

# ML for Melanoma and Renal Cancer - Description of Data

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## Variables

### Patient-Level Variables

- **Code:** Unique Patient ID Number
- **Sex:** Sex of the Patient
- **Metastasis:** Binary indicator of metastasis
- **Images:** Binary indicator for patients with any images
- **ANX\_Image:** Binary indicator if patient has ANX specific image
- **BCL2\_Image:** Binary indicator if patient has BCL2 specific image
- **BCL3\_Image:** Binary indicator if patient has BCL3 specific image
- **HX\_Image:** Binary indicator if patient has HX specific image
- **MITF\_Image:** Binary indicator if patient has MITF specific image
- **PBP\_Image:** Binary indicator if patient has PBP specific image
- **BRAF\_Image:** Binary indicator if patient has BRAF specific image
- **PIR\_Image:** Binary indicator if patient has PIR specific image
- **Metastasis\_Date:** Date metastasis was confirmed
- **Metastasis\_Loc:** Location of metastasis

### Histopathology

- **Hist\_AJCC:** AJCC staging (initial)
- **Hist\_AJCC\_Final:** AJCC staging (final)
- **Hist\_Breslow\_mm:** Breslow depth in millimeters

- **Hist\_\_Ulceration:** Presence of ulceration
- **Hist\_\_Mitosis:** Mitosis count per mm<sup>2</sup>

## Cytokine & Marker Expression

- **GM.CSF:** Granulocyte-macrophage colony-stimulating factor
- **IL.4:** Interleukin-4 level
- **IL.6:** Interleukin-6 level
- **IL.10:** Interleukin-10 level
- **IL.17A:** Interleukin-17A level
- **IFN.y:** Interferon gamma level
- **TGF.b:** Transforming growth factor beta level
- **Dermcidina:** Dermcidin expression level

## Immunohistochemistry & Gene Expression

- **IHC.BRAF:** Immunohistochemical result for BRAF
- **PIRIN:** PIRIN expression level
- **BCL2:** BCL2 expression level
- **Linfos\_\_BCL2.:** BCL2 expression in lymphocytes
- **BCL3:** BCL3 expression level
- **Linfos\_\_BCL3.:** BCL3 expression in lymphocytes
- **PEBP1:** PEBP1 expression level
- **MITF:** MITF expression level
- **ANX5:** ANX5 expression level

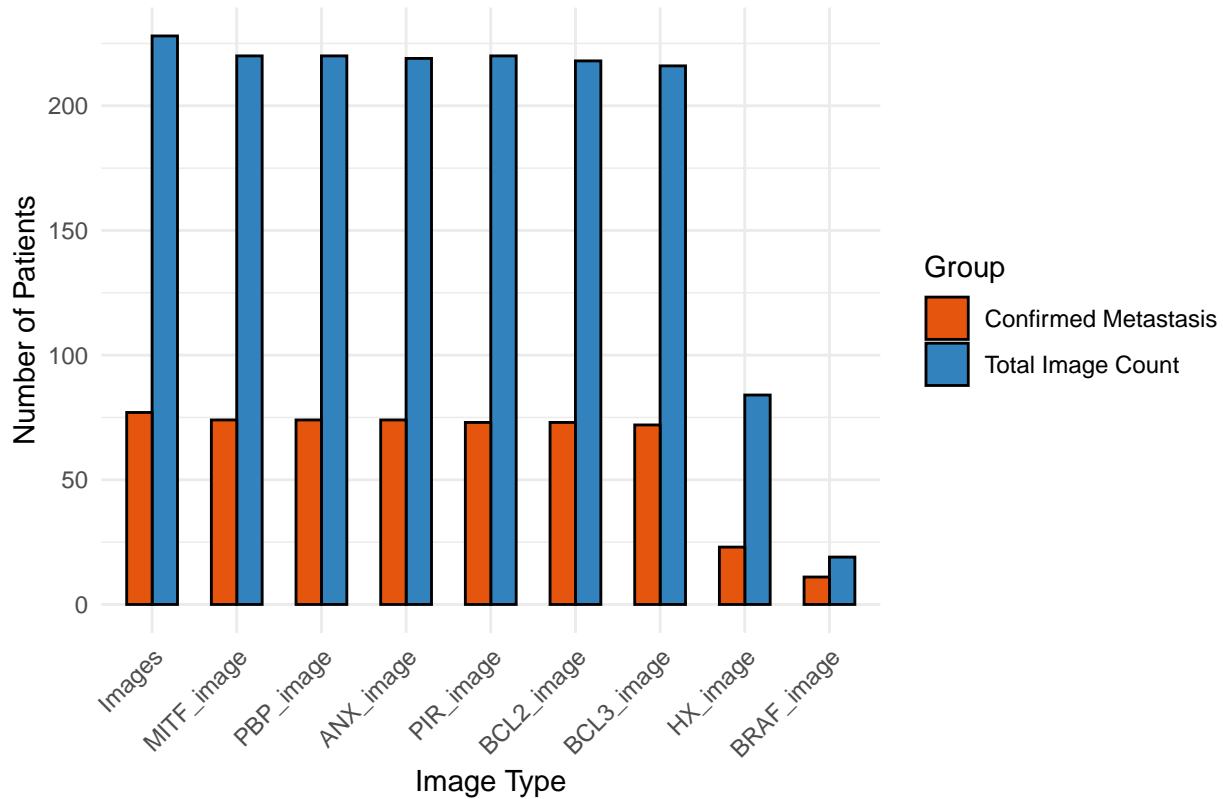
## Tumor Microenvironment

- **infiltrado.linfoide:** Degree of lymphoid infiltration
- **infiltrado.macrofagos:** Degree of macrophage infiltration

## Image Counts and Information

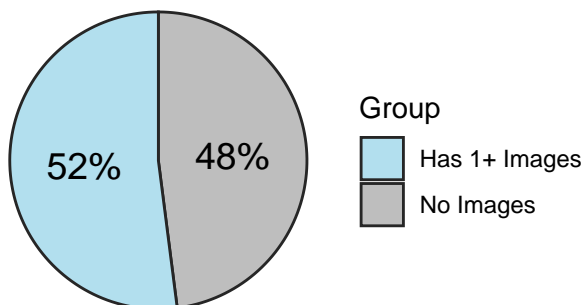
The bar chart below shows and compares the counts of all image types in the data for metastatic/non-metastatic patients

**Image Type Counts – Total Count vs. Metastatic Patients**



The pie charts below compare the proportion of patients who have at least one image between metastatic patients and all patients

**Metastatic Patients**



**All Patients**

