Penn Medicine

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To the JAMA Dermatology Editorial Board,

We have enclosed our manuscript “Single Institution Experience of Pembrolizumab for Patients with Relapsed or Refractory Mycosis Fungoides or Sézary Syndrome” for consideration as a Brief Report to *JAMA Dermatology.*

Mycosis fungoides (MF) and Sézary syndrome (SS) are the most common and well-studied subtypes of cutaneous T-cell lymphomas (CTCLs). Treatment of these cancers requires a multidisciplinary approach with treatment determined by stage and compartment involvement (skin, blood, lymph nodes, and/or viscera). Response for advanced disease is often short-lived and requires generally use of systemic therapy with intravenous agents such as mogamulizumab, romidepsin, or single-agent chemotherapy with usually modest response rates and response duration. Therefore, there is a significant unmet need to expand the treatment options for relapsed or refractory (R/R) MF/SS. Pembrolizumab is an immune checkpoint inhibitor that is often used as salvage treatment options for patients with MF/SS after exhaustion of all other treatment modalities. While previous clinical trials shown promising response rates of 38% for pembrolizumab, there is limited real world data detailing patient outcomes. Therefore, we performed an observational cohort study to describe our single-institution experience.

Our single institution conducted a retrospective study which identified 30 patients with CTCL who received pembrolizumab at any point during their treatment course. The primary outcome was overall survival (OS) and secondary outcomes included progression-free survival (PFS), treatment response, and development of treatment related adverse events (TRAEs). We found that forty-eight percent achieved a global response across evaluable compartments and 65% had clinical benefit (SD or PR). Median PFS for the cohort was 7.4 (95% CI 3.5-14.1) months and median OS was 20.6 (95% CI 10.0-34.2) months. Treatment was generally well tolerated with only 43% having any TRAE and 85% of all TRAEs being Grade 1-2.

This study is the first real world experience reported regarding treatment outcomes of pembrolizumab in MF/SS to the authors’ knowledge. Given the impressive efficacy and excellent tolerability observed, we believe pembrolizumab represents an appealing salvage treatment option for heavily pretreated MF/SS.

This research is original work and has not been published elsewhere. All authors have approved the manuscript for submission in its entirety.

Thank you for your consideration; we look forward to hearing from you.

Sincerely,

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