Cancer Immunotherapy
An evidence-based overview and implications for practice

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BACKGROUND: Significant research progress has been made in immunotherapies since the mid-1990s, and this rapid evolution necessitates evidence-based education on immunotherapies, their pathophysiology, and their toxicities to provide safe, effective care.

OBJECTIVES: The aim of this article is to provide an evidence-based overview, with implications for practice, of checkpoint inhibitors, monoclonal antibodies, oncolytic viral therapies, and chimeric antigen receptor T-cell therapies.

METHODS: Each immunotherapy category is presented according to the pathophysiology of its immune modulation, the classes of agents within each category, evidence-based toxicities associated with each class, and implications for practice.

FINDINGS: Immunotherapies vary in their pathophysiology and offer potential to be highly effective for the management of a wide array of cancer types. Understanding the unique pathophysiology and toxicities is necessary to assess, manage, and provide safe, effective patient-focused care.

KEYWORDS
immunotherapy; monoclonal antibodies; pathophysiology; toxicities

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