



Society for Immunotherapy of Cancer

Advances in Cancer Immunotherapy™

Patient Education and Engagement in Their Treatment with Immunotherapy

Theresa S. Brown, PharmD BCOP CPP

Duke University Hospital

#LearnACI

Disclosures

- No relevant financial relationships to disclose

Objectives

- Identify key points that patient education on immunotherapy should cover
- Describe strategies to engage patients in the immunotherapy education and monitoring process

Immune Checkpoint Inhibitors (ICIs)

- Target immune cell “checkpoints” such as PD-1, PD-L1, and CTLA-4
- Rapidly redefined treatment landscape of many different malignancies
- Increasingly used in clinical practice
 - New types of malignancies
 - Earlier treatment settings

PD-1 Inhibitors	PD-L1 Inhibitors	CTLA-4 Inhibitors
Nivolumab Pembrolizumab Cemiplimab Dostarlimab	Atezolizumab Avelumab Durvalumab	Ipilimumab

Immune-Mediated Adverse Events (irAEs)

- Reported incidence of any-grade irAEs associated with single-agent ICI treatment ranges widely (15-90%)
- Most common: dermatologic, gastrointestinal, hepatic, endocrine, or respiratory
- Many are mild-moderate, but can be serious and even life-threatening
- Management presents a unique challenge that can be addressed at multiple levels
- Patient education is crucial to maximize early recognition and reporting of irAEs

Patient Education

- Patients are primary stakeholders in their own therapy and directly impacted by irAEs → education is first step in irAE management
- Most effective when provided **before treatment initiation**
- Should be done in a quiet environment that supports learning by oncology team members
- Most important topics shown to reduce patient anxiety:
 - Treatment side effects
 - Management strategies
 - Infusion center orientation

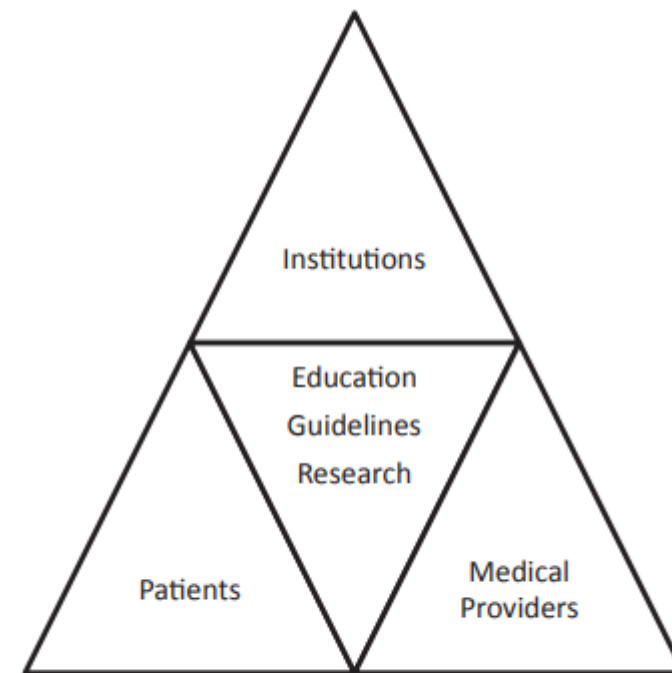


FIGURE 1. Multilevel Approach to Managing Immune-Related Adverse Event Toxicities

Patient Education – Key Points to Cover

1. Background & Mechanism of Action

- ICIs work with the immune system to fight cancer
- Results in unique response patterns and side effects that differ from chemotherapy or radiation

2. Expected Response to Treatment

- Can result in long-term responses
 - Response can be delayed and occur months after treatment, even after an initial increase in tumor size or appearance of new tumors
- Goals of treatment should also be clear

Patient Education – Key Points to Cover

3. Monitoring/Management of irAEs

- Often can be managed effectively without permanent treatment discontinuation
- Usually mild/moderate, but can become severe/life-threatening

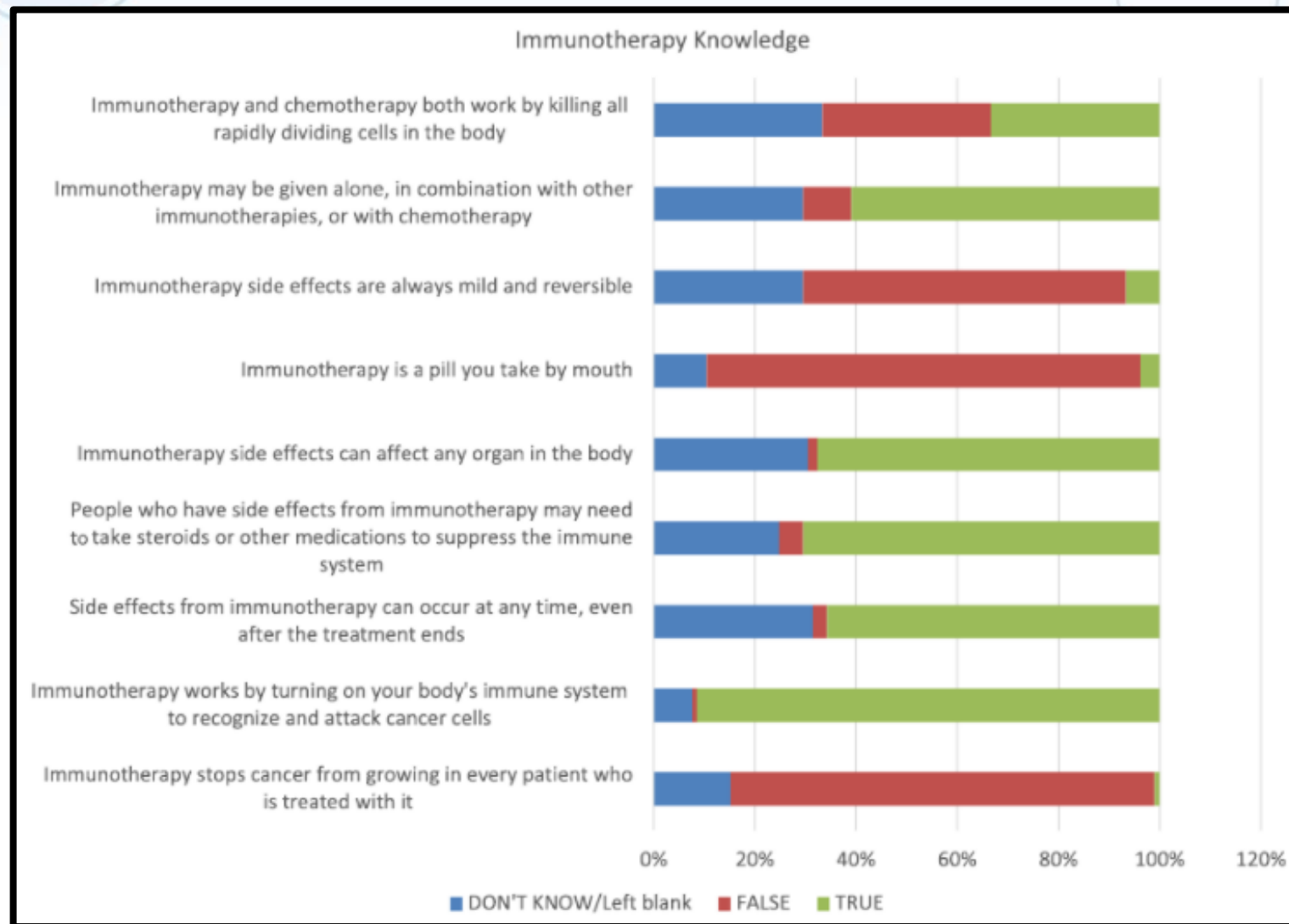
4. Timing of irAEs

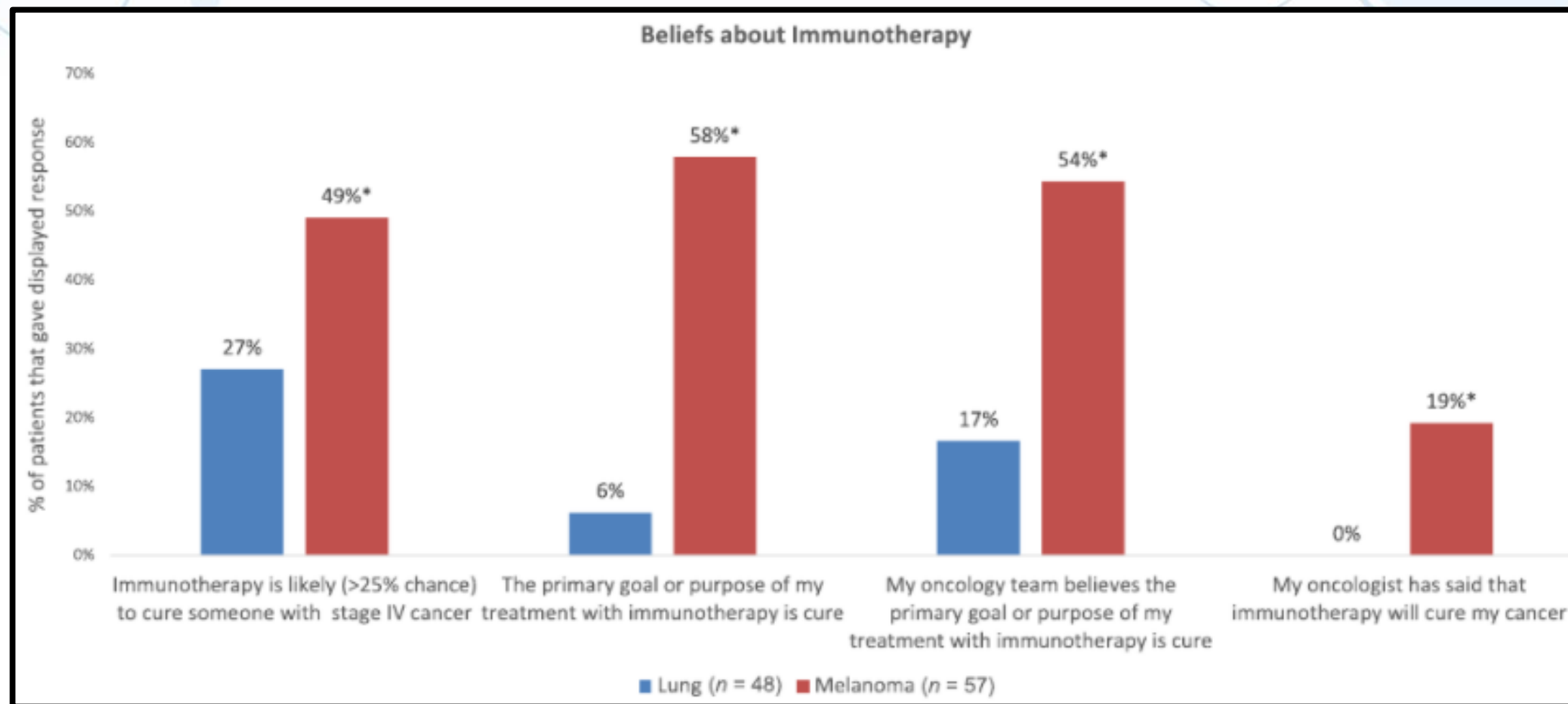
- Most occur within 3 months of starting ICIs but can occur at anytime
- Can have delayed onset and prolonged duration compared with chemotherapy-related adverse events

5. When and How to Contact Provider

Study – Assessment of Patient Knowledge

- Cross-sectional study to assess patients' knowledge about risks, benefits, and goals of immunotherapy
- Study Population (N = 105)
 - Patients with advanced melanoma or non-small cell lung cancer (NCSLC)
 - Initiated therapy with ICI in previous 12 weeks
- Patients completed 9-item knowledge survey and questions from the Prognosis and Treatment Perceptions Questionnaire





Study – Assessment of Patient Knowledge

- Demonstrated substantial knowledge deficits among patients receiving ICIs
- Prevalent expectations that immunotherapy is curative in the setting of advanced disease
 - Especially among patients with melanoma
- Despite being counseled on risks/benefits as part of informed consent process, patients often struggle to recall this information
 - Highlights the need for educational tools

Patient Education – Materials/Tools

- Printed or electronic medical education (pamphlets, booklets, or patient paperwork)
- Patient diaries, questionnaires, or standard assessment forms
 - To help monitor and report potential irAEs
- Immunotherapy Wallet Cards

Patient Education – Wallet Cards

- Can help identify immunotherapy patients at the patient level
- Alert healthcare providers that may not have been involved with a patient's cancer treatment (i.e. urgent care providers) that patient has received ICI
 - Ideally should include phone number for 24/7 access to clinician familiar with irAEs
- Available from Oncology Nursing Society, pharmaceutical companies, and institutions with home-grown cards

Front

IMMUNOTHERAPY WALLET CARD

NAME: _____

CANCER DX: _____

I-O AGENTS RCV'D: ☐ CHECKPOINT INHIBITOR(S)

☐ CAR-T ☐ VACCINES ☐ ONCOLYTIC VIRAL THERAPY

☐ MONOCLONAL ANTIBODIES

DRUG NAME(S): _____

IMMUNOTHERAPY TX START DATE: _____

OTHER CANCER MEDICATIONS: _____

NOTE: IMMUNOTHERAPY AGENTS ARE **NOT** CHEMOTHERAPY AND SIDE EFFECTS MUST BE MANAGED DIFFERENTLY (SEE BACK)

ONS
Oncology Nursing Society

Back

IMMUNOTHERAPY CARD

IMMUNE-RELATED SIDE EFFECTS*, COMMON WITH CHECKPOINT INHIBITORS VARY IN SEVERITY AND MAY REQUIRE REFERRAL AND STEROIDS. PATIENTS HAVE A LIFETIME RISK OF IMMUNE-RELATED SIDE EFFECTS.

*MAY PRESENT AS RASH, DIARRHEA, ABDOMINAL PAIN, COUGH, FATIGUE, HEADACHES, VISION CHANGES, ETC. – CONFIR WITH ONCOLOGY TEAM BEFORE CHANGING I-O REGIMEN OR STARTING SIDE EFFECT TREATMENT.

ONCOLOGY PROVIDER NAME _____

ONCOLOGY PROVIDER NO. _____

EMERGENCY CONTACT _____

CONTACT PHONE NO. _____

COPYRIGHT © 2018 ONCOLOGY NURSING SOCIETY. ALL RIGHTS RESERVED.

Patient Education – Continuing Education

- ASCO & NCCN Guidelines recommend continued patient and caregiver education throughout treatment at regular intervals
- Reinforcement of educational concepts is essential

Study – Immune Checkpoint Inhibitor Program

- Pharmacist-driven program intended to improve patient education and follow-up monitoring
- At least 2 pharmacist-patient encounters added to workflow
 - Initial Encounter:
 - Educate patient/caregivers on signs/symptoms of irAEs
 - Patient given immunotherapy wallet card
 - Subsequent Encounters:
 - Primarily involved assessment of irAEs
 - Completed 7-10 days after ICI administration for first 3 cycles, then every other cycle thereafter

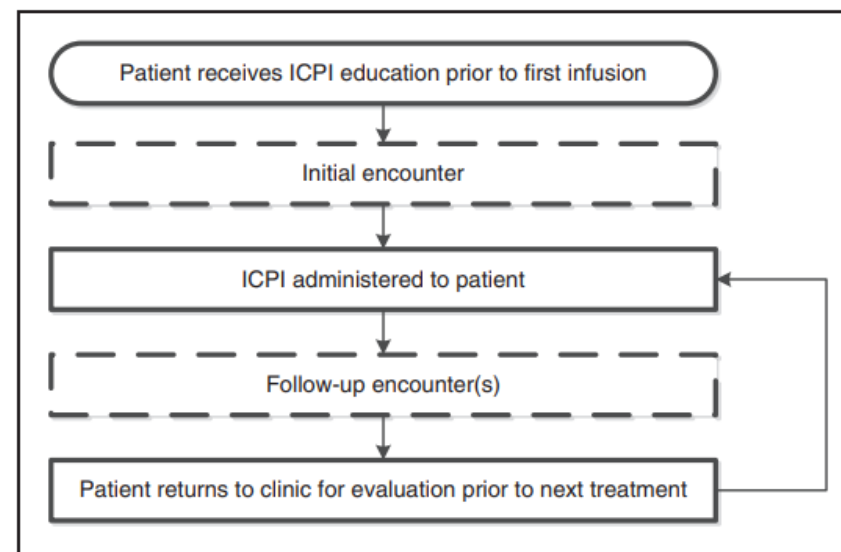


Figure 1. Changes pre- and post-ICPI Program implementation.

Study – Immune Checkpoint Inhibitor Program

- 47 patients enrolled in the program
- Pharmacists completed 34 interventions
 - Escalation of care occurred if pharmacist assessed symptom to be \geq Grade 2 or patient had additional concern that could not be resolved by pharmacist
 - Nonpharmacologic recommendations included avoiding excessive sun exposure and dietary recommendations to avoid dehydration
- Authors concluded that these interventions may lead to earlier recognition and treatment of irAEs

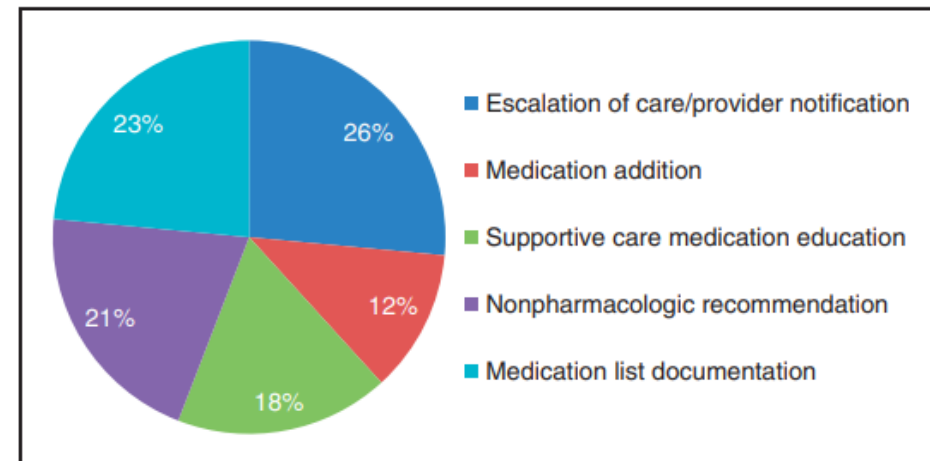


Figure 3. Number and type of pharmacist intervention during follow-up encounters (n = 34).

Patient Education – Barriers

- Learning preferences
- Physical Factors (increased age, decreased visual acuity)
- Environmental Factors
- Language
- Culture
- Health Literacy
- Financial Toxicity

Conclusions

- Patient education extremely important to maximize early detection and reporting of irAEs
 - Should be done prior to receiving ICI and reinforced throughout treatment
- Continued need for new strategies and tools to improve patient education/monitoring and improve patient engagement in the treatment process
 - Immunotherapy Wallet Cards
 - Monitoring Programs

Questions?