Evaluation of Tumor Infiltrating Lymphocytes (TILs) in Melanoma

Guidelines for TILs assessment from the “International Immuno-Oncology Biomarker Working Group”

Authors: Paula Gonzalez Ericsson¹, Melinda Sanders¹ and Valeria Estrada²

¹- Vanderbilt University, Nashville-TN. ²- University of California, San Diego-CA
Define area for TILs evaluation

TILs within the border of the invasive tumor are evaluated. The TILS along the invasive edge are included in the evaluation. Immune infiltrates outside of the tumor borders are not included.

Separately evaluating the central tumor, invasive margins and peri-tumor regions may of interest in the research setting.
Define area for TILs evaluation

TILs within the border of the invasive tumor are evaluated. The TILS along the invasive edge are included in the evaluation. Immune infiltrates outside of the tumor borders are not included.
Define area for TILs evaluation

Areas of necrosis or fibrosis are not included in the evaluation

Exclude this area - Necrosis

Evaluate TILs in this area
Define area for TILs evaluation
Do not score TILs in areas containing tumor necrosis (A) or ulceration (B,C)
Determine type of inflammatory infiltrate

Do not score TILs within granulocytic infiltrate in areas of ulceration or tumor necrosis
Determine the localization of inflammatory infiltrate

Intra-tumor TILs (iTILs)

Stromal TILs (sTILs)
Determine the localization of inflammatory infiltrate

Only iTILs are currently scored in the clinical setting. sTILs may be reported separately in clinical or research settings.
Determine the localization of inflammatory infiltrate

Only iTILs are currently scored in the clinical setting. sTILs may be reported separately in clinical or research settings.
Examples of assessment of TILs

- Mild TILs (5%)
- Moderate TILs (30%)
- Intense TILs (90%)