An Observational, Non-interventional, Multicenter, Multinational Registry of Patients With Atypical Hemolytic Uremic Syndrome: Methodology

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INTRODUCTION

Atypical Hemolytic Uremic Syndrome: Background

- Atypical hemolytic uremic syndrome (aHUS) is a genetic, progressive, life-threatening disease mostly resulting from chronic, uncontrolled complement activation. It is characterized by systemic thrombotic microangiopathy leading to kidney and other end-organ damage.
- Plasma exchange and infusion (PE/PI) has historically been used to manage aHUS; however, evidence suggests that PE/PI offers no significant benefit over simple supportive therapy.
- Eculizumab (Soliris®), a humanized monoclonal antibody to complement factor C5, has revolutionized the management of aHUS.

The global aHUS patient registry (ClinicalTrials.gov identifier: NCT01522183) was initiated in April 2012 to prospectively capture postmarketing effectiveness and safety data on patients treated with eculizumab: the registry will record information on the progression of disease in aHUS patients (whether treated with eculizumab or with other disease management strategies).

RESULTS

Patient Characteristics in Global aHUS Patient Registry

- Table 1 provides information on demographics, aHUS diagnosis, baseline clinical characteristics, and eculizumab treatment characteristics.

Countries Enrolling Patients into aHUS Patient Registry (as of April 1, 2013)

- Australia (n=7)
- Belgium (n=5)
- Denmark (n=1)
- Germany (n=2)
- Israel (n=1)
- Italy (n=2)
- Japan (n=1)
- Spain (n=1)
- United Kingdom (n=1)
- United States (n=25)

Breakdown of Enrolling Sites: Specialist Type

- Nephrologists (91%)
- Hematologists (10%)

Breakdown of Enrolling Sites: Adult- Versus Pediatric-centric

- Adult-centric sites (47%)
- Pediatric-centric sites (52%)

METHODS

Patient Eligibility Criteria

- Inclusion criteria:
  - Male or female patients of any age who have been diagnosed clinically with aHUS
  - With or without an identified complement regulatory factor genetic abnormality or anti-complement factor antibody (if tested)
- Exclusion criteria:
  - Patients on dialysis or with end-stage renal disease

Primary Outcome Measures

- Proportion of patients who experience pre-specified events
- Collection and evaluation of safety and efficacy data specific to the use of eculizumab in patients with aHUS
- Time to first and subsequent occurrence of pre-specified events
- Assessment of the long-term manifestations of TMA complications of aHUS, other clinical outcomes, including morbidity and mortality in patients with aHUS receiving eculizumab treatment or treated with other disease-management approaches

Data Collection

- Data are collected at study enrollment and every 6 months thereafter and include the following:
  - Demographics
  - Medical and disease history
  - Symptoms
  - Targeted laboratory results (including renal function tests)
  - TMA complications
  - Associated treatments and concomitant medications
  - Clinical and patient-reported outcomes
  - Safety of eculizumab and other aHUS treatments

Registry Support

- The registry is supported by Aexion Pharmaceuticals, Inc., with governance by an independent scientific advisory board (SAB) and national coordinators representing each participating country
- Some key responsibilities of the SAB are to:
  - Provide scientific advice on aHUS registry-related matters
  - Propose, discuss, and evaluate program objectives with Aexion
  - Review and provide guidance on future amendments to the protocol, data variables to be collected, and case report form elements as appropriate
  - Advise on analyses and scientific questions of interest
  - Review and provide feedback on publication goals and logistics
  - Contribute to the development of the publication plan
  - Establish and follow protocols for the review and approval of external requests for analyses and publications from individual investigators or national coordinators
  - Advise, counsel, and guide individuals on publications that utilize registry data and resources and use the registry signature
  - Review publication drafts before submission to journals or public release

CONCLUSIONS

- Based on the limited enrollment at this time, reflecting the early stage of the registry, it would be premature to draw scientific conclusions from the data presented in this poster
- The global aHUS patient registry is dedicated to increasing the understanding and awareness of aHUS disease history and progression
- The results of analyses from collected data and outcomes provide an opportunity to optimize care and improve quality of life for aHUS patients
- A single, global aHUS patient registry can maximize both physician and patient participation and provide invaluable information on disease, safety, and efficacy data in a population with a very rare disease
- New clinical sites are encouraged to participate

REFERENCES


ACKNOWLEDGMENTS

The authors wish to acknowledge Alexander Ota, Lyne Sanders, and Kenneth Gilmour of Aexion Pharmaceuticals, Inc., for providing their respective analytical, statistical, and medical writing support and Ruth Sussman of Chameleon Communications International, who provided editorial support with funding from Aexion.

P-SUN111