Using the Diabetes Collaborative Registry (DCR) to Estimate the Potential Real-World Impact of the IRIS Trial on Improving Outcomes in Patients with Cerebrovascular Disease

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BACKGROUND

- Thiazolidinedione use has markedly decreased since concerns arose regarding the CV safety of rosiglitazone
- The IRIS trial demonstrated pioglitazone reduced the risk of MI and stroke in patients with recent stroke or TIA and insulin resistance (but without overt diabetes)
- We estimated the current use and potential impact of pioglitazone in patients with recent stroke or TIA and insulin resistance (but without overt diabetes)
- DCR is a US-based outpatient registry of patients with diabetes or prediabetes seen in cardiology, endocrinology, and primary care practices and currently encompasses 374 practices and 5114 providers

METHODS

- Study Population: 58,466 patients with pre-diabetes or diet-controlled diabetes (HbA1c <7% and on no medications for diabetes [except pioglitazone])
- We assessed the percentage of these patients who would have met the main eligibility criteria for the IRIS trial
- Age ≥40 years and prior stroke or TIA
- No history of heart failure or moderate/severe LV dysfunction
- We then estimated the number of events potentially avoided among the eligible patients using the published absolute risk reductions (both overall and per 100-patient years).
- The most recent visit for each patient was used for analysis

CONCLUSIONS

- In a large US-based outpatient registry, we found that 12% of outpatients with prediabetes or diet-controlled diabetes met the main eligibility criteria for IRIS
- Pioglitazone is rarely used but could have a substantial impact on eligible patients
- Future studies should examine the CV benefits of pioglitazone in the broader population of patients with cerebrovascular disease and overt diabetes or in patients with insulin resistance and other CV disease

Table 2: Possible Events Avoided

<table>
<thead>
<tr>
<th>Drug</th>
<th>Event Rate (Total)</th>
<th>Event Rate (Annualized)</th>
<th>Potential Events Avoided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placebo</td>
<td>0.84%</td>
<td>1.57%</td>
<td>1.57%</td>
</tr>
<tr>
<td>Drug</td>
<td>0.56%</td>
<td>1.32%</td>
<td>1.32%</td>
</tr>
<tr>
<td>Total (4.8 y)</td>
<td>0.70%</td>
<td>1.57%</td>
<td>1.57%</td>
</tr>
</tbody>
</table>

DISCLOSURES

- This research was supported by the American College of Cardiology Foundation. Additional organizations partner with ACCF on the Diabetes Collaborative Registry. The views expressed in this abstract represent those of the author(s), and do not necessarily represent the official views of the ACCF or its partnering organizations.
- For more information go to www.thediabetesregistry.org
- The registry is sponsored by AstraZeneca (Founding Sponsor) and Boehringer Ingelheim Pharmaceuticals, Inc.