Efficacy and Safety of Sotrovimab: Results of a Retrospective Observational Study in a French Hospital

T. Brandin1, H. Capele1, J. Allemand2, L. Foo Cheung3, C. Dumazer1.

1Pharmacy department, 2Infectiology department, 3Gerontology department, Edmond Garin Hospital, Aubagne, France.

Covid-19 results in hospitalization or death in older patients and those with underlying conditions. Sotrovimab is a monoclonal antibody that was designed to prevent progression of Covid-19 in high-risk patients early in the course of disease.

**Aim of the study**: To assess the efficacy and safety of SOTROVIMAB for adults infected with Covid-19 in a 400-beds French hospital.

Monocentric retrospective observational study from January to March 2022

36 adult patients with a positive result on rt-PCR or antigen SARS-CoV-2 test and Covid-19 symptoms within the previous 5 days received SOTROVIMAB

Mean age 83 ± 9y with 80% patients ≥ 75y BMI 25.3 ± 5; sex ratio 0.3 (27F ; 9M)

<table>
<thead>
<tr>
<th>Risk factors for Covid-19 progression</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age ≥ 80 yr</td>
<td>25</td>
</tr>
<tr>
<td>Cancer</td>
<td>12</td>
</tr>
<tr>
<td>Diabetes for which medication was warranted</td>
<td>8</td>
</tr>
<tr>
<td>Obesity: BMI &gt;30</td>
<td>7</td>
</tr>
<tr>
<td>Chronic kidney disease</td>
<td>8</td>
</tr>
<tr>
<td>Congestive heart failure: ≥ NYHA class II</td>
<td>9</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease / asthma</td>
<td>5</td>
</tr>
</tbody>
</table>

Method of diagnosis

- RT-PCR test: 31
- Antigen test: 5

18 patients (50%) already infected with SARS-CoV-2 virus

83% patients (30/36) in nursing home

30 patients (83%) with a complete schema of Covid-19 vaccine

No. of concurrent risk factors for Covid-19 progression

- 1 risk factor
- 2 risk factors
- ≥3 risk factors

36%
28%
36%

Efficacy outcomes

<table>
<thead>
<tr>
<th>No.</th>
<th>Admissions to hospital for any cause in patients in nursing home</th>
<th>Admission to ICU for any cause in hospitalized patients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0/30</td>
<td>0/6</td>
</tr>
</tbody>
</table>

Severe or critical progression

- Low-flow oxygenation: 3
- Death from any cause: 2
- Death related to Covid-19: 1

Associated therapies

- Corticosteroids: 3
- Anticoagulant: 5
- Antibiotics: 4

Adverse events

- Infusion-related reaction: 1
- Serious adverse event: 0

Sotrovimab reduce the risk of disease progression to hospitalisation or death among patients with mild-to-moderate Covid-19. This seems to be legit in our study, as does the safety, especially for elderly patients. Also, the effectiveness of this antibody against disease progression appears to be better for vaccinated patients.