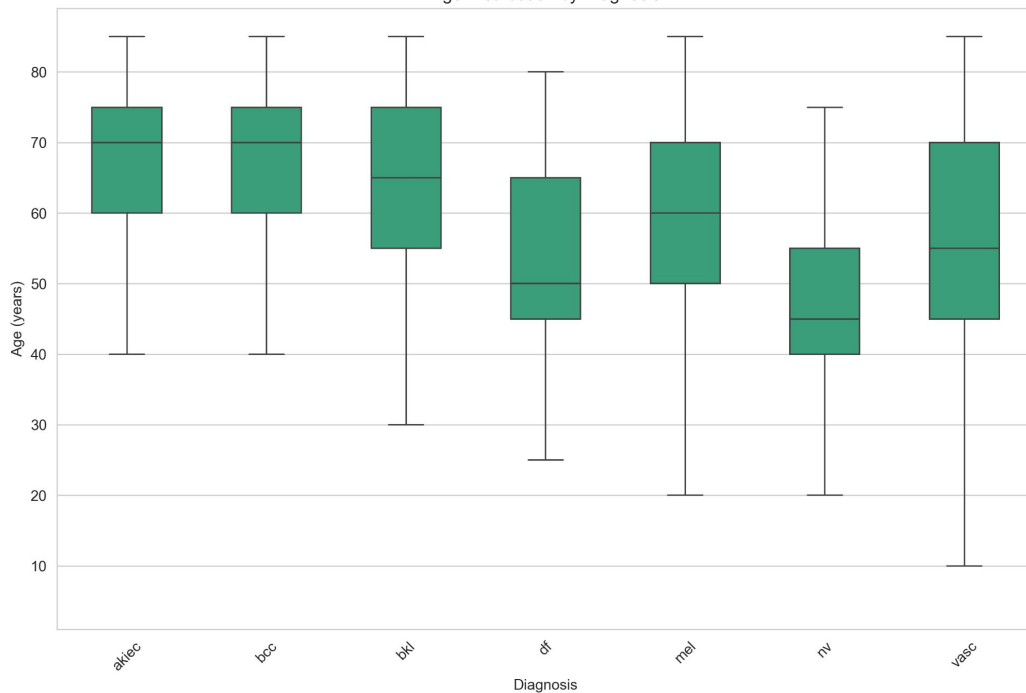
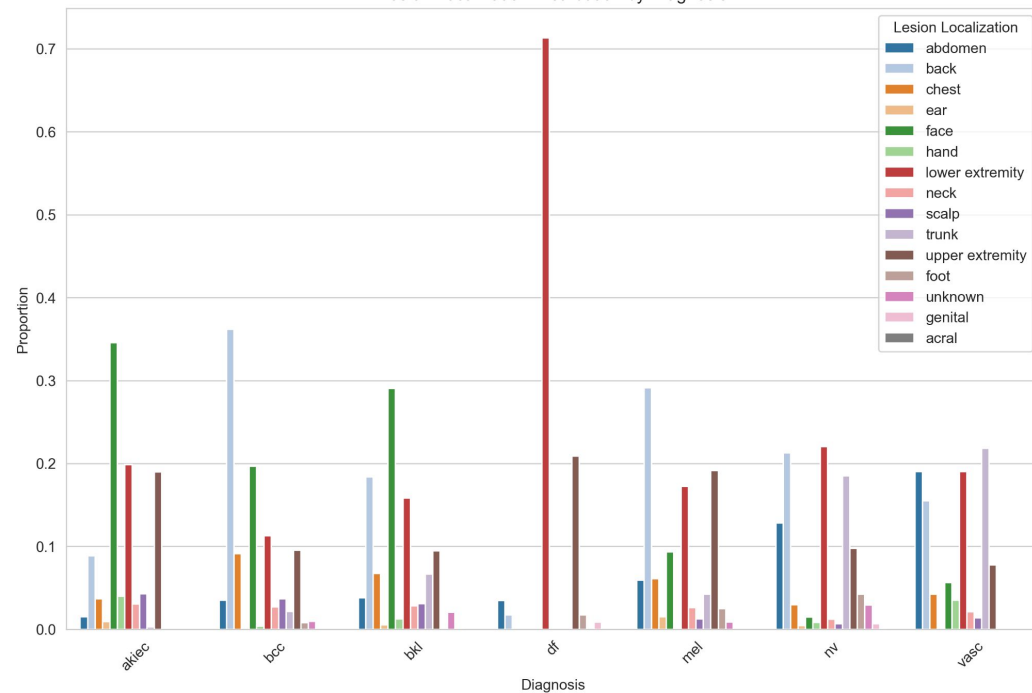


# HAM10000 Metadata Distribution Figures

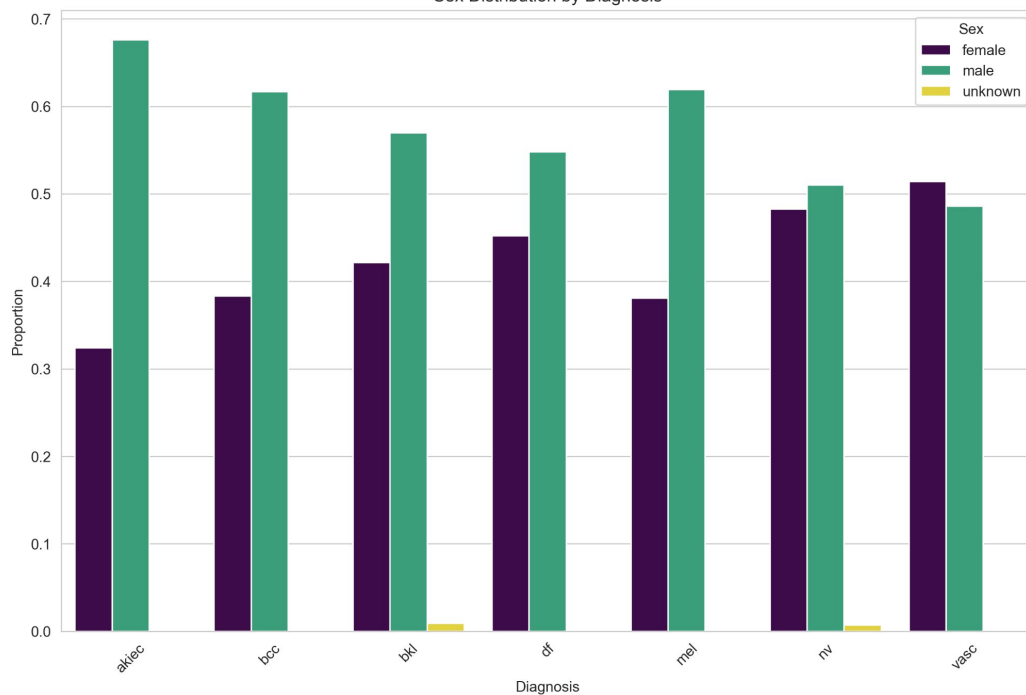
Age Distribution by Diagnosis



Lesion Localization Distribution by Diagnosis



Sex Distribution by Diagnosis



## Key Insights

- Age patterns differentiate nearly all lesion types. Keratinocytic lesions cluster in elderly patients, while melanocytic lesions display broader, younger distributions—most notably, melanocytic nevi (median age  $\approx 45$ ).
- Sex distribution varies significantly across diagnoses. Male predominance is consistent with dermatologic epidemiology, though vascular lesions show a slight female majority and melanocytic nevi are near-parity.
- Anatomical localization indicates strong diagnostic bias. Dermatofibromas occur almost exclusively ( $\sim 93\%$ ) on the extremities, whereas basal cell carcinomas are commonly found on the back or face.
- Collectively, these demographic and anatomical signatures warrant metadata fusion: age, localization, and sex features *complement* visual morphology by providing substantial discriminative power for multimodal classification.