Clinical efficacy and biomarker assessment of VT1021, a CD36/CD47 dual-targeting therapy, in recurrent glioblastoma

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Abstract CTIM-06

**Clinical efficacy and biomarker assessment of VT1021, a CD36/CD47 dual-targeting therapy, in recurrent glioblastoma**

VT1021 is a novel therapeutic that targets the adhesion molecules CD36 and CD47. It has shown promising preclinical and early clinical activity in recurrent glioblastoma (rGBM), a deadly cancer with few treatment options. The aim of this study was to evaluate the safety and efficacy of VT1021 in an open-label, phase I/II trial in rGBM patients. The study included 32 subjects, and the primary endpoint was the overall response rate (ORR) in evaluable rGBM subjects. Secondary endpoints included safety, biomarker assessment, and clinical response.

**Background**

One of the major barriers to the effective treatment of glioblastoma (GBM) is the DNA repair mechanism that allows many tumors to maintain a clonal cell population. DNA repair mechanisms can be targeted in GBM, but this approach is not always effective.

**Safety Profile**

<table>
<thead>
<tr>
<th>Common Adverse Events</th>
<th>Grade 1</th>
<th>Grade 2</th>
<th>Grade 3</th>
<th>Grade 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdominal Pain</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Dizziness</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Nausea</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Vomiting</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Fall</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

**PK Profile**

- There were 373 AE events reported in all GBM subjects treated (N=32), of which 15 were SAEs
- No SAE was considered by site PIs and by sponsor monitor to be related to study drug

**Baseline Characteristics**

- In the rGBM cohort of the expansion phase, of the 32 subjects dosed, the median age was 60 years (range 29-88)
- The majority of patients were male (78.1%)
- Most patients had high CD47 (62.5%)

**Conclusions**

VT1021 demonstrated promising single-agent activity in rGBM with an overall response rate of 34.4% and a median progression-free survival of 10.9 months. The study was terminated early due to the lack of efficacy in rGBM, and future trials with combined clinical and biomarker endpoints are needed to further evaluate VT1021 as a potential treatment for glioblastoma.

**Contact**

For more information on the presentation, please contact Marsha Crochiere at 617 email.

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