Using 31-gene expression profile testing to help guide adjuvant therapy and sentinel lymph node biopsy discussions with patients: A case series

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Immunotherapy has provided significant improvements in advanced-stage melanoma survival, but adverse events can occur in the majority of patients. (Brahmer, et al. J Immun Can 2021)

The 31-GEP provides personalized, independent risk stratification to guide shared decision-making discussions with patients about clinical management, imaging surveillance, and adjuvant therapy.

The 31-GEP helps identify truly high- or low-risk patients who may benefit from different clinical or treatment decisions, allowing patients and their clinicians to be more confident in their decision-making.

Conclusions

**Case 1: 46-year-old female**

- **Clinical**: Bleeding, non-healing, ulcerated lesion on right arm
- **Tumor**: T3b tumor: 4.0 mm, ulcerated, >2 mitoses/mm²
- **SLNB Positive**
- **Stage IIIC**
- **31-GEP**: Class 2B
- **31-SLNAB**: 31.8%

**Case 2: 80-year-old male**

- **Clinical**: Ulcerated lesion of the posterior neck
- **Tumor**: T2a tumor: 1.6 mm, no ulceration, >1 mitoses/mm², no regression
- **SLNB Positive**
- **Stage IIIA**
- **31-GEP**: Class 1A
- **31-GEP result helped guide adjuvant therapy discussions with patient**
- Patient declined adjuvant immunotherapy after discussion with medical and surgical oncologists.

**Case 3: 58-year-old male**

- **Clinical**: Bleeding, evolving nevus of the right leg
- **Tumor**: T2a tumor: 1.35 mm, no ulceration, 1 mitoses/mm², no regression
- **SLNB Positive**
- **Stage IIIA**
- **31-GEP**: Class 2B
- **31-SLNAB**: 18.4%

**31-GEP result guided patient and clinician personalized treatment planning**
- Patient received adjuvant immunotherapy (nivolumab) and had no evidence of disease 11 months later.