



## AB012. Characteristics of malignancy-associated dermatomyositis in hospitalized patients: a nationally representative retrospective cohort study

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**Background:** Dermatomyositis (DM) is well-known to be associated with underlying malignancy. Although numerous studies have explored malignancy in DM population-based studies, little is known about malignancy-associated DM (MADM) in hospitalized inpatients.

**Methods:** We analyzed data from the 2009–2015 National Inpatient Sample, which includes a 20% nationally representative sample of U.S. hospitalizations, to characterize MADM in hospitalized inpatients.

**Results:** A total of 255,260,410 hospitalizations were included. Of 39,253 DM hospitalizations, 4,278 (10.9%) occurred in MADM patients and 34,975 (89.1%) were related to other DM subtypes. DM inpatients were significantly more likely to have malignancies of the breast (1.7-fold), bronchus (1.4-fold), ovary (5.5-fold), head/neck (1.7-fold), esophagus (1.9-fold), and non-Hodgkin

lymphoma (1.8-fold) compared to non-DM inpatients. DM inpatients were less likely to have malignancies of the prostate (3.2-fold), rectum/anus (1.8-fold) and multiple myeloma ( $P=0.0015$ ) than non-DM inpatients. Older DM patients (particularly  $\geq 60$  years) and Caucasian DM inpatients were more likely to have a malignancy ( $P<0.0001$ ) than other DM patients. There were no significant differences in sex or whether patients died during hospitalization between MADM patients and patients with other DM subtypes.

**Conclusions:** When compared to similar non-DM patients, DM inpatients may have increased risk of different malignancies than DM outpatients. This implies optimal malignancy screening protocols may differ for DM patients encountered in clinic as opposed to during hospitalization. Other relevant characteristics to consider for developing optimal malignancy screening protocols for DM inpatients include patient age, gender and ethnicity. Although percentage of DM inpatients with malignancy is shifting over time, there has been no significant change in prevalence of malignancy in the DM inpatient population since 2009.

**Keywords:** Dermatomyositis (DM); hospitalization; internal malignancy

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