	+1	10/18/18	Intl Flavors & Frag	IFF	B	\$56,260,337	420,700	1	BO	12/19/18	\$133.73	\$128.21	13,670	1,140
●○○	+1	12/17/18	Medicines	MDCO	B	\$19,819,932	999,363	3	CEO,DIR,VP	12/20/18	\$19.83	\$17.26	1,275	2,430
●○○	+1	11/26/18	Sunrun	RUN	OB,B	\$6,996,500	720,000	3	BO,CB,CEO,DIR	12/20/18	\$9.72	\$10.90	1,219	2,000
●○○	+1	11/19/18	AVEO Pharm	AVEO	B	\$6,969,960	4,500,000	9	BO	12/21/18	\$1.55	\$1.49	187	1,620
●○○	+1	12/13/18	Chesapeake Energy	CHK	B	\$5,574,630	2,655,000	5	CEO,CFO,DIR,VP	12/20/18	\$2.10	\$1.90	1,736	50,130
●○○	+1	12/19/18	Repro-Med Sys	REPR	B,JB*	\$4,068,205	3,346,677	1	BO,DIR	12/17/18	\$1.22	\$1.43	55	30
●○○	+1	12/17/18	Barings BDC	BBDC	AB,B	\$4,026,335	435,600	3	AO,BO,CFO,FO	12/21/18	\$9.24	\$8.83	453	420
●○○	+1	12/17/18	Magnachip Semi	MX	B	\$3,606,750	515,000	1	BO	12/13/18	\$7.00	\$6.16	213	330
●○○	+1	12/13/18	Mohawk Ind	MHK	B	\$3,051,713	25,937	2	DIR	12/14/18	\$117.66	\$113.21	8,400	1,140
●○○	+1	10/9/18	Meet	MEET	B	\$2,598,646	652,221	1	BO	12/20/18	\$3.98	\$3.84	284	960
●○○	+1	10/31/18	GMS	GMS	B,OB	\$1,973,133	131,160	3	CFO,DIR,TR,VP	12/14/18	\$15.04	\$14.66	604	1,160
●○○	+1	11/23/18	US Concrete	USCR	B	\$1,684,443	50,000	1	DIR	12/17/18	\$33.69	\$32.83	552	460
●○○	+1	12/17/18	Sprott Focus Tr	FUND	B	\$1,678,546	275,000	1	BO,DIR	12/18/18	\$6.10	\$5.51	143	140
●○○	+1	12/20/18	Synalloy	SYNL	B	\$1,545,506	91,466	2	BO,CEO,DIR,PR	12/20/18	\$16.90	\$16.95	150	40
●○○	+1	11/20/18	Lazydays	LAZY	B	\$1,060,720	198,627	1	BO,DIR	12/14/18	\$5.34	\$4.96	42	30
●○○	+1	11/9/18	Camping World	CWH	B	\$1,059,779	70,108	1	BO	12/14/18	\$15.12	\$11.24	987	1,020
●○○	+1	11/28/18	Otelco	OTEL	B	\$1,037,154	65,130	1	BO	12/20/18	\$15.92	\$15.80	54	20
●○○	+1	11/6/18	Churchill Downs	CHDN	B	\$762,221	2,950	2	DIR	12/18/18	\$258.38	\$233.73	3,172	100
●○○	+1	12/18/18	E W Scripps Co	SSP	AB	\$746,673	47,324	5	BO,DIR	12/21/18	\$15.78	\$15.15	1,222	540
●○○	+1	11/14/18	DISH Network	DISH	AB	\$742,950	25,000	1	DIR,VP	12/19/18	\$29.72	\$25.02	11,701	3,940
●○○	+1	12/21/18	Mistras	MG	B	\$510,656	35,000	2	DIR	12/20/18	\$14.59	\$14.38	411	90
●○○	+1	11/28/18	Celgene	CELG	OB	\$507,873	8,600	1	DIR	12/19/18	\$59.06	\$60.92	42,598	7,310
●○○	+1	12/20/18	Enterprise Prod LP	EPD	B	\$496,100	20,000	2	CEO,DIR	12/20/18	\$24.81	\$24.35	53,148	7,330
●○○	+1	12/17/18	Fluent	FLNT	JB*	\$457,499	130,714	1	BO,DIR,PR	12/14/18	\$3.50	\$3.20	241	280
●○○	+1	12/21/18	Caesars Ent	CZR	B	\$399,507	60,675	2	DIR	12/21/18	\$6.58	\$6.03	4,039	24,320
●○○	+1	12/11/18	Century Banc	CNBKA	B	\$393,027	5,388	1	BO	12/18/18	\$72.94	\$70.65	255	10
●○○	+1	11/19/18	XOMA	XOMA	B	\$354,793	25,000	1	BO	12/17/18	\$14.19	\$11.34	95	100
●○○	+1	12/19/18	Forestar	FOR	B	\$342,743	26,000	2	CEO,DIR	12/18/18	\$13.18	\$13.08	549	120
●○○	+1	12/20/18	Cedar Fair LP	FUN	B	\$293,520	6,000	1	CEO,PR	12/19/18	\$48.92	\$47.52	2,682	220
●○○	+1	12/18/18	Huttig Building Prod	HBP	B	\$223,410	90,000	2	DIR	12/17/18	\$2.48	\$2.21	58	130
●○○	+1	12/17/18	Magnolia Oil & Gas	MGY	B	\$223,400	20,000	1	GC,SEC,VP	12/14/18	\$11.17	\$10.66	2,662	1,160
●○○	+1	12/21/18	Washington Prime	WPG	B	\$220,683	45,747	2	CEO,DIR	12/20/18	\$4.82	\$5.01	932	4,300
●○○	+1	11/15/18	Infinity Pharm	INFI	B	\$209,913	175,000	1	BO	12/13/18	\$1.20	\$1.01	57	480
●○○	+1	12/19/18	H&E Equipment Svs	HEES	B	\$200,700	10,000	1	DIR	12/18/18	\$20.07	\$19.69	704	680
●○○	+1	12/19/18	Catalyst Pharm	CPRX	B	\$193,600	80,000	2	CEO,DIR,PR	12/19/18	\$2.42	\$1.99	205	2,350
●○○	+1	12/17/18	Lannett	LCI	B	\$176,800	35,000	2	DIR	12/14/18	\$5.05	\$4.71	185	1,660

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## InsiderInsights Ratings of Latest Insider Purchases (Continued)

InsiderInsights Ratings of Companies with Form 4 Purchases and Accumulations Filed at the SEC in the Past Week

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Insider Rating*	Rating Date	Company	Ticker	Trans Type(s)*	Total Purch Value	Shares Bought	# Insiders - Title(s)*	Latest Trans Date	Ave. Purch Price	Recent Price	Mkt Cap (mm)	10-Day Ave Vol (m)		
●○○	+1	12/17/18	Corp office Pr Tr	OFC	B	\$172,733	7,615	3	CEO,DIR,PR	12/14/18	\$22.68	\$21.42	2,332	1,290
●○○	+1	12/7/18	US Auto Parts	PRTS	B	\$167,868	136,936	1	BO	12/14/18	\$1.23	\$1.02	36	130
●○○	+1	12/10/18	Cerecor	CERC	B	\$165,408	50,000	1	BO,DIR	12/18/18	\$3.31	\$3.20	131	70
●○○	+1	12/20/18	Tailored Brands	TLRD	B	\$150,710	11,304	2	CFO,GC,TR,VP	12/19/18	\$13.33	\$13.12	657	4,480
●○○	+1	12/20/18	Champions Oncology	CSBR	B	\$148,800	20,000	1	CEO,DIR	12/19/18	\$7.44	\$7.35	84	120
●○○	+1	12/20/18	Berkshire Hills Banc	BHLB	B	\$145,740	5,225	4	CEO,DIR,GC,PR,VP	12/20/18	\$27.89	\$26.69	1,212	530
●○○	+1	12/21/18	Terra Tech	TRTC	B	\$129,840	200,000	3	CEO,COO,DIR,PR,SEC	12/21/18	\$0.65	\$0.61	49	1,360
●○○	+1	12/20/18	Open Bank	OPBK	OE*,OB	\$129,000	45,000	2	DIR,O	12/19/18	\$2.87	\$8.13	101	50
●○○	+1	11/19/18	Tile Shop	TTS	B	\$107,000	20,000	1	BO,DIR	12/14/18	\$5.35	\$5.66	299	650
●○○	+1	12/20/18	lovance BioTherap	IOVA	B	\$103,796	12,000	1	DIR	12/18/18	\$8.65	\$7.51	925	1,850
●○○	+1	12/19/18	First Commonwealth	FCF	B	\$97,917	8,000	1	DIR	12/18/18	\$12.24	\$11.63	1,156	920
●○○	+1	12/10/18	Centerstate Bank	CSFL	B	\$92,860	4,425	3	CB,CEO,DIR,O,PR	12/19/18	\$20.99	\$20.24	1,936	750
●○○	+1	11/16/18	Innodata	INOD	B	\$92,527	57,921	1	BO	12/21/18	\$1.60	\$1.62	42	40
●○○	+1	11/20/18	Oasis Midstream LP	OMP	B	\$85,550	5,000	1	DIR	12/19/18	\$17.11	\$15.30	421	180
●○○	+1	12/17/18	Ligand Pharm	LGND	OB	\$74,528	3,400	1	GC,SEC,VP	12/17/18	\$21.92	\$132.50	2,816	650
●○○	+1	11/13/18	Basic Energy Svs	BAS	B	\$73,647	15,000	1	BO	12/14/18	\$4.91	\$4.16	111	570
●○○	+1	12/18/18	Catchmark Timber Tr	CTT	B	\$55,730	7,000	2	CEO,DIR,PR	12/14/18	\$7.96	\$7.07	347	520
●○○	+1	11/5/18	Hersha Hospitality Tr	HT	B	\$50,525	3,000	1	COO,PR	12/21/18	\$16.84	\$16.81	663	450
●○○	+1	12/21/18	Reata Pharm	RETA	B	\$46,287	888	1	DIR	12/20/18	\$52.13	\$50.01	1,486	220
●○○	+0.5	12/18/18	Global Medical Reit	GMRE	JB*	\$29,999,997	3,333,333	3	BO,DIR	12/14/18	\$9.00	\$9.00	232	420
●○○	+0.5	12/18/18	VBI Vaccines	VBIV	JB*	\$21,999,999	15,714,285	2	BO,DIR	12/17/18	\$1.40	\$1.22	111	1,250
●○○	+0.5	12/20/18	Scientific Games	SGMS	B	\$9,162,000	600,000	1	BO,DIR	12/21/18	\$15.27	\$15.13	1,388	1,650
●○○	+0.5	12/21/18	AllianceBernstein LP	AB	B	\$6,354,141	254,675	1	O	12/21/18	\$24.95	\$24.29	2,341	810
●○○	+0.5	12/17/18	Hyster-Yale Materials	HY	AB	\$4,689,840	76,284	16	CB,DIR,O	12/20/18	\$61.48	\$58.08	962	60
●○○	+0.5	12/19/18	Esperion Therap	ESPR	B	\$2,864,070	60,000	1	BO	12/17/18	\$47.73	\$39.26	1,053	710
●○○	+0.5	12/19/18	Astrotech	ASTC	OB	\$2,037,333	866,950	1	BO,CEO,DIR	12/7/18	\$2.35	\$5.00	21	1,680
●○○	+0.5	12/17/18	HD Supply	HDS	B	\$1,849,580	50,000	1	CB,CEO,DIR,PR	12/14/18	\$36.99	\$36.10	6,430	2,900
●○○	+0.5	12/21/18	Limestone Banc	LMST	B	\$1,514,302	114,494	2	DIR	12/20/18	\$13.23	\$13.10	98	20
●○○	+0.5	12/19/18	Dynasil of Amer	DYSL	JB*	\$1,450,000	1,450,000	1	CEO,DIR,PR	12/18/18	\$1.00	\$0.90	16	110
●○○	+0.5	12/10/18	Trinity Ind	TRN	B	\$1,298,519	59,239	1	BO,DIR	12/13/18	\$21.92	\$19.81	2,898	2,630
●○○	+0.5	12/18/18	PVH	PVH	B	\$1,053,854	11,050	2	CB,CEO,DIR	12/14/18	\$95.37	\$88.72	6,719	1,480
●○○	+0.5	12/19/18	Quanta Svs	PWR	B	\$998,923	34,060	2	CEO,CFO,COO,DIR,PR	12/19/18	\$29.33	\$28.25	4,139	1,920
●○○	+0.5	12/20/18	Worthington Ind	WOR	B	\$916,750	25,000	1	DIR	12/19/18	\$36.67	\$34.80	2,059	430
●○○	+0.5	12/21/18	TPG RE Finance Tr	TRTX	AB	\$851,279	46,000	2	CEO,DIR,PR,VP	12/20/18	\$18.51	\$18.26	1,227	210
●○○	+0.5	12/17/18	Libbey	LBY	B	\$735,800	130,000	1	BO	12/13/18	\$5.66	\$4.16	92	140
●○○	+0.5	12/20/18	Stellus Cap Inv	SCM	B	\$721,454	57,600	3	CCO,CEO,CFO,DIR,PR	12/21/18	\$12.53	\$12.22	195	240
●○○	+0.5	12/20/18	Encision	ECIA	JB*	\$700,000	1,750,000	2	BO,DIR	12/19/18	\$0.40	\$0.33	4	20
●○○	+0.5	12/11/18	Synergy CHC	SNYR	JB*	\$673,769	1,225,034	1	BO,CEO,DIR,PR	12/10/18	\$0.55	\$0.14	12	20
●○○	+0.5	12/3/18	Entercom Comms	ETM	B	\$643,740	100,000	1	CB,DIR	12/14/18	\$6.44	\$5.42	773	1,290
●○○	+0.5	10/25/18	Odonate Therap	ODT	B	\$586,639	40,000	1	BO,CEO,DIR	12/18/18	\$14.67	\$12.86	345	90
●○○	+0.5	12/21/18	Delta Air Lines	DAL	B	\$415,104	8,000	1	DIR	12/20/18	\$51.89	\$49.45	33,904	7,490
●○○	+0.5	12/21/18	Schlumberger Limited	SLB	B	\$375,500	10,000	1	VP	12/20/18	\$37.55	\$35.70	49,437	20,370
●○○	+0.5	12/19/18	Eaton Vance	EV	B	\$348,862	10,000	1	DIR	12/18/18	\$34.89	\$33.36	3,902	1,510
●○○	+0.5	12/21/18	SEACOR Marine	SMHI	B	\$278,330	23,000	1	CEO,DIR,PR	12/21/18	\$12.10	\$12.05	246	70
●○○	+0.5	12/21/18	Harvest Cap Credit	HCAP	B	\$246,392	25,842	1	CEO,DIR	12/21/18	\$9.53	\$9.45	61	20
●○○	+0.5	12/20/18	PIMCO Inc Op Fd	PKO	B	\$229,774	9,500	1	O	12/21/18	\$24.19	\$23.27	349	90
●○○	+0.5	12/18/18	Cue Biopharma	CUE	B	\$169,189	33,102	2	DIR	12/20/18	\$5.11	\$4.61	93	110
●○○	+0.5	12/17/18	Investors RE Tr	IRET	B	\$151,049	28,995	3	CEO,CFO,CIO,DIR,PR	12/19/18	\$5.21	\$4.91	655	660
●○○	+0.5	12/21/18	Savara	SVRA	B	\$149,994	23,517	1	CEO,DIR	12/21/18	\$6.38	\$6.27	220	360
●○○	+0.5	12/18/18	South Jersey Ind	SJI	B	\$148,818	4,946	2	CB,DIR,TR,VP	12/19/18	\$30.09	\$28.49	2,436	860

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**InsiderInsights Ratings of Latest Insider Purchases (Continued)**

InsiderInsights Ratings of Companies with Form 4 Purchases and Accumulations Filed at the SEC in the Past Week

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Insider Rating*	Rating Date	Company	Ticker	Trans Type(s)*	Total Purch Value	Shares Bought	# Insiders - Title(s)*	Latest Trans Date	Ave. Purch Price	Recent Price	Mkt Cap (mm)	10-Day Ave Vol (m)	
🟢🟢🟢	+0.5	12/19/18	Nuveen AMT-Free Muni	NVG	B	\$139,874	10,300	1 O	12/17/18	\$13.58	\$13.69	2,773	800
🟢🟢🟢	+0.5	12/21/18	Natl HealthCare	NHC	OB	\$132,325	2,500	1 DIR	12/20/18	\$52.93	\$74.49	1,135	60
🟢🟢🟢	+0.5	12/21/18	Central Securities	CET	B	\$113,624	4,570	2 PR,VP	12/20/18	\$24.86	\$24.36	613	40
🟢🟢🟢	+0.5	12/18/18	Akorn	AKRX	B	\$112,000	25,000	1 GC,SEC,VP	12/14/18	\$4.48	\$3.45	433	4,340
🟢🟢🟢	+0.5	12/21/18	Acacia Research	ACTG	B	\$102,763	35,000	1 DIR	12/20/18	\$2.94	\$2.91	145	220
🟢🟢🟢	+0.5	10/26/18	Sterling Banc	SBT	B	\$88,529	10,000	1 CB,CEO,DIR	12/13/18	\$8.85	\$7.25	384	80
🟢🟢🟢	+0.5	12/20/18	NN	NNBR	B	\$68,150	11,000	2 DIR,O	12/18/18	\$6.20	\$5.84	246	860
🟢🟢🟢	+0.5	12/20/18	NEWTEK Bus Svs	NEWT	B	\$66,851	4,000	1 CB,CEO,DIR	12/20/18	\$16.71	\$15.68	296	370
🟢🟢🟢	+0.5	12/12/18	HCI	HCI	B	\$63,447	1,215	1 DIR	12/18/18	\$52.22	\$48.75	447	140
🟢🟢🟢	+0.5	12/19/18	HV Banc	HVBC	B	\$58,208	3,870	2 COO,DIR,VP	12/19/18	\$15.04	\$14.83	34	10
🟢🟢🟢	+0.5	12/10/18	Ocular Therapeutix	OCUL	B	\$55,000	10,000	1 O	12/14/18	\$5.50	\$4.16	171	640
🟢🟢🟢	+0.5	12/18/18	Mustang Bio	MBIO	B	\$53,805	15,500	1 CEO,DIR,PR	12/10/18	\$3.47	\$2.36	64	100
🟢🟢🟢	+0.5	12/17/18	electroCore	ECOR	B	\$48,300	10,000	1 O	12/13/18	\$4.83	\$5.88	173	160
🟢🟢🟢	+0.5	12/19/18	180 Degree Cap	TURN	B	\$46,250	25,000	1 CB,CEO,DIR	12/18/18	\$1.85	\$1.83	57	90
🟢🟢🟢	+0	12/21/18	Globalstar	GSAT	B,JB*	\$55,745,340	155,806,043	1 BO,CEO,DIR	12/21/18	\$0.36	\$0.47	591	10,620
🟢🟢🟢	+0	11/19/18	Eagle Bulk Shipping	EGLE	B	\$3,786,246	831,610	1 BO	12/19/18	\$4.55	\$4.28	311	440
🟢🟢🟢	+0	12/21/18	TESARO	TSRO	OE*	\$3,299,333	86,672	2 COO,DIR,PR,VP	12/20/18	\$38.07	\$72.69	4,001	4,180
🟢🟢🟢	+0	12/10/18	Revlon	REV	B	\$2,964,413	125,000	1 BO,DIR	12/21/18	\$23.72	\$22.78	1,204	150
🟢🟢🟢	+0	12/20/18	D R Horton	DHI	OE*	\$2,709,000	300,000	1 CB,DIR	12/18/18	\$9.03	\$33.62	12,650	5,400
🟢🟢🟢	+0	12/18/18	NuStar Energy LP	NS	B	\$2,298,460	100,000	1 DIR	12/17/18	\$22.98	\$21.15	2,264	940
🟢🟢🟢	+0	12/20/18	Red Lion Hotels	RLH	B	\$2,219,723	303,675	1 BO	12/20/18	\$7.31	\$7.29	179	180
🟢🟢🟢	+0	12/13/18	Independent Bank	IBTX	OB,B	\$2,099,795	118,381	3 BO,CB,CEO,DIR,LO,PR	12/14/18	\$17.74	\$45.52	1,387	290
🟢🟢🟢	+0	12/21/18	Soleno Therap	SLNO	JB*	\$2,000,060	1,245,135	1 BO	12/19/18	\$1.61	\$1.57	34	110
🟢🟢🟢	+0	12/17/18	Radius Health	RDUS	B	\$1,854,168	123,000	2 BO,SO,VP	12/20/18	\$15.07	\$13.36	608	1,000
🟢🟢🟢	+0	11/7/18	Del Friscos Rest	DFRG	B	\$1,641,316	253,000	1 BO	12/20/18	\$6.49	\$6.54	218	650
🟢🟢🟢	+0	12/20/18	CNX Res	CNX	B	\$1,195,000	100,000	1 DIR	12/19/18	\$11.95	\$11.69	2,380	3,590
🟢🟢🟢	+0	12/14/18	Cumulus Media	CMLS	B	\$1,187,130	110,000	1 BO	12/17/18	\$10.79	\$10.11	167	40
🟢🟢🟢	+0	12/7/18	J M Smucker Co	SJM	B	\$1,080,843	11,000	1 DIR	12/19/18	\$98.26	\$96.10	10,932	1,440
🟢🟢🟢	+0	12/19/18	LCI Ind	LCII	B	\$948,600	15,000	1 DIR	12/17/18	\$63.24	\$61.46	1,550	340
🟢🟢🟢	+0	12/17/18	Evolus	EOLS	B	\$946,977	74,400	3 DIR	12/17/18	\$12.73	\$10.57	288	460
🟢🟢🟢	+0	12/21/18	Strongbridge Biopharm	SBBP	B	\$943,375	237,079	1 BO	12/21/18	\$3.98	\$3.89	184	330
🟢🟢🟢	+0	12/17/18	Blue Hills Banc	BHBK	OB	\$862,055	61,269	1 CEO,PR	12/17/18	\$14.07	\$21.19	569	170
🟢🟢🟢	+0	12/21/18	Arthur J Gallagher	AJG	OE*,B	\$835,592	19,200	1 VP	12/19/18	\$43.52	\$71.06	13,050	1,410
🟢🟢🟢	+0	12/18/18	DSP	DSPG	AB	\$833,751	77,168	1 DIR	12/21/18	\$10.80	\$10.65	236	110
🟢🟢🟢	+0	12/21/18	Alpha & Omega Semi	AOSL	AB	\$710,401	71,570	1 BO,CEO,DIR	12/21/18	\$9.93	\$9.72	231	130
🟢🟢🟢	+0	12/21/18	Natl Commerce	NCOM	OE*	\$684,790	47,000	2 CB,CEO,CFO,DIR,PR	12/19/18	\$14.57	\$34.39	711	90
🟢🟢🟢	+0	10/30/18	Safety Inc & Growth	SAFE	AB	\$652,748	33,800	1 BO	12/21/18	\$19.31	\$19.55	356	40
🟢🟢🟢	+0	12/20/18	FalconStor Software	FALC	OB	\$606,758	606,758,144	2 BO,DIR	12/18/18	\$0.00	\$0.04	4	90
🟢🟢🟢	+0	12/18/18	Document Security Sys	DSS	JB*	\$600,000	612,245	1 BO,DIR	12/17/18	\$0.98	\$0.75	13	90
🟢🟢🟢	+0	10/2/18	Natl Fuel Gas Co	NFG	OE*	\$597,600	20,000	1 COO	12/13/18	\$29.88	\$53.18	4,572	710
🟢🟢🟢	+0	12/18/18	Bausch Health	BHC	B	\$584,018	25,440	1 PR	12/14/18	\$22.96	\$18.11	6,335	6,440
🟢🟢🟢	+0	12/20/18	FIRST Finl NW	FFNW	AB	\$439,838	29,226	1 DIR	12/20/18	\$15.05	\$15.17	166	30
🟢🟢🟢	+0	12/17/18	Sealed Air	SEE	B	\$420,126	12,500	2 CEO,DIR,PR,VP	12/17/18	\$33.61	\$33.64	5,279	3,010
🟢🟢🟢	+0	12/14/18	SeaChange Intl	SEAC	B	\$360,142	294,279	1 BO	12/20/18	\$1.22	\$1.18	42	360
🟢🟢🟢	+0	12/17/18	KA MLP Midstream Invs	KYN	B	\$313,682	22,000	2 DIR,PR,VP	12/21/18	\$14.26	\$12.96	1,496	1,760
🟢🟢🟢	+0	12/21/18	Douglas Emmett	DEI	B	\$297,296	8,700	1 DIR	12/20/18	\$34.17	\$34.04	5,785	1,040
🟢🟢🟢	+0	12/21/18	Prosperity Banc	PB	B	\$295,700	5,000	1 DIR,VCB	12/20/18	\$59.14	\$58.07	4,056	540
🟢🟢🟢	+0	11/16/18	Tellurian	TELL	B	\$285,660	42,320	1 DIR	12/17/18	\$6.75	\$5.97	1,436	1,720
🟢🟢🟢	+0	12/18/18	Marchex	MCHX	B	\$282,939	102,259	1 BO	12/20/18	\$2.77	\$2.63	110	90
🟢🟢🟢	+0	12/20/18	AXT	AXTI	OB	\$278,974	115,199	1 CEO,DIR	12/19/18	\$2.42	\$4.06	161	550

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Insider Rating*	Rating Date	Company	Ticker	Trans Type(s)*	Total Purch Value	Shares Bought	# Insiders - Title(s)*	Latest Trans Date	Ave. Purch Price	Recent Price	Mkt Cap (mm)	10-Day Ave Vol (m)	
○○○	+0	12/21/18	FMC	FMC	B	\$251,650	3,500	1 DIR	12/20/18	\$71.90	\$70.87	9,543	1,070
○○○	+0	12/17/18	Big Lots	BIG	B	\$250,385	8,500	1 CEO,DIR,PR	12/14/18	\$29.46	\$27.05	1,083	2,180
○○○	+0	12/19/18	Metlife	MET	B	\$249,865	6,400	1 DIR	12/17/18	\$39.04	\$38.63	38,122	9,140
○○○	+0	12/21/18	AgroFresh Solutions	AGFS	B,JB*	\$236,634	60,000	5 CEO,CFO,DIR	12/21/18	\$3.94	\$3.54	179	200
○○○	+0	11/21/18	Marathon Petrol	MPC	B	\$217,490	3,500	1 DIR	12/14/18	\$62.14	\$56.74	39,199	9,730
○○○	+0	12/18/18	Health Insurance In	HIQ	B	\$200,510	6,500	1 DIR	12/17/18	\$30.85	\$26.80	454	2,680
○○○	+0	12/19/18	Genesis Energy LP	GEL	B	\$197,500	10,000	1 VP	12/18/18	\$19.75	\$19.00	2,328	1,320
○○○	+0	12/19/18	Veru	VERU	B	\$188,832	130,000	2 BO,DIR,O	12/18/18	\$1.45	\$1.34	84	110
○○○	+0	12/21/18	ARC Document Sol	ARC	B	\$186,680	100,000	1 BO,CB,CEO,DIR,PR	12/21/18	\$1.87	\$1.87	86	320
○○○	+0	12/17/18	Kraton	KRA	B	\$185,001	8,000	1 CTO,VP	12/14/18	\$23.13	\$19.74	631	400
○○○	+0	12/17/18	FlexShopper	FPAY	JB*	\$183,076	254,427	1 BO	12/20/18	\$0.72	\$0.67	12	200
○○○	+0	10/24/18	Trinity Place	TPHS	JB*	\$181,845	41,089	1 BO	12/19/18	\$4.43	\$5.29	167	60
○○○	+0	12/10/18	Legacy Reserves	LGCY	B	\$166,600	110,000	1 BO	12/14/18	\$1.51	\$1.35	144	1,300
○○○	+0	12/17/18	Replimune	REPL	OB	\$152,250	87,000	1 O	12/13/18	\$1.75	\$13.50	426	100
○○○	+0	12/21/18	Marvell Tech	MRVL	B	\$148,500	10,000	1 DIR	12/20/18	\$14.85	\$14.89	9,789	12,320
○○○	+0	10/25/18	Citizens & Northern	CZNC	OE*,OB	\$145,322	8,169	4 DIR,VP	12/20/18	\$17.79	\$24.63	303	10
○○○	+0	12/19/18	Triple-S Mgt	GTS	B,JB*	\$124,300	7,760	2 CEO,DIR,PR	12/19/18	\$16.02	\$16.24	373	170
○○○	+0	12/20/18	South State	SSB	B	\$122,450	2,000	2 DIR	12/20/18	\$61.23	\$58.22	2,127	290
○○○	+0	11/14/18	Aerpio Pharm	ARPO	B	\$115,224	60,000	1 BO,DIR	12/20/18	\$1.92	\$1.73	70	90
○○○	+0	12/21/18	Pershing Gold	PGLC	B	\$115,076	126,000	1 BO	12/20/18	\$0.91	\$0.90	30	120
○○○	+0	12/21/18	Oceaneering Intl	OII	B	\$114,200	10,000	2 CEO,CFO,DIR,PR,VP	12/21/18	\$11.42	\$11.29	1,112	1,770
○○○	+0	12/17/18	CSS Ind	CSS	B	\$110,000	10,000	1 DIR	12/14/18	\$11.00	\$9.60	85	50
○○○	+0	12/19/18	Lamar Advertising Co	LAMR	OB	\$109,500	6,000	1 DIR	12/18/18	\$18.25	\$67.45	6,712	710
○○○	+0	12/21/18	Ind Contract Drilling	ICD	B	\$106,220	37,000	2 DIR	12/21/18	\$2.87	\$2.90	220	390
○○○	+0	12/17/18	C&J Energy Svs	CJ	B	\$102,638	7,030	1 DIR	12/14/18	\$14.60	\$13.04	878	1,590
○○○	+0	12/17/18	Solar Cap	SLRC	B	\$101,753	5,000	1 DIR	12/14/18	\$20.35	\$18.92	800	130
○○○	+0	12/17/18	Midland States Banc	MSBI	B	\$99,986	4,395	1 DIR	12/14/18	\$22.75	\$20.24	480	170
○○○	+0	12/21/18	First Business Finl	FBIZ	B	\$99,950	5,000	1 DIR	12/20/18	\$19.99	\$19.70	173	20
○○○	+0	12/17/18	Knight-Swift Transporta	KNX	B	\$99,909	3,661	1 DIR	12/13/18	\$27.29	\$23.98	4,186	3,300
○○○	+0	11/28/18	Jason Ind	JASN	B	\$99,531	63,977	1 BO	12/14/18	\$1.56	\$1.35	37	230
○○○	+0	12/20/18	Navistar Intl	NAV	B	\$93,430	3,500	1 DIR	12/20/18	\$26.69	\$25.00	2,473	1,180
○○○	+0	11/15/18	Metropolitan Bank	MCB	OB	\$90,000	3,000	1 DIR	12/14/18	\$30.00	\$31.14	256	20
○○○	+0	12/17/18	Construction Part	ROAD	B	\$88,740	10,500	2 CFO,VP	12/18/18	\$8.45	\$8.51	438	170
○○○	+0	12/17/18	Constellation Pharm	CNST	OB	\$87,521	15,884	1 O	12/13/18	\$5.51	\$5.70	147	30
○○○	+0	12/12/18	Amer Woodmark	AMWD	B	\$82,839	1,500	1 DIR,PR	12/21/18	\$55.23	\$55.67	961	240
○○○	+0	12/12/18	Hunt Finance Tr	HCFT	B	\$80,456	25,000	1 DIR	12/19/18	\$3.22	\$2.92	69	100
○○○	+0	12/11/18	Carters	CRI	AB	\$80,100	1,000	1 DIR	12/19/18	\$80.10	\$76.87	3,524	830
○○○	0	12/20/18	Inseego	INSG	JB*	\$34,421,398	11,473,799	2 BO	12/19/18	\$3.00	\$3.70	272	480
○○○	0	11/14/18	Carvana Co	CVNA	B	\$21,321,946	630,000	1 BO	12/19/18	\$33.84	\$29.84	4,299	2,120
○○○	0	11/8/18	Appian	APPN	B	\$5,280,168	200,000	1 BO	12/17/18	\$26.40	\$24.93	1,587	480
○○○	0	12/18/18	Live Nation Ent	LYV	OE*	\$4,345,000	1,580,000	1 CEO,DIR,PR	12/14/18	\$2.75	\$48.76	10,217	1,280
○○○	0	12/6/18	Enbridge	ENB	OB	\$1,386,350	70,000	2 DIR,O	12/21/18	\$19.81	\$30.76	59,171	9,760
○○○	0	12/21/18	Pacific Biosciences	PACB	OB	\$1,356,129	316,990	1 CFO,VP	12/20/18	\$4.28	\$7.39	1,100	2,400
○○○	0	12/13/18	Patrick Ind	PATK	B	\$1,229,115	40,000	2 CEO,DIR	12/17/18	\$30.73	\$28.37	681	560
○○○	0	11/13/18	Axon Enterprise	AAXN	OE*	\$1,037,386	218,397	1 CEO,DIR	12/20/18	\$4.75	\$41.79	2,443	960
○○○	0	12/18/18	Ares Cap	ARCC	B	\$801,000	50,000	1 CEO,DIR	12/14/18	\$16.02	\$14.84	6,326	4,340
○○○	0	12/18/18	Healthequity	HQY	OB	\$718,685	17,410	1 CEO,DIR,PR	12/14/18	\$41.28	\$55.33	3,452	1,120
○○○	0	12/12/18	Verisk Analytics	VRSK	OE*	\$704,682	32,031	1 CEO,DIR,PR	12/17/18	\$22.00	\$106.01	17,451	1,100
○○○	0	12/20/18	Centene	CNC	OB	\$570,200	10,000	1 CB,CEO,DIR	12/18/18	\$57.02	\$112.51	23,105	2,550
○○○	0	11/19/18	Party Cityco	PRTY	B	\$493,997	51,458	1 CEO,DIR	12/14/18	\$9.60	\$8.80	854	1,790

See last page for the Key to Ratings, Titles & Transaction Type codes.

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**InsiderInsights Ratings of Latest Insider Purchases (Continued)**

InsiderInsights Ratings of Companies with Form 4 Purchases and Accumulations Filed at the SEC in the Past Week

Sorted by: Insider Rating, then Total Transaction Value.

Generated with Special Screens tool at InsiderInsights.com using Pre-Programmed Screen: "Ratings of Latest Purchases"

Insider Rating*	Rating	Date	Company	Ticker	Trans Type(s)*	Total Purch Value	Shares Bought	# Insiders - Title(s)*	Latest Trans Date	Ave. Purch Price	Recent Price	Mkt Cap (mm)	10-Day Ave Vol (m)
000	0	12/7/18	Teladoc Health	TDOC	OB	\$383,942	134,878	2 CEO,CFO,COO,DIR,VP	12/20/18	\$2.85	\$44.01	3,085	2,160
000	0	10/31/18	NovaGold Res	NG	OE*	\$325,500	150,000	1 CEO,DIR,PR	12/14/18	\$2.17	\$3.83	1,232	1,850
000	0	11/11/18	Old Line Banc	OLBK	OB	\$212,940	33,800	1 CEO,PR	12/18/18	\$6.30	\$25.93	441	40
000	0	12/20/18	Macerich Co	MAC	B	\$200,826	4,500	1 DIR	12/18/18	\$44.63	\$41.72	5,885	1,940
000	0	12/17/18	Regeneron Pharm	REGN	OE*	\$193,847	4,125	1 CT,VP	12/20/18	\$46.99	\$344.60	36,639	840
000	0	11/26/18	Northfield Banc	NFBK	OE*	\$192,854	27,220	1 DIR	12/18/18	\$7.09	\$12.86	637	200
000	0	12/18/18	Martin Marietta Mat	MLM	B	\$174,070	1,000	1 DIR	12/14/18	\$174.07	\$165.29	10,366	870
000	0	11/29/18	Ventas	VTR	OB	\$167,864	5,940	1 DIR	12/21/18	\$28.26	\$60.27	21,484	2,890
000	0	12/18/18	Monmouth RE Inv	MNR	JB*	\$164,000	12,529	1 O	12/17/18	\$13.09	\$12.72	1,165	980
000	0	12/19/18	HG	STLY	B	\$154,361	366,514	1 BO	12/19/18	\$0.42	\$0.42	6	50
000	0	12/18/18	PGT Innovations	PGTI	OE*	\$140,544	70,272	1 DIR	12/14/18	\$2.00	\$15.22	882	710
000	0	11/28/18	Destination XL	DXLG	B	\$134,074	55,500	1 BO	12/14/18	\$2.42	\$1.99	99	70
000	0	12/20/18	Evans Banc	EVBN	B	\$132,269	3,995	2 CEO,DIR,PR	12/20/18	\$33.11	\$32.51	157	20
000	0	12/20/18	XBiotech	XBIT	OB	\$125,000	50,000	1 BO,CEO,DIR	12/19/18	\$2.50	\$6.27	225	180
000	0	12/17/18	ExtService	EXLS	B	\$123,543	2,220	1 DIR	12/13/18	\$55.65	\$48.93	1,676	230
000	0	12/18/18	Renewable Energy	REGI	B	\$119,700	5,000	1 DIR	12/17/18	\$23.94	\$23.27	868	920
000	0	12/18/18	Luther Burbank	LBC	B	\$116,350	12,722	1 DIR	12/13/18	\$9.15	\$8.09	457	140
000	0	11/8/18	Public Storage	PSA	OB	\$115,960	1,000	1 DIR	12/18/18	\$115.96	\$203.30	35,448	1,600
000	0	12/14/18	Allscripts Healthcare	MDRX	B	\$109,846	10,585	2 DIR	12/14/18	\$10.38	\$9.09	1,588	4,240
000	0	12/21/18	Portola Pharm	PTLA	OB	\$105,706	25,782	1 DIR	12/19/18	\$4.10	\$15.46	1,027	2,310
000	0	12/17/18	Loxo Oncology	LOXO	B	\$100,716	725	1 DIR	12/13/18	\$138.92	\$127.80	3,913	410
000	0	11/26/18	Raymond James Finl	RJF	OE*	\$99,951	2,064	1 PR	12/14/18	\$48.43	\$70.41	10,089	1,700
000	0	12/6/18	Ebix	EBIX	B	\$99,275	2,500	1 CB,CEO,DIR	12/21/18	\$39.71	\$40.38	1,263	570
000	0	12/18/18	Resonant	RESN	B	\$96,465	66,758	1 DIR	12/17/18	\$1.44	\$1.18	32	260
000	0	11/20/18	Cullen/Frost Bankers	CFR	B	\$93,380	1,000	1 DIR	12/14/18	\$93.38	\$85.40	5,461	590
000	0	12/19/18	General Finance	GFN	JB*	\$84,543	863	1 BO	12/20/18	\$97.96	\$9.13	277	80
000	0	12/20/18	County Banc	ICBK	OB	\$72,960	6,080	1 DIR,PR	12/19/18	\$12.00	\$19.91	133	10
000	0	12/10/18	Rocket Pharm	RCKT	OB	\$67,601	55,869	1 COO	12/20/18	\$1.21	\$11.21	497	440
000	0	12/21/18	CymaBay Therap	CBAY	B	\$65,399	10,000	1 CEO,DIR	12/21/18	\$6.54	\$6.54	389	850
000	0	12/12/18	MutualFirst Finl	MFSF	OB	\$56,850	5,000	1 DIR	12/17/18	\$11.37	\$27.40	235	10
000	0	11/13/18	Ball	BLL	OE*	\$52,765	5,266	1 VP	12/17/18	\$10.02	\$43.62	14,796	4,340
000	0	12/20/18	Qualys	QLYS	OB	\$51,228	5,756	1 GC,SEC,VP	12/19/18	\$8.90	\$67.88	2,673	450
000	0	11/11/18	BorgWarner	BWA	B	\$49,927	1,421	1 DIR	12/19/18	\$35.14	\$33.77	7,033	2,240
000	0	12/3/18	Athenex	ATNX	OB	\$45,500	10,000	1 BO,CB,CEO,DIR	12/20/18	\$4.55	\$10.97	734	610
000	0	12/17/18	TriCo Banc	TCBK	B	\$45,000	1,250	1 CFO,VP	12/6/18	\$36.00	\$32.86	1,000	90
000	0	11/19/18	Williams Industrial Svs	WLMS	B	\$44,000	20,000	2 BO,DIR	12/17/18	\$2.20	\$2.21	41	20
000	0	11/21/18	Pacira Pharm	PCRX	OB	\$42,600	12,000	1 CB,CEO,DIR	12/18/18	\$3.55	\$41.56	1,709	500
---	+100	11/29/18	Resideo Tech	REZI	B	\$159,639	7,200	3 O	12/14/18	\$22.17	\$20.08	2,469	1,950
---	-200	12/21/18	Endocyte	ECYT	OE*	\$774,202	140,214	1 DIR	12/17/18	\$5.52	\$23.99	1,969	1,890

See last page for the Key to Ratings, Titles & Transaction Type codes.

## InsiderInsights Ratings of Latest Insider Sales

InsiderInsights Ratings of Companies with Form 4 Sales and Distributions Filed at the SEC in the Past Week

Sorted by: Insider Rating, then Total Transaction Value.

Generated with Special Screens tool at InsiderInsights.com using Pre-Programmed Screen: "Ratings of Latest Sales"

Insider Rating*	Rating Date	Company	Ticker	Trans Type(s)*	Total Sale Value	Shares Sold	# Insiders - Title(s)*	Latest Trans Date	Ave. Sale Price	Recent Price	% Pr Below Highs	Mkt Cap (mm)		
●●●	-2	12/19/18	Stitch Fix	SFIX	AS	\$649,160	33,673	2	BO,CEO,COO,DIR,PR	12/19/18	\$19.28	\$16.87	-64%	1,679
●●●	-2	11/5/18	Snap	SNAP	AS	\$452,354	78,031	2	CAO,CFO,VP	12/19/18	\$5.80	\$4.99	-73%	6,462
●●○	-1	10/4/18	Acorda Therap	ACOR	S	\$3,688,812	228,710	1	BO	12/20/18	\$16.13	\$12.94	-54%	615
●●○	-1	12/14/18	TherapMD	TXMD	OS	\$1,630,493	443,037	2	CEO,DIR,PR,SEC	12/20/18	\$3.68	\$3.68	-52%	875
●●○	-1	12/19/18	SiteOne Landscape	SITE	OS	\$1,105,335	19,750	2	A,CFO,SEC,VP	12/18/18	\$55.97	\$52.95	-41%	2,162
●●○	-1	11/8/18	Fitbit	FIT	AS	\$550,000	110,000	1	GC,SEC,VP	12/18/18	\$5.00	\$4.80	-36%	1,193
●●○	-0.5	12/4/18	AnaplysBio	ANAB	OS	\$4,900,231	71,776	2	CEO,DIR,O,PR	12/17/18	\$68.27	\$55.40	-50%	1,482
●●○	-0.5	12/19/18	Carbon Black	CBLK	AS	\$681,500	50,000	1	O	12/17/18	\$13.63	\$12.27	-61%	833
●●○	-0.5	12/19/18	Vera Bradley	VRA	AS	\$524,927	61,614	2	BO	12/18/18	\$8.52	\$8.06	-51%	279
●●○	-0.5	12/20/18	Peoples United Finl	PBCT	S	\$478,907	32,163	1	HR,VP	12/19/18	\$14.89	\$14.08	-27%	5,313
○○○	-0	11/23/18	Walmart	WMT	S	\$340,287,168	3,677,658	3	BO,DIR	12/19/18	\$92.53	\$87.13	-16%	253,135
○○○	-0	10/17/18	salesforcecom	CRM	OS,AS	\$41,840,215	313,969	4	CB,CEO,DIR,GC,LO,PR	12/21/18	\$133.26	\$122.91	-18%	94,026
○○○	-0	12/7/18	AutoZone	AZO	OS	\$17,743,622	21,000	1	CIO,VP	12/17/18	\$844.93	\$826.04	-6%	20,820
○○○	-0	12/18/18	Broadcom	AVGO	OS	\$14,027,335	54,500	4	CEO,CFO,DIR,PR,SO	12/17/18	\$257.38	\$244.91	-5%	101,257
○○○	-0	12/21/18	DocuSign	DOCU	S,AS,OS	\$11,941,353	283,666	3	DIR,GC,SEC	12/21/18	\$42.10	\$37.99	-37%	6,278
○○○	-0	12/6/18	Alphabet	GOOG	AS	\$10,414,958	10,000	1	CEO,DIR	12/19/18	\$1,041	\$991.25	-19%	685,287
○○○	-0	11/14/18	RealPage	RP	S,AS	\$9,481,314	203,000	3	BO,CB,CEO,DIR,PR,VP	12/18/18	\$46.71	\$45.15	-23%	4,240
○○○	-0	11/9/18	Square	SQ	AS	\$9,296,307	153,035	2	BO,CB,CEO,DIR,O,PR	12/19/18	\$60.75	\$52.51	-40%	21,713
○○○	-0	12/21/18	SL Green Rlty	SLG	S	\$9,155,439	110,000	1	CEO,DIR	12/21/18	\$83.23	\$80.48	-22%	6,863
○○○	-0	12/3/18	Cracker Barrel	CBRL	S	\$7,236,050	42,258	1	BO	12/18/18	\$171.24	\$161.67	-7%	3,886
○○○	-0	11/19/18	Morningstar	MORN	AS	\$7,054,689	62,054	1	BO,CB,DIR	12/20/18	\$113.69	\$106.73	-22%	4,553
○○○	-0	12/18/18	Edwards Lifesciences	EW	OS,AS	\$6,835,979	45,300	4	CB,CEO,DIR,VP	12/21/18	\$150.90	\$144.21	-7%	30,147
○○○	-0	12/18/18	Nutanix	NTNX	AS,S	\$6,223,322	150,921	3	DIR,O,OO,VP	12/19/18	\$41.24	\$36.47	-36%	6,533
○○○	-0	11/14/18	ServiceNow	NOW	AS	\$5,653,037	32,500	1	DIR	12/17/18	\$173.94	\$162.00	-16%	29,047
○○○	-0	12/13/18	VMware	VMW	S	\$5,600,000	35,000	1	DIR	12/14/18	\$160.00	\$144.99	-6%	59,430
○○○	-0	12/7/18	Coupa Software	COUP	S,AS,OS	\$5,276,440	86,632	4	AO,CEO,CFO,DIR,O	12/21/18	\$60.91	\$54.57	-34%	3,244
○○○	-0	12/17/18	SBA Comms	SBAC	OS	\$4,571,535	26,456	2	CAO,DIR,VP	12/14/18	\$172.80	\$161.79	-3%	18,334
○○○	-0	12/6/18	Mongodb	MDB	S	\$4,458,038	50,625	1	SO	12/19/18	\$88.06	\$72.95	-6%	3,910
○○○	-0	11/16/18	Clorox Co	CLX	AS	\$4,067,964	25,317	1	COO,VP	12/17/18	\$160.68	\$154.51	-4%	19,724
○○○	-0	12/17/18	Zscaler	ZS	AS	\$4,044,012	102,387	3	CTO,DIR,LO,O,OO,VP	12/20/18	\$39.50	\$34.96	-19%	4,274
○○○	-0	12/10/18	Zuora	ZUO	S	\$3,811,756	208,431	1	DIR	12/20/18	\$18.29	\$16.08	-52%	1,745
○○○	-0	12/6/18	HubSpot	HUBS	AS,OS	\$3,788,147	30,277	2	CEO,COO,DIR,PR	12/20/18	\$125.12	\$115.20	-24%	4,520
○○○	-0	12/6/18	Workday	WDAY	S,AS	\$3,754,465	24,071	3	GC,O,PR,SEC,VP	12/20/18	\$155.97	\$144.93	-10%	31,595
○○○	-0	10/19/18	Vonage	VG	AS	\$3,665,333	400,000	1	DIR	12/19/18	\$9.16	\$8.19	-38%	1,962
○○○	-0	10/10/18	Cummins	CMI	OS	\$3,307,197	24,830	1	CB,CEO,DIR	12/17/18	\$133.19	\$128.22	-31%	20,587
○○○	-0	12/18/18	Five Below	FIVE	S	\$3,074,498	31,500	1	DIR	12/17/18	\$97.60	\$90.38	-28%	5,040
○○○	-0	12/12/18	Okta	OKTA	AS	\$2,902,221	46,265	3	CFO,DIR	12/17/18	\$62.73	\$54.59	-18%	6,029
○○○	-0	10/31/18	TPI Composites	TPIC	AS	\$2,832,210	115,822	1	DIR	12/19/18	\$24.45	\$23.50	-26%	811
○○○	-0	11/21/18	Beigene	BGNE	OS	\$2,673,536	20,000	1	SO	12/18/18	\$133.68	\$124.50	-39%	7,714
○○○	-0	11/13/18	Humana	HUM	S	\$2,366,965	7,931	4	HR,IO,O,PR	12/18/18	\$298.44	\$274.64	-16%	37,677
○○○	-0	12/19/18	Inv Tech	ITG	OS,S	\$2,299,669	76,618	3	CEO,DIR,PR	12/21/18	\$30.01	\$30.02	-1%	992
○○○	-0	12/6/18	New Relic	NEWR	S,AS	\$2,288,381	27,002	3	CFO,O	12/20/18	\$84.75	\$74.03	-26%	4,217
○○○	-0	12/6/18	Twilio	TWLO	AS	\$2,101,843	24,350	2	BO,CEO,DIR,GC,SEC	12/18/18	\$86.32	\$76.15	-14%	7,616
○○○	-0	11/21/18	HMS	HMSY	OS,S	\$2,053,863	59,524	5	CB,CEO,CFO,DIR,HR	12/14/18	\$34.50	\$27.37	-9%	2,297
○○○	-0	12/3/18	Guidewire Software	GWRE	AS,OS,S	\$1,955,807	24,022	6	CEO,COO,DIR,GC,O	12/19/18	\$81.42	\$75.38	-24%	6,108
○○○	-0	12/21/18	AFLAC	AFL	OS,S	\$1,868,317	42,429	3	PR,VP	12/21/18	\$44.03	\$43.23	-9%	32,910
○○○	-0	12/4/18	Trade Desk	TTD	AS	\$1,845,513	15,000	1	CTO	12/18/18	\$123.03	\$106.55	-24%	4,608
○○○	-0	11/1/18	Dolby LABS	DLB	AS	\$1,831,004	28,359	3	CEO,DIR,GC,PR,SEC	12/18/18	\$64.57	\$59.52	-13%	6,146
○○○	-0	12/3/18	Keysight Tech	KEYS	S,OS	\$1,796,903	29,416	2	VP	12/19/18	\$61.09	\$57.13	-13%	10,720
○○○	-0	11/9/18	CorVel	CRVL	OS,AS	\$1,752,672	27,719	2	BO,CB,DIR	12/21/18	\$63.23	\$59.88	-12%	1,123

See last page for the Key to Ratings, Titles & Transaction Type codes.

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### InsiderInsights Ratings of Latest Insider Sales (Continued)

InsiderInsights Ratings of Companies with Form 4 Sales and Distributions Filed at the SEC in the Past Week

Sorted by: Insider Rating, then Total Transaction Value.

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Insider Rating*	Rating Date	Company	Ticker	Trans Type(s)*	Total Sale Value	Shares Sold	# Insiders - Title(s)*	Latest Trans Date	Ave. Sale Price	Recent Price	% Pr Below Highs	Mkt Cap (mm)		
○○○	-0	10/16/18	Veeva Sys	VEEV	AS	\$1,576,823	18,029	2	DIR,GC,SEC,VP	12/18/18	\$87.46	\$80.99	-21%	11,768
○○○	-0	12/13/18	Fate Therap	FATE	S	\$1,519,156	108,998	1	DIR	12/19/18	\$13.94	\$11.50	-25%	742
○○○	-0	12/11/18	Stryker	SYK	OS	\$1,508,080	9,332	1	COO,PR	12/18/18	\$161.60	\$150.73	-10%	56,401
○○○	-0	12/3/18	Tyler Tech	TYL	OS	\$1,396,913	7,500	1	DIR	12/14/18	\$186.26	\$177.18	-26%	6,879
○○○	-0	12/17/18	Systemax	SYX	OS	\$1,381,395	44,652	2	CFO,PR,VP	12/14/18	\$30.94	\$23.81	-19%	887
○○○	-0	12/12/18	Haemonetics	HAE	OS,S	\$1,289,014	12,525	2	DIR	12/14/18	\$102.92	\$92.17	-13%	4,764
○○○	-0	12/21/18	Express	EXPR	S	\$1,288,654	240,425	1	BO	12/20/18	\$5.36	\$4.99	-54%	342
○○○	-0	12/4/18	Regenxbio	RGNX	OS,AS	\$1,286,275	27,500	3	CEO,CFO,DIR,GC,PR	12/18/18	\$46.77	\$39.37	-44%	1,411
○○○	-0	11/21/18	Cornerstone OnD	CSOD	AS,OS	\$1,277,524	24,552	3	CEO,DIR,O	12/19/18	\$52.03	\$46.75	-12%	2,740
○○○	-0	10/9/18	Civitas Solutions	CIVI	AS	\$1,254,739	71,393	1	CEO,DIR,PR	12/19/18	\$17.58	\$17.46	-4%	631
○○○	-0	12/14/18	Arrowhead Pharm	ARWR	AS	\$1,252,800	90,000	1	CEO,DIR	12/19/18	\$13.92	\$11.21	-38%	1,034
○○○	-0	12/20/18	EQGP LP	EQGP	S	\$1,117,383	56,263	1	DIR	12/18/18	\$19.86	\$19.93	-35%	6,028
○○○	-0	9/21/18	Exxon Mobil	XOM	S	\$1,092,527	15,000	1	VP	12/19/18	\$72.84	\$68.12	-18%	288,407
○○○	-0	11/26/18	Sailpoint Tech	SAIL	AS	\$1,068,371	47,000	2	CEO,CFO,DIR,PR,TR	12/18/18	\$22.73	\$21.38	-34%	1,877
○○○	-0	11/14/18	Workiva	WK	OS,AS	\$1,038,255	30,000	2	BO,CFO,CTO,VP	12/20/18	\$34.61	\$32.39	-14%	1,420
○○○	-0	12/18/18	Omnicecl	OMCL	AS	\$1,013,801	15,893	3	CB,CEO,CFO,DIR,PR	12/19/18	\$63.79	\$58.42	-20%	2,315
○○○	-0	12/18/18	Mastercard	MA	AS	\$959,993	5,000	1	DIR	12/17/18	\$192.00	\$175.19	-15%	180,935
○○○	-0	11/9/18	Amphastar Pharm	AMPH	S	\$925,679	45,193	2	BO,CEO,DIR	12/14/18	\$20.48	\$19.64	-9%	905
○○○	-0	11/19/18	Minerals Tech	MTX	OS	\$870,090	17,454	1	VP	12/19/18	\$49.85	\$49.47	-38%	1,744
○○○	-0	11/14/18	Green Plains	GPRE	S	\$833,595	63,015	1	COO,PR	12/20/18	\$13.23	\$12.49	-39%	517
○○○	-0	12/17/18	Zogenix	ZGNX	S	\$826,910	20,000	1	DIR	12/14/18	\$41.35	\$34.16	-34%	1,434
○○○	-0	11/26/18	Boston Beer	SAM	AS	\$800,004	2,909	1	BO,CB,DIR	12/14/18	\$275.01	\$246.98	-17%	2,870
○○○	-0	12/7/18	Yum! Brands	YUM	OS	\$761,959	8,343	1	CFO,PR	12/17/18	\$91.33	\$88.14	-3%	27,526
○○○	-0	12/19/18	Walt Disney Co	DIS	AS	\$730,905	6,654	2	FO,GC,SEC,VP	12/20/18	\$109.84	\$104.22	-8%	155,149
○○○	-0	12/14/18	QAD	QADA	JS*	\$728,840	18,000	1	BO,DIR,PR	12/21/18	\$40.49	\$40.25	-34%	758
○○○	-0	12/21/18	United Finl Banc	UBNK	OS	\$697,626	47,000	1	CEO,DIR,PR	12/20/18	\$14.84	\$14.67	-19%	749
○○○	-0	10/4/18	ResMed	RMD	AS,OS	\$697,084	6,193	2	CFO,COO,PR	12/17/18	\$112.56	\$106.45	-4%	15,169
○○○	-0	11/16/18	Retrophin	RTRX	AS	\$683,786	31,001	3	CEO,CFO,COO,DIR	12/21/18	\$22.06	\$21.18	-32%	874
○○○	-0	12/21/18	AutoNation	AN	OS	\$679,812	20,000	1	DIR	12/20/18	\$33.99	\$33.64	-45%	3,025
○○○	-0	11/6/18	Five9	FIVN	OS	\$669,275	16,411	2	OO,PR,VP	12/20/18	\$40.78	\$39.32	-18%	2,311
○○○	-0	11/16/18	Pinnacle West Cap	PNW	S	\$664,582	7,258	2	OO,VP	12/13/18	\$91.57	\$89.41	-1%	10,021
○○○	-0	11/15/18	Western Union	WU	OS	\$653,573	35,717	3	DIR	12/14/18	\$18.30	\$16.83	-18%	7,452
○○○	-0	12/20/18	Pioneer Natural Res	PXD	S	\$644,080	4,800	1	CEO,DIR,PR	12/19/18	\$134.18	\$125.08	-37%	21,321
○○○	-0	11/21/18	Inspire Medical Sys	INSP	AS	\$643,213	15,000	1	CEO,DIR,PR	12/18/18	\$42.88	\$37.50	-26%	858
○○○	-0	10/2/18	HP	HPQ	S	\$641,574	28,774	1	PR	12/14/18	\$22.30	\$19.65	-18%	30,526
○○○	-0	12/11/18	United Therap	UTHR	OS	\$618,240	6,000	1	GC,VP	12/20/18	\$103.04	\$102.51	-33%	4,468
○○○	-0	11/5/18	PriceSmart	PSMT	AS	\$615,991	9,900	1	BO,DIR	12/17/18	\$62.22	\$56.09	-34%	1,709
○○○	-0	10/22/18	TriNet	TNET	OS,AS	\$612,908	14,312	2	CEO,DIR,PR,VP	12/19/18	\$42.82	\$40.06	-29%	2,822
○○○	-0	12/18/18	DexCom	DXCM	AS	\$606,167	5,000	1	VP	12/14/18	\$121.23	\$108.32	-20%	9,624
○○○	-0	11/19/18	Intersect ENT	XENT	OS	\$594,504	20,000	1	CEO,DIR,PR	12/17/18	\$29.73	\$26.28	-31%	803
○○○	-0	11/20/18	Quotient Tech	QUOT	AS	\$570,530	50,000	1	CB,DIR	12/17/18	\$11.41	\$10.39	-29%	989
○○○	-0	10/23/18	AmerisourceBergen	ABC	OS	\$563,360	6,974	1	VP	12/14/18	\$80.78	\$71.98	-24%	15,255
○○○	-0	11/6/18	Smart Global	SGH	OS	\$545,081	18,800	2	DIR,VP	12/17/18	\$28.99	\$28.75	-49%	655
○○○	-0	12/18/18	Booking	BKNG	AS	\$528,218	294	1	CEO,PR	12/17/18	\$1,797	\$1,633	-19%	75,674
○○○	-0	12/6/18	Ambarella	AMBA	S	\$522,234	13,743	3	CEO,CTO,DIR,SO,VP	12/18/18	\$38.00	\$34.33	-43%	1,100
○○○	-0	12/12/18	RingCentral	RNG	AS	\$514,769	6,389	2	CFO,O	12/21/18	\$80.57	\$71.51	-24%	5,745
○○○	-0	9/21/18	Pure Storage	PSTG	OS	\$498,269	30,000	1	CFO	12/19/18	\$16.61	\$15.02	-43%	3,629
○○○	-0	11/21/18	Mercury Sys	MRCY	AS	\$484,050	10,000	1	CEO,DIR,PR	12/18/18	\$48.41	\$43.54	-16%	2,107
○○○	-0	9/25/18	Comcast	CMCSA	OS	\$476,185	13,086	1	GC,SEC,VP	12/18/18	\$36.39	\$33.75	-17%	153,546
○○○	-0	10/17/18	Collegium Pharm	COLL	AS	\$454,491	25,000	1	DIR	12/17/18	\$18.18	\$14.78	-39%	491

See last page for the Key to Ratings, Titles & Transaction Type codes.

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### InsiderInsights Ratings of Latest Insider Sales (Continued)

InsiderInsights Ratings of Companies with Form 4 Sales and Distributions Filed at the SEC in the Past Week

Sorted by: Insider Rating, then Total Transaction Value.

Generated with Special Screens tool at InsiderInsights.com using Pre-Programmed Screen: "Ratings of Latest Sales"

Insider Rating*	Rating Date	Company	Ticker	Trans Type(s)*	Total Sale Value	Shares Sold	# Insiders - Title(s)*	Latest Trans Date	Ave. Sale Price	Recent Price	% Pr Below Highs	Mkt Cap (mm)	
○○○	-0	11/20/18	Tucows	TCX	S	\$447,600	7,000	1 DIR	12/14/18	\$63.94	\$60.63	-11%	644
○○○	-0	12/13/18	Toro Co	TTC	S,OS	\$442,093	7,727	1 VP	12/18/18	\$57.21	\$54.30	-15%	5,730
○○○	-0	11/16/18	Global Payments	GPN	AS	\$439,349	4,300	3 DIR	12/14/18	\$102.17	\$96.27	-21%	15,231
○○○	-0	12/18/18	Aecom	ACM	AS	\$435,111	15,756	1 LO,VP	12/18/18	\$27.62	\$25.34	-31%	3,962
○○○	-0	12/18/18	Jernigan Cap	JCAP	S	\$403,945	19,081	1 DIR	12/14/18	\$21.17	\$19.92	-4%	406
○○○	-0	12/12/18	Hewlett Packard	HPE	AS	\$398,760	27,182	1 PR,TO	12/13/18	\$14.67	\$12.61	-25%	17,637
○○○	-0	9/19/18	Baxter Intl	BAX	OS	\$374,626	5,610	2 DIR	12/13/18	\$66.78	\$62.90	-15%	33,472
○○○	-0	12/21/18	Watsco	WSO	JS*	\$353,166	2,500	1 VP	12/20/18	\$141.27	\$133.59	-27%	5,000
○○○	-0	12/12/18	Bio-Rad LABS	BIO	JS*	\$349,928	1,411	1 CFO,VP	12/14/18	\$248.00	\$225.45	-28%	6,869
○○○	-0	11/7/18	Bottomline Tech	EPAY	S	\$338,117	6,723	1 MD	12/13/18	\$50.29	\$44.17	-32%	1,903
○○○	-0	12/3/18	Ciena	CIEN	AS	\$327,289	9,500	5 CFO,CTO,FO,GC,VP	12/17/18	\$34.45	\$31.71	-5%	4,893
○○○	-0	9/24/18	Zynga	ZNGA	OS,AS	\$326,050	87,000	2 COO,HR	12/18/18	\$3.75	\$3.63	-18%	3,129
○○○	-0	11/20/18	UniFirst	UNF	AS	\$307,230	2,200	1 BO	12/17/18	\$139.65	\$134.88	-28%	2,582
○○○	0	12/17/18	Regeneron Pharm	REGN	OS	\$47,184,504	244,048	1 DIR,PR	12/13/18	\$193.34	\$344.60	-54%	36,639
○○○	0	12/20/18	Amer Finl	AFG	S	\$9,998,831	109,768	1 CEO,DIR,PR	12/19/18	\$91.09	\$88.24	-23%	7,876
○○○	0	12/7/18	Pluralsight	PS	S	\$9,257,826	387,600	1 BO,DIR,F	12/14/18	\$23.89	\$19.61	-38%	2,649
○○○	0	11/19/18	Goosehead Insurance	GSHD	AS	\$7,760,961	285,096	4 BO,CEO,CFO,DIR	12/18/18	\$27.22	\$23.70	-29%	860
○○○	0	12/13/18	Patrick Ind	PATK	S	\$6,746,853	222,347	1 DIR	12/17/18	\$30.34	\$28.37	-58%	681
○○○	0	11/26/18	Kellogg	K	AS	\$5,768,520	100,000	1 BO	12/20/18	\$57.69	\$57.64	-23%	20,002
○○○	0	11/14/18	Fiserv	FISV	AS	\$3,699,032	50,000	1 CEO,DIR,PR	12/19/18	\$73.98	\$70.92	-11%	28,260
○○○	0	12/13/18	Genomic Health	GHDX	AS	\$3,339,527	50,000	1 CEO,DIR,PR	12/18/18	\$66.79	\$60.29	-28%	2,178
○○○	0	11/14/18	Fair Isaac	FICO	OS	\$3,276,136	17,996	2 VP	12/21/18	\$182.05	\$175.05	-23%	5,069
○○○	0	11/13/18	Ball	BLL	OS	\$3,024,630	63,000	1 CB,DIR,PR	12/14/18	\$48.01	\$43.62	-6%	14,796
○○○	0	11/20/18	Wayfair	W	S,AS	\$2,749,812	27,661	7 BO,CEO,CFO,COO	12/17/18	\$99.41	\$82.14	-33%	7,421
○○○	0	11/14/18	Tutor Perini	TPC	S	\$2,583,960	160,000	4 BO,CB,CEO,DIR	12/20/18	\$16.15	\$15.39	-43%	770
○○○	0	12/19/18	Crispr Therap AG	CRSP	S	\$2,176,898	72,934	1 DIR	12/18/18	\$29.85	\$22.73	-60%	1,180
○○○	0	11/6/18	Chegg	CHGG	S,OS,AS	\$1,681,695	57,350	2 CFO,DIR	12/19/18	\$29.32	\$25.89	-12%	2,975
○○○	0	12/7/18	Teladoc Health	TDOC	OS,AS	\$1,655,227	33,374	3 BD,CEO,DIR,O,VP	12/19/18	\$49.60	\$44.01	-44%	3,085
○○○	0	12/19/18	Cimpress NV	CMPR	OS	\$1,591,544	14,763	1 DIR	12/18/18	\$107.81	\$100.35	-37%	3,102
○○○	0	12/20/18	Centene	CNC	AS	\$1,520,600	12,540	2 IO,VP	12/18/18	\$121.26	\$112.51	-19%	23,105
○○○	0	12/11/18	Kroger Co	KR	S	\$1,404,039	47,946	2 COO,VP	12/18/18	\$29.28	\$27.40	-10%	21,858
○○○	0	12/21/18	Portola Pharm	PTLA	OS	\$1,195,002	64,218	1 DIR	12/17/18	\$18.61	\$15.46	-67%	1,027
○○○	0	12/21/18	CymaBay Therap	CBAY	S	\$1,123,589	142,381	1 DIR	12/18/18	\$7.89	\$6.54	-49%	389
○○○	0	12/18/18	Inogen	INGN	OS	\$1,108,787	8,500	1 DIR	12/14/18	\$130.45	\$115.29	-55%	2,481
○○○	0	11/30/18	Tabula Rasa HealthCar	TRHC	OS	\$1,018,048	16,000	2 CEO,DIR,PR	12/18/18	\$63.63	\$57.91	-30%	1,185
○○○	0	11/9/18	Liveramp	RAMP	S	\$943,379	21,657	1 LO	12/19/18	\$43.56	\$38.78	-15%	3,065
○○○	0	10/1/18	Codexis	CDXS	AS	\$925,950	50,000	1 DIR	12/20/18	\$18.52	\$15.93	-20%	861
○○○	0	10/31/18	NovaGold Res	NG	S,OS	\$878,138	224,089	2 CEO,DIR,PR	12/18/18	\$3.92	\$3.83	-24%	1,232
○○○	0	12/12/18	Verisk Analytics	VRSK	OS,AS	\$678,094	6,090	2 DIR,PR	12/19/18	\$111.35	\$106.01	-11%	17,451
○○○	0	11/28/18	CarGurus	CARG	AS	\$673,600	20,000	1 CTO	12/19/18	\$33.68	\$30.81	-41%	3,392
○○○	0	9/27/18	Amer Software	AMSWA	OS	\$671,022	68,194	1 PR	12/17/18	\$9.84	\$9.30	-48%	288
○○○	0	11/20/18	Corning	GLW	OS	\$613,600	20,000	1 VCB	12/19/18	\$30.68	\$28.78	-16%	23,036
○○○	0	12/21/18	Adobe	ADBE	AS	\$608,539	2,692	1 SO,VP	12/19/18	\$226.05	\$208.80	-19%	101,922
○○○	0	11/15/18	Carbonite	CARB	S,AS	\$512,074	19,518	2 CEO,CFO,DIR,PR	12/19/18	\$26.24	\$24.10	-39%	833
○○○	0	11/2/18	FibroGen	FGEN	OS,AS	\$475,172	11,752	4 CFO,DIR,FO,O,VP	12/20/18	\$40.43	\$40.23	-40%	3,419
○○○	0	12/17/18	TriCo Banc	TCBK	S,OS	\$432,235	12,136	3 CFO,DIR,VP	12/14/18	\$35.62	\$32.86	-11%	1,000
○○○	0	12/3/18	Intel	INTC	AS	\$409,874	8,552	1 VP	12/18/18	\$47.93	\$44.84	-17%	204,650
○○○	0	9/18/18	Dave & Busters Ent	PLAY	OS	\$338,341	7,500	1 VP	12/17/18	\$45.11	\$43.68	-33%	1,688
○-○-○	-200	12/21/18	Endocyte	ECYT	OS	\$3,354,072	150,253	1 O	12/21/18	\$22.32	\$23.99	-7%	1,969

See last page for the Key to Ratings, Titles & Transaction Type codes.

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**COMPANIES WITH LARGEST AGGREGATE INSIDER PURCHASES**

Includes Transaction Types B, AB, & JB\*, Filed at the SEC in the past week. Top 50 only.

Generated with Special Screens tool at InsiderInsights.com using Pre-Programmed Screen: "Largest Company Buys (Week) + All Ratings"

Insider Rating*	Rating Date	Company	Ticker	Trans Type(s)*	Total Purch Value	Shares Bought	# Insiders - Title(s)*	Latest Trans Date	Ave. Purch Price	Recent Price	Mkt Cap (mm)	10-Day Ave Vol (m)
●○○	+1 12/21/18	W R Grace	GRA	B	\$101,731,584	1,672,968	1 BO	12/21/18	\$60.81	\$60.72	4,068	900
●○○	+1 12/20/18	Axovant Sciences	AXON	JB*	\$80,000,000	80,000,000	8 BO	12/18/18	\$1.00	\$0.99	154	2,050
●○○	+1 10/18/18	Intl Flavors & Frag	IFF	B	\$56,260,337	420,700	1 BO	12/19/18	\$133.73	\$128.21	13,670	1,140
○○○	+0 12/21/18	Globalstar	GSAT	B,JB*	\$55,745,340	155,806,043	1 BO,CEO,DIR	12/21/18	\$0.36	\$0.47	591	10,620
○○○	0 12/20/18	Inseego	INSG	JB*	\$34,421,398	11,473,799	2 BO	12/19/18	\$3.00	\$3.70	272	480
●○○	+0.5 12/18/18	Global Medical Reit	GMRE	JB*	\$29,999,997	3,333,333	3 BO,DIR	12/14/18	\$9.00	\$9.00	232	420
●○○	+0.5 12/18/18	VBI Vaccines	VBIV	JB*	\$21,999,999	15,714,285	2 BO,DIR	12/17/18	\$1.40	\$1.22	111	1,250
○○○	0 11/14/18	Carvana Co	CVNA	B	\$21,321,946	630,000	1 BO	12/19/18	\$33.84	\$29.84	4,299	2,120
●○○	+1 12/17/18	Medicines	MDCO	B	\$19,819,932	999,363	3 CEO,DIR,VP	12/20/18	\$19.83	\$17.26	1,275	2,430
●○○	+2 12/21/18	Lions Gate Ent	LGFA	B	\$11,100,981	779,900	1 BO,DIR	12/21/18	\$14.23	\$14.00	2,909	1,880
●○○	+0.5 12/20/18	Scientific Games	SGMS	B	\$9,162,000	600,000	1 BO,DIR	12/21/18	\$15.27	\$15.13	1,388	1,650
●○○	+0.1 11/19/18	AVEO Pharm	AVEO	B	\$6,969,960	4,500,000	9 BO	12/21/18	\$1.55	\$1.49	187	1,620
●○○	+1 11/26/18	Sunrun	RUN	B	\$6,567,500	500,000	1 BO	12/17/18	\$13.14	\$10.90	1,219	2,000
●○○	+0.5 12/21/18	AllianceBernstein LP	AB	B	\$6,354,141	254,675	1 O	12/21/18	\$24.95	\$24.29	2,341	810
●○○	+1 12/13/18	Chesapeake Energy	CHK	B	\$5,574,630	2,655,000	5 CEO,CFO,DIR,VP	12/20/18	\$2.10	\$1.90	1,736	50,130
○○○	0 11/8/18	Appian	APPN	B	\$5,280,168	200,000	1 BO	12/17/18	\$26.40	\$24.93	1,587	480
●○○	+0.5 12/17/18	Hyster-Yale Materials	HY	AB	\$4,689,840	76,284	16 CB,DIR,O	12/20/18	\$61.48	\$58.08	962	60
●○○	+1 12/19/18	Repro-Med Sys	REPR	JB*,B	\$4,068,205	3,346,677	1 BO,DIR	12/17/18	\$1.22	\$1.43	55	30
●○○	+1 12/17/18	Barings BDC	BBDC	AB,B	\$4,026,335	435,600	3 AO,BO,CFO,FO	12/21/18	\$9.24	\$8.83	453	420
○○○	+0 11/19/18	Eagle Bulk Shipping	EGLE	B	\$3,786,246	831,610	1 BO	12/19/18	\$4.55	\$4.28	311	440
●○○	+1 12/17/18	Magnachip Semi	MX	B	\$3,606,750	515,000	1 BO	12/13/18	\$7.00	\$6.16	213	330
●●●	+3 11/20/18	Platform Specialty Prod	PAH	B	\$3,225,400	300,000	2 BO,DIR,GC,SEC,VP	12/20/18	\$10.75	\$9.78	2,820	2,230
●○○	+1 12/13/18	Mohawk Ind	MHK	B	\$3,051,713	25,937	2 DIR	12/14/18	\$117.66	\$113.21	8,400	1,140
○○○	+0 12/10/18	Revlon	REV	B	\$2,964,413	125,000	1 BO,DIR	12/21/18	\$23.72	\$22.78	1,204	150
●●○	+2 12/21/18	Dova Pharm	DOVA	B	\$2,934,259	468,631	5 BO,CEO,CFO,DIR,PR	12/21/18	\$6.26	\$6.80	192	870
●○○	+0.5 12/19/18	Esperion Therap	ESPR	B	\$2,864,070	60,000	1 BO	12/17/18	\$47.73	\$39.26	1,053	710
●○○	+1 10/9/18	Meet	MEET	B	\$2,598,646	652,221	1 BO	12/20/18	\$3.98	\$3.84	284	960
●●○	+2 12/19/18	New Mtn Finance	NMFC	B	\$2,517,671	200,805	3 COO,DIR,PR	12/17/18	\$12.54	\$12.25	932	570
○○○	+0 12/18/18	NuStar Energy LP	NS	B	\$2,298,460	100,000	1 DIR	12/17/18	\$22.98	\$21.15	2,264	940
○○○	+0 12/20/18	Red Lion Hotels	RLH	B	\$2,219,723	303,675	1 BO	12/20/18	\$7.31	\$7.29	179	180
○○○	+0 12/21/18	Soleno Therap	SLNO	JB*	\$2,000,060	1,245,135	1 BO	12/19/18	\$1.61	\$1.57	34	110
○○○	+0 12/17/18	Radius Health	RDUS	B	\$1,854,168	123,000	2 BO,SO,VP	12/20/18	\$15.07	\$13.36	608	1,000
●○○	+0.5 12/17/18	HD Supply	HDS	B	\$1,849,580	50,000	1 CB,CEO,DIR,PR	12/14/18	\$36.99	\$36.10	6,430	2,900
●○○	+1 11/23/18	US Concrete	USCR	B	\$1,684,443	50,000	1 DIR	12/17/18	\$33.69	\$32.83	552	460
●○○	+1 12/17/18	Sprott Focus Tr	FUND	B	\$1,678,546	275,000	1 BO,DIR	12/18/18	\$6.10	\$5.51	143	140
●○○	+1 10/31/18	GMS	GMS	B	\$1,665,383	106,160	2 DIR	12/14/18	\$15.69	\$14.66	604	1,160
○○○	+0 11/7/18	Del Friscos Rest	DFRG	B	\$1,641,316	253,000	1 BO	12/20/18	\$6.49	\$6.54	218	650
●○○	+1 12/20/18	Synalloy	SYNL	B	\$1,545,506	91,466	2 BO,CEO,DIR,PR	12/20/18	\$16.90	\$16.95	150	40
●○○	+0.5 12/21/18	Limestone Banc	LMST	B	\$1,514,302	114,494	2 DIR	12/20/18	\$13.23	\$13.10	98	20
●○○	+0.5 12/19/18	Dynasil of Amer	DYSL	JB*	\$1,450,000	1,450,000	1 CEO,DIR,PR	12/18/18	\$1.00	\$0.90	16	110
●●○	+2 12/14/18	Compass Diversified	CODI	B,JB*	\$1,428,188	96,175	3 BO,O	12/17/18	\$14.85	\$12.39	742	370
●○○	+0.5 12/10/18	Trinity Ind	TRN	B	\$1,298,519	59,239	1 BO,DIR	12/13/18	\$21.92	\$19.81	2,898	2,630
○○○	0 12/13/18	Patrick Ind	PATK	B	\$1,229,115	40,000	2 CEO,DIR	12/17/18	\$30.73	\$28.37	681	560
○○○	+0 12/20/18	CNX Res	CNX	B	\$1,195,000	100,000	1 DIR	12/19/18	\$11.95	\$11.69	2,380	3,590
○○○	+0 12/14/18	Cumulus Media	CMLS	B	\$1,187,130	110,000	1 BO	12/17/18	\$10.79	\$10.11	167	40
●●○	+2 12/14/18	Koppers	KOP	B	\$1,120,650	65,000	3 CFO,TR,VP	12/18/18	\$17.24	\$16.80	345	420
○○○	+0 12/7/18	J M Smucker Co	SJM	B	\$1,080,843	11,000	1 DIR	12/19/18	\$98.26	\$96.10	10,932	1,440
●○○	+1 11/20/18	Lazydays	LAZY	B	\$1,060,720	198,627	1 BO,DIR	12/14/18	\$5.34	\$4.96	42	30
●○○	+1 11/9/18	Camping World	CWH	B	\$1,059,779	70,108	1 BO	12/14/18	\$15.12	\$11.24	987	1,020
●○○	+0.5 12/18/18	PVH	PVH	B	\$1,053,854	11,050	2 CB,CEO,DIR	12/14/18	\$95.37	\$88.72	6,719	1,480

\* See last page for the Key to Ratings, Titles & Transaction Type codes.



**COMPANIES WITH LARGEST AGGREGATE FORM 4 SALES**

Includes Transaction Types S, AS, JS\*, Filed at the SEC in the past week. Top 50 only.

Generated with Special Screens tool at InsiderInsights.com using Pre-Programmed Screen: "Largest Company Sales (Week) + All Ratings"

Insider Rating*	Rating Date	Company	Ticker	Trans Type(s)*	Total Sale Value	Shares Sold	# Insiders - Title(s)*	Latest Trans Date	Ave. Sale Price	Recent Price	Mkt Cap (mm)	10-Day Ave Vol (m)		
○ ○ ○	-0	11/23/18	Walmart	WMT	S	\$340,287,168	3,677,658	3	BO,DIR	12/19/18	\$92.53	\$87.13	253,135	10,500
○ ○ ○	-0	10/17/18	salesforcecom	CRM	AS	\$40,621,926	304,784	2	CB,CEO,DIR	12/21/18	\$133.28	\$122.91	94,026	7,500
○ ○ ○	-0	12/6/18	Alphabet	GOOG	AS	\$10,414,958	10,000	1	CEO,DIR	12/19/18	\$1,041	\$991.25	685,287	2,340
○ ○ ○ ○	0	12/20/18	Amer Finl	AFG	S	\$9,998,831	109,768	1	CEO,DIR,PR	12/19/18	\$91.09	\$88.24	7,876	470
○ ○ ○	-0	11/14/18	RealPage	RP	AS,S	\$9,481,314	203,000	3	BO,CB,CEO,DIR,PR,VP	12/18/18	\$46.71	\$45.15	4,240	850
○ ○ ○	-0	11/9/18	Square	SQ	AS	\$9,296,307	153,035	2	BO,CB,CEO,DIR,O,PR	12/19/18	\$60.75	\$52.51	21,713	17,440
○ ○ ○ ○	0	12/7/18	Pluralsight	PS	S	\$9,257,826	387,600	1	BO,DIR,F	12/14/18	\$23.89	\$19.61	2,649	880
○ ○ ○	-0	12/21/18	SL Green Rlty	SLG	S	\$9,155,439	110,000	1	CEO,DIR	12/21/18	\$83.23	\$80.48	6,863	1,040
○ ○ ○ ○	0	11/19/18	Goosehead Insurance	GSHD	AS	\$7,760,961	285,096	4	BO,CEO,CFO,DIR	12/18/18	\$27.22	\$23.70	860	200
○ ○ ○	-0	12/3/18	Cracker Barrel	CBRL	S	\$7,236,050	42,258	1	BO	12/18/18	\$171.24	\$161.67	3,886	440
○ ○ ○	-0	11/19/18	Morningstar	MORN	AS	\$7,054,689	62,054	1	BO,CB,DIR	12/20/18	\$113.69	\$106.73	4,553	120
○ ○ ○ ○	0	12/13/18	Patrick Ind	PATK	S	\$6,746,853	222,347	1	DIR	12/17/18	\$30.34	\$28.37	681	560
○ ○ ○	-0	12/18/18	Nutanix	NTNX	AS,S	\$6,223,322	150,921	3	DIR,O,OO,VP	12/19/18	\$41.24	\$36.47	6,533	3,120
○ ○ ○ ○	0	11/26/18	Kellogg	K	AS	\$5,768,520	100,000	1	BO	12/20/18	\$57.69	\$57.64	20,002	2,960
○ ○ ○	-0	11/14/18	ServiceNow	NOW	AS	\$5,653,037	32,500	1	DIR	12/17/18	\$173.94	\$162.00	29,047	2,130
○ ○ ○	-0	12/13/18	VMware	VMW	S	\$5,600,000	35,000	1	DIR	12/14/18	\$160.00	\$144.99	59,430	1,830
○ ○ ○	-0	12/7/18	Coupa Software	COUP	S,AS	\$4,521,732	74,404	5	AO,CEO,CFO,DIR,O	12/21/18	\$60.77	\$54.57	3,244	1,230
○ ○ ○ ○	-0	12/6/18	Mongobd	MDB	S	\$4,458,038	50,625	1	SO	12/19/18	\$88.06	\$72.95	3,910	1,480
○ ○ ○	-0	11/16/18	Clorox Co	CLX	AS	\$4,067,964	25,317	1	COO,VP	12/17/18	\$160.68	\$154.51	19,724	1,230
○ ○ ○	-0	12/17/18	Zscaler	ZS	AS	\$4,044,012	102,387	3	CTO,DIR,LO,O,OO,VP	12/20/18	\$39.50	\$34.96	4,274	2,540
○ ○ ○	-0	12/21/18	Docusign	DOCU	AS,S	\$3,962,311	95,968	2	DIR	12/21/18	\$41.29	\$37.99	6,278	4,530
○ ○ ○	-0	12/10/18	Zuora	ZUO	S,AS	\$3,830,520	209,481	2	DIR	12/20/18	\$18.29	\$16.08	1,745	1,880
○ ○ ○	-0	12/6/18	Workday	WDAY	AS,S	\$3,754,465	24,071	3	GC,O,PR,SEC,VP	12/20/18	\$155.97	\$144.93	31,595	2,910
○ ○ ○ ○	0	11/14/18	Fiserv	FISV	AS	\$3,699,032	50,000	1	CEO,DIR,PR	12/19/18	\$73.98	\$70.92	28,260	2,570
● ○ ○	-1	10/4/18	Acorda Therap	ACOR	S	\$3,688,812	228,710	1	BO	12/20/18	\$16.13	\$12.94	615	1,080
○ ○ ○	-0	10/19/18	Vonage	VG	AS	\$3,665,333	400,000	1	DIR	12/19/18	\$9.16	\$8.19	1,962	2,810
○ ○ ○ ○	0	12/13/18	Genomic Health	GHDX	AS	\$3,339,527	50,000	1	CEO,DIR,PR	12/18/18	\$66.79	\$60.29	2,178	440
○ ○ ○	-0	12/18/18	Five Below	FIVE	S	\$3,074,498	31,500	1	DIR	12/17/18	\$97.60	\$90.38	5,040	1,230
○ ○ ○	-0	12/12/18	Okta	OKTA	AS	\$2,902,221	46,265	3	CFO,DIR	12/17/18	\$62.73	\$54.59	6,029	2,540
○ ○ ○	-0	10/31/18	TPI Composites	TPIC	AS	\$2,832,210	115,822	1	DIR	12/19/18	\$24.45	\$23.50	811	260
○ ○ ○ ○	0	11/20/18	Wayfair	W	AS,S	\$2,749,812	27,661	7	BO,CEO,CFO,COO	12/17/18	\$99.41	\$82.14	7,421	2,730
○ ○ ○ ○	0	11/14/18	Tutor Perini	TPC	S	\$2,583,960	160,000	4	BO,CB,CEO,DIR	12/20/18	\$16.15	\$15.39	770	410
○ ○ ○	-0	11/13/18	Humana	HUM	S	\$2,366,965	7,931	4	HR,IO,O,PR	12/18/18	\$298.44	\$274.64	37,677	1,370
○ ○ ○	-0	12/6/18	New Relic	NEWR	S,AS	\$2,288,381	27,002	3	CFO,O	12/20/18	\$84.75	\$74.03	4,217	710
○ ○ ○ ○	0	12/19/18	Crispr Therap AG	CRSP	S	\$2,176,898	72,934	1	DIR	12/18/18	\$29.85	\$22.73	1,180	880
○ ○ ○	-0	12/6/18	Twilio	TWLO	AS	\$2,101,843	24,350	2	BO,CEO,DIR,GC,SEC	12/18/18	\$86.32	\$76.15	7,616	5,080
○ ○ ○	-0	12/3/18	Guidewire Software	GWRE	AS,S	\$1,922,887	23,622	5	CEO,COO,DIR,GC,O	12/19/18	\$81.40	\$75.38	6,108	820
○ ○ ○	-0	12/6/18	HubSpot	HUBS	AS	\$1,881,894	15,277	1	CEO,DIR	12/20/18	\$123.18	\$115.20	4,520	500
○ ○ ○	-0	12/4/18	Trade Desk	TTD	AS	\$1,845,513	15,000	1	CTO	12/18/18	\$123.03	\$106.55	4,608	1,290
○ ○ ○	-0	11/1/18	Dolby LABS	DLB	AS	\$1,831,004	28,359	3	CEO,DIR,GC,PR,SEC	12/18/18	\$64.57	\$59.52	6,146	410
○ ○ ○	-0	10/16/18	Veeva Sys	VEEV	AS	\$1,576,823	18,029	2	DIR,GC,SEC,VP	12/18/18	\$87.46	\$80.99	11,768	1,360
○ ○ ○ ○	0	12/20/18	Centene	CNC	AS	\$1,520,600	12,540	2	IO,VP	12/18/18	\$121.26	\$112.51	23,105	2,550
○ ○ ○	-0	12/13/18	Fate Therap	FATE	S	\$1,519,156	108,998	1	DIR	12/19/18	\$13.94	\$11.50	742	1,130
○ ○ ○ ○	0	12/7/18	Teladoc Health	TDOC	AS	\$1,486,500	30,000	1	CEO,DIR	12/19/18	\$49.55	\$44.01	3,085	2,160
○ ○ ○ ○	0	12/11/18	Kroger Co	KR	S	\$1,404,039	47,946	2	COO,VP	12/18/18	\$29.28	\$27.40	21,858	7,720
○ ○ ○	-0	12/21/18	Express	EXPR	S	\$1,288,654	240,425	1	BO	12/20/18	\$5.36	\$4.99	342	2,380
○ ○ ○	-0	10/9/18	Civitas Solutions	CIVI	AS	\$1,283,519	73,393	2	CEO,DIR,IO,PR	12/19/18	\$17.49	\$17.46	631	770
○ ○ ○	-0	12/14/18	Arrowhead Pharm	ARWR	AS	\$1,252,800	90,000	1	CEO,DIR	12/19/18	\$13.92	\$11.21	1,034	1,900
○ ○ ○ ○	0	12/21/18	CymaBay Therap	CBAY	S	\$1,123,589	142,381	1	DIR	12/18/18	\$7.89	\$6.54	389	850
○ ○ ○	-0	12/20/18	EQGP LP	EQGP	S	\$1,117,383	56,263	1	DIR	12/18/18	\$19.86	\$19.93	6,028	1,100

\* See last page for the Key to Ratings, Titles & Transaction Type codes.

**LARGEST INDIVIDUAL PURCHASES (1-50)**

Includes Transaction Types B, AB, JB\*, & selected OB.. Top 100 by dollar value, filed at the SEC in the past week.

Note: If Insider Rating Date > 3 Months Old or Insider Rating is Bearish, Recent Buying Activity is Considered Insignificant.

Generated with Special Screens tool at InsiderInsights.com using Pre-Programmed Screen: "Large Individual Buys (Week) + All Ratings".

Insider Rating*	Rating Date	Insider Name	Title(s)	Company	Ticker	Trans Type(s)*	Total Purch Value	Latest Trans Date	Ave. Purch Price	Recent Price	Subsequent Holdings	Delta % Own	Mkt Cap (mm)
●○○	+1 12/21/18	40 North Latitude Fd	BO	W R Grace	GRA	B	\$101.7mm	12/21/18	\$ 60.81	\$60.72	17,328,276	11%	4,068
●○○	+1 10/18/18	Winder Inv Pte	BO	Intl Flavors & Frag	IFF	B	\$56,260,337	12/19/18	\$ 133.73	\$128.21	93,837,090	0%	13,670
○○○	+0 12/21/18	Monroe James III	BO,CEO	Globalstar	GSAT	B,JB*	\$55,745,340	12/21/18	\$ 0.36	\$0.47	\$164.1mm	10%	591
○○○	0 12/20/18	Golden Harbor	BO	Inseego	INSG	JB*	\$29,258,188	12/19/18	\$ 3.00	\$3.70	18,799,228	108%	272
○○○	0 11/14/18	Spruce House Parthip	BO	Carvana Co	CVNA	B	\$21,321,946	12/19/18	\$ 33.84	\$29.84	5,500,000	13%	4,299
●○○	+0.5 12/18/18	Perceptive Adv	BO	VBI Vaccines	VBIV	JB*	\$20,000,000	12/13/18	\$ 1.40	\$1.22	23,631,440	153%	111
●○○	+1 12/17/18	Denner Alexander J	DIR	Medicines	MDCO	B	\$17,311,330	12/20/18	\$ 20.15	\$17.26	8,293,000	12%	1,275
●○○	+2 12/21/18	Racheky Mark H MD	DIR,BO	Lions Gate Ent	LGF.A	B	\$11,100,981	12/21/18	\$ 14.23	\$14.00	1,377,775	130%	1,275
○○○	+1 12/20/18	Viking Global Inv	BO	Axovant Sciences	AXON	JB*	\$10,000,000	12/18/18	\$ 1.00	\$0.99	99,285,712	11%	154
○○○	+1 12/20/18	Viking Global Performar	BO	Axovant Sciences	AXON	JB*	\$10,000,000	12/18/18	\$ 1.00	\$0.99	99,285,712	11%	154
○○○	+1 12/20/18	Qvt Associates Gp	BO	Axovant Sciences	AXON	JB*	\$10,000,000	12/18/18	\$ 1.00	\$0.99	99,285,712	11%	154
○○○	+1 12/20/18	Machado Patrick	BO	Axovant Sciences	AXON	JB*	\$10,000,000	12/18/18	\$ 1.00	\$0.99	99,285,712	11%	154
○○○	+1 12/20/18	Roivant Sciences	BO	Axovant Sciences	AXON	JB*	\$10,000,000	12/18/18	\$ 1.00	\$0.99	99,285,712	11%	154
○○○	+1 12/20/18	Dexxon	BO	Axovant Sciences	AXON	JB*	\$10,000,000	12/18/18	\$ 1.00	\$0.99	99,285,712	11%	154
○○○	+1 12/20/18	Lo Andrew	BO	Axovant Sciences	AXON	JB*	\$10,000,000	12/18/18	\$ 1.00	\$0.99	99,285,712	11%	154
○○○	+1 12/20/18	Svf Invs \	BO	Axovant Sciences	AXON	JB*	\$10,000,000	12/18/18	\$ 1.00	\$0.99	99,285,712	11%	154
●○○	+0.5 12/18/18	Huang Yanping	BO	Global Medical Reit	GMRE	JB*	\$9,999,999	12/14/18	\$ 9.00	\$9.00	3,715,611	43%	232
●○○	+0.5 12/18/18	Zhang Jing Guo	BO,DIR	Global Medical Reit	GMRE	JB*	\$9,999,999	12/14/18	\$ 9.00	\$9.00	3,715,611	43%	232
●○○	+0.5 12/18/18	Zh Usa	BO	Global Medical Reit	GMRE	JB*	\$9,999,999	12/14/18	\$ 9.00	\$9.00	3,715,611	43%	232
●○○	+0.5 12/20/18	Perelman Ronald O	BO,DIR	Scientific Games	SGMS	B	\$9,162,000	12/21/18	\$ 15.27	\$15.13	70,301,472	1%	1,388
●○○	+1 11/26/18	Tiger Global Mgt	BO	Sunrun	RUN	B	\$6,567,500	12/17/18	\$ 13.14	\$10.90	17,817,200	3%	1,219
●○○	+0.5 12/21/18	Axa Equitable	O	AllianceBernstein LP	AB	B	\$6,354,141	12/21/18	\$ 24.95	\$24.29	2,566,838	11%	2,341
○○○	0 11/8/18	Abdiel Cap Mgt	BO	Appian	APPN	B	\$5,280,168	12/17/18	\$ 26.40	\$24.93	7,273,491	3%	1,587
○○○	0 12/20/18	North Sound Trading	BO	Inseego	INSG	JB*	\$5,163,210	12/19/18	\$ 3.00	\$3.70	9,246,570	23%	272
○○○	+1 12/13/18	Dunham Archie W	DIR	Chesapeake Energy	CHK	B	\$5,082,000	12/19/18	\$ 2.12	\$1.90	13,294,750	22%	1,736
○○○	+1 12/19/18	Manko Joseph M Jr	BO,DIR	Repro-Med Sys	REPR	B,JB*	\$4,068,205	12/17/18	\$ 1.22	\$1.43	6,548,374	105%	55
○○○	+1 12/17/18	Barings	BO,FO	Barings BDC	BBDC	AB	\$3,816,073	12/21/18	\$ 9.25	\$8.83	72,523,362	1%	453
○○○	+0 11/19/18	Oaktree Cap Gp	BO	Eagle Bulk Shipping	EGLE	B	\$3,786,246	12/19/18	\$ 4.55	\$4.28	50,019,440	2%	311
○○○	+1 12/17/18	Brigade Cap Mgt	BO	Magnachip Semi	MX	B	\$3,606,750	12/13/18	\$ 7.00	\$6.16	6,567,641	9%	213
○○○	+0 12/10/18	Perelman Ronald O	BO,DIR	Revlon	REV	B	\$2,964,413	12/21/18	\$ 23.72	\$22.78	90,346,640	0%	1,204
○○○	+1 12/13/18	Balcaen Filip	DIR	Mohawk Ind	MHK	B	\$2,933,963	12/14/18	\$ 117.66	\$113.21	884,751	3%	8,400
●○○	+0.5 12/19/18	Biotech Target N V	BO	Esperion Therap	ESPR	B	\$2,864,070	12/17/18	\$ 47.73	\$39.26	3,342,964	2%	1,053
○○○	+1 10/9/18	Luxor Cap	BO	Meet	MEET	B	\$2,598,646	12/20/18	\$ 3.98	\$3.84	3,933,497	20%	284
●○○	+2 12/21/18	Manning Paul B	BO,DIR	Dova Pharm	DOVA	B	\$2,477,164	12/21/18	\$ 6.27	\$6.80	25,637,408	2%	192
○○○	+0 12/18/18	Greehey William E	DIR	NuStar Energy LP	NS	B	\$2,298,460	12/17/18	\$ 22.98	\$21.15	9,058,682	1%	2,264
●○○	+2 12/19/18	Klinsky Steven B	DIR	New Mtn Finance	NMFC	B	\$2,276,926	12/17/18	\$ 12.52	\$12.25	6,315,173	3%	932
○○○	+0 12/20/18	Coliseum Cap Mgt	BO	Red Lion Hotels	RLH	B	\$2,219,723	12/20/18	\$ 7.31	\$7.29	3,554,039	9%	179
●○○	+3 11/20/18	Franklin Martin E	BO,DIR	Platform Specialty Prod	PAH	B	\$2,192,000	12/14/18	\$ 10.96	\$9.78	2,419,500	9%	2,820
●○○	+0.5 12/19/18	Pickens Thomas Boone	BO,CEO	Astrotech	ASTC	OB	\$2,037,333	12/7/18	\$ 2.35	\$5.00	1,563,351	124%	21
○○○	+1 12/17/18	Cox Christopher T	VP	Medicines	MDCO	B	\$2,008,950	12/20/18	\$ 17.70	\$17.26	334,955	51%	1,275
○○○	+0 12/21/18	Feinberg Larry N	BO	Soleno Therap	SLNO	JB*	\$2,000,060	12/19/18	\$ 1.61	\$1.57	2,519,346	98%	34
●○○	+0.5 12/18/18	Kariv Tomer	DIR	VBI Vaccines	VBIV	JB*	\$1,999,999	12/17/18	\$ 1.40	\$1.22	1,744,969	452%	111
●○○	+0.5 12/17/18	Deangelo Joseph J	CB,CEO	HD Supply	HDS	B	\$1,849,580	12/14/18	\$ 36.99	\$36.10	292,618	21%	6,430
○○○	+0 12/17/18	Biotech Growth N V	BO	Radius Health	RDS	B	\$1,807,038	12/20/18	\$ 15.06	\$13.36	13,360,552	1%	608
○○○	+1 11/23/18	Rossi Theodore P	DIR	US Concrete	USCR	B	\$1,684,443	12/17/18	\$ 33.69	\$32.83	146,822	52%	552
○○○	+1 12/17/18	George W Whitney	BO,DIR	Sprott Focus Tr	FUND	B	\$1,678,546	12/18/18	\$ 6.10	\$5.51	10,473,408	3%	143
○○○	+0 11/7/18	Armistice Cap	BO	Del Friscos Rest	DFRG	B	\$1,641,316	12/20/18	\$ 6.49	\$6.54	4,425,000	6%	218
○○○	+0 12/13/18	Viola Vincent J	BO	Independent Bank	IBTX	OB	\$1,600,002	12/14/18	\$ 17.19	\$45.52	4,443,839	2%	1,387
○○○	+1 10/31/18	Ross Ronald R	DIR	GMS	GMS	B	\$1,565,520	12/14/18	\$ 15.66	\$14.66	250,790	66%	604
○○○	+1 12/20/18	Privet Fd Mgt	BO	Synalloy	SYNL	B	\$1,506,731	12/20/18	\$ 16.94	\$16.95	1,204,010	8%	150

See last page for the Key to Ratings, Titles & Transaction Type codes.

Continued on Next Page

**LARGEST INDIVIDUAL PURCHASES** (Continued 51-100)

Includes Transaction Types B, AB, JB\*, & selected OB.. Top 100 by dollar value, filed at the SEC in the past week.

Note: If Insider Rating Date > 3 Months Old or Insider Rating is Bearish, Recent Buying Activity is Considered Insignificant.

Generated with Special Screens tool at InsiderInsights.com using Pre-Programmed Screen: "Large Individual Buys (Week) + All Ratings".

Insider Rating*	Rating Date	Insider Name	Title(s)	Company	Ticker	Trans Type(s)*	Total Purch Value	Latest Trans Date	Ave. Purch Price	Recent Price	Subsequent Holdings	Delta % Own	Mkt Cap (mm)
●○○○	+0.5 12/21/18	Wycoff W Kirk	DIR	Limestone Banc	LMST	B	\$1,474,702	12/20/18	\$ 13.23	\$13.10	272,544	69%	98
●○○○	+0.5 12/19/18	Sulick Peter	CEO,DIR	Dynasil of Amer	DYSL	JB*	\$1,450,000	12/18/18	\$ 1.00	\$0.90	2,778,730	109%	16
○○○○	0 12/21/18	Barnes Susan K	CFO,VP	Pacific Biosciences	PACB	OB	\$1,356,129	12/20/18	\$ 4.28	\$7.39	708,157	81%	1,100
●●○○	+2 12/14/18	Anholt Invs	BO	Compass Diversified	CODI	JB*,B	\$1,332,667	12/17/18	\$ 14.94	\$12.39	8,385,732	1%	742
●○○○	+0.5 12/10/18	Boze Brandon B	BO,DIR	Trinity Ind	TRN	B	\$1,298,519	12/13/18	\$ 21.92	\$19.81	21,900,000	0%	2,898
○○○○	+0 12/20/18	Lanigan Bernard Jr	DIR	CNX Res	CNX	B	\$1,195,000	12/19/18	\$ 11.95	\$11.69	100,000	New	2,380
○○○○	+0 12/14/18	Nimbus Atlas	BO	Cumulus Media	CMLS	B	\$1,187,130	12/17/18	\$ 10.79	\$10.11	1,674,273	7%	167
○○○○	+0 12/7/18	Smucker Timothy P	DIR	J M Smucker Co	SJM	B	\$1,080,843	12/19/18	\$ 98.26	\$96.10	651,745	2%	10,932
●○○○	+1 11/20/18	Coliseum Cap Mgt	BO,DIR	Lazydays	LAZY	B	\$1,060,720	12/14/18	\$ 5.34	\$4.96	253,145	364%	42
●○○○	+1 11/9/18	Abrams Cap Mgt LP	BO	Camping World	CWH	B	\$1,059,779	12/14/18	\$ 15.12	\$11.24	3,858,808	2%	987
●○○○	+0.5 12/17/18	Rankin Alfred M	CB,DIR	Hyster-Yale Materials	HY	AB	\$1,055,867	12/20/18	\$ 61.52	\$58.08	925,360	2%	962
●○○○	+0.5 12/17/18	Rankin Victoire G	O	Hyster-Yale Materials	HY	AB	\$1,041,448	12/20/18	\$ 61.54	\$58.08	825,715	2%	962
●○○○	+1 11/28/18	Sochet Ira	BO	Otelco	OTEL	B	\$1,037,154	12/20/18	\$ 15.92	\$15.80	1,570,698	4%	54
●●○○	+3 11/20/18	Capps John Edward	GC,VP	Platform Specialty Prod	PAH	B	\$1,033,400	12/20/18	\$ 10.33	\$9.78	458,666	28%	2,820
○○○○	0 12/6/18	Hansen Cynthia L	O	Enbridge	ENB	OB	\$990,250	12/20/18	\$ 19.81	\$30.76	105,423	90%	59,171
●○○○	+0.5 12/18/18	Chirico Emanuel	CB,CEO	PVH	PVH	B	\$955,055	12/14/18	\$ 95.51	\$88.72	247,420	4%	6,719
○○○○	+0 12/19/18	Gero James	DIR	LCI Ind	LCII	B	\$948,600	12/17/18	\$ 63.24	\$61.46	278,473	6%	1,550
○○○○	+0 12/21/18	Cdk Associates	BO	Strongbridge Biopharm	SBBP	B	\$943,375	12/21/18	\$ 3.98	\$3.89	6,531,908	4%	184
○○○○	0 12/13/18	Cleveland Todd M	CEO,DIR	Patrick Ind	PATK	B	\$925,615	12/17/18	\$ 30.85	\$28.37	616,219	5%	681
●○○○	+0.5 12/20/18	Blystone John B	DIR	Worthington Ind	WOR	B	\$916,750	12/19/18	\$ 36.67	\$34.80	164,370	18%	2,059
●●○○	+2 12/14/18	Johnson R Michael	VP	Koppers	KOP	B	\$867,500	12/17/18	\$ 17.35	\$16.80	161,534	45%	345
○○○○	+0 12/17/18	Parent William M	CEO,PR	Blue Hills Banc	BHBK	OB	\$862,055	12/17/18	\$ 14.07	\$21.19	539,469	13%	569
○○○○	+0 12/18/18	Paul Cynthia	DIR	DSP	DSPG	AB	\$833,751	12/21/18	\$ 10.80	\$10.65	410,878	23%	236
●○○○	+0.5 12/21/18	Guggenheim Greta	CEO,DIR	TPG RE Finance Tr	TRTX	AB	\$832,779	12/20/18	\$ 18.51	\$18.26	220,768	26%	1,227
○○○○	0 12/18/18	Deveer R Kipp	CEO,DIR	Ares Cap	ARCC	B	\$801,000	12/14/18	\$ 16.02	\$14.84	225,000	29%	6,326
●○○○	+1 11/19/18	Barris Peter J	BO	AVEO Pharm	AVEO	B	\$774,440	12/21/18	\$ 1.55	\$1.49	20,896,038	2%	187
●○○○	+1 11/19/18	Mott David M	BO	AVEO Pharm	AVEO	B	\$774,440	12/21/18	\$ 1.55	\$1.49	20,896,038	2%	187
●○○○	+1 11/19/18	Makower Joshua	BO	AVEO Pharm	AVEO	B	\$774,440	12/21/18	\$ 1.55	\$1.49	20,896,038	2%	187
●○○○	+1 11/19/18	Sandell Scott D	BO	AVEO Pharm	AVEO	B	\$774,440	12/21/18	\$ 1.55	\$1.49	20,896,038	2%	187
●○○○	+1 11/19/18	Baskett Forest	BO	AVEO Pharm	AVEO	B	\$774,440	12/21/18	\$ 1.55	\$1.49	20,896,038	2%	187
●○○○	+1 11/19/18	Sonsini Peter W	BO	AVEO Pharm	AVEO	B	\$774,440	12/21/18	\$ 1.55	\$1.49	20,896,038	2%	187
●○○○	+1 11/19/18	Florence Anthony A Jr	BO	AVEO Pharm	AVEO	B	\$774,440	12/21/18	\$ 1.55	\$1.49	20,896,038	2%	187
●○○○	+1 11/19/18	Makhzoumi Mohamad	BO	AVEO Pharm	AVEO	B	\$774,440	12/21/18	\$ 1.55	\$1.49	20,896,038	2%	187
●○○○	+1 11/19/18	Growth Equity Ops Iv	BO	AVEO Pharm	AVEO	B	\$774,440	12/21/18	\$ 1.55	\$1.49	20,896,038	2%	187
●○○○	+0.5 12/19/18	Austin Earl C Jr	CEO,DIR	Quanta Svs	PWR	B	\$749,700	12/19/18	\$ 29.40	\$28.25	441,647	6%	4,139
●○○○	+1 11/14/18	Defranco James	DIR,VP	DISH Network	DISH	AB	\$742,950	12/19/18	\$ 29.72	\$25.02	2,702,058	1%	11,701
●○○○	+0.5 12/17/18	Brigade Cap Mgt	BO	Libbey	LBY	B	\$735,800	12/13/18	\$ 5.66	\$4.16	2,410,000	6%	92
○○○○	0 12/18/18	Kessler Jon	CEO,DIR	Healthequity	HQY	OB	\$718,685	12/14/18	\$ 41.28	\$55.33	432,410	4%	3,452
○○○○	+0 12/21/18	Chang Mike F	BO,CEO	Alpha & Omega Semi	AOSL	AB	\$710,401	12/21/18	\$ 9.93	\$9.72	8,438,774	1%	231
●○○○	+0.5 12/11/18	Ross Jack	BO,CEO	Synergy CHC	SNYR	JB*	\$673,769	12/10/18	\$ 0.55	\$0.14	1,625,034	306%	12
○○○○	+0 10/30/18	Istar	BO	Safety Inc & Growth	SAFE	AB	\$652,748	12/21/18	\$ 19.31	\$19.55	15,205,866	0%	356
●○○○	+0.5 12/3/18	Field Joseph M	CB,DIR	Entercom Comms	ETM	B	\$643,740	12/14/18	\$ 6.44	\$5.42	9,975,344	1%	773
○○○○	+0 12/17/18	Romine Kristine	DIR	Evolus	EOLS	B	\$603,611	12/17/18	\$ 12.58	\$10.57	121,041	66%	288
○○○○	+0 12/18/18	Chan Heng Fai Ambrose	BO,DIR	Document Security Sys	DSS	JB*	\$600,000	12/17/18	\$ 0.98	\$0.75	1,786,531	52%	13
●○○○	+0.5 10/25/18	Tang Kevin C	BO,CEO	Odonate Therap	ODT	B	\$586,639	12/18/18	\$ 14.67	\$12.86	12,822,338	0%	345
○○○○	+0 12/18/18	Appio Thomas	PR	Bausch Health	BHC	B	\$584,018	12/14/18	\$ 22.96	\$18.11	128,922	25%	6,335
○○○○	0 12/20/18	Neidorff Michael F	CB,CEO	Centene	CNC	OB	\$570,200	12/18/18	\$ 57.02	\$112.51	3,699,611	0%	23,105
●○○○	+1 11/28/18	Mario Ernest	DIR	Celgene	CELG	OB	\$507,873	12/19/18	\$ 59.06	\$60.92	63,013	16%	42,598
●○○○	+1 11/6/18	Duchossois Richard L	DIR	Churchill Downs	CHDN	B	\$504,313	12/17/18	\$ 258.62	\$233.73	193,500	1%	3,172
●●○○	+2 12/18/18	Herlitz Grant	PR	Howard Hughes	HHC	B	\$500,394	12/17/18	\$ 98.29	\$92.16	93,275	6%	3,966

See last page for the Key to Ratings, Titles & Transaction Type codes.

**LARGEST INDIVIDUAL SALES** (1-50)

Includes Transaction Types S, AS, JS\*. Top 100 by dollar value, filed at the SEC in the past week.

Note: If Insider Rating Date > 3 Months Old or Insider Rating is Bullish, Recent Selling Activity is Considered Insignificant.

Generated with Special Screens tool at InsiderInsights.com using Pre-Programmed Screen: "Large Individual Sales (Week) + All Ratings".

Insider Rating*	Rating Date	Insider Name	Title(s)	Company	Ticker	Trans Type(s)*	Total Purch Value	Latest Trans Date	Ave. Purch Price	Recent Price	Subsequent Holdings	Delta % Own	Mkt Cap (mm)	
○○○	-0	11/23/18	Walton Alice L	BO	Walmart	WMT	S	\$113,429,056	12/19/18	\$ 92.53	\$87.13	125,990,924	-1%	253,135
○○○	-0	11/23/18	Walton Jim C	BO	Walmart	WMT	S	\$113,429,056	12/19/18	\$ 92.53	\$87.13	125,990,924	-1%	253,135
○○○	-0	11/23/18	Walton S Robson	BO,DIR	Walmart	WMT	S	\$113,429,056	12/19/18	\$ 92.53	\$87.13	125,990,924	-1%	253,135
○○○	-0	10/17/18	Benioff Marc	CB,CEO	salesforcecom	CRM	AS	\$40,572,623	12/21/18	\$ 133.28	\$122.91	95,779,344	0%	94,026
○○○	-0	12/6/18	Pichai Sundar	CEO,DIR	Alphabet	GOOG	AS	\$10,414,958	12/19/18	\$ 1,041	\$991.25	505	-95%	685,287
○○○	0	12/20/18	Lindner Carl H III	CEO,DIR	Amer Finl	AFG	S	\$9,998,831	12/19/18	\$ 91.09	\$88.24	2,604,976	-4%	7,876
○○○	0	12/7/18	Onion Frederick	BO,DIR,F	Pluralsight	PS	S	\$9,257,826	12/14/18	\$ 23.89	\$19.61	2,612,400	-13%	2,649
○○○	-0	12/21/18	Holliday Marc	CEO,DIR	SL Green Rlty	SLG	S	\$9,155,439	12/21/18	\$ 83.23	\$80.48	8,385	-93%	6,863
○○○	-0	12/3/18	Biglari Sardar	BO	Cracker Barrel	CBRL	S	\$7,236,050	12/18/18	\$ 171.24	\$161.67	4,322,218	-1%	3,886
○○○	-0	11/19/18	Mansueto Joseph D	BO,CB	Morningstar	MORN	AS	\$7,054,689	12/20/18	\$ 113.69	\$106.73	68,038,544	0%	4,553
○○○	0	12/13/18	Gendell Jeffrey L	DIR	Patrick Ind	PATK	S	\$6,746,853	12/17/18	\$ 30.34	\$28.37	864,825	-20%	681
○○○	-0	11/9/18	Dorsey Jack	BO,CB	Square	SQ	AS	\$6,296,020	12/19/18	\$ 61.11	\$52.51	-	All	21,713
○○○	0	11/26/18	Kellogg W K Fdn Tr	BO	Kellogg	K	AS	\$5,768,520	12/20/18	\$ 57.69	\$57.64	65,131,840	0%	20,002
○○○	-0	11/14/18	Luddy Frederic B	DIR	ServiceNow	NOW	AS	\$5,653,037	12/17/18	\$ 173.94	\$162.00	112,500	-22%	29,047
○○○	-0	12/13/18	Brown Michael W	DIR	VMware	VMW	S	\$5,600,000	12/14/18	\$ 160.00	\$144.99	16,923	-67%	59,430
○○○	-0	12/18/18	Attanasio Louis J	O	Nutanix	NTNX	AS	\$5,559,952	12/19/18	\$ 41.34	\$36.47	-	All	6,533
○○○	-0	11/14/18	Winn Stephen T	BO,CB	RealPage	RP	AS	\$4,664,142	12/18/18	\$ 46.64	\$45.15	14,054,587	-1%	4,240
○○○	-0	11/14/18	Seren Cap	BO	RealPage	RP	AS	\$4,664,142	12/18/18	\$ 46.64	\$45.15	14,054,587	-1%	4,240
○○○	-0	12/6/18	Eisenberg Meagen	SO	Mongodb	MDB	S	\$4,458,038	12/19/18	\$ 88.06	\$72.95	31,352	-62%	3,910
○○○	-0	12/7/18	Bernshteyn Robert	CEO,DIR	Coupa Software	COUP	S,AS	\$4,223,682	12/21/18	\$ 61.13	\$54.57	293,146	-19%	3,244
○○○	-0	11/16/18	Willoughby Dawn C	COO,VP	Clorox Co	CLX	AS	\$4,067,964	12/17/18	\$ 160.68	\$154.51	18,586	-58%	19,724
○○○	-0	12/10/18	Volpi Michelangelo	DIR	Zuora	ZUO	S	\$3,811,756	12/20/18	\$ 18.29	\$16.08	1,649	-99%	1,745
○○○	0	11/14/18	Yabuki Jeffery W	CEO,DIR	Fiserv	FISV	AS	\$3,699,032	12/19/18	\$ 73.98	\$70.92	277,214	-15%	28,260
●○○	-1	10/4/18	Scopia Cap Mgt	BO	Acorda Therap	ACOR	S	\$3,688,812	12/20/18	\$ 16.13	\$12.94	17,265,149	-1%	615
○○○	-0	10/19/18	Citron Jeffrey A	DIR	Vonage	VG	AS	\$3,665,333	12/19/18	\$ 9.16	\$8.19	1,650,000	-20%	1,962
○○○	-0	12/21/18	Krach Keith J	DIR	DocuSign	DOCU	AS	\$3,547,726	12/21/18	\$ 41.10	\$37.99	14,895,058	-1%	6,278
○○○	0	12/13/18	Popovits Kimberly J	CEO,DIR	Genomic Health	GHDX	AS	\$3,339,527	12/18/18	\$ 66.79	\$60.29	116,982	-30%	2,178
○○○	-0	12/18/18	Sargent Ronald	DIR	Five Below	FIVE	S	\$3,074,498	12/17/18	\$ 97.60	\$90.38	143,674	-18%	5,040
○○○	-0	11/9/18	Henry Alyssa	O	Square	SQ	AS	\$3,000,287	12/17/18	\$ 60.01	\$52.51	429,153	-10%	21,713
○○○	-0	10/31/18	Derosa Michael Lawrence	DIR	TPI Composites	TPIC	AS	\$2,832,210	12/19/18	\$ 24.45	\$23.50	6,597,233	-2%	811
○○○	0	11/19/18	Jones Mark Evan	BO,CEO	Goosehead Insurance	GSHD	AS	\$2,575,189	12/18/18	\$ 27.22	\$23.70	5,244,843	-2%	860
○○○	0	11/19/18	Mark & Robyn Jones Desc	BO	Goosehead Insurance	GSHD	AS	\$2,575,189	12/18/18	\$ 27.22	\$23.70	5,244,843	-2%	860
○○○	0	11/19/18	Jones Robyn Mary E	BO,DIR	Goosehead Insurance	GSHD	AS	\$2,575,189	12/18/18	\$ 27.22	\$23.70	5,244,843	-2%	860
○○○	-0	12/17/18	Apte Manoj	O	Zscaler	ZS	AS	\$2,561,128	12/17/18	\$ 39.07	\$34.96	207,963	-24%	4,274
○○○	0	12/19/18	Emster Kurt Von	DIR	Crispr Therap AG	CRSP	S	\$2,176,898	12/18/18	\$ 29.85	\$22.73	1,164,268	-6%	1,180
○○○	-0	12/6/18	Sachleben Mark	CFO	New Relic	NEWR	S,AS	\$2,096,514	12/20/18	\$ 84.87	\$74.03	236,234	-9%	4,217
○○○	-0	12/6/18	Halligan Brian	CEO,DIR	HubSpot	HUBS	AS	\$1,881,894	12/20/18	\$ 123.18	\$115.20	664,975	-2%	4,520
○○○	-0	12/4/18	Pickles David Randall	CTO	Trade Desk	TTD	AS	\$1,845,513	12/18/18	\$ 123.03	\$106.55	50,077	-23%	4,608
○○○	-0	12/6/18	Lawson Jeff	BO,CEO	Twilio	TWLO	AS	\$1,797,791	12/18/18	\$ 86.31	\$76.15	90,372	-19%	7,616
○○○	-0	12/6/18	Shaughnessy James P	GC,VP	Workday	WDAY	S	\$1,556,900	12/20/18	\$ 155.69	\$144.93	48,435	-17%	31,595
○○○	-0	12/13/18	Nashat Amir	DIR	Fate Therap	FATE	S	\$1,519,156	12/19/18	\$ 13.94	\$11.50	3,804,530	-3%	742
○○○	0	12/7/18	Gorevic Jason N	CEO,DIR	Teladoc Health	TDOC	AS	\$1,486,500	12/19/18	\$ 49.55	\$44.01	506,184	-6%	3,085
○○○	-0	12/17/18	Sinha Amit	CTO,DIR	Zscaler	ZS	AS	\$1,421,722	12/20/18	\$ 40.30	\$34.96	2,182,662	-2%	4,274
○○○	-0	12/21/18	Contrarius Inv Mgt	BO	Express	EXPR	S	\$1,288,654	12/20/18	\$ 5.36	\$4.99	6,884,816	-3%	342
○○○	-0	10/9/18	Nardella Bruce F	CEO,DIR	Civitas Solutions	CIVI	AS	\$1,254,739	12/19/18	\$ 17.58	\$17.46	548,838	-12%	631
○○○	-0	12/14/18	Anzalone Christopher R	CEO,DIR	Arrowhead Pharm	ARWR	AS	\$1,252,800	12/19/18	\$ 13.92	\$11.21	1,542,455	-6%	1,034
○○○	-0	12/12/18	Losch William E	CFO	Okta	OKTA	AS	\$1,241,490	12/17/18	\$ 62.07	\$54.59	-	All	6,029
○○○	0	12/20/18	Hunter Jesse N	VP	Centene	CNC	AS	\$1,212,600	12/18/18	\$ 121.26	\$112.51	226,382	-4%	23,105
○○○	0	11/14/18	Tutor Ronald N	BO,CB	Tutor Perini	TPC	S	\$1,209,750	12/19/18	\$ 16.13	\$15.39	5,536,601	-1%	770
○○○	0	11/14/18	Ronald N Tutor Separate	BO	Tutor Perini	TPC	S	\$1,209,750	12/19/18	\$ 16.13	\$15.39	5,536,601	-1%	770

See last page for the Key to Ratings, Titles & Transaction Type codes.

Continued on Next Page

**LARGEST INDIVIDUAL SALES** (Continued 51-100)

Includes Transaction Types S, AS, JS\*. Top 100 by dollar value, filed at the SEC in the past week.

Note: If Insider Rating Date > 3 Months Old or Insider Rating is Bullish, Recent Selling Activity is Considered Insignificant.

Generated with Special Screens tool at InsiderInsights.com using Pre-Programmed Screen: "Large Individual Sales (Week) + All Ratings".

Insider Rating*	Rating Date	Insider Name	Title(s)	Company	Ticker	Trans Type(s)*	Total Purch Value	Latest Trans Date	Ave. Purch Price	Recent Price	Subsequent Holdings	Delta % Own	Mkt Cap (mm)
○○○	-0	12/6/18	Fernandez Gomez Lucian PR	Workday	WDAY	AS	\$1,143,077	12/17/18	\$ 155.65	\$144.93	165,271	-4%	31,595
○○○	-0	11/1/18	Yeaman Kevin J	CEO,DIR	Dolby LABS	DLB	\$1,136,674	12/18/18	\$ 64.58	\$59.52	38,567	-31%	6,146
○○○	0	12/21/18	Emster Kurt Von	DIR	CymaBay Therap	CBAY	\$1,123,589	12/18/18	\$ 7.89	\$6.54	131,036	-52%	389
○○○	-0	12/20/18	Porges David L	DIR	EQGP LP	EQGP	\$1,117,383	12/18/18	\$ 19.86	\$19.93	-	All	6,028
○○○	-0	11/21/18	Miller Adam L	CEO,DIR	Cornerstone OnD	CSOD	\$1,094,742	12/19/18	\$ 52.13	\$46.75	3,947,925	-1%	2,740
○○○	-0	9/21/18	Corson Bradley W	VP	Exxon Mobil	XOM	\$1,092,527	12/19/18	\$ 72.84	\$68.12	223,461	-6%	288,407
○○○	-0	12/12/18	Kourey Michael R	DIR	Okta	OKTA	\$1,089,148	12/17/18	\$ 62.24	\$54.59	-	All	6,029
○○○	-0	12/6/18	Dermetzis Petros	O	Workday	WDAY	\$1,054,488	12/17/18	\$ 156.75	\$144.93	171,559	-4%	31,595
○○○	0	11/6/18	Schlein Ted	DIR	Chegg	CHGG	\$1,002,190	12/13/18	\$ 28.84	\$25.89	178,540	-16%	2,975
○○○	-0	12/18/18	Haythornthwaite Richard	DIR	Mastercard	MA	\$959,993	12/17/18	\$ 192.00	\$175.19	35,983	-12%	180,935
○○○	0	11/9/18	Jones Jerry C	LO	Liveramp	RAMP	\$943,379	12/19/18	\$ 43.56	\$38.78	216,086	-9%	3,065
○○○	0	10/1/18	Yang Patrick Y	DIR	Codexis	CDXS	\$925,950	12/20/18	\$ 18.52	\$15.93	53,817	-48%	861
○○○	-0	11/9/18	Zhang Jack Y	BO,CEO	Amphastar Pharm	AMPH	\$892,309	12/14/18	\$ 20.48	\$19.64	2,072,317	-2%	905
○○○	-0	11/14/18	Briggs Jeffrey S	COO,PR	Green Plains	GPRE	\$833,595	12/20/18	\$ 13.23	\$12.49	210,006	-23%	517
○○○	-0	12/17/18	Hawley Roger	DIR	Zogenix	ZGNX	\$826,910	12/14/18	\$ 41.35	\$34.16	70,575	-22%	1,434
○○○	0	12/11/18	Donnelly Michael Joseph	COO,VP	Kroger Co	KR	\$811,040	12/13/18	\$ 29.60	\$27.40	287,726	-9%	21,858
○○○	-0	11/26/18	Koch C James	BO,CB	Boston Beer	SAM	\$800,004	12/14/18	\$ 275.01	\$246.98	100,997	-3%	2,870
○○○	-0	10/16/18	Faddis Jonathan	GC,VP	Veeva Sys	VEEV	\$794,153	12/17/18	\$ 88.24	\$80.99	1,073	-89%	11,768
○○○	-0	12/3/18	Ryu Marcus	CEO,DIR	Guidewire Software	GWRE	\$788,572	12/18/18	\$ 81.17	\$75.38	10,255	-49%	6,108
○○○	-0	11/13/18	Margulis Heidi S	O	Humana	HUM	\$786,755	12/18/18	\$ 296.22	\$274.64	6,476	-29%	37,677
○○○	-0	10/16/18	Sekhri Paul J	DIR	Veeva Sys	VEEV	\$782,671	12/18/18	\$ 86.68	\$80.99	17,041	-35%	11,768
○○○	-0	11/26/18	Mclain Mark D	CEO,DIR	Sailpoint Tech	SAIL	\$749,852	12/17/18	\$ 22.72	\$21.38	1,563,714	-2%	1,877
○○○	-0	12/14/18	Lopker Pamela M	BO,PR	QAD	QADA	\$728,840	12/21/18	\$ 40.49	\$40.25	25,024,475	0%	758
○○○	-0	12/4/18	Mills Kenneth T	CEO,DIR	Regenxbio	RGNX	\$700,927	12/17/18	\$ 46.73	\$39.37	216,000	-6%	1,411
○○○	-0	11/14/18	Trom Jeff D	BO,CTO,V	Workiva	WK	\$684,827	12/20/18	\$ 34.24	\$32.39	317,735	-6%	1,420
●○○	-0.5	12/19/18	Viscuso Michael	O	Carbon Black	CBLK	\$681,500	12/17/18	\$ 13.63	\$12.27	1,006,132	-5%	833
○○○	0	11/28/18	Chrzan Oliver Ian	CTO	CarGurus	CARG	\$673,600	12/19/18	\$ 33.68	\$30.81	1,872,906	-1%	3,392
○○○	-0	12/19/18	Braverman Alan N	GC,VP	Walt Disney Co	DIS	\$651,303	12/20/18	\$ 109.81	\$104.22	221,898	-3%	155,149
○○○	-0	12/20/18	Dove Timothy L	CEO,DIR	Pioneer Natural Res	PXD	\$644,080	12/19/18	\$ 134.18	\$125.08	274,101	-2%	21,321
○○○	-0	11/21/18	Herbert Timothy P	CEO,DIR	Inspire Medical Sys	INSP	\$643,213	12/18/18	\$ 42.88	\$37.50	259,624	-5%	858
○○○	-0	10/2/18	Cho Alex	PR	HP	HPQ	\$641,574	12/14/18	\$ 22.30	\$19.65	-	All	30,526
○○○	-0	11/5/18	Price Robert E	BO,DIR	PriceSmart	PSMT	\$615,991	12/17/18	\$ 62.22	\$56.09	1,588,357	-1%	1,709
○○○	0	12/21/18	Lewnes Ann	SO,VP	Adobe	ADBE	\$608,539	12/19/18	\$ 226.05	\$208.80	50,140	-5%	101,922
○○○	-0	12/18/18	Balo Andrew K	VP	DexCom	DXCM	\$606,167	12/14/18	\$ 121.23	\$108.32	73,105	-6%	9,624
○○○	-0	12/18/18	Lipps Randall A	CB,CEO	Omniceil	OMCL	\$605,804	12/18/18	\$ 63.89	\$58.42	155,543	-6%	2,315
○○○	-0	11/13/18	Fleming William Kevin	PR	Humana	HUM	\$602,738	12/18/18	\$ 295.03	\$274.64	7,323	-22%	37,677
○○○	0	12/11/18	Schlotman J Michael	VP	Kroger Co	KR	\$592,999	12/18/18	\$ 28.86	\$27.40	282,452	-7%	21,858
○○○	-0	12/12/18	Horowitz Benjamin A	DIR	Okta	OKTA	\$571,583	12/17/18	\$ 65.21	\$54.59	1,703,351	-1%	6,029
○○○	-0	11/20/18	Boal Steven R	CB,DIR	Quotient Tech	QUOT	\$570,530	12/17/18	\$ 11.41	\$10.39	3,423,628	-1%	989
●○○	-1	11/8/18	Missan Andy	GC,VP	Fitbit	FIT	\$550,000	12/18/18	\$ 5.00	\$4.80	78,719	-58%	1,193
○○○	-0	11/13/18	Huval Timothy S	HR	Humana	HUM	\$536,319	12/18/18	\$ 305.07	\$274.64	8,831	-17%	37,677
○○○	-0	12/18/18	Tans Gillian	CEO,PR	Booking	BKNG	\$528,218	12/17/18	\$ 1,797	\$1,633.39	5,539	-5%	75,674
○○○	0	11/20/18	Macri Edmond	SO	Wayfair	W	\$517,384	12/17/18	\$ 101.19	\$82.14	6,338	-45%	7,421
○○○	0	11/20/18	Mulliken John Champlin	CTO	Wayfair	W	\$492,496	12/17/18	\$ 100.20	\$82.14	12,150	-29%	7,421
○○○	-0	11/21/18	Aslett Mark	CEO,DIR	Mercury Sys	MRCY	\$484,050	12/18/18	\$ 48.41	\$43.54	382,440	-3%	2,107
○○○	0	12/7/18	Seibel Donald Arthur Jr	DIR	ACNB	ACNB	\$483,677	12/20/18	\$ 38.08	\$40.20	17,706	-42%	283
●○○	-0.5	12/20/18	Norton David K	HR,VP	Peoples United Finl	PBCT	\$478,907	12/19/18	\$ 14.89	\$14.08	99,995	-24%	5,313
●○○	-2	12/19/18	Smith Mike C	COO,PR	Stitch Fix	SFIX	\$475,700	12/17/18	\$ 19.03	\$16.87	47,761	-34%	1,679
○○○	0	11/20/18	Oblak Steve	O	Wayfair	W	\$474,033	12/17/18	\$ 101.03	\$82.14	121,357	-4%	7,421
○○○	0	11/15/18	Ali Mohamad	CEO,DIR	Carbonite	CARB	\$470,206	12/19/18	\$ 26.29	\$24.10	1,038,952	-2%	833

See last page for the Key to Ratings, Titles & Transaction Type codes.

### LARGEST FORM 3 FILINGS

Includes Transaction Type 3. Top 50 by Subsequent Holdings, filed at the SEC in the past week.

Note: If Insider Rating Date > 3 Months Old, Recent Form 3 Activity is Considered Insignificant.

Generated with Special Screens tool at InsiderInsights.com using Pre-Programmed Screen: "Largest Form 3 Filings (Week) + All Ratings"

Insider Rating*	Rating Date	Insider Name	Title	Company	Ticker	Trans Type(s)*	Latest Trans Date	Recent Price	Subsequent Holdings	Mkt Cap (mm)	10-Day Ave Vol (m)	
○○○	-0	8/10/16	Spruce House Partnership	BO	XPO Logistics	XPO	3	12/19/18	\$52.06	12,750,000	6,609	12,230
---	NR	NR	Stevens Brent M	BO,DIR	Concrete Pumping	BBCP	3	12/6/18	\$8.36	11,005,275	240	50
○○○	+0	8/29/18	Brennan Patrick Thomas	DIR	Emergent Cap	EMGC	3	12/11/18	\$0.09	10,200,000	14	260
●●●	-2	4/30/18	Archon Capital Management	BO	ConforMIS	CFMS	3	12/12/18	\$0.40	7,610,455	25	700
○○○	-0	3/14/18	Oak Tree Archway	BO	Shiloh Ind	SHLO	3	12/11/18	\$6.53	7,300,866	153	70
○○○	-0	12/21/18	Contrarius Investment Management Ltd	BO	Express	EXPR	3	12/12/18	\$4.99	7,125,241	342	2,380
○○○	0	12/19/18	Vertex Pharmaceuticals (europe) Ltd	BO	Crispr Therap AG	CRSP	3	12/20/18	\$22.73	5,250,000	1,180	880
○○○	+0	12/13/18	Hite Hedge Asset Management	BO	Falcon Minerals	FLMN	3	12/4/18	\$7.11	5,039,476	610	840
○○○	-0	8/15/18	Chavez Miguel	BO	Robert Half Intl	RHI	3	12/17/18	\$54.04	4,000,000	6,565	1,190
○○○	-0	7/3/18	Realty Adv Inc	BO	New Concept Energy	GBR	3	12/4/18	\$1.40	3,060,000	3	70
○○○	+0	8/29/18	Houk Matthew D	DIR	Emergent Cap	EMGC	3	12/11/18	\$0.09	2,792,442	14	260
○○○	-0	10/10/18	Blackrock Inc	BO	Envestnet	ENV	3	12/17/18	\$47.38	2,355,816	2,166	370
○○○	+0.5	12/17/18	Brigade Leveraged Capital Structures Fd	BO	Libbey	LBY	3	12/13/18	\$4.16	2,290,000	92	140
○○○	+0.5	12/17/18	Brigade Capital Management	BO	Libbey	LBY	3	12/12/18	\$4.16	2,280,000	92	140
○○○	+0	11/30/18	Mcelhaugh Michael J	O	Arbutus Biopharma	ABUS	3	12/11/18	\$3.51	1,387,457	195	220
○○○	+0	10/7/15	Saba Capital Management L P	BO	Invesco Van Kampen High Inc	VLT	3	12/13/18	\$12.13	1,066,507	99	50
---	NR	NR	Rice William G	CB,CEO	Aptose Biosciences	APTO	3	12/21/18	\$1.98	133,014	72	250
---	NR	NR	Platzer Erich	DIR	Aptose Biosciences	APTO	3	12/21/18	\$1.98	115,000	72	250
---	NR	NR	Chow Gregory K	CFO,VP	Aptose Biosciences	APTO	3	12/21/18	\$1.98	112,014	72	250
○○○	-0	8/21/18	Farris Ray G	VP	Lee Enterprises	LEE	3	12/6/18	\$2.06	106,151	118	380
○○○	0	11/6/18	Fillmore John Paul	O	Chegg	CHGG	3	12/20/18	\$25.89	85,403	2,975	1,350
○○○	-0	11/13/18	Kaes Peter	GC,VP	Rapid7	RPD	3	12/14/18	\$28.93	84,315	1,369	550
○○○	-0	11/13/18	Luconi Christina	HR	Rapid7	RPD	3	12/14/18	\$28.93	72,153	1,369	550
○○○	-0	8/7/18	Gaudette Robert J	VP	NRG Energy	NRG	3	12/6/18	\$37.21	68,918	10,788	6,780
---	NR	NR	Whitehead Warren	DIR	Aptose Biosciences	APTO	3	12/21/18	\$1.98	50,000	72	250
---	+100	4/23/18	Fees Jessica	O	Surface Oncology	SURF	3	12/14/18	\$3.70	45,904	102	300
○○○	+0.5	12/19/18	Glickman Mark A	O	Esperion Therap	ESPR	3	12/20/18	\$39.26	20,000	1,053	710
---	NR	NR	Burger Denis R	DIR	Aptose Biosciences	APTO	3	12/21/18	\$1.98	16,254	72	250
○○○	-0	10/2/18	Bramley Claire	CT	HP	HPQ	3	12/15/18	\$19.65	15,819	30,526	13,890
○○○	-0	12/18/18	Churchey Randy L	DIR	Jernigan Cap	JCAP	3	12/6/18	\$19.92	13,085	406	310
○○○	-0	6/22/18	Pollema Steven C	TO,VP	TTEC	TTEC	3	12/13/18	\$25.12	11,681	1,160	110
---	NR	NR	Vincent Mark D	DIR	Aptose Biosciences	APTO	3	12/21/18	\$1.98	6,500	72	250
○○○	+0	9/12/17	Costa Jennifer E	GC,VP	Stage Stores	SSI	3	12/17/18	\$1.10	6,096	31	190
○○○	0	9/18/18	Srinivasan Padmanabhan T	VP	LogMeln	LOGM	3	12/6/18	\$78.59	5,061	4,021	860
○○○	-0	8/23/18	Black Christopher James	CFO,VP	Franklin Finl Network	FSB	3	12/12/18	\$25.86	5,000	376	100
○○○	+0	1/29/18	Nabel Elizabeth G	DIR	Tekla World Healthcare Fd	THW	3	12/13/18	\$10.92	3,799	332	250
○○○	+0	10/10/18	Nabel Elizabeth G	DIR	Tekla Healthcare Ops Fd	THQ	3	12/13/18	\$15.19	2,816	651	250
○○○	+0	1/29/18	Nabel Elizabeth G	DIR	Tekla Life Sciences Investors	HQL	3	12/13/18	\$13.99	2,787	308	200
○○○	+0	10/17/18	Nabel Elizabeth G	DIR	Tekla Healthcare Inv	HQH	3	12/13/18	\$16.57	2,417	689	320
○○○	0	2/5/18	Grant William F III	DIR	MidSouth Banc	MSL	3	12/12/18	\$10.44	2,000	174	30
○○○	+0.5	11/16/18	Letier A Scott	DIR	Conduent	CNDT	3	12/18/18	\$10.01	2,000	2,115	3,490
○○○	0	12/18/18	Carter Maverick	DIR	Live Nation Ent	LYV	3	12/18/18	\$48.76	2,000	10,217	1,280
○○○	0	2/28/18	Coady Trisha L	VP	HealthStream	HSTM	3	12/14/18	\$23.28	1,660	753	160
○○○	+0	12/21/18	Stebbins Peggy J	CAO,CT	First Business Finl	FBIZ	3	11/30/18	\$19.70	1,055	173	20
○○○	0	9/18/18	Bennett John Buel	VP	LogMeln	LOGM	3	12/6/18	\$78.59	774	4,021	860
○○○	-0	12/4/18	Damgard John M	DIR	Interactive Brokers	IBKR	3	12/1/18	\$52.40	500	21,762	720
○○○	-0	12/6/18	Milligan Stephen D	DIR	Autodesk	ADSK	3	12/13/18	\$120.30	196	26,347	2,190
○○○	0	11/2/18	Ives Louisa M	DIR	First of Long Island	FLIC	3	12/20/18	\$19.62	75	500	70
○○○	+1	10/1/07	Burns John Thomas	CT,FO,VP	Sellas Life Sciences	SLS	3	12/17/18	\$1.22	18	27	330
○○○	-0	11/6/18	Varughese John	VP	Dunkin Brands	DNKN	3	12/10/18	\$64.29	10	5,310	900

See last page for the Key to Ratings, Titles & Transaction Type codes.

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



**KEY FOR TITLE CODES:**

A=Assistant, AI=Affiliated Investor, AO=Accounting Officer, BD=Business Development, BO=Beneficial Owner, CAO=Chief Accounting Officer, CB=Chairman, CCO=Chief Compliance Officer, CEO=Chief Executive Officer, CFO=Chief Financial Officer, CIO=Chief Information Officer, CO=Compliance Officer, COO=Chief Operating Officer, CT=Controller, CTO=Chief Technology Officer, DIR=Director, F=Founder, FO=Financial Officer, GC=General Counsel, HR=Human Resources, IO=Information Officer, IR=Investor Relations, LO=Legal Officer, MD=Managing Director, O=Officer, OO=Operating Officer, PR=President, PT=Partner, REL=Relative of insider, SEC=Secretary, SH=Shareholder, SO=Sales Officer, TO=Technology Officer, TR=Treasurer, TT=Trustee, VCB=Vice Chairman, VP=Vice President, X=Ex Officer or other title displayed.

**KEY FOR TRANSACTION TYPE CODES:**

- B = Open-Market Insider Buy.
- S = Open-Market Insider Sale.
- AB = Automatic Buy through the insider's 10b5-1 program.
- AS = Automatic Sale through the insider's 10b5-1 program
- JB\* = Supposed Open-Market Acquisition done outside the price range or trading volume on the day.
- JS\* = Supposed Open-Market Disposition done outside the price range or trading volume on the day.
- OB = Option Exercise that was not sold at all.
- OE\* = Option Exercise that was only partially sold.
- OS\* = Partial Sale of Exercised Options.
- OE = Option Exercise that was completely sold.
- OS = Complete Sale of Exercised Options.
- JB = Non Open-Market Acquisition (Transaction Price is often unrelated to market price on the day).
- JS = Non Open-Market Disposition (Transaction Price often unrelated to market price on the day).
- 3 = Form 3 filing indicating new insider. New insiders must file a Form 3 whether or not they have any holdings in the company.

**KEY FOR INSIDERINSIGHTS COMPANY RATINGS:**

	<b>+3 SIGNIFICANTLY BULLISH</b>	<b>Interpreting our color-coded Ratings icons is straightforward: Green is Bullish; Red is Bearish.</b>
	<b>+2 SIGNIFICANTLY BULLISH</b>	<p>Some Significantly Bullish and Bearish Ratings are clearly stronger than others. Reasons for a Significant Rating garnering 2 or 3 colored icons instead of just one include: clusters of insiders acting similarly; insiders having very predictive track records (as per our Insider Statistics); large \$ value transactions, and trades resulting in large changes in holdings; transactions that represent reversals of opinion, and; many other proprietary metrics and behavioral factors.</p> <p>Despite computing and relaying different strengths of Significant insider signals, however, we do not purport that a +3 or -3 Significance Rating is three times more likely to be correct, or is more likely to result in a larger stock move.</p> <ul style="list-style-type: none"> <li>◆ Our back tests and experience indicate that the major alpha generation comes from the fact that a stock's insider activity has surpassed our calculated threshold of Significance. The strength of Significance is less important.</li> <li>◆ It is further valid to consider stocks with Ratings that are merely Leaning Bullish or Bearish in your long and short analysis, as these Ratings have also proved to generate alpha, though less than Significant Ratings.</li> <li>◆ Ratings should also be interpreted in concert with a stock's price action. It is normal behavior for insiders to buy when their stock has fallen in price, and sell when it rises sharply. So even an Insignificantly Bullish Rating on a stock that has doubled, or Insignificantly Bearish Rating on a stock that has halved in price imparts intelligence.</li> <li>◆ Our Ratings are considered "active" for 3 months, or until replaced by another Rating.</li> </ul>
	<b>+1 SIGNIFICANTLY BULLISH</b>	
	<b>+0.5 LEANING BULLISH</b>	
	<b>+0 INSIGNIFICANTLY BULLISH</b>	
	<b>0 CONFLICTING PURCHASES &amp; SALES</b>	
	<b>-0 INSIGNIFICANTLY BEARISH</b>	
	<b>-0.5 LEANING BEARISH</b>	
	<b>-1 SIGNIFICANTLY BEARISH</b>	
	<b>-2 SIGNIFICANTLY BEARISH</b>	
	<b>-3 SIGNIFICANTLY BEARISH</b>	
<hr/>		
	<b>+200 Purchases During Corporate Action.</b>	<b>May occasionally relay arbitrage intelligence.</b>
	<b>+100 Purchases Related to IPO.</b>	<b>Value of investment intelligence is uncertain when stock is unseasoned.</b>
	<b>-100 Sales Related to IPO.</b>	<b>Value of investment intelligence is uncertain when stock is unseasoned.</b>
	<b>-200 Sales During Corporate Action.</b>	<b>May occasionally relay arbitrage intelligence.</b>
	<b>NR Not Yet Rated.</b>	<b>There has not been a combination of insider activity and other factors to warrant a Rating.</b>

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