Title: Cancer Risk in Dermatomyositis: A Meta-analysis of Cohort Studies

Journal: American Journal of Clinical Dermatology

Authors: Jeannette M. Olazagasti, B.S.¹, Pedro J. Baez, B.S.¹, David A. Wetter, M.D.², Floranne C. Ernste, M.D.³

Affiliations:
1. Mayo Graduate School, Mayo Clinic, Rochester, MN
2. Department of Dermatology, Mayo Clinic, Rochester, MN
3. Division of Rheumatology, Department of Medicine, Mayo Clinic, Rochester, MN

Corresponding author:
Jeannette M. Olazagasti
Mayo Graduate School
Mayo Clinic
200 1st St SW
Rochester, MN 55905
Phone: 507-538-4268
Fax: 507-284-3757
Email: olazagastilourido.jeannette@mayo.edu

Electronic supplementary material:

eTable 1. Risk of bias assessment.

eFigure 1. Sensitivity analysis of overall malignancy risk in the combined DM population.

eFigure 2. Funnel-plot of the 10 studies evaluating cancer risk among patients with dermatomyositis compared with the general population.
eTable 1. Risk of bias assessment.*

<table>
<thead>
<tr>
<th>Authors (year)</th>
<th>Criteria</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Representative</td>
<td>Appropriate DM definition</td>
<td>Inception cohort</td>
<td>Appropriate cancer ascertainment</td>
<td>Adjustments for age and sex</td>
<td>Adjustments for other factors</td>
<td></td>
</tr>
<tr>
<td>Limaye et al.[1] (2013)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>To et al.[2] (2012)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>So et al.[3] (2011)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Chen et al.[4] (2010)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Antiochos et al.[5] (2009)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Buchbinder et al.[6] (2001)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Stockton et al.[7] (2001)</td>
<td>Yes</td>
<td>Unclear</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Airio et al.[8] (1995)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Chow et al.[9] (1995)</td>
<td>Yes</td>
<td>Unclear</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Sigurgeirsson et al.[10] (1992)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

*Yes= no bias; no=potential bias. DM=dermatomyositis. Unclear= Studies used the International Classification of Diseases code for identification of patients with DM, but it was uncertain which diagnostic criteria for DM were used.
eFigure 1. Sensitivity analysis of overall malignancy risk in the combined DM population.
eFigure 2. Funnel-plot of the 10 studies evaluating cancer risk among patients with dermatomyositis compared with the general population.
References:


