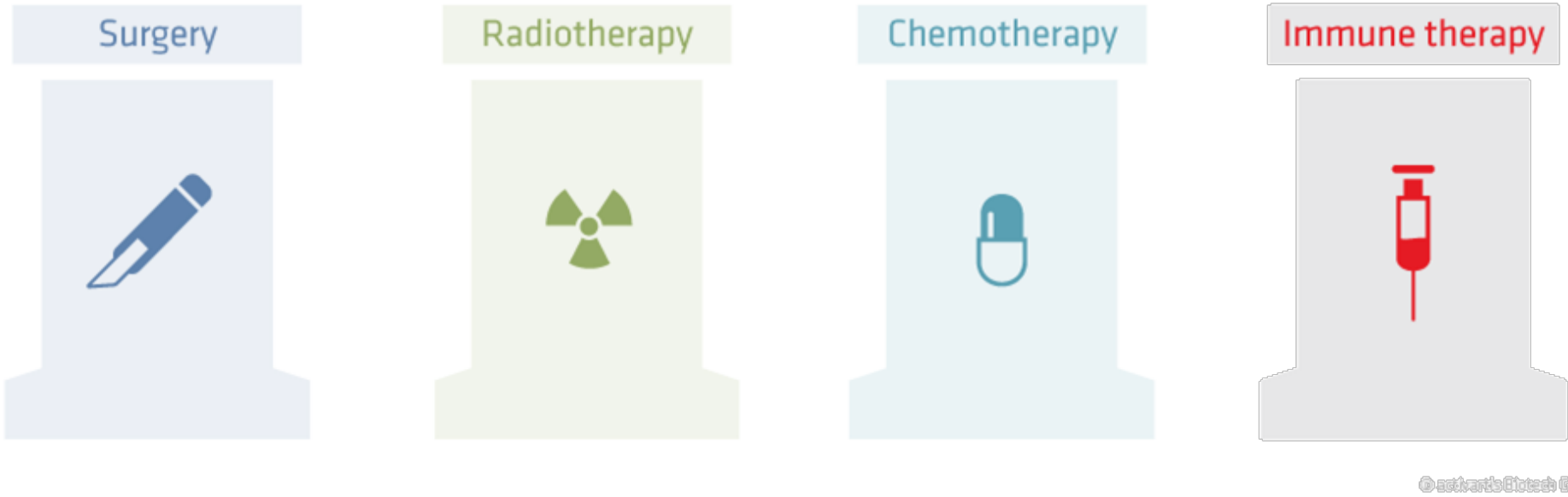
NASPCC Symposium on Immuno-Oncology in Prostate Cancer: Current and Future Trends

June 24, 2021

10:00 am – 2:30 pm (Pacific)

Pillars of Cancer Therapy

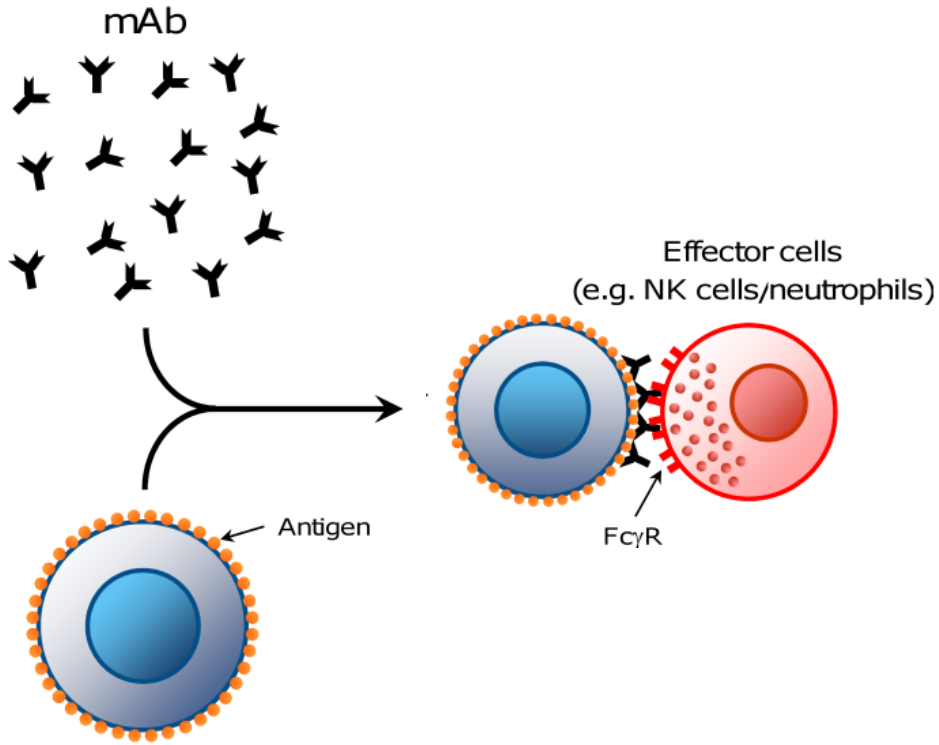


Smyth, *Immunol Cell Biol* 2017.

Cancer Immunotherapy

Antibody Immunotherapy

- Antibody Dependent Cellular Cytotoxicity (ADCC)
  *Rituximab (NHL)
  (Beck et al., 1999)



Tumor Cell

Adapted from Weiner LM et al.; Antibody-based immunotherapy of cancer. *Cell*, 2012

Cancer Immunotherapy

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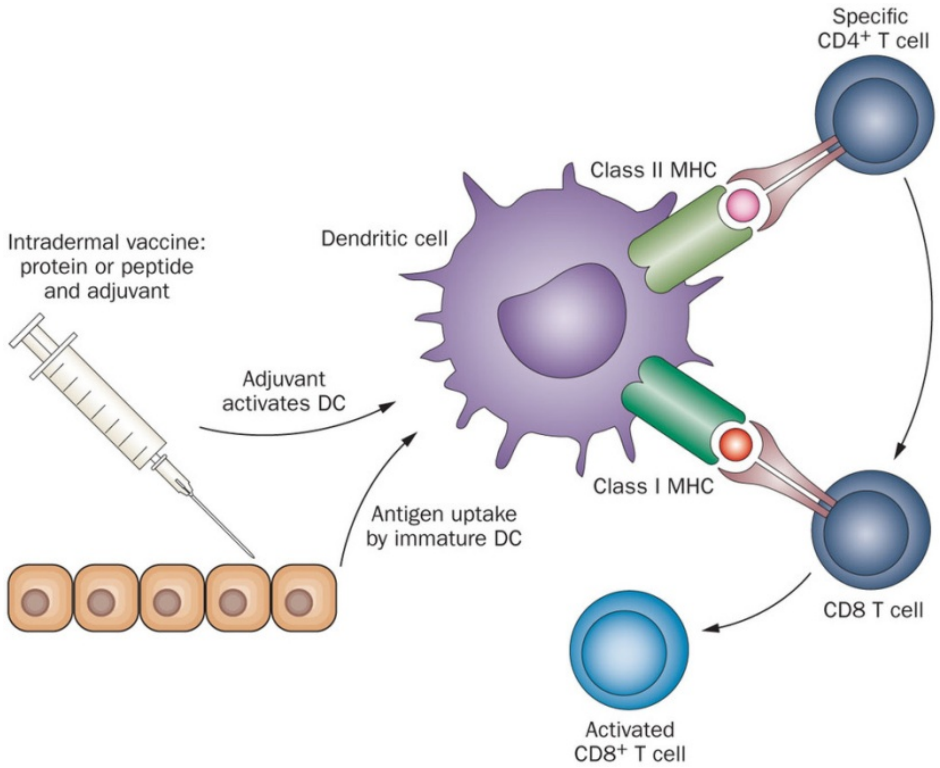
Cancer Vaccines

- Elicit anti-tumor T-cell responses by inducing tumor antigen expression on DCs
  *Provenge
  (Hahn et al., 2012)



Adapted from Hahn NM et al.; *Human Vaccines & Immunotherapeutics*., 2012

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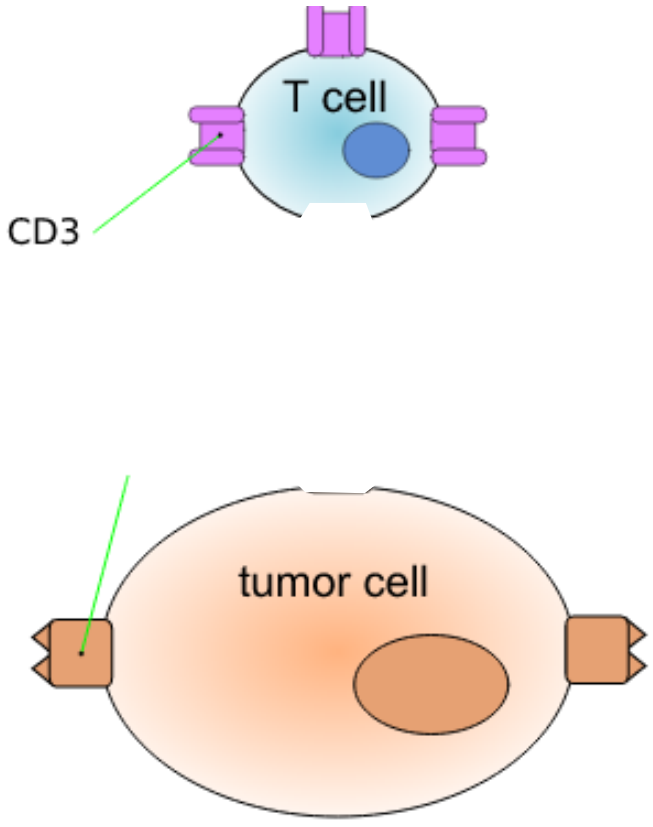

Bi-Specific T cell engagers

- Anti-CD3/CD19 Bi-specific Blinatumomab (ALL)
  (Robinson HR. et al., 2018)

Adapted from Weiner LM et al.; Antibody-based immunotherapy of cancer. *Cell*, 2012

Cancer Immunotherapy

Antibody Immunotherapy

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Tumor Death

Activation

Bi-Specific T cell engagers

- Anti-CD3/CD19 Bi-specific Blinatumomab (ALL)
  (Robinson HR. et al., 2018)

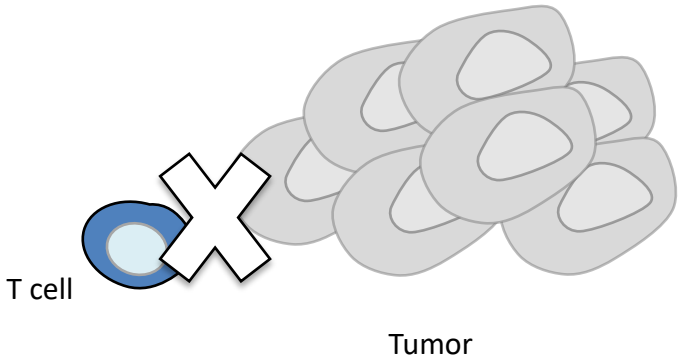
Checkpoint Blockade

- Anti-PD1 / Anti-CTLA-4 mAbs
  *Nivolumab/Ipilimumab
  Metastatic melanoma
  (Ascierto et al., 2012)

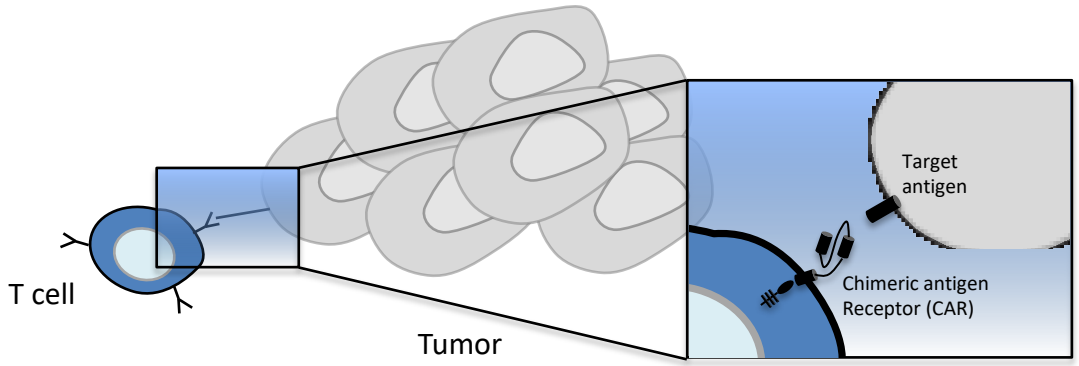
Adapted from Weiner LM et al.; Antibody-based immunotherapy of cancer. *Cell*, 2012

Chimeric Antigen Receptor (CAR) T Cell Therapy

Conventional TCR:MHC

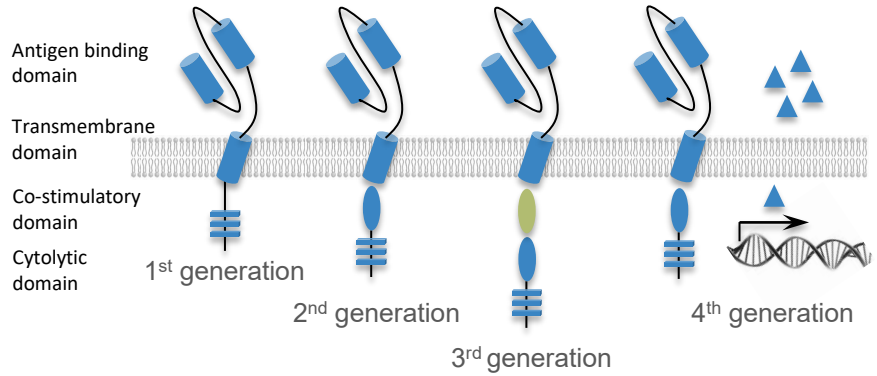


Chimeric antigen receptor



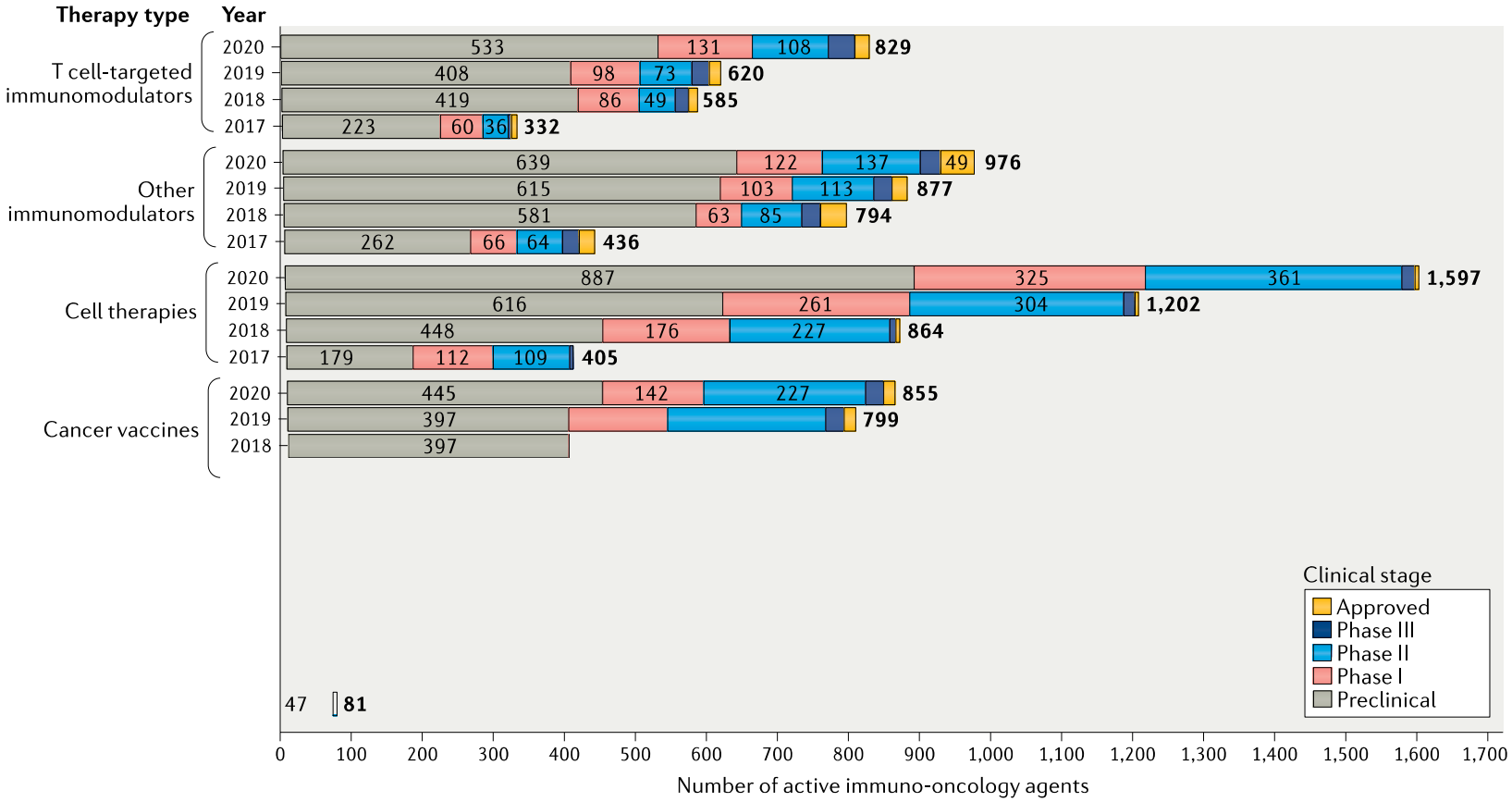
Escape mechanisms in the majority of cancers

- MHC down-regulation / defective antigen presentation of TAAs
- Immunosuppressive tumor-infiltrating immune cells



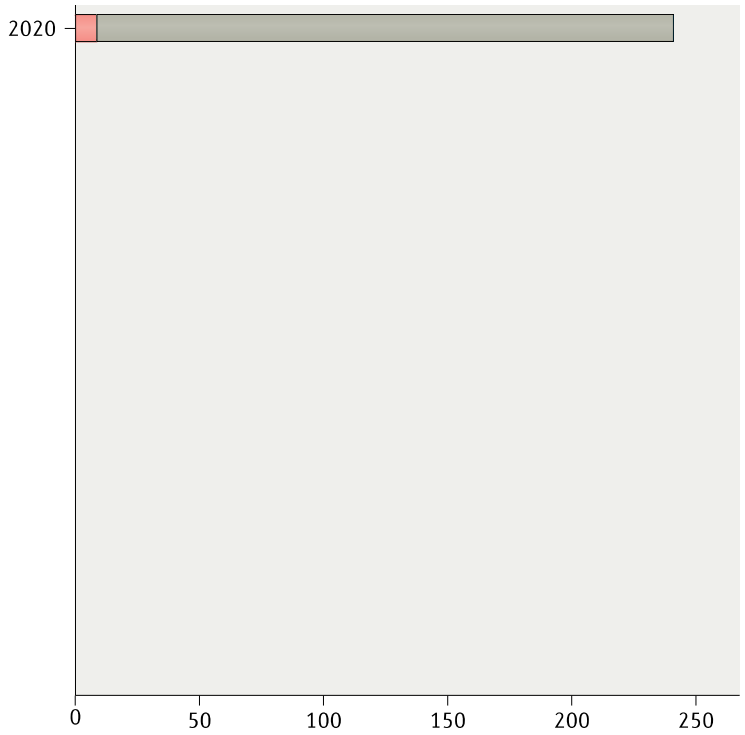
Adapted from Roberts et al, *Leuk & Lymphoma* 2017

Today's Landscape of Immunotherapy



Yu, et al. *Nat Rev Drug Disc* 2019

Today’s Landscape of Immunotherapy



Upadhaya et al. *Nat Rev Drug Disc* 2020

Prostate Cancer Immunotherapy

Session One

10:15 am – 10:35 am	Redirecting T-Cells for Prostate Cancer Immunotherapy **Lawrence Fong MD** University of California, San Francisco
10:40 am – 11:00 am	CAR-T Development in Sub-Types of Prostate Cancer: How Mechanistic Biology Impacts Future Therapies **John Lee, MD, PhD** Fred Hutchinson Cancer Center
11:05 am – 11:25 am	Chimeric Antigen Receptor T-Cell Therapies for Advanced Prostate Cancer: Clinical Trials (and Tribulations) **Vivek Narayen, MD, MS** University of Pennsylvania
11:30 am – 11:50 am	Advancing CAR-T Cells for Prostate Cancer **Saul Priceman, PhD** City of Hope Medical Center
11:50 am – 12:10 pm	**Panel Discussion**
12:10 pm – 12:25 pm	**Break**

Session Two

12:30 pm – 12:50 pm	Upcoming Clinical Trial of DLL3/CF3 BiTE in Neuroendocrine Prostate Cancer **Rahul Aggarwal, MD** University of California, San Francisco
12:55 pm – 1:15 pm	Anti-CTLA-4-Therapy in Prostate Cancer **Sumit Subudhi, MD, PhD** UT MD Anderson Cancer Center
1:20 pm – 1:40 pm	The Quest for an Effective Immunotherapy for Prostate Cancer **James Gulley, MD, PhD** National Institutes of Health (NIH)
1:45 pm – 2:05 pm	Allogenic Approaches to Cell Therapy for Tumors of Various Sorts **Charles Drake, MD, PhD** New York-Presbyterian/Columbia
2:10 pm – 2:30 pm	**Panel Discussion**
2:30 pm	**Closing Remarks**