

Take-Home Points

Part A

From Basic Principles to Clinical Applications of Cancer Immunotherapy and Overcoming Barriers to Incorporating Immunotherapy Into **Community Practice**







Society for Immunotherapy of Cancer



MELANOMA

Clinical Applications of Cancer Immunotherapy

- Many types of immunotherapy for melanoma are FDA approved and should be considered elements of the standard of care
 - PD-1 antibodies nivolumab and pembrolizumab can be used first or second line in melanoma.
 - Ipilimumab/nivolumab combination is especially effective in treatment of melanoma in PD-L1 negative patients.
- Over 50 percent of patients on ipilimumab/nivolumab combination therapy have high grade side effects, so patients should be actively monitored.

LUNG CANCER

- Nivolumab, pembrolizumab, and now atezolizumab have overall similar benefit and toxicity for lung cancer.
 - Nivolumab and atezolizumab are approved for second-line treatment irrespective of PD-L1 status .
 - Pembrolizumab is approved as second line-treatment if PD-L1+ >1 percent.
 - Frequency: nivolumab q2w, pembrolizumab and atezolizumab q3w
- Pembrolizumab is superior to platinum doublet in the first-line setting for lung cancer if the tumor has PD-L1 expression ≥ 50 percent.









Clinical Applications of Cancer Immunotherapy

GENITOURINARY CANCERS

Immunotherapies are active across GU malignancies.

- Sipuleucel-T offers a survival advantage compared to placebo in asymptomatic or minimally symptomatic metastatic castrate-resistant prostate carcinoma.
- Atezolizumab and nivolumab are approved for platinum-resistant metastatic bladder cancer and induce durable response in approximately 20 percent of patients.
- Avelumab/durvalumab are approved for locally advanced or metastatic bladder cancer whose disease has progressed during or after platinum-containing chemotherapy or within 12 months of neoadjuvant or adjuvant chemotherapy.
- Given the overall survival benefit and tolerability, nivolumab is an appropriate recommendation for previously treated patients with metastatic RCC (in the absence of contraindications).
- irAEs are manageable, but potentially serious; clinical staff must emphasize the necessity for patients to report symptoms immediately to their physician.







Clinical Applications of Cancer Immunotherapy

HEMATOLOGIC MALIGNANCIES

Recently approved therapies for hematologic malignancies:

- For NHL/CLL: obinutuzumab and ibrutinib
- For myeloma: daratumumab and elotuzumab
- For ALL: blinatumumab
- For Hodgkin lymphoma: nivolumab and pembrolizumab

HEAD AND NECK SQUAMOUS CELL CARCINOMA (HNSCC)

• PD-1 antibodies nivolumab and pembrolizumab are approved in second-line recurrent/metastatic HNSCC in the oral cavity, oropharynx, larynx, and hypopharynx.





Overcoming Barriers to Incorporating Immunotherapy Into Practice

HOSPITAL OPERATIONS AND REIMBURSEMENT

- As immuno-oncology agents increase in utilization, hospitals must invest in the staffing infrastructure to ensure benefits evaluations are completed, predeterminations are submitted, and denials are appealed.
- Emergency response protocols for immuno-oncology agents should be in place, and staff education should be provided on the unique adverse events related to immuno-oncology agents.
- Reimbursement teams should be well-versed in Medicare local and national coverage determinations and commercial payer clinical guidelines and pathways.

