

Immunotherapy Adherence Patterns in Melanoma Patients: A Retrospective Analysis

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Background: Immunotherapy has significantly improved outcomes for patients with melanoma, taking their median survival from 6-9 months to over 5 years. However, this is severely limited by the high discontinuation rate (50-60%). Understanding adherence factors is critical for optimizing treatment success and allows physicians to address potential complications earlier.

Methods: In this study, we performed a 5-year chart review in the Indiana University Health system through Cerner's electronic health records. In order to determine patients with Stage III melanoma, we used ICD-10 codes C43 (malignant melanoma) and C77 (lymph node metastases). Only 28 of 75 patients reviewed satisfied the inclusion criteria. We looked at demographics, clinical features, treatment regimen, patient preferences, and discontinuation outcomes. Descriptive statistics were applied to assess adherence and discontinuation factors.

Results: Among those 28 eligible patients, 20 (71.4%) of them discontinued immunotherapy. Those who received ipilimumab-nivolumab therapy had the highest discontinuation rate while patients with nivolumab monotherapy had the lowest. Adverse effects from the treatment itself were the most common cause of discontinuation. Socioeconomic factors like time to treatment centers (mean 29.4, \pm 15.9 minutes) and insurance type had no effect on discontinuation.

Conclusion: In this retrospective, single-system cohort study, it highlights that immunotherapy discontinuation is still very high in patients with melanoma, likely due to adverse effects. Socioeconomic factors, in contrast, had no effect on the discontinuation rate. Although the sample size is limited, these findings could lead to future studies with larger cohorts that could be used to inform melanoma treatment in real-world patients.