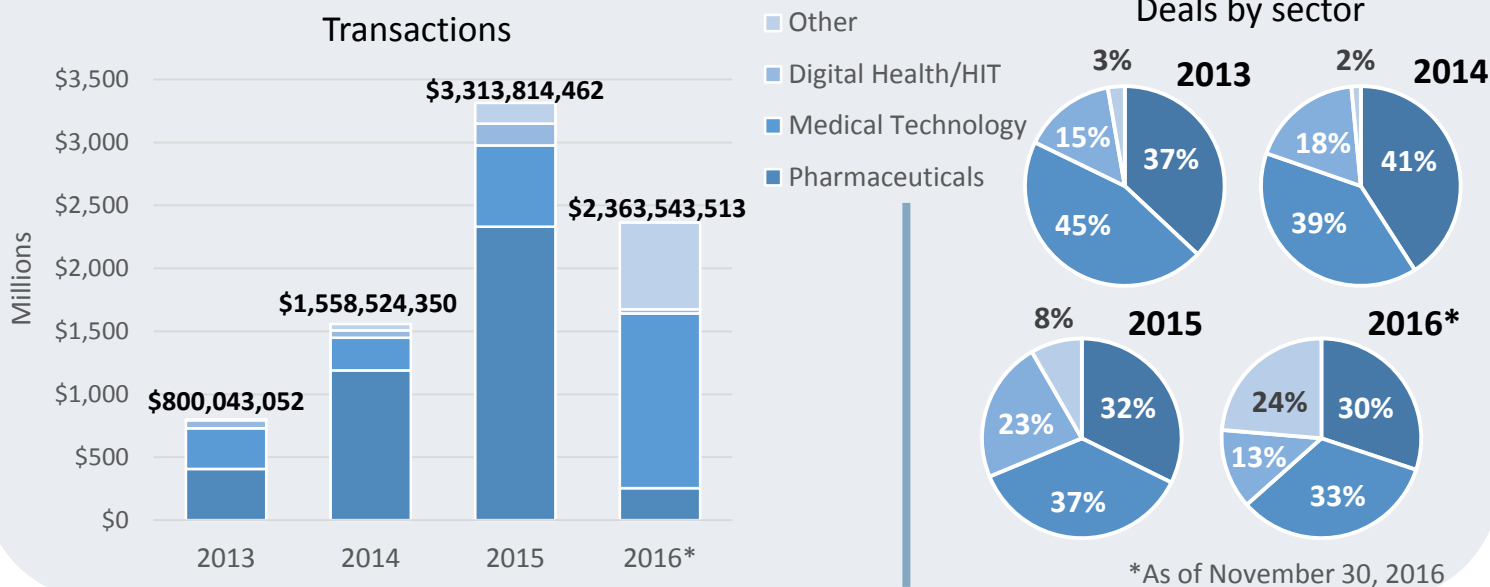


A monthly report summarizing the Life Science transactions and trends in Washington State.

Washington State Transactions by Industry



News highlights:

- Washington State University Innovation Center serves as a startup incubator that offers both wet lab and non-wet lab space and office space. Currently, the Innovation Center is at capacity with five startups leasing space.
- Novo Nordisk has received U.S. approval for a new combination drug to treat diabetes. Novo's Xultophy combines a long-lasting insulin with a so-called GLP-1 medicine that stimulates insulin production in the pancreas.
- The University of Washington and the Kidney Research Institute have opened the new Center for Dialysis Innovation. The center's goal is to use new technologies to revolutionize kidney treatment with the help of biomaterials and bioengineering.
- Adaptive Biotechnologies expands in redesigned headquarters to nearly 200 employees in Seattle.
- Mpirica Health, a startup focused on transparency in the health care industry, has partnered with Chicago-based company, Welvie, to put its hospital and surgeon quality scores in front of a much larger audience. Welvie, offers analytics and outreach for patients to make informed decisions before going into surgery, works with national companies Humana and Anthem.

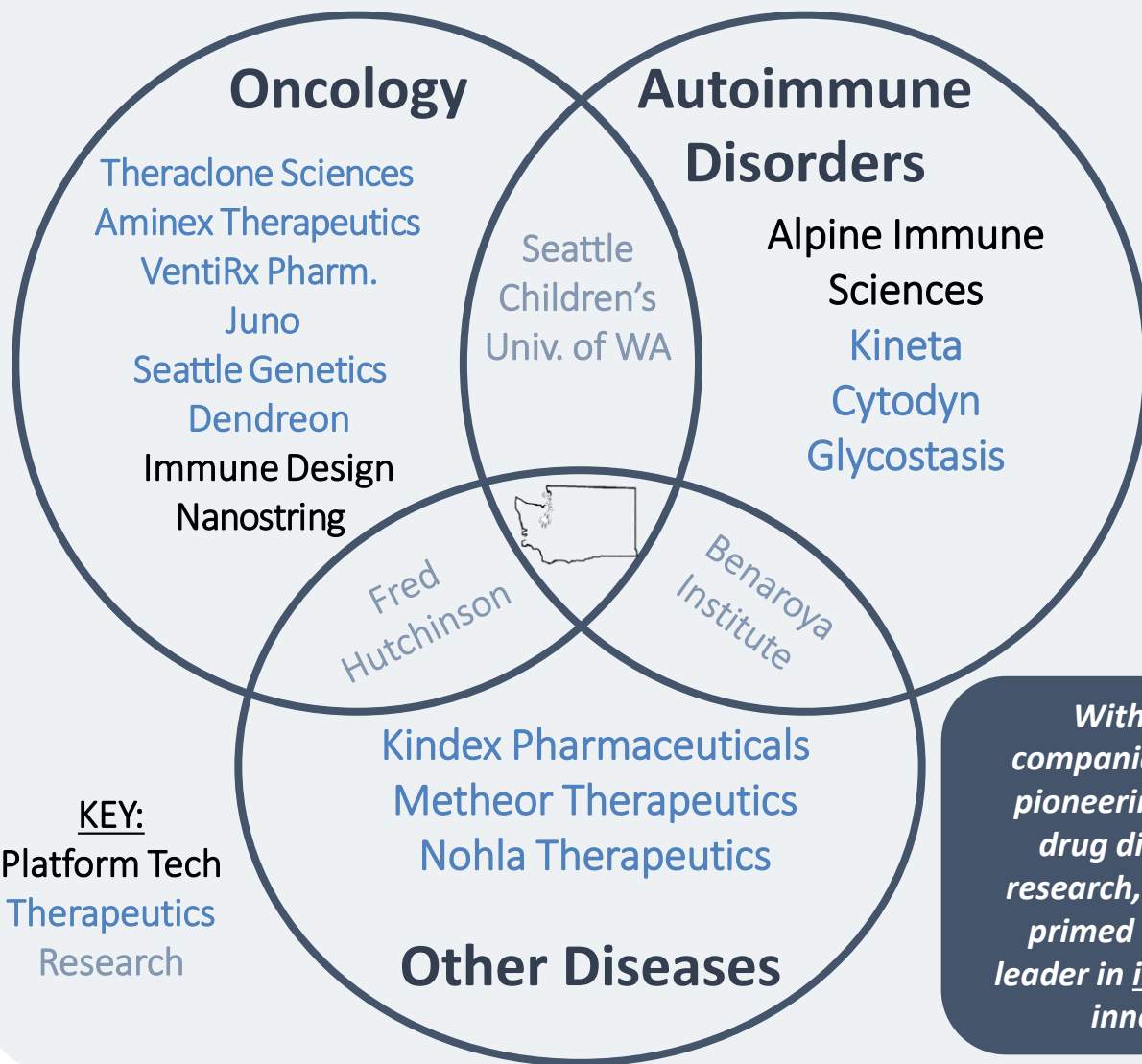
Deal highlights:

- **Immusoft** \$2.8M (Series A)
- **Act X** \$1.9M (Equity)
- **Cyrus Biotechnology** \$140,000 (Equity)
- **Invio** \$160,000 (Angel)

November total: \$5,290,645
2016 running total (Jan-Nov 30th): \$2,363,543,513

“[Immunotherapy] represents a new, emerging, and really extraordinary new era for life sciences.”
 - Dr. Richard Klausner at the 2016 Governor’s Life Sciences Summit

Immunotherapy Spotlight



Multiple Applications:
 Adaptive
 Nexgenia
 Immusoft
 Etubics
 Pregenen
 Presage Biosci.

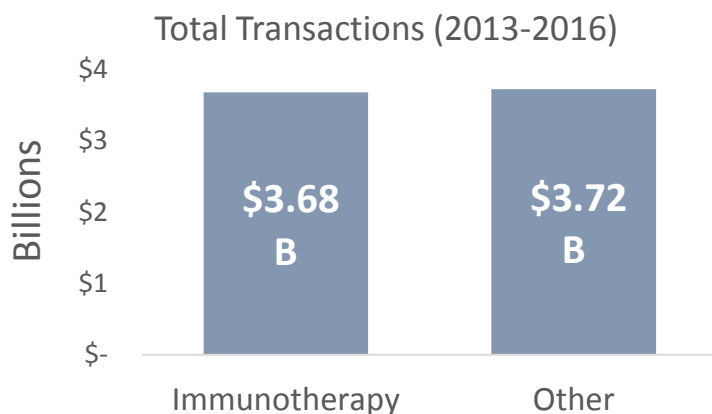
KEY:
 Platform Tech
 Therapeutics
 Research

With about 25 companies/institutions pioneering techniques, drug discovery, and research, Washington is primed to be a world leader in immunotherapy innovations.

Since 2013, immunotherapy transactions in WA state represent about 50% of all completed transactions.

2016 immunotherapy debt, equity and partnership deal highlights:

- Juno \$50M
- Alpine Immune \$48M
- Nohla \$21M
- Nanostring \$24M



Washington Life Science Transactions 2016

Date	Company	Type	Amount	Date	Company	Type	Amount
01/07/16	NanoString Technologies	Unknown	\$22,000,000	06/02/16	Mirabilis Medica	Debt	\$2,232,833
01/11/16	Spiral Genetics	Unknown	\$50,000	06/09/16	Ave Maria Biotechnology	Equity	\$100,000
01/12/16	Blaze Bioscience	Debt	\$991,000	06/09/16	Cadence Biomedical	Debt	\$80,000
01/14/16	Stemgenics	Equity	\$930,000	06/13/16	Alpine Immune Sciences	Equity	\$48,000,000
01/20/16	Vicis	Seed	\$8,000,000	06/20/16	Kineta	Debt	\$1,752,688
01/25/16	Clario Medical Imaging	Equity	\$185,000	06/22/16	Marina Biotech	Debt	\$300,000
02/02/16	Oricula Therapeutics	Grant	\$2,060,000	06/24/16	Catacore Corp	Equity	\$30,000
02/02/16	ID Genomics	Equity	\$50,000	06/24/16	TwinStrand Biosciences	Debt	\$1,938,964
02/11/16	M3 Biotechnology	Equity	\$10,000,000	07/05/16	Revalesio Corp	Equity	\$13,999,912
02/11/16	Spiral Genetics	Unknown	\$50,000	07/14/16	Magnolia Medical Technologies	Series B	\$13,757,109
02/16/16	Physio-Control	Acquisition	\$1,280,000,000	07/19/16	Joylux	Equity	\$2,000,000
02/16/16	KPI Therapeutics	Debt	\$50,500	07/26/16	Just Biotherapeutics	Series A	\$14,000,000
02/17/16	Glycostasis	Acquisition	undisclosed	08/04/16	98point6	Equity	\$11,000,000
02/23/16	Cytodyn	Equity	\$30,574,665	08/05/16	Mirabilis Medica	Debt	\$5,000,000
02/24/16	Ave Maria Biotechnology	Equity	\$40,000	08/09/16	CSATS	Equity	\$3,283,516
02/29/16	VitalWare	Series A	undisclosed	08/09/16	SpringStar	Grant	\$1,500,000
02/29/16	NanoString Technologies	Partnership	\$24,000,000	08/10/16	Ave Maria Biotechnology	Equity	\$100,000
03/03/16	LabConnect	Venture Equity	\$4,000,000	08/17/16	Kineta IO, LLC	Equity	\$238,422
03/11/16	Allen Institute for Brain Science	Contract	\$18,700,000	08/17/16	Kineta One, LLC	Debt	\$125,000
03/16/16	Ave Maria Biotechnology	Equity	\$350,000	08/17/16	Vie Diagnostics	Grant	\$225,000
03/17/16	Act X	Unknown	\$308,810	08/19/16	Nexgenia	Equity	\$1,859,887
03/22/16	Seattle Children's Research Institute	Grant	\$1,000,000	08/23/16	Benaroya Research Institute	Grant	\$8,000,000
03/22/16	Breast Microseed	Debt	\$100,000	08/24/16	Briotech	Equity	\$250,000
03/23/16	Frazier Healthcare Partners	Fund	\$525,000,000	08/29/16	Impel Neuropharma	Debt	\$1,090,000
03/23/16	University of Washington	Grant	\$250,000	08/29/16	Navisonics	Debt	\$335,000
03/24/16	The Paul G. Allen Frontiers Group	Fund	\$100,000,000	08/30/16	KinDex Pharmaceuticals	Debt	\$327,274
04/06/16	Cyrus Biotechnology	Debt	\$535,000	09/16/16	Sound Pharmaceuticals	Debt	\$3,800,000
04/06/16	2Morrow	Debt	\$325,000	09/16/16	Cocrystal Discovery	Equity	\$4,008,201
04/07/16	Medstreaming LLC	Equity	\$12,200,000			Public	
04/07/16	Prevensio, Inc	Debt	\$675,000	09/20/16	Immune Design	Offering	\$30,300,000
04/08/16	Medstreaming LLC	Equity	\$2,500,000	09/26/16	Ario	Equity	\$1,035,000
04/12/16	Silverback Therapeutics	Equity	\$10,000,000	09/28/16	Verda Bio	Equity	\$545,000
04/14/16	Vicis	Series A	\$4,000,000	09/29/16	PotaVida	Equity	\$275,000
04/18/16	Juno Therapeutics	Partnership	\$50,000,000	10/06/16	Infectious Disease Research Institute	Grant	\$491,000
04/23/16	ID Genomics	Grant	\$3,000,000	10/13/16	Feminina Group	Debt	\$77,500
04/27/16	Cardiac Insight	Debt	\$2,505,524	10/13/16	Vicis	Debt	\$3,955,000
04/29/16	Ave Maria Biotechnology	Equity	\$2,200,000	10/18/16	Impel Neuropharma	Debt	\$80,000
05/05/16	Kineta	Award	\$7,200,000	10/18/16	Sightlight Surgical	Series A	\$10,000,000
05/10/16	Aqueduct Critical Care	Equity	\$3,067,177	10/18/16	Infectious Disease Research Institute	Partnership	\$15,000,000
05/10/16	Spiral Genetics	Unknown	\$50,000	10/31/16	Deep Cell Industries	Equity	\$25,000
05/11/16	Cytodyn	Equity	\$4,301,500	11/01/16	Immusoft Corp	Series A	\$2,739,999
05/11/16	Mental Health Data Services	Equity	\$333,333	11/07/16	Act X	Equity	\$1,900,646
05/13/16	Ave Maria Biotechnology	Equity	\$50,000	11/16/16	Cyrus Biotechnology	Equity	\$490,000
05/17/16	PhaseRx	IPO	\$18,500,000	11/18/16	Invio, Inc	Angel	\$160,000
05/20/16	Haverhill Genetics	Debt	\$125,000				
05/24/16	Vicis	Equity	\$6,000,000				
05/25/16	Kineta Three, LLC	Equity	\$760,778				
05/26/16	Litesprite	Debt	\$50,000				
05/31/16	Kineta Two, LLC	Equity	\$67,275				
				2016 Running Total as of November 30, 2016			
				\$2,363,543,513			

Don't see a transaction listed?
Contact Yesenia Green at
yesenia@lifesciencewa.org

Washington-based Life Science Transactions 2015

Date	Company	Type	Amount	Date	Company	Type	Amount
01/22/15	Alder Biopharmaceuticals	Second public offering	\$203,600,000	06/29/15	Nexgenia	Equity	\$1,617,582
01/22/15	Adaptive Biotechnologies	Series E	\$93,750,000	06/30/15	Vera Whole Health, Inc	Debt	\$2,000,000
01/28/15	Vesiflo	Convertible note	\$650,000	07/13/15	Arivale	Series B	\$36,000,000
01/30/15	MalarVx, Inc	Equity	\$110,000	07/14/15	Cytodyn	Equity	\$1,972,500
02/05/15	Alpine Immune Sciences	Seed	\$1,300,000	07/14/15	RF Surgical Systems	Acquisition	\$235,000,000
02/05/15	M3 Biotechnology	Equity	\$150,000	07/21/15	Deep Domain	Equity	\$260,507
02/10/15	Valant Medical Solutions	Venture Equity	\$285,350	07/31/15	Qliance Medical Management	Debt	\$2,676,730
02/13/15	Stasys Medical	Series A	\$160,000	08/07/15	Precision Image Analysis	Equity	\$60,348
02/18/15	StratoScientific	Venture Equity	\$550,000	08/11/15	Vicis	Venture Equity	\$1,500,000
02/23/15	Dendreon	Acquisition	\$495,000,000	08/12/15	Marina Biotech	Equity	\$1,100,000
03/06/15	Cerevast Therapeutics	Series C	\$1,375,000	08/13/15	Bloomingtondale Memory Care	Equity	\$3,373,525
03/09/15	KinDex Pharmaceuticals	Series A	\$500,000	08/17/15	OtoNexus Medical Technologies	Debt	\$754,990
03/11/15	Cardiac Dimensions	Venture Equity	\$15,200,000	08/18/15	ImmuSoft	Debt	\$375,000
03/15/15	Medical Mirror Systems	Equity	\$250,000	08/19/15	Sound Pharmaceuticals	Debt	\$300,000
03/19/15	Nortis	Venture Equity	\$408,845	08/21/15	Navigating Cancer	Venture Equity	\$6,605,573
03/20/15	Healthentic	Series C	\$3,750,000	08/28/15	Aqueduct Critical Care	Equity	\$3,712,304
03/20/15	StratoScientific	Venture Equity	\$150,000	09/02/15	Kona Medical	Debt	\$10,000,300
03/25/15	Cadence Biomedical	Equity	\$959,578	09/14/15	Seattle Genetics	Second public offering	\$525,000,000
04/08/15	NuvoMed	Equity	\$390,637	09/14/15	Impel Neuropharma	Equity	\$1,257,927
04/10/15	Cardeas Pharma	Series B	\$3,500,000	09/18/15	Impel Neuropharma	Equity	\$4,000,000
04/13/15	Carena	Debt	\$500,000	09/21/15	Cardiac Insight	Undisclosed	\$3,500,000
04/17/15	X2 Biosystems	Venture Equity	\$350,000	09/22/15	Just Biotherapeutics	Series A	\$15,000,000
04/23/15	Deep Domain	Venture Equity	\$30,000	09/24/15	VDA Pharma	Debt	\$55,000
04/24/15	Mpirica Health	Series A	\$1,600,000	09/24/15	Joylux	Seed	\$3,000,000
05/01/15	Mirabilis Medica	Debt	\$2,920,000	09/30/15	Accelerator Corporation	Venture Equity	\$11,700,000
05/06/15	Adaptive Biotechnologies	Series F	\$195,000,000	10/02/15	Spiral Genetics	Debt	\$200,000
05/06/15	Theraclone Sciences	Venture Equity	\$3,080,000	10/04/15	Cytodyn	Equity	\$2,693,800
05/06/15	Cyrus Biotechnology	Debt	\$850,000	10/15/15	Global Health Vaccine Center of Innovation	Partnership	\$9,500,000
05/06/15	InDemand Interpreting	Venture Equity	\$4,000,000	10/19/15	Novuson Surgical	Equity	\$500,000
05/14/15	Cytodyn	Debt	\$3,281,050	10/27/15	Alpine Immune Sciences	Partnership	\$5,000,000
05/18/15	Tissue Regeneration Systems	Debt	\$2,093,182	10/27/15	Park Boulevard Memory Care, LLC	Equity	\$3,524,925
05/19/15	KPI Therapeutics	Equity	\$27,000	10/30/15	Metheor Therapeutics	Equity	\$90,000
05/21/15	Ventec Life Systems	Venture Equity	\$8,192,480	11/04/15	Clarity Health	Acquisition	Undisclosed
05/27/15	BioViva USA	Equity	\$250,000	11/11/15	Aminex Therapeutics	Series A	\$4,000,000
06/02/15	C-SATS	Venture Equity	\$2,500,000	11/11/15	Mpirica Health	Venture Equity	\$400,000
06/03/15	Magnolia Medical Technologies	Venture Equity	\$6,235,322	11/13/15	Qliance Medical Management	Equity	\$450,000
06/04/15	Carena	Series B	\$13,300,000	11/16/15	Implicit Bioscience	Equity	\$50,800
06/05/15	Valant Medical Solutions	Venture Equity	\$3,000,000	11/20/15	M3 Biotechnology	Equity	\$3,500,000
06/11/15	Glycostasis	Equity	\$149,998	11/25/15	OtoNexus Medical Technologies	Debt	\$1,403,080
06/16/15	Altius Institute for Biomedical Sciences	Partnership	\$95,000,000	12/01/15	Universal Cells	Partnership	\$5,500,000
06/16/15	Remote Medical International	Partnership	\$95,000,000	12/04/15	Breast Microseed	Debt	\$500,000
06/17/15	Stratos Genomics	Series B	\$19,999,976	12/16/15	Matrix Genetics	Debt	\$1,600,000
06/20/15	Global Innovation Exchange	Partnership	\$45,000,000	12/23/15	Switch Healthcare	Equity	\$300,000
06/20/15	Vicis	Seed	\$1,600,000	12/24/15	Nohla Therapeutics	Equity	\$21,000,000
06/22/15	Qliance Medical Management	Debt	\$520,753	12/24/15	Nativis	Equity	\$250,000
06/24/15	Nativis	Venture Equity	\$725,000	12/29/15	PhaseRx	Debt	\$4,000,000
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				
				2015 Total			\$3,263,814,462

Check out the past issues of the Washington Life Science Report at:

<http://www.lifesciencewa.org/?page=WAINvestment>