**BACKGROUND**

- Acute myeloid leukemia (AML) is diagnosed at a median age of 67; this age group (60-69 years) faces a much lower 5-year survival rate than their younger counterparts (8% vs. up to 38%).
- Study cohorts are often too small for intensive treatments.
- Hypomethylating agents azacitidine (AZA) and decitabine (DEC) are considered current standard of care in this population.

- In a randomized phase 2 study, glucaglucagel (GLAS), an oral non-HDAC inhibitor, combined with low dose Ara-C (LDAC) showed significantly better overall survival (OS) vs. LDAC alone in previously untreated AML patients ineligible for intensive chemotherapy.

**OBJECTIVES**

- The objective of the present analysis was to conduct an indirect comparison of the relative efficacy in terms of OS for GLAS+LDAC vs. AZA and DEC, respectively.

**RESULTS**

**Systematic Literature Review**

- 6032 studies were identified through the OVID search:
  - 2394 abstracts were reviewed
  - 2394 abstracts were reviewed

- 8 abstracts were added from the ASH 2016 Conference

**Table 1: Studies Considered for ITC**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Intervention</th>
<th>Inclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cortes 2016</td>
<td>GLAS+LDAC</td>
<td>GLAS+LDAC, Low risk, <em>HR</em> MDS until for randomization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AML patients with ≥ 10% blasts at baseline</td>
</tr>
<tr>
<td>Fenaux 2010</td>
<td>AZA</td>
<td>AZA, AML patients with ≥ 20% BM blasts at baseline, central BM review</td>
</tr>
<tr>
<td>Dombret 2015</td>
<td>DEC</td>
<td>DEC, AML patients with ≥ 20% blasts at baseline</td>
</tr>
<tr>
<td>Kantarjian 2012</td>
<td>GLAS+LDAC</td>
<td>GLAS+LDAC, Low risk, <em>HR</em> MDS until for randomization</td>
</tr>
</tbody>
</table>

**Figure 2: Indirect OS HR for GLAS+LDAC vs. AZA and DEC**

**CONCLUSIONS**

- Using ITC, treatment with GLAS+LDAC showed significantly better OS HR than AZA and DEC in previously untreated NIC AML patients.
- Limitations of current analysis include mixed IC & NIC populations for the AZA trial, and mixed comparators of both LDAC and BSC for the DEC trial.
- Analysis using patient-level data matching baseline characteristics across studies may enable more robust ITC.

**LIMITATIONS**

- Mixed IC & NIC population for the AZA trial may lead to over or under-estimation of HR for AZA and GLAS+LDAC.
- Mixed comparators of both LDAC and BSC in the DEC trial may lead to over-estimation of HR for DEC vs. LDAC.

**REFERENCES**