Patients with moderate-to-severe AD were also matched to a non-AD control cohort (matched 1:1 by age and sex) from the same database. The median (IQR) follow-up time in days was 1111 (524–1505) for AD, 1068 (401–1587) for non-AD controls, and 1176 (584–1621) for RA controls. Patients with moderate-to-severe AD had a lower MACE incidence than non-AD matched controls and patients with RA. The crude incidence of MACE, defined as myocardial infarction or stroke with inpatient length of stay ≥1 day, was quantified for each cohort. Comparator groups included controls without AD (non-AD; matched 1:1 by age [within 1 year], sex, and cohort entry date [same day]) and patients with RA (moderate-to-severe disease only). The association between AD and cardiovascular comorbidity is unclear and not well characterized in those with moderate-to-severe rheumatoid arthritis.

OBJECTIVE

To assess the risk of major adverse cardiovascular events (MACE) in patients with atopic dermatitis vs matched controls without atopic dermatitis (AD) and patients with rheumatoid arthritis, and to evaluate the risk of MACE in a subgroup with moderate-to-severe disease.

CONCLUSIONS

Among patients with AD, risk of MACE was lower than that of non-AD matched controls and patients with rheumatoid arthritis. Patients with moderate-to-severe AD had a lower MACE incidence than non-AD matched controls and patients with RA. The crude incidence of MACE, defined as myocardial infarction or stroke with inpatient length of stay ≥1 day, was quantified for each cohort. Comparator groups included controls without AD (non-AD; matched 1:1 by age [within 1 year], sex, and cohort entry date [same day]) and patients with RA (moderate-to-severe disease only). The association between AD and cardiovascular comorbidity is unclear and not well characterized in those with moderate-to-severe rheumatoid arthritis.

RESULTS

Among patients with AD, risk of MACE was lower than that of non-AD matched controls and patients with rheumatoid arthritis. Patients with moderate-to-severe AD had a lower MACE incidence than non-AD matched controls and patients with RA.

Characterizing the underlying risk of MACE in AD can inform treatment benefit-risk assessments and shared decision-making and improve patient outcomes.

Table 1. Baseline Demographic and Clinical Characteristics

TABLE 1

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>AD (N = 381,221)</th>
<th>Moderate-to-severe AD (N = 97,445)</th>
<th>Non-AD matched controls (N = 381,221)</th>
<th>RA (N = 289,776)</th>
<th>Moderate-to-severe RA (N = 72,353)</th>
<th>MACE Hazard Ratio</th>
<th>95% CI</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, years, mean (SD)</td>
<td>67.4 (10.8)</td>
<td>68.4 (10.9)</td>
<td>67.4 (10.8)</td>
<td>67.4 (10.8)</td>
<td>67.4 (10.8)</td>
<td>1.00 (1.00)</td>
<td>1.00</td>
<td>.499</td>
</tr>
<tr>
<td>Gender, % (N)</td>
<td>48% (180,867)</td>
<td>50% (49,106)</td>
<td>48% (180,867)</td>
<td>50% (144,888)</td>
<td>50% (36,176)</td>
<td>1.01 (0.99–1.03)</td>
<td>1.04</td>
<td>.628</td>
</tr>
<tr>
<td>Race, % (N)</td>
<td>White, 83% (315,182)</td>
<td>81% (30,526)</td>
<td>83% (315,182)</td>
<td>81% (111,286)</td>
<td>81% (22,453)</td>
<td>1.13 (1.08–1.19)</td>
<td>1.18</td>
<td>.001</td>
</tr>
</tbody>
</table>
| Baseline Demographic and Clinical Characteristics

Figure 3. Incidence of MACE

Figure 4. Relative Risk of MACE

Figure 5. Risk of MACE in Patients With AD by Baseline Demographic and Clinical Characteristics

Risk of MACE

The median risk of MACE was lower in patients with AD compared with non-AD matched controls and patients with RA. Among patients with moderate-to-severe AD, the risk of MACE was similar to that of non-AD matched controls and lower than patients with moderate-to-severe RA. The median risk of MACE in patients with AD was lower than either patients with RA or patients with moderate-to-severe AD.

Characterizing the underlying risk of MACE in AD can inform treatment benefit-risk assessments and shared decision-making and improve patient outcomes.