



*CME/CE-Certified myCME Go Mobile Webcast*

## **Immune Checkpoint Inhibitors and Rheumatologic irAEs: Clinical Pearls for Practice**

### **FACULTY PRESENTERS**

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### **PROGRAM DESCRIPTION**

With the increasing use of immune checkpoint inhibitor (ICI) therapy for the treatment of various cancers, rheumatologists and rheumatology nurses are likely to encounter a wide variety of specific rheumatologic immune-related adverse events (irAEs) such as inflammatory arthritis, sicca syndrome, myositis, polymyalgia rheumatica, and crystal disease. Because treatment considerations may be different for irAEs compared with other rheumatologic conditions, it is essential that clinicians are able to identify, grade, and appropriately treat these conditions. In this educational activity—the first in a series of 3 interrelated myCME Go activities—an oncologist and a rheumatologist discuss the currently available ICIs and their mechanisms of action as well as associated rheumatologic irAE presentations and diagnosis strategies.

### **INTENDED AUDIENCE**

This activity is designed for rheumatologists, rheumatology nurses, and NPs and PAs with a specialty in rheumatology.

### **LEARNING OBJECTIVES**

After participating in this activity, learners should be better able to:

- Describe the currently approved immune checkpoint inhibitors (ICIs), their indications, and their mechanisms of action
- Discuss the adverse events seen with use of ICIs, particularly immune-related adverse events (irAEs)
- Recognize the distinct clinical features and grades of rheumatologic irAEs and their long-term sequelae

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- **Dr. Cappelli** is a consultant for Bristol-Myers Squibb and has received royalties from Regeneron/Sanofi.

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Supported by an educational grant from  
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## FACULTY BIOGRAPHIES



**Julie R. Brahmer, MD, MSc**, is the Director of the Thoracic Oncology Program and Professor of Oncology at the Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins. She also directs the Kimmel Cancer Center on the Johns Hopkins Bayview campus and is co-principal investigator on Johns Hopkins' National Clinical Trials Network and helps direct all oncology cooperative group activities on the Johns Hopkins campuses. Dr. Brahmer is an international leader in lung cancer clinical trials research with particular expertise in drug development for thoracic malignancies and immunotherapy.

Dr. Brahmer received her undergraduate degree in Chemistry and Philosophy in 1989 from the Creighton University in Omaha, Nebraska and went on to receive her medical degree from the University of Nebraska Medical Center College of Medicine in 1993. Completing her internship and residency in Internal Medicine at the University of Utah, she later became the Chief Medical Resident until moving to Baltimore to complete her fellowship in Medical Oncology at the Kimmel Cancer Center at Johns Hopkins.

Dr. Brahmer is an active clinical leader in the treatment of lung cancer and mesothelioma. She helps lead the organization of the multidisciplinary thoracic malignancy conference whose members meet weekly to discuss thoracic malignancy cases that need a multidisciplinary review/approach. Her research and clinical practice focuses on the development of new therapies for the treatment and prevention of lung cancer and mesothelioma.

Dr. Brahmer's research interests include leading early phase immunotherapy trials of anti-PD-1 antibodies, international phase III studies of immunotherapies in lung cancer and investigator-initiated trials evaluating epigenetic therapies in combination with immunotherapies.

She is a member of the American Society of Clinical Oncology and the Eastern Cooperative Oncology Group (ECOG) Thoracic Committee and Cancer Prevention Steering Committee. She is one of the founding Board members for the National Lung Cancer Partnership, where she serves as a member and the Chairman of the Scientific Executive Committee. She is also on the medical advisory board of the Lung Cancer Research Fund and LUNGeity.



**Laura C. Cappelli, MD, MHS** received her undergraduate degree from the University of Pennsylvania and her M.D. from Johns Hopkins University School of Medicine. She completed her residency in internal medicine and performed a fellowship in rheumatology at Johns Hopkins. She also obtained an MHS in Clinical Investigation from the Johns Hopkins Bloomberg School of Public Health. She joined the faculty in 2016 after completing her fellowship.

Her research focuses on inflammatory arthritis and on the effects of cancer immunotherapy. Dr. Cappelli started a research program to evaluate the rheumatologic adverse effects of cancer immunotherapy. New agents, called immune checkpoint inhibitors, work to boost patients' own immune systems to fight their cancer, leading to great advances in treatment. However, they can also lead to adverse events as a result of their mechanism of action. Rheumatologists are seeing patients with inflammatory arthritis, immune-mediated dry mouth and eyes, myositis, vasculitis and other adverse events due to cancer immunotherapy. Dr. Cappelli is investigating several different aspects of these adverse events including the clinical characteristics, epidemiology, impact on patients, and the biologic mechanisms. Her work involves collaborations with oncologists and laboratory investigators in rheumatology and oncology.

Additionally, Dr. Cappelli studies rheumatoid arthritis. She has focused on defining unique clinical features of patients with seronegative disease, that is, those patients lacking the traditional markers in the blood seen in rheumatoid arthritis. She also collaborates with laboratory investigators to study the use of specific autoantibodies as biomarkers in rheumatoid arthritis.