To view a video of Dr. Gerard Francisco discussing these data, please follow the link below:

https://vimeo.com/295664517/c270120eb0
Patient Demographics and Clinical Characteristics

- In total, 731 patients received onabotulinumtoxinA treatment at the 1-year interim analysis.
- In the total population, 37% of patients were naïve to botulinum toxins for the treatment of spasticity.
- The most common etiologies of spasticity observed were stroke, multiple sclerosis (MS), cerebral palsy (CP), traumatic brain injury (TBI), and spinal cord injury (SCI) (*Figure 1*).

Baseline patient demographics are provided in *Table 1*.

**Table 1. Baseline patient demographics and clinical characteristics**

<table>
<thead>
<tr>
<th>Etiology</th>
<th>Stroke (N=755)</th>
<th>MS (N=157)</th>
<th>CP (N=79)</th>
<th>TBI (N=64)</th>
<th>SCI (N=34)</th>
<th>Total (N=731)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, y</td>
<td>411 (14.1)</td>
<td>119 (10.3)</td>
<td>77 (14.6)</td>
<td>45 (12.9)</td>
<td>42 (12.3)</td>
<td>730 (10.0)</td>
</tr>
<tr>
<td>Sex, n (%)</td>
<td>210 (69.7)</td>
<td>60 (50.0)</td>
<td>42 (58.8)</td>
<td>28 (44.1)</td>
<td>24 (70.6)</td>
<td>290 (40.1)</td>
</tr>
<tr>
<td>Race, n (%)</td>
<td>200 (64.4)</td>
<td>60 (50.0)</td>
<td>32 (41.0)</td>
<td>16 (25.0)</td>
<td>11 (32.4)</td>
<td>207 (28.3)</td>
</tr>
</tbody>
</table>

Effectiveness: Disability Assessment Scale

- The Disability Assessment Scale (DAS) revealed that patients with stroke, MS, or CP showed significant improvement over the course of onabotulinumtoxinA treatment, as indicated by reduced DAS scores compared with treatment 1, in the areas of pain, dressing, limb posture, and mobility.
- *Patients with TBI and SCI did not show consistent improvements on the DAS, which is likely owing to lower sample sizes in these etiologies.*

**Figure 2. Change in DAS across treatment sessions by etiology of spasticity**

OnabotulinumtoxinA Treatment Utilization

- The dose of onabotulinumtoxinA administered varied by etiology (*Table 2*).
- Across etiologies, there was slight variation in dosing, with higher mean and median doses of onabotulinumtoxinA administered to patients with TBI compared with patients with stroke, MS, CP, and SCI.
- The most frequently treated presentation, as well as the dose of onabotulinumtoxinA administered, varied by etiology (*Table 3*).
- For equinovarus foot, the total median dose of onabotulinumtoxinA administered ranged between 100U and 240U across etiologies.

**Table 2. Dose of onabotulinumtoxinA by etiology of spasticity**

<table>
<thead>
<tr>
<th>Etiology</th>
<th>Stroke (N=755)</th>
<th>MS (N=157)</th>
<th>CP (N=79)</th>
<th>TBI (N=64)</th>
<th>SCI (N=34)</th>
<th>Total (N=731)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dose (U)</td>
<td>411 (14.1)</td>
<td>119 (10.3)</td>
<td>77 (14.6)</td>
<td>45 (12.9)</td>
<td>42 (12.3)</td>
<td>730 (10.0)</td>
</tr>
<tr>
<td>Stroke</td>
<td>277.0 (168.0)</td>
<td>236.5 (144.6)</td>
<td>209.0 (116.0)</td>
<td>162.0 (116.0)</td>
<td>115.0 (100.0)</td>
<td>277.0 (168.0)</td>
</tr>
</tbody>
</table>

**Table 3. Most frequently treated presentation and corresponding dose of onabotulinumtoxinA by etiology of spasticity**

- Most common presentation: Clenched fist
- Dose: 200U
- *Primary study objectives included:* Evaluation of onabotulinumtoxinA treatment utilization in adult patients with spasticity in actual clinical practice; Assessment of patient and clinician satisfaction with onabotulinumtoxinA treatment for spasticity; Interim analysis includes all data up to 1-year follow-up; Data were summarized using descriptive statistics.

**Summary**

ASPIRE is an international, multicenter, prospective, observational registry conducted at select sites in North America, Europe, and Asia (NCT01303780).

- Patients across multiple etiologies treated with onabotulinumtoxinA for spasticity, regardless of past botulinum toxin treatment, were included.
- Treatments were determined by the participating treating clinician.
- OnabotulinumtoxinA utilization was recorded at each visit; clinician satisfaction was determined at each subsequent visit, while patient satisfaction was determined at 5 ± 1 week post-treatment.

**DISCLAIMERS**

- No new safety signals were identified.

**Background**

- Etiology-specific differences in onabotulinumtoxinA treatment utilization and effectiveness are largely unknown.
- ASPIRE findings may help optimize onabotulinumtoxinA treatment in patients with spasticity.
- Evaluate real-world onabotulinumtoxinA treatment utilization and effectiveness across etiologies of spasticity from the ASPIRE study.