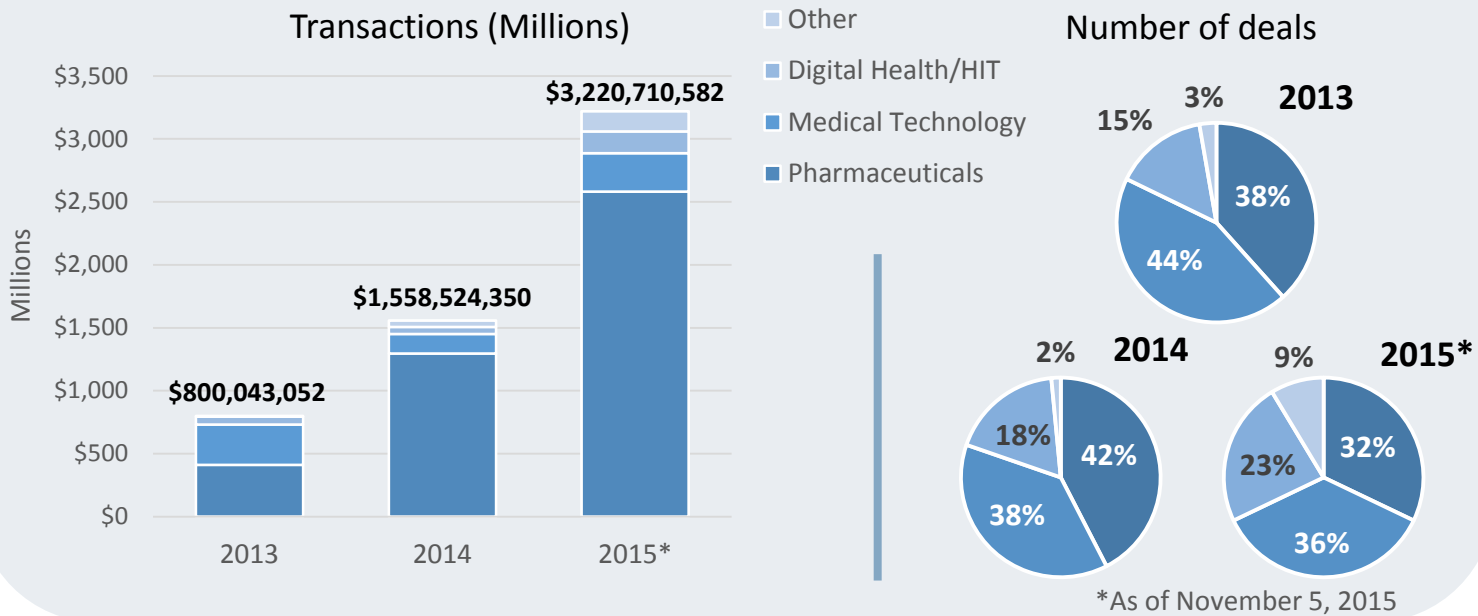


*A monthly report summarizing the Life Science transactions and trends in Washington State.*

Washington State Transactions

## Washington State Transactions by Industry



### News highlights:

- Genomics England and LabKey Software have formed a deal for LabKey to develop a data-management platform that meets the needs of the 100,000 Genomes Project. The deal puts the open-source LabKey Server platform at the center of the infrastructure the massive sequencing project will use to integrate and share data.
- Blaze Bioscience’s ‘tumor paint’, BLZ-100, was validated in a dog study to successfully guide surgery in dogs with a variety of tumor types.
- Nexgenia, a privately held biotechnology company focused on the development and manufacture of proprietary polymer-based reagents, is collaborating with Seattle Children’s Research Institute to develop improved immunotherapies for the treatment of cancer. The collaboration will allow researchers from both institutions to use Nexgenia’s technology platform to efficiently target and select immune cells, including CAR T cells.
- Sanofi Pasteur, the Bill & Melinda Gates Foundation and the Infectious Disease Research Institute (IDRI) have partnered to create the Global Health Vaccine Center of Innovation (GHVCI), a joint effort aimed at making a new, cheaper model for vaccines development.

### Deal highlights:

- Global Health Vaccine Center of Innovation** \$9.5 million (Partnership)
- Novuson Surgical** \$500,000 (Equity)
- Alpine Immune Sciences** \$5 million (Partnership)
- Park Boulevard Memory Care** \$3.5 million (Equity)
- Metheor Therapeutics** \$90,000 (Equity)
- Clarity Health** Undisclosed (Acquisition by SCI Solutions)

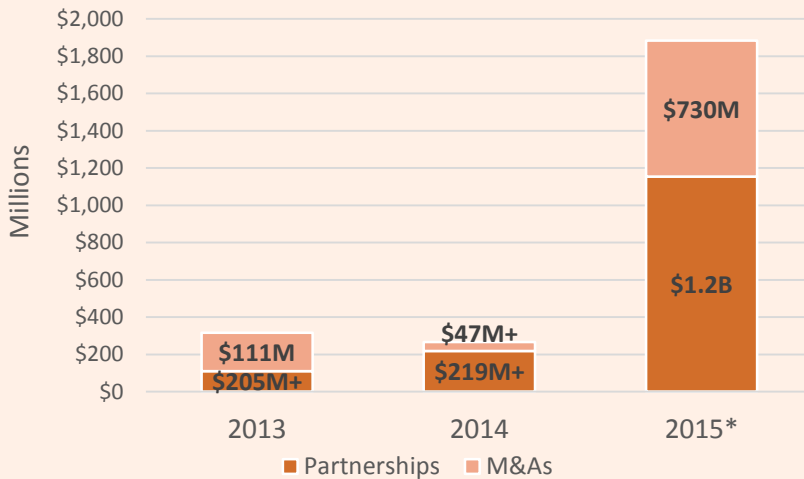
**September 2015 total:** \$21,508,725  
**2015 running total (Jan – Nov 5<sup>th</sup>):** \$3,220,710,582

October 2015

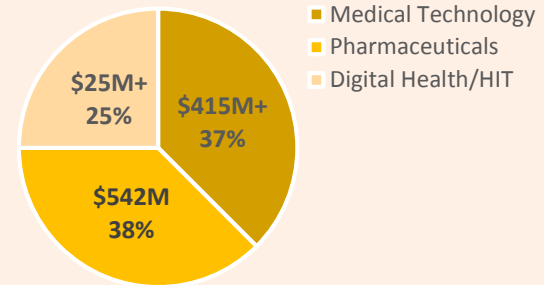
## Partnership and M&A Activity from 2013-2015

Partnership and M&A activity in 2015 more than tripled combined activity from 2013 and 2014.

Partnership and M&A Activity (Millions)



M&As by Sector (Number of Deals)



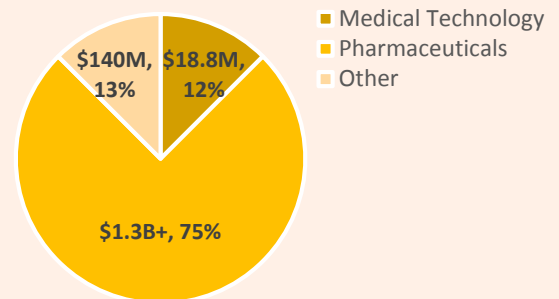
### M&A Highlights:

- RF Surgical Systems acquired by Medtronic (\$235M)
- Ekos acquired by BTG (\$180M)
- Alpine Biosciences acquired by Oncothyreon (\$27M)
- Avado acquired by WebMD (\$25M)

## Partnership Deal Highlights from 2013 to 2015

Celgene, Sanofi, and Takeda Pharmaceuticals were most active in partnering with WA based companies.

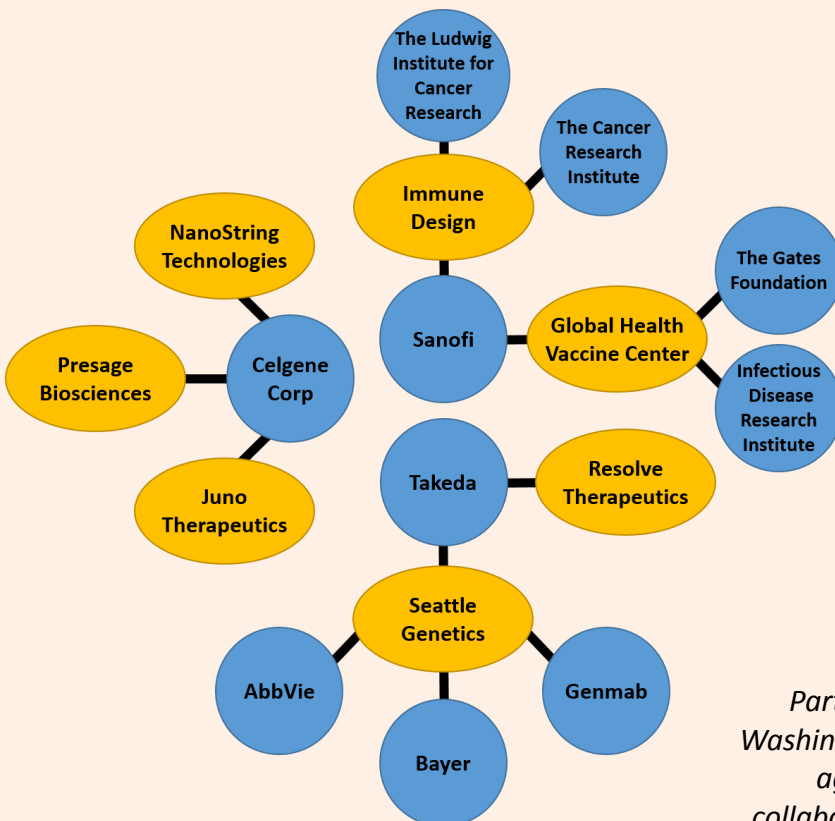
Partnerships by Sector (Number of Deals)



### Partnership Highlights:

- Juno Therapeutics and Celgene (\$1B)
- Immune Design and Sanofi (\$168M)
- Altius Institute for Biomedical Sciences and GSK (\$95M)
- Seattle Genetics and AbbVie (\$25M)
- Presage Biosciences and Celgene (\$13M)
- Sanofi Pasteur and the Gates Foundation jointly funded the Global Health Vaccine Center (\$9.5M)

Partnerships between strategic companies and Washington-based companies include co-development agreements, licensing of technologies, and collaborations to build new institutes in Washington.



+: includes transactions w/undisclosed amount

\*As of November 5, 2015

## Washington-based Life Science Transactions 2015

Date	Company	Type	Amount
01/22/15	Alder Biopharmaceuticals	Second public offering	\$203,600,000
01/22/15	Adaptive Biotechnologies	Series E	\$93,750,000
01/28/15	Vesiflo	Convertible note	\$650,000
01/30/15	MalarVx, Inc	Equity	\$110,000
02/05/15	Alpine Immune Sciences	Seed	\$1,300,000
02/10/15	Valant Medical Solutions	Venture Equity	\$285,350
02/13/15	Stasys Medical	Series A	\$160,000
02/18/15	StratoScientific	Venture Equity	\$550,000
02/23/15	Dendreon	Acquisition	\$495,000,000
03/06/15	Cerevast Therapeutics	Series C	\$1,375,000
03/09/15	KinDex Pharmaceuticals	Series A	\$500,000
03/11/15	Cardiac Dimensions	Venture Equity	\$15,200,000
03/15/15	Medical Mirror Systems	Equity	\$250,000
03/19/15	Nortis	Venture Equity	\$408,845
03/20/15	Healthentic	Series C	\$3,750,000
03/20/15	StratoScientific	Venture Equity	\$150,000
03/25/15	Cadence Biomedical	Equity	\$959,578
04/08/15	NuvoMed	Equity	\$390,637
04/10/15	Cardeas Pharma	Series B	\$3,500,000
04/13/15	Carena	Debt	\$500,000
04/17/15	X2 Biosystems	Venture Equity	\$350,000
04/23/15	Deep Domain	Venture Equity	\$30,000
04/24/15	Mpirica Health	Series A	\$1,600,000
05/01/15	Mirabilis Medica	Debt	\$2,920,000
05/06/15	Adaptive Biotechnologies	Series F	\$195,000,000
05/06/15	Theraclone Sciences	Venture Equity	\$3,080,000
05/06/15	Cyrus Biotechnology	Debt	\$850,000
05/06/15	InDemand Interpreting	Venture Equity	\$4,000,000
05/14/15	Cytodyn	Debt	\$3,281,050
05/18/15	Tissue Regeneration Systems	Debt	\$2,093,182
05/19/15	KPI Therapeutics	Equity	\$27,000
05/21/15	Ventec Life Systems	Venture Equity	\$8,192,480
05/27/15	BioViva USA	Equity	\$250,000
06/02/15	C-SATS	Venture Equity	\$2,500,000
06/03/15	Magnolia Medical Technologies	Venture Equity	\$6,235,322
06/04/15	Carena	Series B	\$13,300,000
06/05/15	Valant Medical Solutions	Venture Equity	\$3,000,000
06/11/15	Glycostasis	Equity	\$149,998
06/16/15	Altius Institute for Biomedical Sciences	Partnership	\$95,000,000
06/16/15	Remote Medical International	Partnership	\$95,000,000
06/17/15	Stratos Genomics	Series B	\$19,999,976
06/20/15	Global Innovation Exchange	Partnership	\$45,000,000
06/20/15	Vicis	Seed	\$1,600,000
06/22/15	Qliance Medical Management	Debt	\$520,753
06/24/15	Nativis	Venture Equity	\$725,000
06/24/15	Cadence Biomedical	Series B	\$1,200,000
06/25/15	Blaze Bioscience	Equity	\$85,400
06/28/15	Juno Therapeutics	Partnership	\$1,000,000,000
06/29/15	Nexgenia	Equity	\$1,617,582
06/30/15	Vera Whole Health, Inc	Debt	\$2,000,000
07/13/15	Arivale	Series B	\$36,000,000
07/14/15	Cytodyn	Equity	\$1,972,500
07/14/15	RF Surgical Systems	Acquisition	\$235,000,000
07/21/15	Deep Domain	Equity	\$260,507
07/31/15	Qliance Medical Management	Debt	\$2,676,730

Date	Company	Type	Amount
08/07/15	Precision Image Analysis	Equity	\$60,348
08/11/15	Vicis	Venture Equity	\$1,500,000
08/12/15	Marina Biotech	Equity	\$1,100,000
08/13/15	Bloomingtondale Memory Care	Equity	\$3,373,525
08/17/15	OtoNexus Medical Technologies	Debt	\$754,990
08/18/15	Immusoft	Debt	\$375,000
08/19/15	Sound Pharmaceuticals	Debt	\$300,000
08/21/15	Navigating Cancer	Venture Equity	\$6,605,573
08/28/15	Aqueduct Critical Care	Equity	\$3,712,304
09/02/15	Kona Medical	Debt	\$10,000,300
09/14/15	Seattle Genetics	Second public offering	\$525,000,000
09/14/15	Impel Neuropharma	Equity	\$1,257,927
09/18/15	Impel Neuropharma	Equity	\$4,000,000
09/21/15	Cardiac Insight	Undisclosed	\$3,500,000
09/22/15	Just Biotherapeutics	Series A	\$15,000,000
09/24/15	VDA Pharma	Debt	\$55,000
09/24/15	Joylux	Seed	\$3,000,000
09/30/15	Accelerator Corporation	Venture Equity	\$11,700,000
10/02/15	Spiral Genetics	Debt	\$200,000
10/04/15	Cytodyn	Equity	\$2,693,800
10/15/15	Global Health Vaccine Center of Innovation	Partnership	\$9,500,000
10/19/15	Novuson Surgical	Equity	\$500,000
10/27/15	Alpine Immune Sciences	Partnership	\$5,000,000
10/27/15	Park Boulevard Memory Care, LLC	Equity	\$3,524,925
10/30/15	Metheor Therapeutics	Equity	\$90,000
11/04/15	Clarity Health	Acquisition	Undisclosed

**2015 Running Total as of November 5, 2015** **\$3,220,710,582**

## Washington-based Life Science Transactions 2013

Date	Company	Type	Amount
01/03/13	Qliance Medical Management	Series D	\$8,650,000
01/04/13	RF Surgical Systems	Series A	\$120,000
01/30/13	Immune Design	3rd installment series B	\$10,625,000
01/31/13	FlexMinder	Series A	\$1,200,000
02/08/13	Kineta	Venture Equity	\$2,737,052
02/14/13	X2 Biosystems	Undisclosed	\$2,000,000
02/15/13	Healionics	Undisclosed	\$50,000
02/20/13	Miribilis Medica	Undisclosed	\$120,000
02/20/13	Ventec Life Systems	Venture Equity	\$6,800,000
02/22/13	Blaze Bioscience	Series A	\$8,500,000
02/22/13	Endogastric Solutions	Debt	\$10,000,000
02/27/13	Resolve Therapeutics	Partnership	\$8,000,000
03/01/13	Cadence Biomedical	Venture Equity	\$213,000
04/01/13	EveryMove	Series A	\$3,500,000
04/03/13	Avado	Seed equity	\$1,000,000
03/05/13	PreSage Biosciences	Partnership	\$13,000,000
03/12/13	Appature	Acquisition	NA
03/12/13	Spiral Genetics	Venture Equity	\$3,200,000
03/25/13	Theraclone Sciences	Series B	\$14,000,000
04/02/13	Cardiac Dimensions	Debt	\$2,730,000
04/02/13	Cerevast Therapeutics	Venture Equity	\$1,500,000
04/11/13	Atossa Genetics	Venture Equity	\$100,000
04/17/13	Beat BioTherapeutics	Debt	\$2,500,000
04/18/13	NuvoMed	Equity	\$485,000
04/19/13	Miribilis Medica	Debt	\$100,000
05/13/13	NanoString Technologies	Venture Equity	\$150,000
05/23/13	Cardeas Pharma	Series B	\$34,000,000
05/23/13	Valant Medical Solutions	Venture Equity	\$784,000
05/24/13	Remote Medical International	Venture Equity	\$8,000,000
05/24/13	Ekos	Acquisition	\$180,000,000
05/28/13	VentriPoint	Debt	\$750,000
05/30/13	Cadence Biomedical	Grant	\$1,000,000
05/30/13	Oncothyreon	Stock sale	\$10,000,000
06/03/13	AVM Biotechnology	Venture Equity	\$708,000
06/05/13	Mobisante	Venture Equity	\$4,200,000
06/06/13	Cheetah Medical	Venture Equity	\$14,500,000
06/12/13	Immune Design	Partnership	\$10,000,000
06/14/13	Miribilis Medica	Venture Equity	\$7,000,000
06/18/13	Exo Labs	Undisclosed	\$836,000
06/20/13	X2 Biosystems	Venture Equity	\$1,200,000
06/25/13	Seattle Genetics - Bayer deal	Partnership	\$20,000,000
06/26/13	NanoString Technologies	IPO	\$54,000,000
06/27/13	Lifecom	Series A	\$1,100,000
06/28/13	Blaze Biosciences	Series B	\$8,100,000
07/12/13	PhaseRx	Debt	\$500,000
07/12/13	X2 Biosystems	Debt	\$720,000
08/15/13	Project Violet	Undisclosed	\$20,000,000
08/16/13	Tissue Regeneration Systems	Venture Equity	\$4,600,000
08/19/13	Allozyne	Debt	\$2,500,000
09/03/13	Oncofactor	Venture Equity	\$1,000,000
09/03/13	Alpine Bioventures	Equity	\$5,000,000
09/09/13	Stratos Genomics	Venture Equity	\$2,000,000
09/16/13	Adaptive Biotechnologies	Grant	\$2,530,000
09/20/13	Integrated Diagnostics	Equity	\$1,500,000
10/03/13	PhaseRx	Debt	\$1,400,000
10/10/13	Kineta	Venture Equity	\$760,000
10/15/13	Qliance Medical Management	Venture Equity	\$5,500,000
10/16/13	Sound Pharmaceuticals	Venture Equity	\$6,000,000
10/16/13	Cardiac Dimensions	Debt	\$555,000
10/21/13	Kona Medical	Venture Equity	\$10,000,000
10/29/13	Avado	Acquisition	\$25,000,000
10/30/13	Immune Design	Venture Equity	\$49,000,000
11/04/13	Kineta	Grant	\$6,800,000
11/15/13	Cell Therapeutics	Partnership	\$60,000,000
11/26/13	Cerevast Therapeutics	Debt	\$1,780,000
11/27/13	Impel NeuroPharma	Venture Equity	\$2,640,000
12/05/13	Clarity Health	Series B	\$6,600,000
12/03/13	Blaze Bioscience	Series B*	\$900,000
12/05/13	Juno Therapeutics	Series A	\$120,000,000
12/10/14	Integrated Diagnostics	Seed equity	\$300,000
12/27/13	X2 Biosystems	Venture Equity	\$5,000,000
<b>2013 Total</b>			<b>\$800,043,052</b>

## Washington-based Life Science Transactions 2014

Date	Company	Type	Amount
01/07/14	Cardiac Dimensions	Debt	\$367,000
01/08/14	Seattle Genetics	Partnership	\$25,000,000
01/13/14	Juno Therapeutics	Series A extension	\$25,000,000
01/13/14	ActX	Seed equity	\$1,900,000
01/14/14	NovuMed	Undisclosed	\$535,000
01/21/14	Seattle Genetics	Partnership	\$9,000,000
02/04/14	Acucela	IPO (Japan)	\$162,000,000
02/12/14	Cardiac Dimensions	Debt	\$456,000
02/12/14	Nativis	Venture Equity	\$9,160,000
03/05/14	Immunexpress	Venture Equity	\$6,000,000
03/14/14	Kineta	Venture Equity	undisclosed
03/14/14	Nortis	Undisclosed	\$1,200,000
03/17/14	CadenceMD	Debt	\$55,000
03/20/14	Cardiac Dimensions	Debt	\$380,000
03/25/14	Clarity Health	Venture Equity	\$836,000
03/25/14	BioLife Solutions	IPO	\$15,400,000
03/25/14	FlexMinder	Series A	\$1,200,000
03/26/14	KinDex Pharmaceuticals	Series A	\$5,000,000
04/07/14	Adaptive Biotechnologies	Series C&D	\$105,000,000
04/09/14	Oricula Therapeutics	Seed equity	\$122,000
04/10/14	Tissue Regeneration Systems	Debt	\$1,500,000
04/14/14	JeNu Biosciences	Debt	\$1,480,000
04/14/14	Etubics	Seed	\$4,400,000
04/16/14	Cardiac Dimensions	Venture Equity	\$20,000,000
04/18/14	X2 Biosystems	Debt	\$2,510,000
04/24/14	Juno Therapeutics	Series A extension	\$31,000,000
04/29/14	Integrated Diagnostics	Debt	\$17,000,000
04/29/14	Integrated Diagnostics	Series B	\$30,250,000
05/08/14	Alder Biopharmaceuticals	IPO	\$80,000,000
05/13/14	Stratos Genomics	Series B	\$10,000,000
05/14/14	PharmalN	Venture Equity	\$1,500,000
05/15/14	AVM Biotechnology	Series B	\$1,500,000
05/16/14	Kineta	Equity	\$1,627,498
06/06/14	NanoString Technologies	Partnership	\$5,750,000
06/15/14	Cardiac Insight	Series B	\$7,000,000
07/01/14	Pregenen	Acquisition	\$20,000,000
07/11/14	Nortis	Venture Equity	\$1,000,000
07/15/14	Valant Medical	Venture Equity	\$11,000,000
07/18/14	ActX	Seed	\$750,000
07/21/14	Nativis	Undisclosed	\$2,319,000
07/25/14	Immune Design	IPO	\$60,000,000
07/29/14	Accelerator Corporation	Venture Equity	\$51,100,000
07/29/14	Amgen	Closing WA Offices	
07/30/14	Theraclone Sciences	Partnership	undisclosed
07/30/14	Array Health	Debt	\$100,000
07/30/14	Jintronic	Debt	\$772,500
08/04/14	Juno Therapeutics	Series B	\$134,000,000
08/07/14	Immune Design	License	\$168,000,000
08/11/14	Alpine BioSciences	Acquisition	\$27,000,000
08/15/14	Carena	Debt	\$1,995,000
08/21/14	Immusoft	Series A	\$2,300,000
09/02/14	Clarity Health	Venture Equity	\$1,059,352
09/03/14	NovoNordisk	Closing Inflammatory Research Center	
09/10/14	Seattle Genetics	License	\$11,000,000
09/15/14	Tissue Regeneration Systems	Debt	\$500,000
09/23/14	VentriRx Pharmaceuticals	Venture Equity	\$19,300,000
09/26/14	Array Health	Series A	\$13,000,000
10/07/14	Cardiac Dimensions	Venture Equity	\$8,500,000
10/08/14	Blaze BioScience	NCI SBIR Phase II Funding	\$1,500,000
10/09/14	Mirador Biomedical	Acquisition	undisclosed
10/27/14	Limeade	Series C	\$25,000,000
11/05/14	Vicis	Seed	\$2,000,000
11/19/14	IDRI	Contract	\$3,600,000
11/21/14	Aortica	Series A	\$7,000,000
12/09/14	Allen Institute for Cell Science	Paul Allen Donation	\$100,000,000
12/19/14	Juno Therapeutics	IPO	\$264,600,000
12/30/14	Oncogenex	Venture Equity	\$27,000,000
12/30/14	Cerevast Therapeutics	Venture Equity	\$10,000,000
<b>2014 Total</b>			<b>\$1,558,524,350</b>

This report is prepared by WBBA Commercialization Manager, Yesenia Green, PhD, [yesenia@washbio.org](mailto:yesenia@washbio.org).

*\*\*The data in this report is compiled from publicly disclosed information and is not independently verified by WBBA.*