

CHAIRMAN'S REPORT-2016 AGM

2016 has been an interesting year for the Pompe Community. It is the ten-year anniversary of the approval of Myozyme by the EMA and FDA: a milestone that should be celebrated. The majority of patients around the world now have access to treatment. The IPA recognizes that this treatment is not a cure, and its effectiveness varies for patients. But what we know without a doubt is that it is an important first step in the treatment of Pompe Disease. The natural history of Pompe disease is clear—patients will exhibit progressive muscle weakness. What is also clear after ten years of commercial treatment, and seven years of clinical trials before that, is that Myozyme slows or halts the disease process for most patients.

The ten-year anniversary of the approval of Myozyme is a chance to look back at how far we have come, and also to look towards the future and where we want to go.

We have come from a time where a treatment was merely a hope for the future, to a reality today where it is available for most patients around the world. In the rare disease world this is a very fortunate place to be, but for the Pompe Community it is not good enough. 2015 saw Australia finally adding Myozyme to their reimbursement scheme for all patients, but New Zealand has yet to do the same. China, Scotland, Wales, some states in Canada, and other places around the world have likewise not moved to reimburse for treatment. The future that the IPA wants to see is one in which every Pompe patient is able to access treatment, regardless of where they live. We will continue to work with the national patient organizations until this happens.

The IPA is also committed to raising awareness on a national and international level of the early signs and symptoms of Pompe. It is clear after ten years of commercial therapy that early intervention leads to the best outcomes for patients. The difficulty is that the first symptoms of Pompe can be extremely difficult to detect—especially in the Late-Onset population. We must work together and with the medical/scientific community to increase awareness so future Pompe patients are diagnosed before irreversible damage is done. This goal was the focus of the 2016 International Pompe Day, and I will go into more detail on it below.

Myozyme is the first step in treating Pompe disease, but it is not the final step. Therefore, the IPA remains committed to working with all research groups and all interested industry members to develop new and better therapies and new and better ways to treat and manage Pompe disease.

In addition to these activities, the IPA continues to support patients around the world through our support of national patient organizations and through direct one-on-one contact. A brief overview of our activities is laid out below:

PATIENT AFFILIATES

The IPA currently has contacts and affiliates in 65 countries. This number continues to grow, and we diligently work to strengthen our existing contacts as well as make new contacts. The IPA works through existing patient organizations where possible, but if there is not an existing

patient organization supporting Pompe patients, we work with treating physicians, patients, or other interested parties who desire to be a point of contact for patients in their country.

A list of IPA Affiliates is available on the IPA website (www.worldpompe.org). Contacts that are individuals may not have their information posted to the IPA website for privacy reasons, but it will be provided if you contact the IPA Communication Coordinator (Maryze Schoneveld van der Linde) at maryze@worldpompe.org.

INTERNATIONAL POMPE DAY

April 15, 2014 marked the first annual International Pompe Day. The goal of International Pompe Day is to raise awareness of Pompe disease on a local, national, and international level and to show the world that “Together We Are Strong”—the slogan selected by the Pompe community.

The success of International Pompe Day was continued in 2015 and again in 2016. Once again, the ways in which International Pompe Day was celebrated were as unique and diverse as the Pompe community. Some chose to celebrate privately with their families while others organized educational workshops.

In addition to recognizing International Pompe Day through the IPA sponsored Art Contest and Photo Gallery, the IPA Members decided that they wanted to focus on the importance of early diagnosis for 2016. In particular, we decided to raise awareness of the often overlooked early symptoms of Pompe disease. To that end, educational material was developed for the IPA website (<http://worldpompe.org/index.php/pompe-disease/diagnosis>) and an Awareness Flyer was created. This Flyer was translated into 26 languages and is available on the IPA website for our Members to distribute to their patients, physicians, and the general public.

The IPA is proud of how our community continues to unite on International Pompe Day, and is excited to see how it is celebrated in 2017.

POMPE (EM)POWER PROGRAM

In 2014 the IPA launched the Pompe (Em)Power Program—a mentoring/young adult program to empower individuals that are interested in becoming involved with international patient advocacy. The Program was launched because the IPA believes it is our responsibility to the international Pompe Community to protect the future of our Community. As long as there are Pompe patients, there will be a need for a strong international patient organization to coordinate activities and advocacy.

The goal of the Program is to identify, encourage and mentor individuals all over the world. However, due to the desire to include representatives at all levels of the disease spectrum, it was decided that we would begin with regional meetings so as to limit travel restraints.

The first meeting of the Pompe (Em)Power Program was held in June 2015 in the Netherlands, and participants came from Israel, Italy, and the United Kingdom. The IPA has been very encouraged to see the participants take the lessons learned from the meeting and return to their home countries and initiate new support systems and programs for their fellow patients. The IPA intends to continue this program by holding a follow-up meeting in conjunction with

the AGSD-UK annual meeting in October 2017. More information will be available through the IPA Member Updates and the IPA Secret Members Facebook group as this meeting is organized.

IPA'S SECRET FACEBOOK PAGE

During the AGM in Heidelberg, Germany the Affiliates expressed an interest in developing a private forum to facilitate communication between different patient organizations. The first approach the IPA took was to try and facilitate this communication through the IPA website Community Forum. However, it became clear that this approach was not ideal for the majority of our Members.

This topic was again discussed during the AGM in Texas in 2015 and the preference of our Members present was to create a Secret Facebook Group for IPA Members. This was done and over the last year it has been an additional forum for our Members to communicate, share insights and experiences, and for the IPA Board to distribute information to our Members.

RESEARCH AND DRUG DEVELOPMENT

The Board of the International Pompe Association strives to stay informed of all developments related to Pompe research. We develop and maintain relationships with the major research centers, as well as the pharmaceutical companies involved in Pompe research. Through our interactions we seek to share the patient perspective throughout the drug/treatment development process.

As of November 2016, there are 41 Open Studies focusing on Pompe disease on Clinicaltrials.gov (keyword search: Pompe disease). These include pharmaceutical sponsored studies and research institution sponsored studies.

When the IPA was founded in 1999, we hoped to one day have a treatment for Pompe disease. We have now had a commercial therapy on the market for ten years. This is a wonderful milestone for our rare disease community, but it is only the start of our journey. The scientific/medical community continues to look for new ways to manage and treat Pompe disease and there are multiple industry members working on developing new therapies for Pompe. In the rare disease space, the Pompe Community is fortunate to have this level of dedication to improving the quality of life of patients all over the world.

Personally, I am very excited to see what develops in the next few years. Below are brief updates regarding the status of the Pompe Programs of the pharmaceutical companies actively engaged in Pompe disease research.

AMICUS

Amicus is pursuing a combination Chaperone-ERT therapy for Pompe disease. It consists of a uniquely engineered recombinant human acid alpha-glucosidase (rhGAA) enzyme (designated ATB200) with an optimized carbohydrate structure to enhance uptake, administered in combination with a pharmacological chaperone (AT2221, Miglustat) to potentially improve activity and stability.

Amicus has initiated a Phase I/II trial in adults. Trial centers are opening in the US, Australia, Germany, UK and the Netherlands per clinicaltrials.gov. More information on this trial is available on clinicaltrials.gov (identifier: [NCT02675465](https://clinicaltrials.gov/ct2/show/study/NCT02675465)).

AUDENTES THERAPEUTICS

Audentes is developing a gene therapy AT002 for the treatment of Pompe disease. While still in the preclinical stage of development, according to data presented at the American Society of Gene and Cell Therapy Annual Meeting the results are promising and Audentes hopes to continue moving towards Phase 1 trials.

BIOMARIN

In June 2016 Biomarin announced that it was stopping the clinical development of its product, BMN 701, for commercial reasons, rather than the safety or efficacy of their product. More information on this development, including the IPA's position on this development, is available on the IPA website.

GENZYME

Myozyme (Lumizyme in the United States) is the only commercially available treatment for Pompe disease. Genzyme continues to manufacture and market this treatment around the world, and seeks to expand its commercial availability where possible.

In addition to Myozyme/Lumizyme, Genzyme is developing a next-generation ERT:NeoGAA. The Phase 1 study of NeoGAA was completed in the first quarter of 2015, and Genzyme announced results at the WORLD Symposium in San Diego earlier this year. Encouraged by those results they have now initiated a Phase 3 trial, COMET, for Late-Onset Pompe patients who have not previously been treated for Pompe Disease. More information on this trial is available on the IPA website, and also on clinicaltrials.gov (identifier: [NCT02782741](https://clinicaltrials.gov/ct2/show/study/NCT02782741))

OXYRANE

Oxyrane was developing a version of enzyme replacement therapy (ERT) produced using a yeast expression host (other companies produce ERT using CHO cell lines). Their website has not been updated for several years and so we conclude that they are no longer developing this product.

VALERION

Valerion is doing preclinical work in the Pompe mouse model for their compound VAL-1221. VAL-1221 is a chemical conjugation of the proprietary delivery antibody 3E10 with GAA (acid glucosidase), the missing enzyme in GSD Type II (Pompe disease). No results have been released as of November 2016. However, the IPA understands that they hope to show increased clearance of glycogen within the lysosome and cytoplasm, and improved function when compared to currently available treatments.

POMPE CONNECTIONS

The Pompe Connections and Pompe Connections: Treatment Edition are an on-going project for the IPA. Marsha Zimmerman continues to lead this Project, and works with Maryze Schoneveld

van der Linde and our Affiliates to make these informative and educational brochures available in as many languages as possible.

These brochures are made available through the IPA website (<http://worldpompe.org/index.php/publications>), and we also send them out upon request.

Currently, we are seeking translators for the following languages: Chinese (Simple and Traditional/Complex), Turkish, Portuguese, Polish, Hebrew, and French.

We are also seeking suggestions for future topics to be covered.