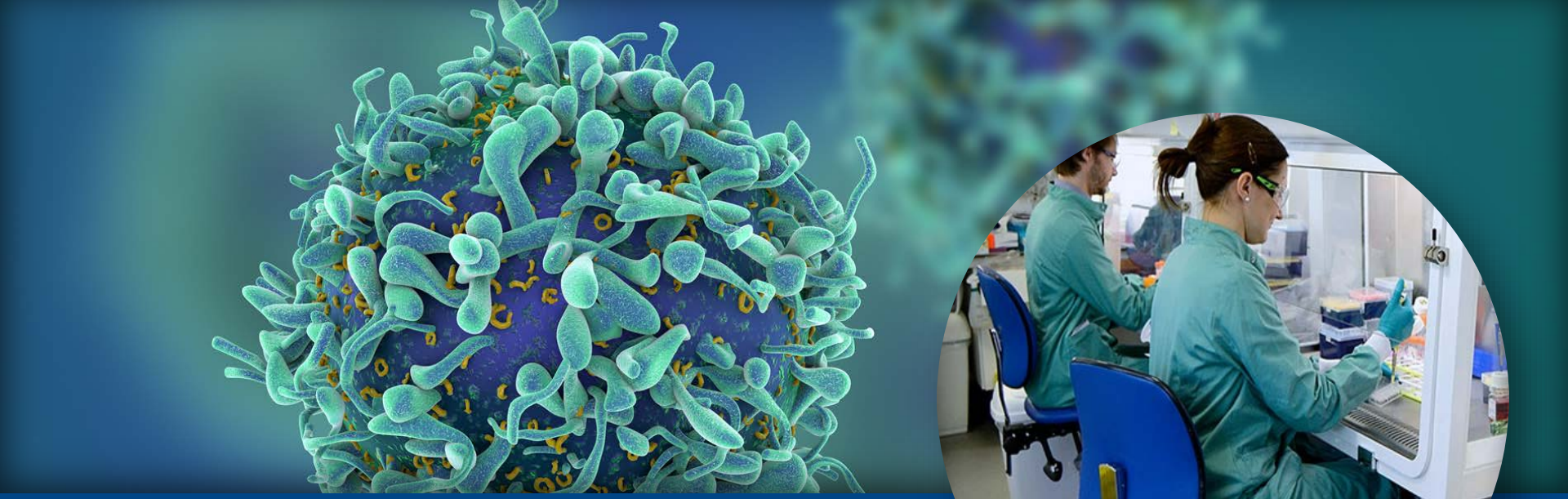

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Disclaimer

This presentation contains “forward-looking statements,” as that term is defined under the Private Securities Litigation Reform Act of 1995 (PSLRA), which statements may be identified by words such as “believe,” “may”, “will,” “estimate,” “continue,” “anticipate,” “intend,” “expect” and other words of similar meaning. These forward-looking statements involve certain risks and uncertainties. Such risks and uncertainties could cause our actual results to differ materially from those indicated by such forward-looking statements, and include, without limitation: the success, cost and timing of our product development activities and clinical trials; our ability to submit an IND and successfully advance our technology platform to improve the safety and effectiveness of our existing TCR therapeutic candidates; the rate and degree of market acceptance of T-cell therapy generally and of our TCR therapeutic candidates; government regulation and approval, including, but not limited to, the expected regulatory approval timelines for TCR therapeutic candidates; and our ability to protect our proprietary technology and enforce our intellectual property rights; amongst others. For a further description of the risks and uncertainties that could cause our actual results to differ materially from those expressed in these forward-looking statements, as well as risks relating to our business in general, we refer you to our Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission (SEC) on November 10, 2016 and our other SEC filings.

We urge you to consider these factors carefully in evaluating the forward-looking statements herein and are cautioned not to place undue reliance on such forward-looking statements, which are qualified in their entirety by this cautionary statement. The forward-looking statements contained in this presentation speak only as of the date the statements were made and we do not undertake any obligation to update such forward-looking statements to reflect subsequent events or circumstances. We intend that all forward-looking statements be subject to the safe-harbor provisions of the PSLRA.

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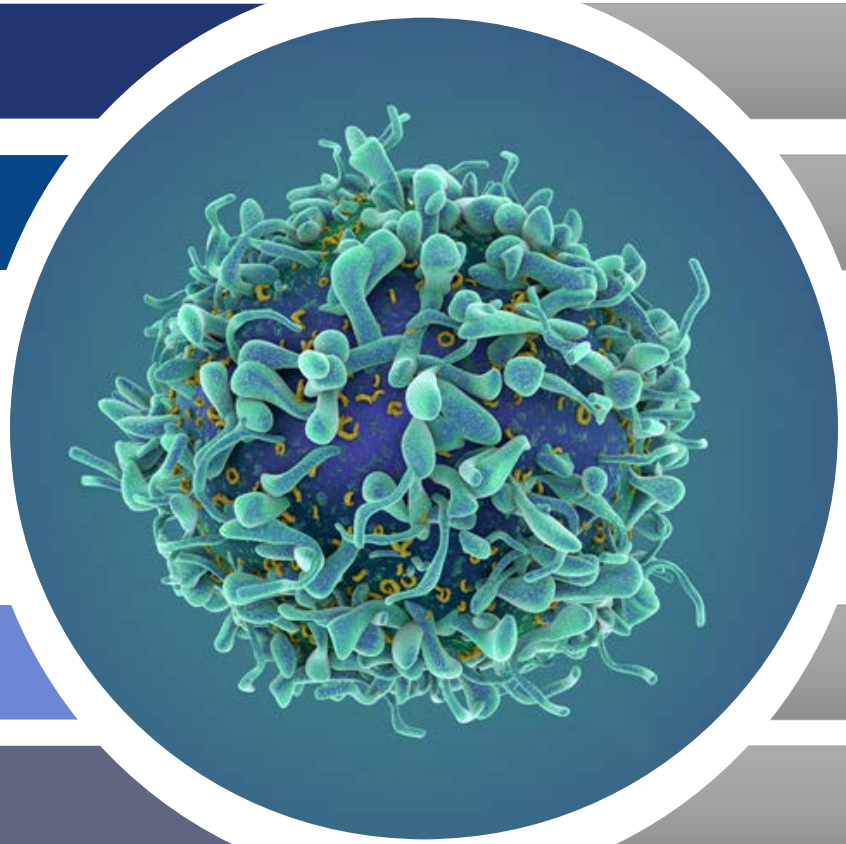
Adaptimmune: Leading the TCR T-cell Space



Pioneering	24 years of TCR innovation
Peerless	The only affinity-tuned TCRs
Industry leading	Unmatched SPEAR® T-cell pipeline
Transformative	Proven efficacy in solid tumors
Data driven	Informed approach to clinical development
Forward-thinking	Combination and next generation approaches

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Adaptimmune Pipeline Overview

Multiple Targets with Near Term Clinical Milestones

GSK option	**NY-ESO**	• Clinical data in synovial sarcoma and multiple myeloma • Active trials in synovial sarcoma, MRCLS, ovarian and non-small cell lung cancer (NSCLC) • Registration studies planned for 2017
Wholly-owned	**MAGE-A10**	• IND open • Studies enrolling in head & neck, melanoma, urothelial (bladder), and NSCLC
	AFP	• IND open • Study in hepatocellular cancer in 2017
	MAGE-A4	• IND open (announced January 2017) • Multi-tumor study in 2017
	Undisclosed targets	• 12 targets in research and safety testing • Assessing 2-3 for key cancers

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Unmatched Clinical Pipeline of Affinity Enhanced TCRs

SPEAR target	Indication	Notes	Pre-IND / Phase I / II / Registration trial
NY-ESO	Synovial sarcoma	Registration trial	
		Cohort 1 - High NY-ESO + CTX / FLU	
		Cohort 2 - Low NY-ESO + CTX / FLU	
		Cohort 3 – no FLU	
		Cohort 4 – modified CTX / FLU	
	Myxoid / Round cell liposarcoma	Pilot study	
	Multiple myeloma	Autologous SCT	
		Combination with anti-PD1 (KEYTRUDA)	
	Ovarian	No FLU	
		Modified CTX / FLU	
	Melanoma	No Flu	
	Non-small cell lung cancer (NSCLC)	Modified CTX / FLU	
MAGE-A10	NSCLC	Modified CTX / FLU	
	Urothelial (bladder), melanoma, H&N	Modified CTX / FLU	
AFP	Hepatocellular cancer	Modified CTX / FLU	
MAGE-A4	Urothelial, melanoma, H&N, ovarian, NSCLC, esophageal, gastric		

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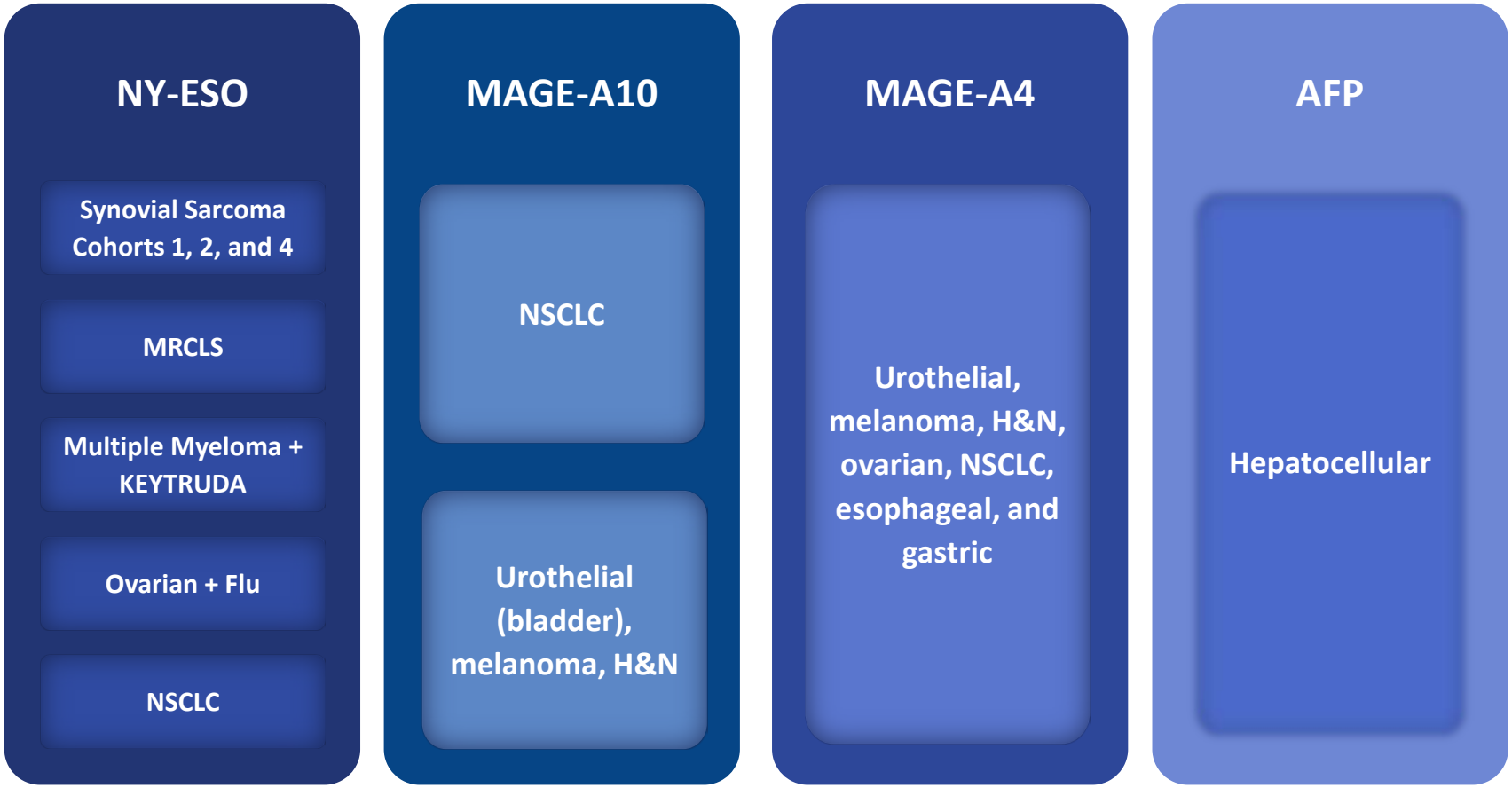
2017: A Year of Significant Data Delivery

Potential for Data from Multiple SPEAR T-cell Therapies in Multiple Tumors



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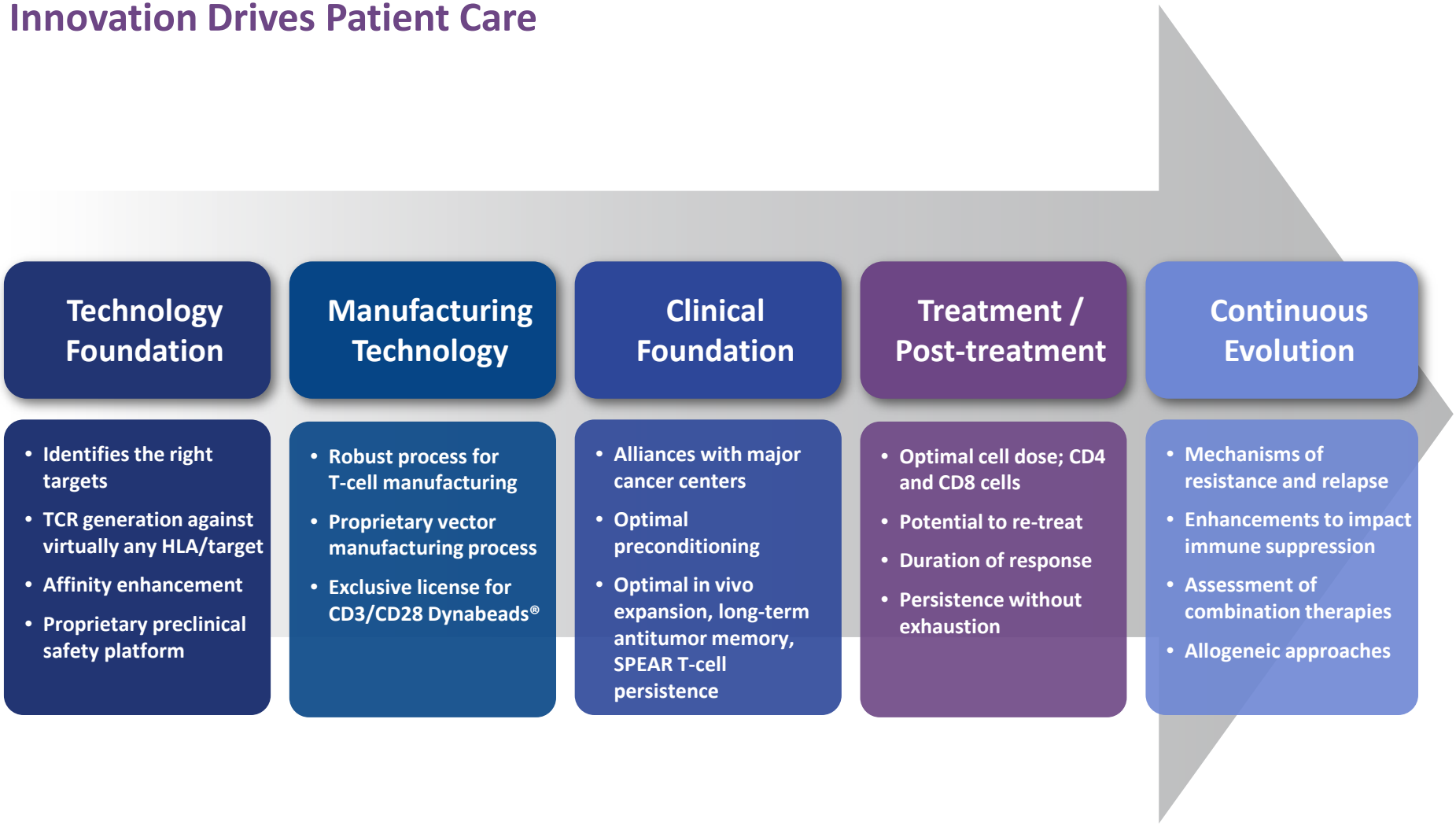
Patient Outcomes Depend on Great Science

Innovation Drives Patient Care



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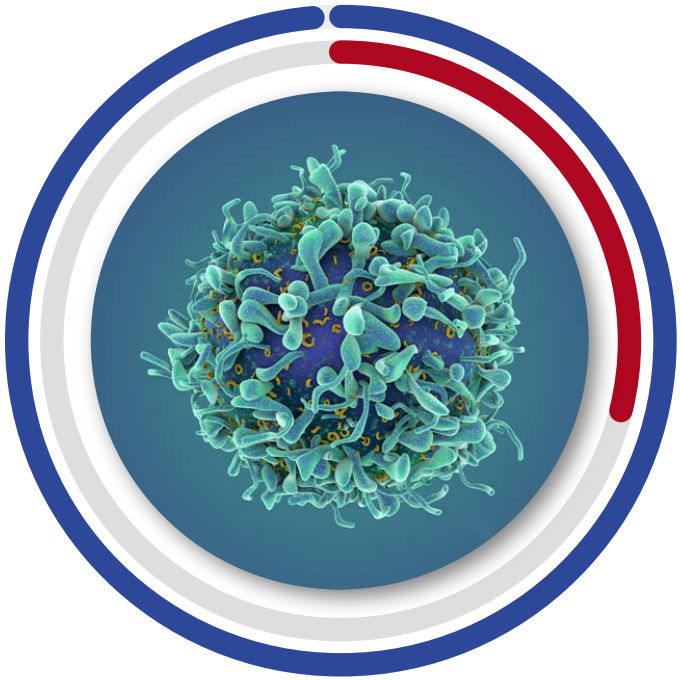
CAR-T vs TCR: Differences in Access to Human Proteome

Significantly Better Access to Peptides with T-cell Receptors



TCRs	**Nearly all proteins are available to TCRs**
	Access to extra- and intracellular proteins
	Unlimited targets; utilizes the T-cell's native receptor
	Affinity tuned SPEAR TCRs overcome low target expression; required to address solid tumors
CAR-T	**Only ~28% of proteins available to CAR-T cells**
	Mostly limited to extracellular proteins
	Limited targets compared to TCRs
	Chimeric antigen receptor; not designed to recognize an HLA peptide

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Affinity Optimization is Critical to Address Majority of Antigens

Adaptimmune is the Only Company with this Proprietary Technology

- T-cells bind to targets on cancer cells
- Cancer downregulates targets to avoid detection
- Most naturally occurring anti-tumor T-cells are low affinity (require more targets)

- SPEAR T-cells are affinity enhanced to overcome this problem
- Proprietary preclinical engineering ensures tumor-specific response
- Optimal specificity and affinity for antitumor activity
- Demonstrated efficacy in solid tumors

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Clinical Data Overview

NY-ESO SPEAR T-cell Therapy in the Clinic

Compelling Response and Survival Data in Multiple Cancers

Disease setting	Response rate	Survival data	Source
Melanoma	5/11 (2CRs, 22 and 20 months)	-	Robbins PF, Rosenberg SA et al. J Clin Oncol. 2011 Mar 1;29(7):917-24
Melanoma	11/20 (55%)	33% at five years	Robbins PF et al. Clin Cancer Res. 2015 Mar 1;21(5):1019-27
Synovial Sarcoma (study 1)	4/6 (all PRs), up to 18 months	-	Robbins PF, Rosenberg SA et al. J Clin Oncol. 2011 Mar 1;29(7):917-24
Synovial Sarcoma (study 1)	11/18 (61%)	38% at 3 years, 14% at 5 years	Robbins PF et al. Clin Cancer Res. 2015 Mar 1;21(5):1019-27
Synovial Sarcoma (study 2)	6/12 (1 CR, 5 PRs)	Median survival 18 months	C. Mackall et al. Ann Oncol (2016) 27 (suppl 6)
Synovial Sarcoma – low expressers	1/5 PRs	-	C. Mackall et al. Ann Oncol (2016) 27 (suppl 6)
Multiple Myeloma with ASCT	91% ORR, 59% CR	Median survival 3 years (January 2016)	ASH 2015 poster - Rapoport AP, Binder-Scholl GK et al. Abstract #2012; 120: 472 Rapoport AP et al. Nat Med. 2015 Aug;21(8):914-21

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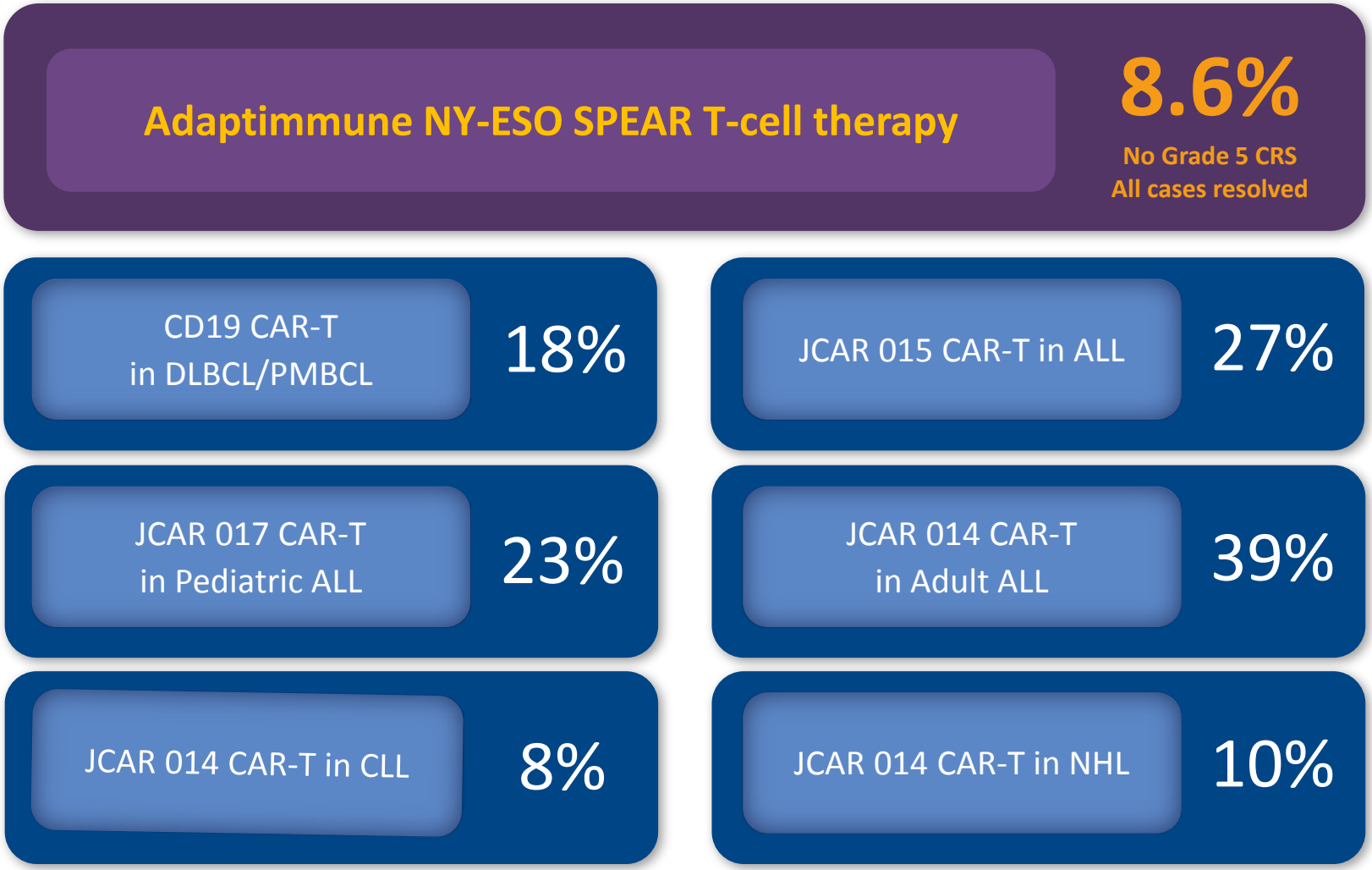
Frequency of Grade 3+ CRS: NY-ESO SPEAR-T vs CAR-Ts



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Neurotoxicity: NY-ESO SPEAR-T vs CAR-Ts

NY-ESO SPEAR T-cells: Not associated with the type and severity of neurotoxicity events seen with CAR-T

CD19 CAR-T in DLBCL/PMBCL	34% **Grade 3 or 4** **3% Grade 5**
JCAR 015 CAR-T in ALL	29% **Grade 3+**
JCAR 017 CAR-T in Pediatric ALL	23% **Severe**
JCAR 014 CAR-T in Adult ALL	39% **Grade 3+**
JCAR 014 CAR-T in CLL	25% **Grade 3-5**
JCAR 014 CAR-T in NHL	10% **Severe**

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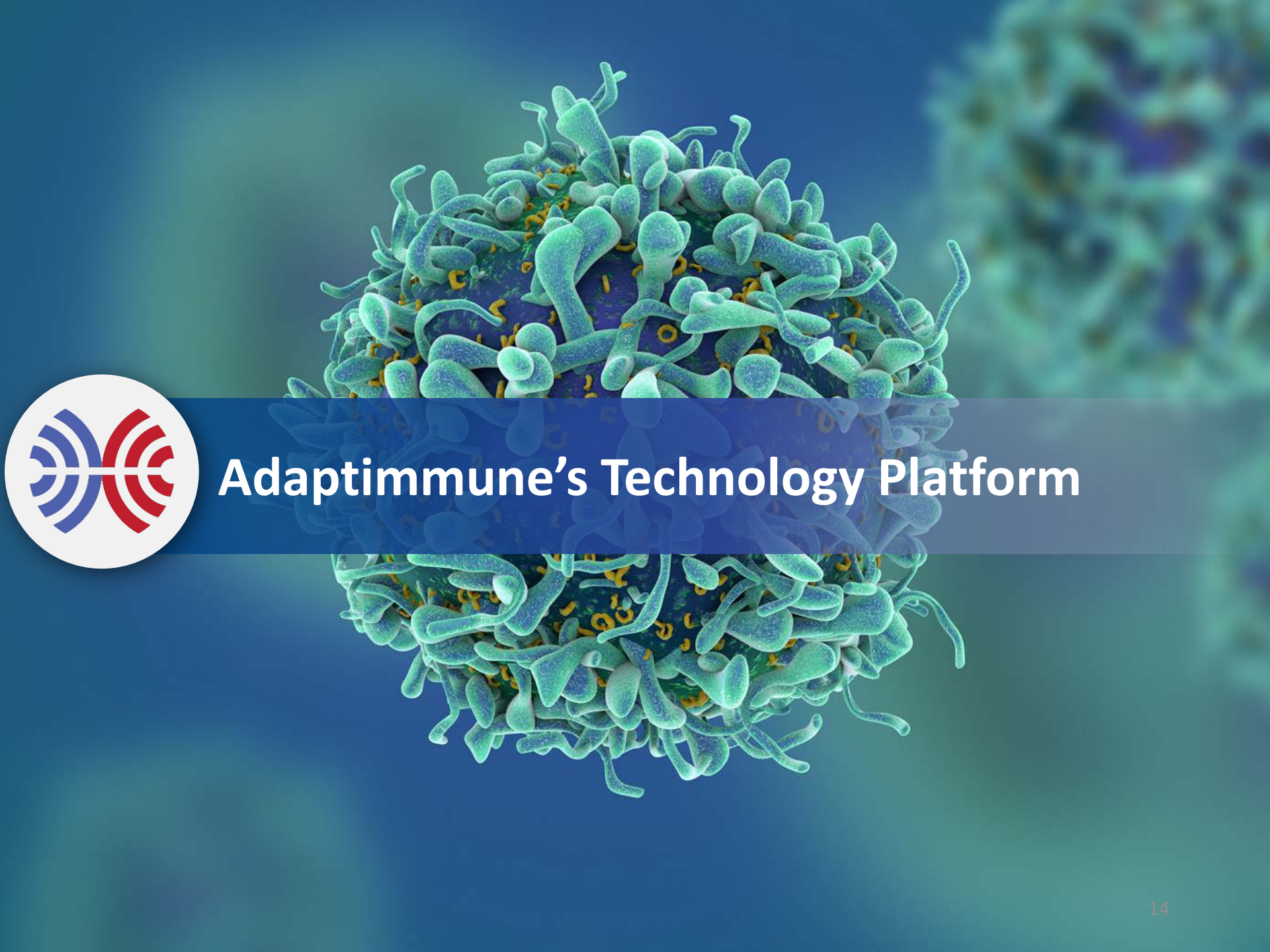
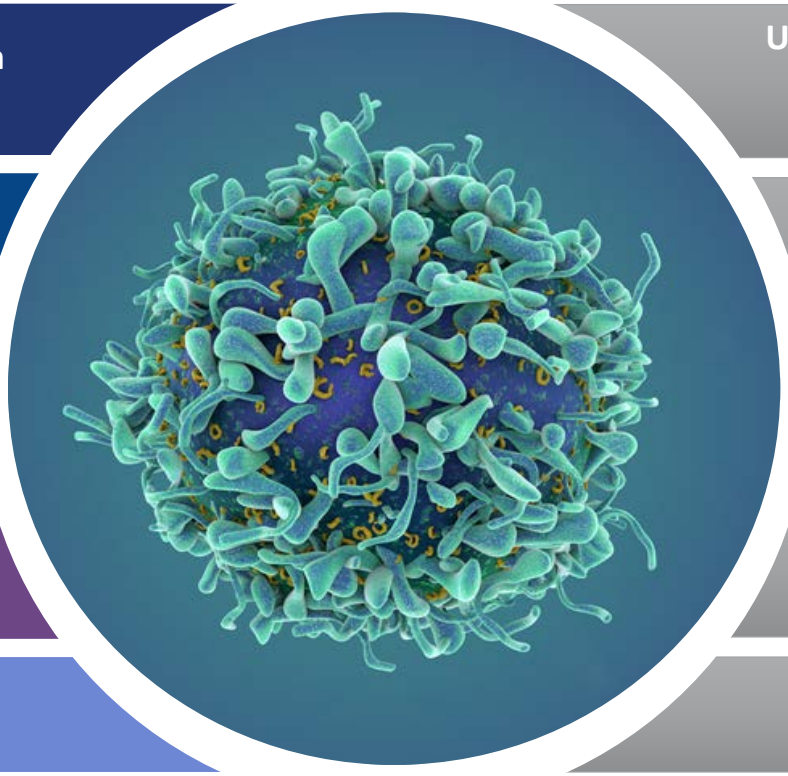


Adaptimmune's Technology Platform

Proprietary SPEAR Technology Platform

Optimized Target Identification, Safety Testing and Manufacturing

- Mass spectrometry platform for target ID/validation
- TCR generation/ identification platform
- Empirical engineering of optimal affinity by phage display
- Proprietary platform for systematic safety analysis
- Proprietary manufacturing with CD3/CD28 Dynabeads



- Unlimited cancer targets, any HLA; minimal expression on normal tissues
- Ability to generate TCRs against virtually any HLA/target
- Ensures potency with minimal cross reactivity
- Minimizes risk of off target binding
- Ensures expansion and long-term persistence

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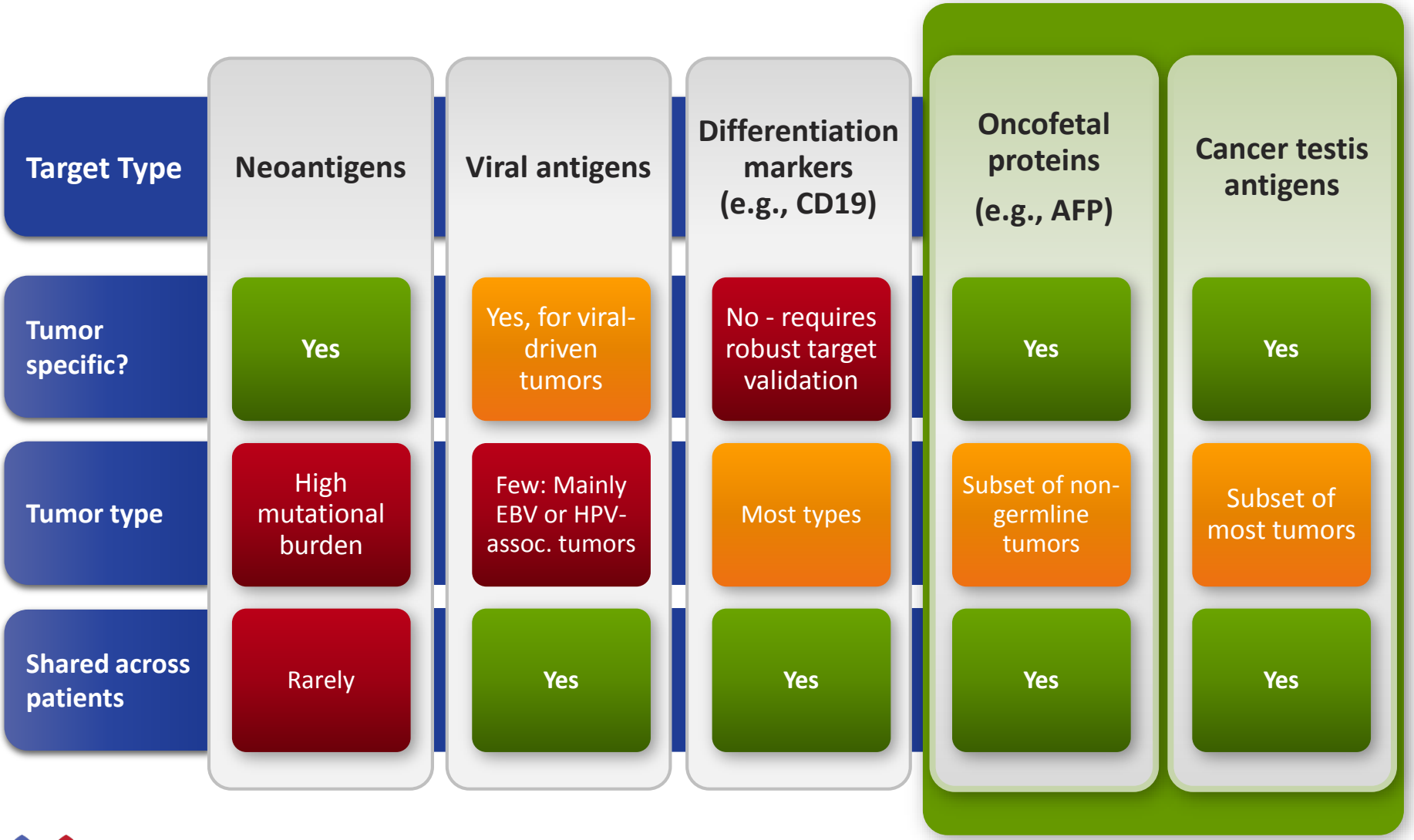
Prioritizing Targets for Clinical Assessment

The Right Targets: Evaluating Antigens for Immunotherapy



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Next Targets: Potential INDs in 2017/2018

First Generation	**Targets expressed in >45%**	Hepatocellular
	2 targets; both expressed in >98%	Prostate
	Target expressed in >65%	Breast Cancer
	Target expressed in >60%	Triple Neg. Breast Cancer (TNBC)

Source: TCGA Research Network: http://cancergenome.nih.gov, January 2017.

Second Generation	**dnTGFβRII**	Blocks immune suppression by TGFβ in tumor microenvironment
	Construct X	Promotes antigen spread, anti-tumor memory, and tumor inflammation

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Prioritizing Cancers with Significant Unmet Medical Need[1]

Prioritizing targets expressed by up to 99% of:

Prostate	**180,890** new cases **26,120** deaths
AML	**19,950** new cases **10,430** deaths
Pancreatic	**53,070** new cases **41,780** deaths
Colon	**134,490** new cases **49,190** deaths
SCLC	**33,656** new cases **23,712** deaths[2]
Breast	**246,660** new cases **40,450** deaths
Gastric	**26,370** new cases **10,730** deaths
NSCLC (Adeno and Squamous)	**190,732** new cases **134,368** deaths[3]

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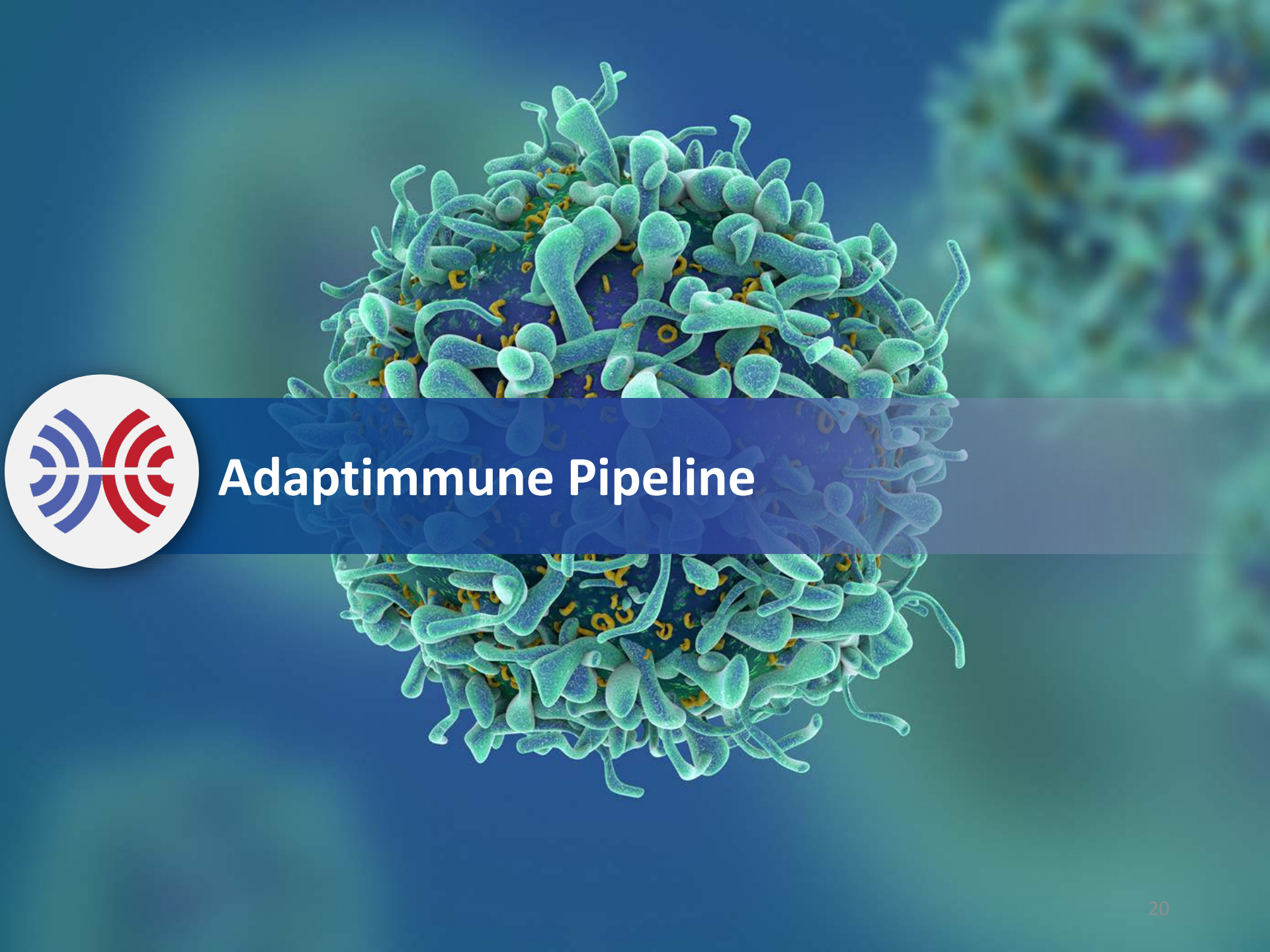
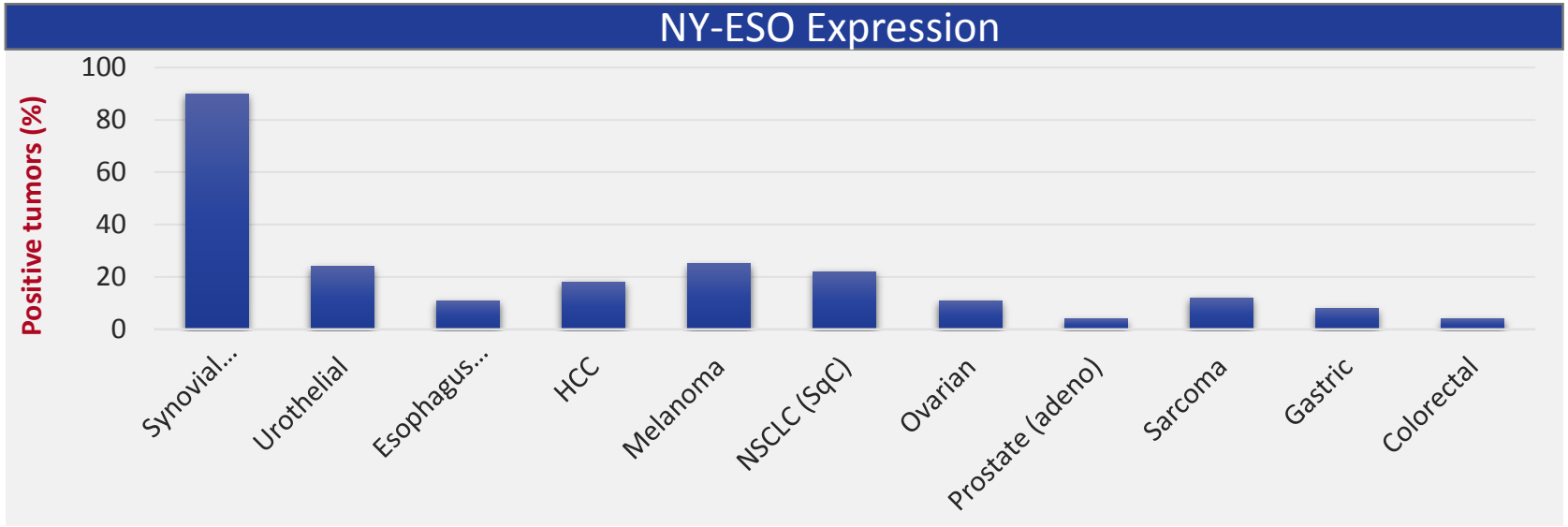
[1] American Cancer Society 2016 estimates
[2] ACS: Approximately 15% of all lung cancers are SCLC
[3] ACS: Approximately 85% of all lung cancers are NSCLC



Adaptimmune Pipeline

Deep Pipeline Across Major Cancers

NY-ESO: Expressed Across a Wide Range of Tumors



Source: TCGA Research Network: http://cancergenome.nih.gov, January 2017.

Estimated Annual Deaths

	US[1]	Europe[2]
Soft tissue sarcoma	4,990	-
Myeloma	12,650	24,287
Ovarian	14,240	42,716
Melanoma	10,130	22,199
Lung	158,080	353,580

1. Source: seer.cancer.gov; http://www.cancer.org/; 2016 data
2. Source: eco.iarc.fr/eucan; 2012 data

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Deep Pipeline Across Major Cancers

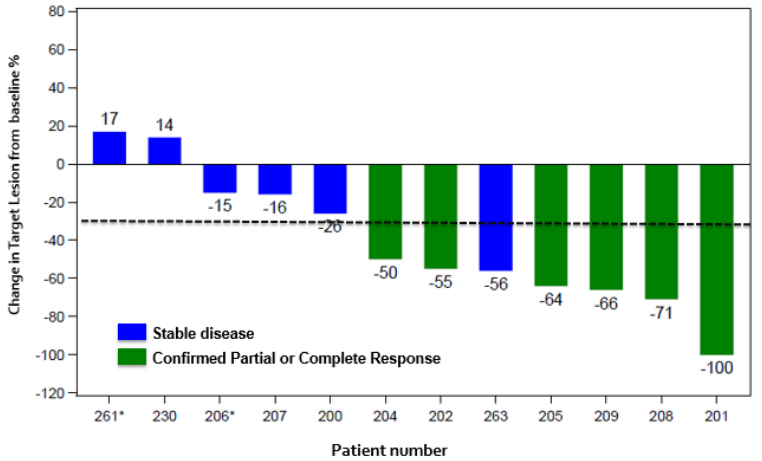
NY-ESO SPEAR T-cell Development Program: Sarcoma

SPEAR target	Indication	Notes	Pre-IND	Phase I / II	Registration
NY-ESO	Synovial sarcoma	Registration			
		Cohort 1 - High NY-ESO +CTX / FLU			
		Cohort 2 - Low NY-ESO +CTX / FLU			
		Cohort 3 – no fludarabine			
		Cohort 4 – modified CTX / FLU			
	Myxoid / Round cell liposarcoma	Pilot study			

Complete | Ongoing | Planned

NY-ESO SPEAR T-cells in Synovial Sarcoma

- ~18 months (80 weeks) median survival for cohort 1
- 60% response rate (6/10) in patients receiving target cell dose (50% overall response rate [6/12]) in context of CTX + fludarabine
- Confirmed response seen in 1 of 5 patients with low NY-ESO expression
- Overall, manageable toxicity; highly persistent cells in the presence of fludarabine



2017 Milestones:

Data from synovial sarcoma cohorts 1, 2, and 4; MRCLS pilot study

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Deep Pipeline Across Major Cancers

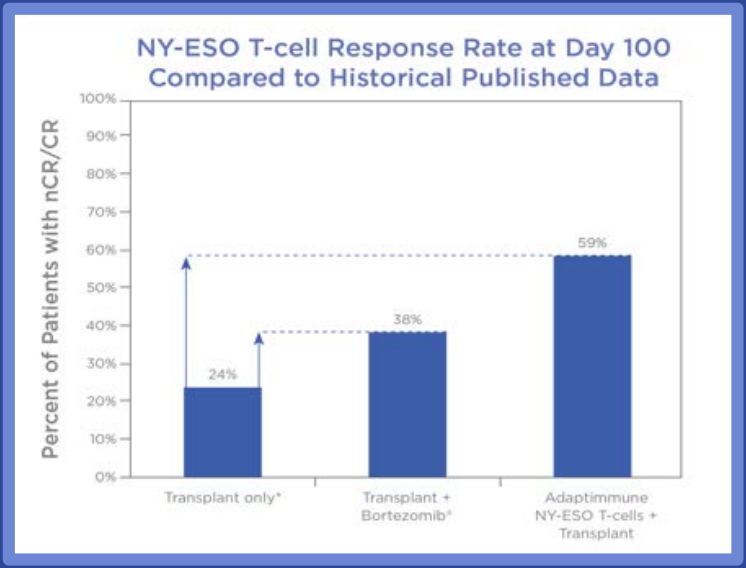
NY-ESO SPEAR T-cell Development Program: Multiple Myeloma

SPEAR target	Indication	Notes	Pre-IND	Phase I / II	Registration
NY-ESO	Multiple myeloma	Autologous SCT			
		Combination with anti-PD1 (KEYTRUDA)			

Complete | Ongoing | Planned

NY-ESO SPEAR T-cells in Multiple Myeloma

- 3-year overall survival (OS) as of Jan. 2016
- 91 percent (20/22) response rate at day 100
- Median: PFS=19.1 months (11/2015)
- Manageable toxicity, highly persistent cells



2017 Milestones:

Initiation of combination study with KEYTRUDA®; potential for data in late 2017

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Deep Pipeline Across Major Cancers

NY-ESO SPEAR T-cell Development Programs: Ovarian, Melanoma, and NSCLC

SPEAR target	Indication	Notes	Pre-IND	Phase I / II	Registration
NY-ESO	Ovarian	No fludarabine			
		modified CTX / FLU			
	Melanoma	No fludarabine			
	Non-small cell lung cancer (NSCLC)	modified CTX / FLU			

Results of ovarian and melanoma studies with CTX only highlight need for preconditioning regimen including fludarabine

2017 Milestones:
Data from studies in NSCLC and ovarian (with FLU)

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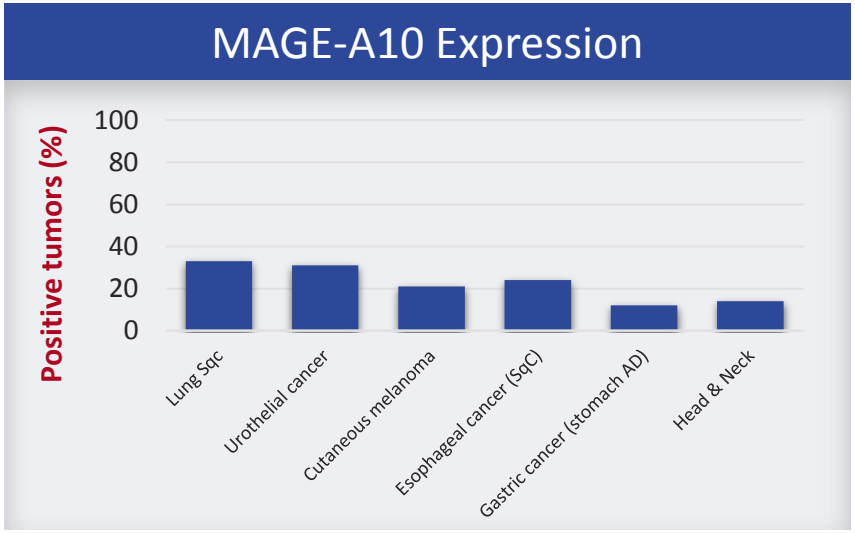
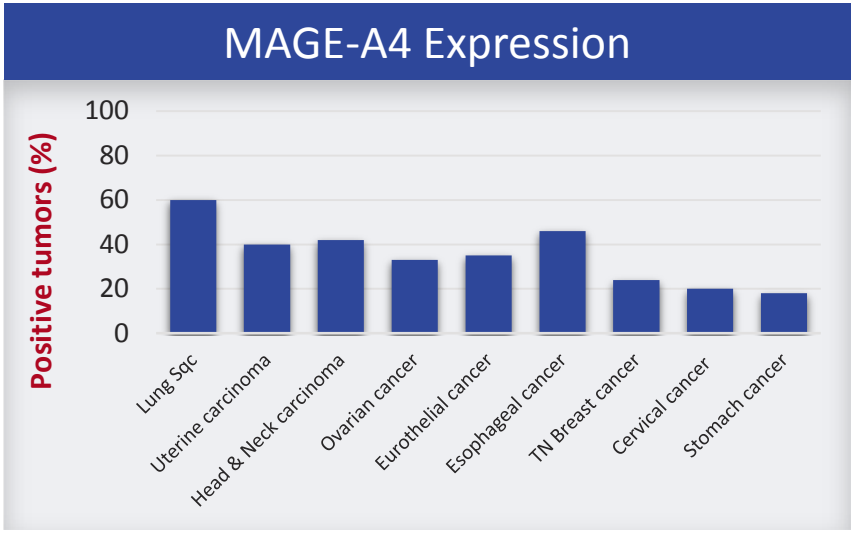
Deep Pipeline Across Major Cancers

MAGE-A10 and -A4: Expressed Across a Wide Range of Tumors





Source: TCGA Research Network: http://cancergenome.nih.gov, January 2017.

Estimated Annual Deaths

	US[1]	Europe[2]
Urothelial	16,390	52,374
Head and neck	9,570	43,704
Ovarian	14,240	42,716
Melanoma	10,130	22,199
Lung	158,080	353,580
Esophageal	15,690	39,504
Gastric	10,730	107,313

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1. Source: seer.cancer.gov; http://www.cancer.org/; 2016 data
2. Source: eco.iarc.fr/eucan; 2012 data

Deep Pipeline Across Major Cancers

MAGE-A10 and -A4 SPEAR T-cell Development Programs: Multiple Cancers

SPEAR target	Indication	Notes	Pre-IND	Phase I / II	Registration
MAGE-A10	Non-small cell lung cancer (NSCLC)	modified CTX / FLU			
	Urothelial (bladder), melanoma, H&N	modified CTX / FLU			
MAGE-A4	Urothelial, melanoma, H&N, ovarian, NSCLC, esophageal, gastric				

2017 Milestones:
Data from NSCLC and triple tumor studies of MAGE-A10 SPEAR T-cells

2017 / 2018 Milestones:
Data from multi-tumor study of MAGE-A4 SPEAR T-cells

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Deep Pipeline Across Major Cancers

Building a Franchise: Broad Coverage of Cancers with Existing CTA Pipeline

Tumor Overlap Examples

Lung Squamous Cell

NY-ESO-1	22%
MAGE-A10	33%
MAGE-A4	60%
Expression by 1 or more	65%

Urothelial Cancer

NY-ESO-1	24%
MAGE-A10	31%
MAGE-A4	35%
Expression by 1 or more	48%

Head & Neck Cancer (squamous cell)

NY-ESO-1	10%
MAGE-A10	14%
MAGE-A4	42%
Expression by 1 or more	44%

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Source: TCGA Research Network: http://cancergenome.nih.gov, January 2017.

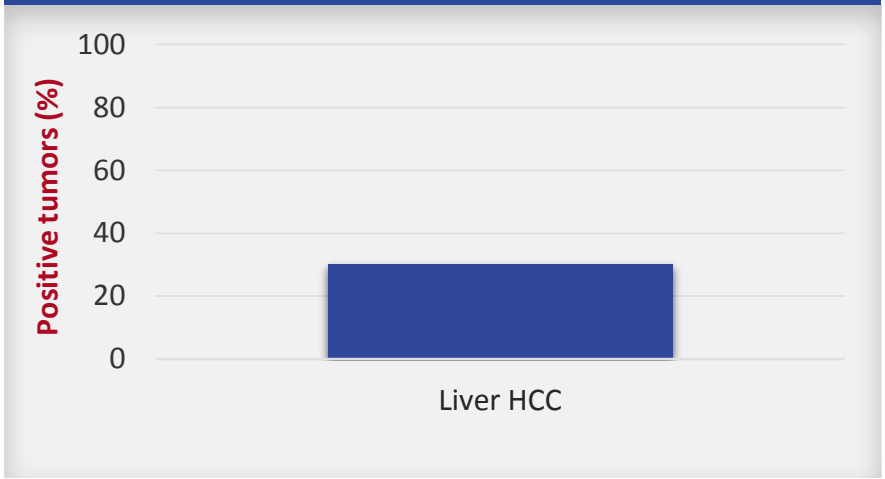
Deep Pipeline Across Major Cancers

AFP SPEAR T-cell Development Program: Hepatocellular cancer

SPEAR target	Indication	Notes	Pre-IND	Phase I / II	Registration
AFP	Hepatocellular cancer	Modified CTX / FLU			

Complete | Ongoing | Planned

AFP Expression



Source: TCGA Research Network: http://cancergenome.nih.gov, January 2016.

Estimated Annual Deaths

	US[1]	Europe[2]
Liver HCC	27,170	62,152

2017/2018 Milestones:

Data from study in hepatocellular cancer

1. **Source: seer.cancer.gov; http://www.cancer.org/; 2016 data**
2. **Source: eco.iarc.fr/eucan; 2012 data**

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Leading Innovation in Engineered T-cell Therapy

Next Generation: Depth and Durability in Solid Tumors

- Combination studies starting in 2017
- Enhancing resistance to tumor microenvironment: 5 programs and growing
  - ✓ Block effects of immunosuppression (e.g., TGF-β)
  - ✓ Overcoming metabolic restrictions of tumor environment
  - ✓ Other internal programs in development
- Enhancing T-cell potency and function: 11 programs and growing
  - ✓ Enhancement of Class-I restricted CD4 T-cell function
  - ✓ Enhancement of cytotoxic function
  - ✓ Enhancement of epitope spreading
  - ✓ Other internal programs in development
  - ✓ Partnership with Bellicum

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Leading Innovation in Engineered T-cell Therapy

Innovative Partnership with Bellicum

- Staged collaboration to evaluate Bellicum's "GoTCR" switch technology
- Technology could complement our next generation efforts

> ✓ Provides potential on/off switch to T-cell
>
> ✓ May further enhance SPEAR T-cell proliferation, activation and persistence

- Preclinical POC will be completed in 2017
- Potential to proceed into co-development / co-commercialization phase in 2017/2018

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Leading Innovation in Engineered T-cell Therapy

Allogeneic Approach to TCR T-cell Therapy

- Partnered with Universal Cells
- Benefits of allogeneic approach include

  - ✓ Allows one manufacturing batch to treat numerous patients
  - ✓ Enhanced control and standardization of manufactured product
  - ✓ Eliminates risk of rejection by host and GvHD
  - ✓ Decreases manufacturing costs
  - ✓ Scalable for unlimited commercial manufacture

- Progenitor cell line evaluated; T-cell differentiation ongoing
- Pre-IND meeting in planning

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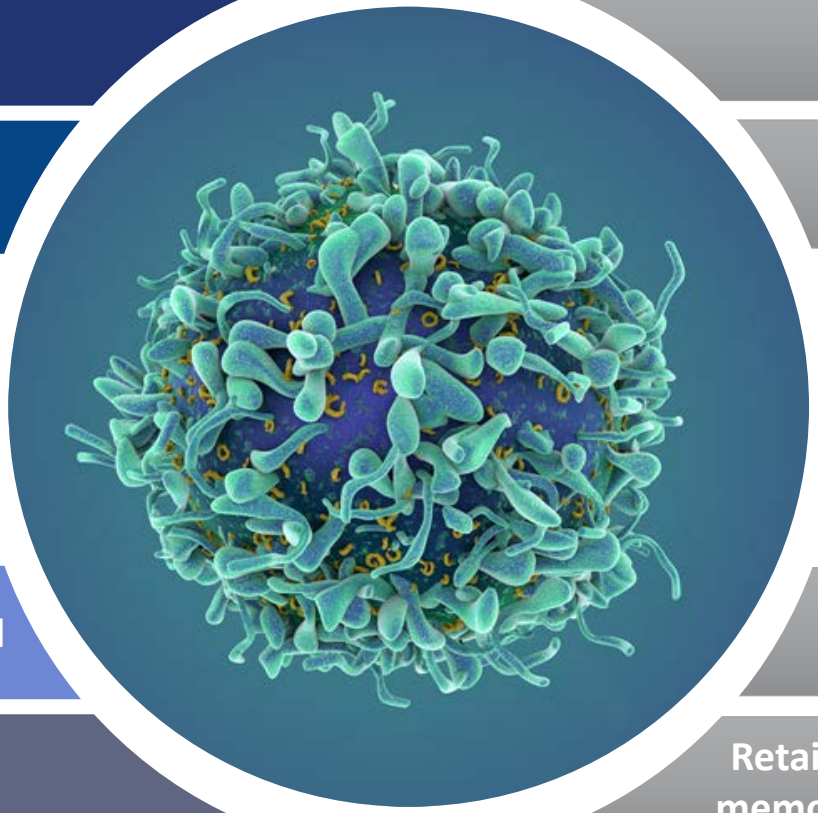
Optimizing T-cell Product Manufacturing

Advantages of Adaptimmune's Manufacturing Process

Robust Expansion	**Minimizes vector requirement, no IL-2 or feeder cells**
Maximum Flexibility	**Cryopreservation possible on both ends of the manufacturing process**
Positive Selection	**CD3/CD28 beads; CD4 and CD8 T-cells; no Tregs**
Serum Free Expansion	**Reduced serum dependency for minimizing cost and risk**
Rapid Turnaround	**10-day manufacturing process**
T-cell Persistence	**Retained tumoricidal activity; long-term memory phenotype, minimal exhaustion**



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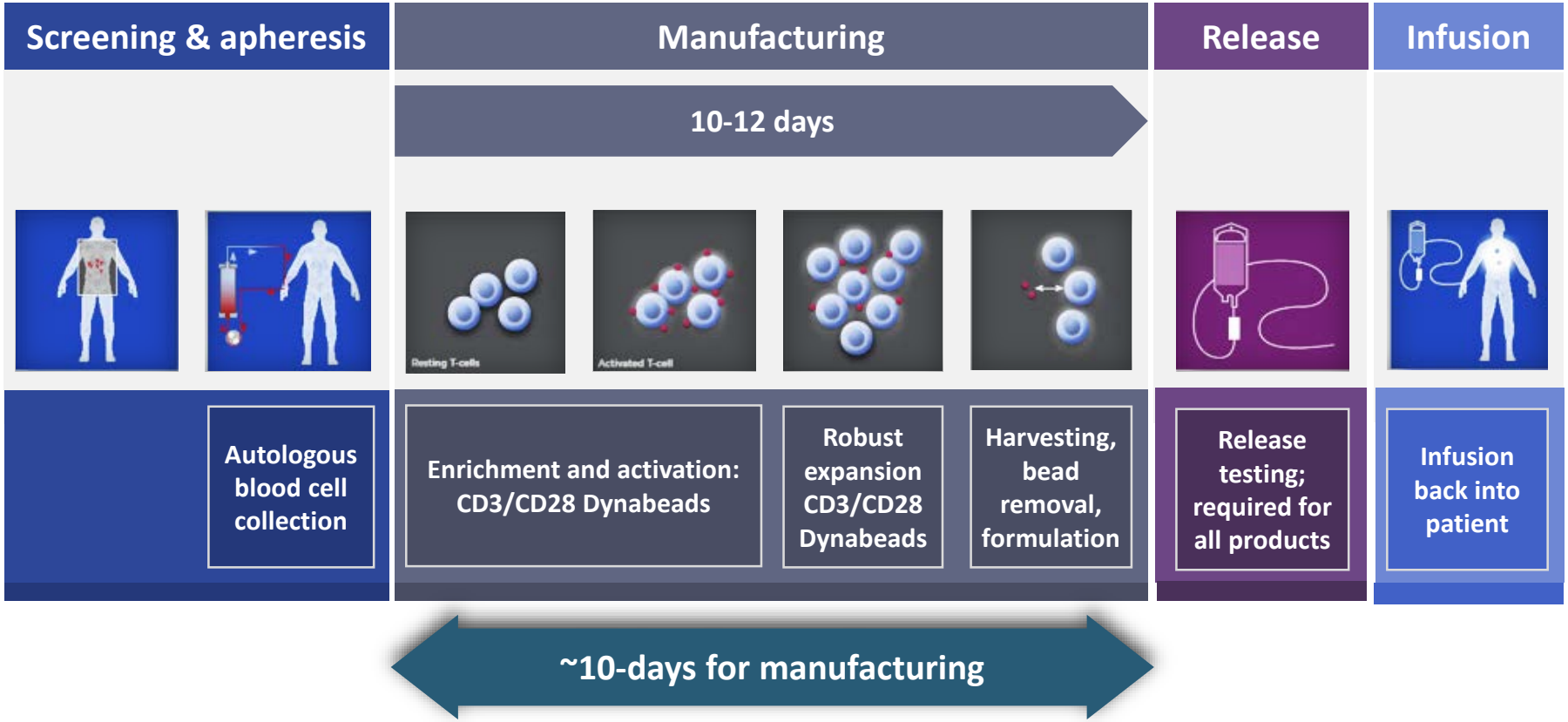
Cell Manufacturing: The Patient Journey

Industry Leading In Vitro Expansion



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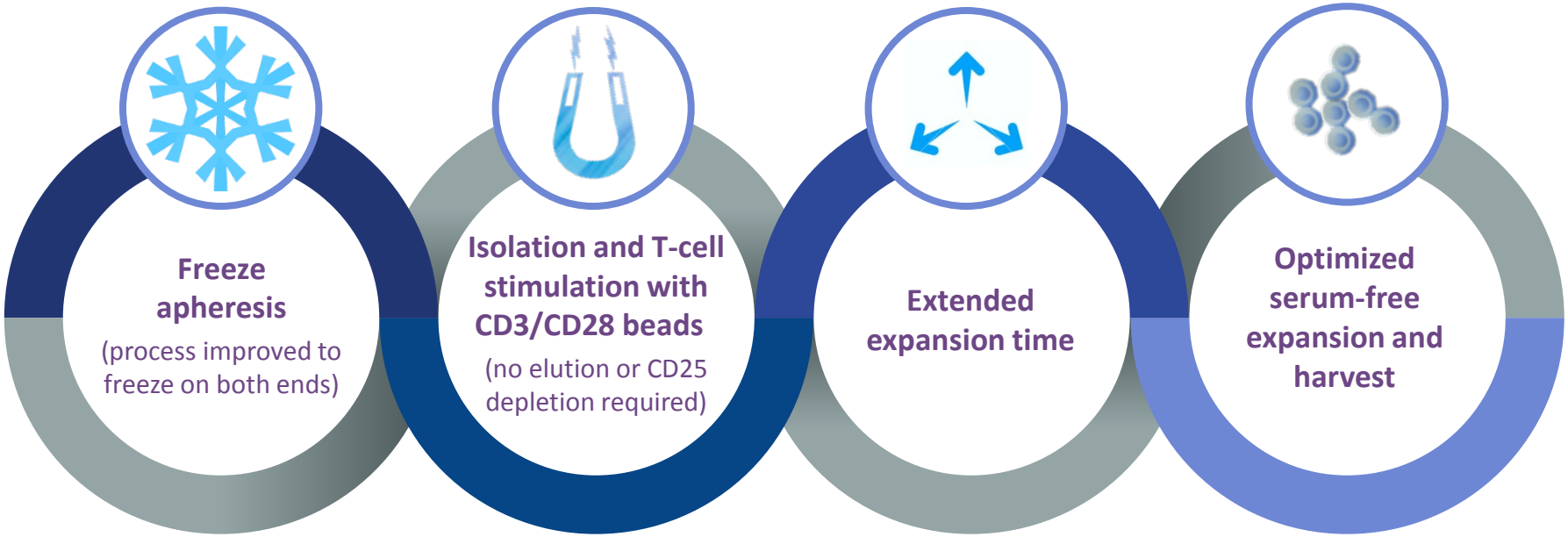
Cell Manufacturing

Improved Efficiency over Academic Process



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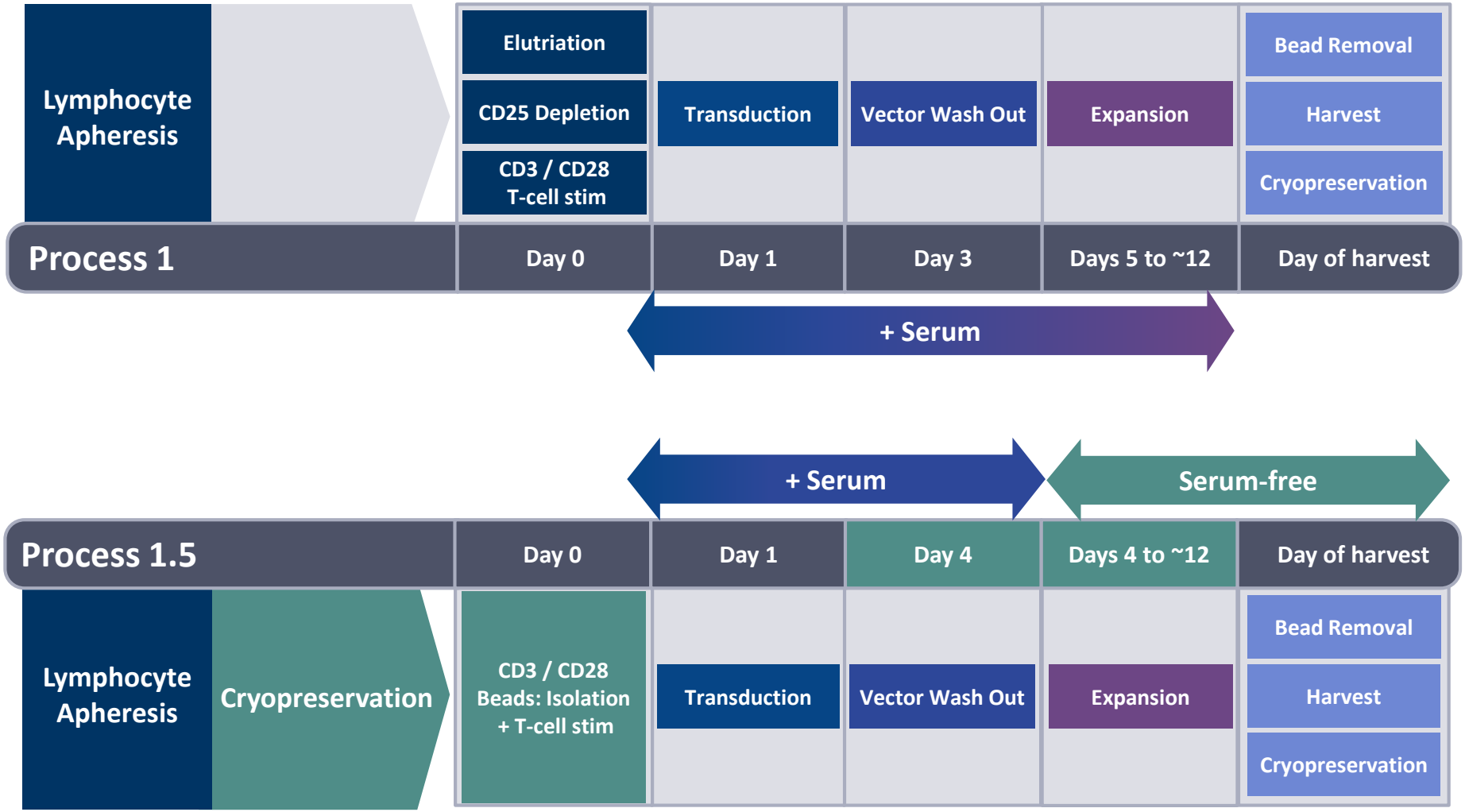
Delivering on a Commercial-Ready Process

Enhancements to Ensure Commercial Feasibility



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Denotes change in process 1.5

Corporate Update

Global Technology Network: Partnering with Industry Leaders

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Strong Financial Position

Third Quarter 2016 Financial Results

- Financial position as of September 30, 2016
  - $140.4 million of cash and cash equivalents
  - $47.1 million of short-term deposits
  - Combined represents a total liquidity position of $187.5 million*
- Will fund operations through mid-2018**

* Total liquidity position is a non GAAP financial measure, which is explained and reconciled to the most directly comparable financial measures prepared in accordance with GAAP

** Guidance excludes any new business development and is based on current company assumptions

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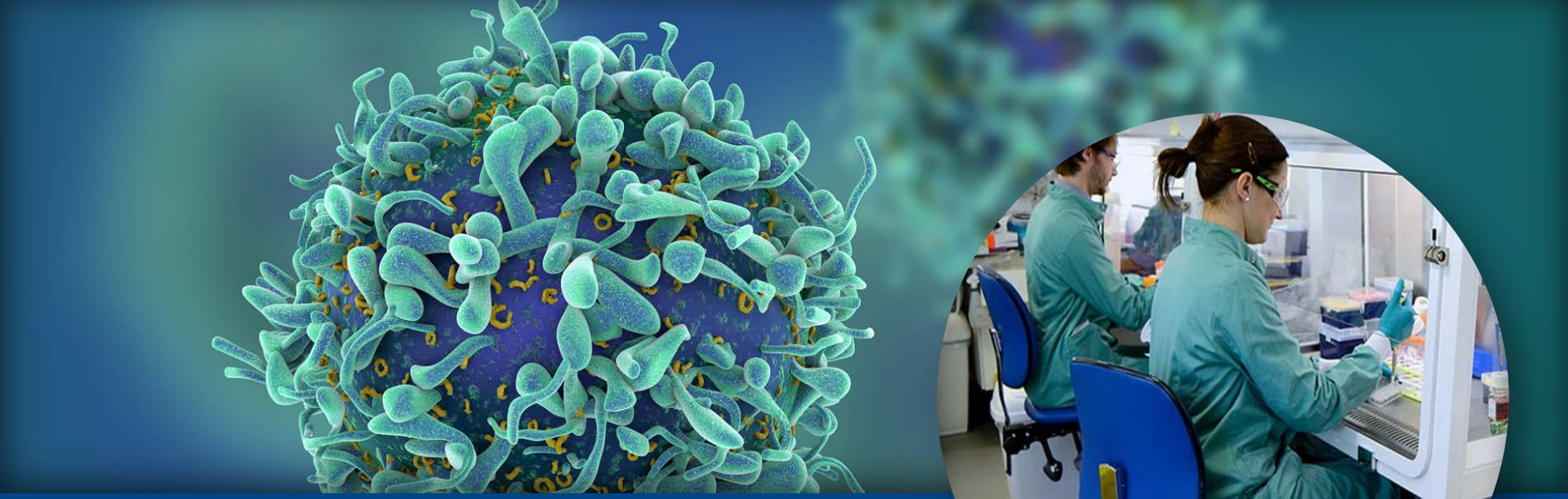

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January 2017

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