

**Legends of online supplemental videos****Online supplemental video S1 (Complementary of figure 4).**

Video depicting the strategy for mIF staining. The video shows an example of a melanoma derived from a disease-free patient and the staining to unveil the apoptotic melanoma cells (positive to markers caspase-3 and MART-1), and exhausted cytotoxic TRM CD8 T cells (positive to markers CD8, CD103, PD1, GZB and LAMP1), either TCF1+ or TCF1-.

**Online supplemental video S1 (Complementary of figure 4).**

Video depicting the strategy for mIF staining. The video shows an example of a melanoma derived from a metastatic patient and the staining to unveil the apoptotic melanoma cells (positive to markers caspase-3 and MART-1), and exhausted cytotoxic TRM CD8 T cells (positive to markers CD8, CD103, PD1, GZB and LAMP1), either TCF1+ or TCF1-.