Spring 2020

AGSD UK
Association for Glycogen Storage Disease

GLISTEN
GLYCOGEN STORAGE NEWS

CONFERENCE WEEKEND 2020
Wyboston Lakes Centre 17th & 18th October
Bookings open in a few weeks on our website

In 2018 AGSD-UK conducted a survey of members. We will soon be sending out a new survey.

We want to know your views, they matter.

In 2018, we asked about life with a GSD and you replied;

- Social life is affected by GSD, many feel isolated or lonely and a high number live with pain.
- Employment is affected by having a GSD and preferred employment is badly affected too.
- Most members describe themselves positively as 'coping well' with their GSD.
- Members prefer AGSD-UK to focus on improved treatments, cure, research and a registry.
- Responders said that AGSD-UK had helped them to be informed about their GSD (80%) and helped them manage their condition too (over 40%).
- ASGD-UK helped reduce isolation and improved confidence for over 30% of respondents.

Cover photo, Keiron Stubbings

Message from the Chairman

Welcome to this new format Glisten for Spring 2020. We are intending to produce editions more frequently to get news and reports to you sooner.

The coming year promises to be one of progress for therapies for glycogen storage disease. We are closely monitoring research and trials in order to keep members informed. Check our website often for news and updates.

www.agsd.org.uk

Trials are active, especially in GSDs 1,2,3 and 5 and, although not all GSDs feature heavily in research, there is cross-fertilisation in science, learning and trial outcomes.

Trustees will be inviting an interesting range of speakers, including trial and research updates, to our conference in **Wyboston Lakes in October**.

Allan Muir stepped down as Charity Director in September 2019. Allan had been in post for almost 9 years, tirelessly promoting the charity's endeavours. Trustees are actively discussing the next steps for management of the charity. We have recently secured grants from industry and foundations to underpin our core work, family days and the conference.

However, as always, we especially seek your help with fundraising, please check pages 7-9 for some ideas and inspiration. Support, advice and information are available, as always, for anyone affected by GSD, feel free to get in touch.

Thanks to all our hard working, mostly voluntary, team. Andrew Wakelin's expert help is invaluable.

My co-Trustees and I are devoted to moving the charity forward. Ailsa Arthur deserves a special mention for giving many extra hours of her time. Cori Action Team, Pompe Support Team and our GSD Co-ordinators are very dedicated to their mission and we could not manage without them. Care Advisor Jane Lewthwaite and Office Manager Jackie Henson, thank you for stepping up when needed.

In conclusion, although 2019 was definitely a period of change for the charity, we are recalibrating and our message is very much 'business as usual'.

Nick Jones, Chairman of Trustees

George and the book about GSD1a that he inspired

contents

Financial Headlines 2018-2019 2019-2020

2018/19 was a challenging year for many charities, AGSD-UK included.

In spite of this, our services continued to grow and after transfers we actually grew our unrestricted reserves over the year.

Changes in the date that major funders gave us their grants and awards skewed the income received in 18/19 but the sums are now in our accounts for 19/20, making a healthier picture.

We continue to benefit annually from around £60k of ***in-kind effort**** from professionals and volunteers alike.

*This means donated help, such as a senior medic reviewing the content of a leaflet before publication.

What we deliver is much greater than our actual financial resources.

TOTAL INCOME:
£167,640

RESTRICTED:
£103,566

UNRESTRICTED:
£64,074

TOTAL EXPENDITURE:
£228,035

RESTRICTED:
£161,080

UNRESTRICTED:
£66,955

After four months as CEO Neil Bradbury stepped down during his probationary period.

Fundraising update

Could you organise an event? Every little helps...

Christmas Lights raise £501

Frank and Irene Green from Hale in Altrincham have family affected by GSD. For years they have decorated the front of their home with festive lights every Christmas, adding more and more each year over time.

Friends and neighbours suggested they accept donations and raise money for charity, and ASGD-UK is the happy beneficiary.

Frank said "Someone put a card through our door saying they appreciated the lights, that they bucked up their spirits, and enclosing £10.

People travel from a long way off and my wife pops out to offer a chocolate to anyone who stops to give.

Another card and donation was sent from a bereaved neighbour who wrote, "You provide the sparkle that is helping us to get through"."

Thank you Irene and Frank.

Jeans for Genes

Could you encourage your school or workplace to fundraise for AGSD-UK via Jeans for Genes?

14th-20th September 2020

You organise any simple event during that week such as wearing jeans to work and donating a 'fine' for your dress down day.

Go to their website

www.jeansforgenesday.org

or phone them on
0800 980 4800

It is important that you tick AGSD-UK when registering so that we, not somebody else, get your money.

The advantage of this is that there is a huge amount of publicity organised by Jeans for Genes, they have posters and sponsor forms you can use too.

The Wendy House Nursery in Erdington, Birmingham, signed up for 'Jeans for Genes' in 2019 to fundraise for AGSD-UK!

Keep on Running Kieron!

Before October 2019 Kieron had never run at all, not even for a bus!

He decided to support his fiancé, Gemma, who has Pompe disease.

He was awarded his place in the London Marathon via the open ballot and then chose to dedicate his fundraising to AGSD-UK.

As if it wasn't enough to start training from scratch, he took on a massive fundraising challenge too.

Could you support Kieron by donating to his fundraising Facebook page?

www.uk.virginmoneygiving.com/kieronstubbings

Check out his progress on his page *Kieron's 2020 London Marathon Fundraising* page on Facebook

Kieron is marrying our own Pompe Support Team member, Gemma Seyfang on 9th July, we wish them all the best. Kieron is also training to be a London black cab driver and doing *'The Knowledge'* so as he also has a full time job, he's pretty busy.

Together they have a fundraising online auction. They have already sold football tickets and tea at Fortnum and Mason.

Upcoming auction items are; ballet tickets, win a mini for the weekend, massage treatments, County cricket tickets, Apple watch and an ipad and a Smart Doorbell with camera and Corporate level tickets for Tottenham vs Manchester United on March 14th (worth £399). Please get bidding, keep watching the FB page.

They are running other events too, a curry buffet on Friday 28th Feb in Thundersley, Essex, tickets £20, please contact Gemma here to get a ticket **info@agsd.org.uk**

The other event is in Chelmsford, an adult bingo night on 6th March. Tickets are all sold out but Gemma is looking for raffle prizes of value such as tickets for an event or a voucher for a spa treatment.

Kieron has been selected as one of only three people in the UK by ORS, a company selling hydration products for runners. He will be sharing his story on Instagram to learn about the challenges he faces training for his first ever marathon. He has a photo shoot with them soon. They are going to promote AGSD-UK at the same time.

He is doing the London Winter 10k run on Feb 9th, then the Stepford Trials half marathon on Sunday March 8th, he does the Brentwood half marathon on Sunday 15th March and the London Marathon itself on Sunday 26th April.

COMMUNICATION

Andrew Wakelin has done an excellent job developing our website over the last eighteen months; it has been a vast amount of work and effort for which we are very grateful. If you have not looked, do it now!

www.agsd.org.uk

It receives a lot of hits and increased traffic including contact from new patients and queries from industry, medics and many others.

Jackie Henson, whom many of you know as our office manager and book-keeper, has taken on the continued management of the website.

Lisa Massimo, who used to be our GSD1 co-ordinator, is taking over posting on social media and helping with web stories too.

If you find a piece of interesting news or have a story, share it: info@agsd.org.uk

WHAT ENQUIRIES COME TO AGSD-UK?

Here is a sample from the last few weeks. Of course, all were answered, either by our GSD Co-ordinators, staff or a Trustee.

My daughter is 10 years old and has suffered all her life with gastro symptoms. At 3 months old she was diagnosed with Reflux and Lactose intolerance and in the last few years undergone 5 Gastroscopies and been diagnosed with EoE. However, she still constantly feels unwell. She feels shaky/ wobbly a lot of the time, gets palpitations. Gets extremely hot and sweaty and can't bear the heat. When she feels shaky it makes her anxious as she feels like she's going to faint. she is also always hungry, she eats but then feels wobbly and hour later. Does this sound like a form of GSD? or am I still clutching at straws? thanks in advance.

I am a School Nurse at an International School in the UK. I have had notification of a new student from China who will board with us during term time. She is from China, and suffers with GSD1, I was just after some advice please, what I should be looking out for, triggers, warning signs, when to refer to GP etc.

We are a pharmaceutical company holding an event for Rare Disease Day, would you have a member who could come to join a panel discussion about their condition to our staff meeting?

I am a Paediatric Student Nurse currently researching Pompe Diseases and compiling a case study presentation to present at university about a child I have cared for in placement who has Infantile-onset Pompe Disease.

I am a Patient Education Liaison Manager for a pharmaceutical company. One of my patients has come across your medical alert card for Pompe disease and was wondering how she could obtain one. I have done some research with Pompe organizations in the US and they do not seem to have a card with this specific information. Are these cards for sale?

I am a health visitor looking for weaning guidelines for a baby with GSD1a

I'm contacting you on behalf of my husband. He's been battling symptoms of GSD for years and all the doctors he has seen keep sending him around in circles. We recently heard about GSD and would like to see a doctor that specializes in diagnosing them. We live in Spain but will travel anywhere for proper treatment. Please advise at your earliest convenience! Thank you.

Conference Reports

AGSD-UK Conference October 2019

Hepatic Workshop Report

This year's hepatic workshop saw faces old and new, all pleased to see each other, swapping tales, humour and general support. We were especially delighted to welcome Marialaura Caiaffa from the Italian Association for Glycogen Storage disease.

The session started with an introduction from Dr Helen Munday on the recent gene therapy trials for GSD1a. She reported there had been no adverse events and some improvements had been seen in the recipients. However, the trials were still ongoing and further studies still needed to be made. Dr Munday then went on to talk about diet and then the recent Glyde trials, which compared Glycosade with uncooked corn starch. Glycosade showed metabolic improvement, but again further studies need to be made.

Dr Saikat Santra from Birmingham Children's Hospital spoke on managing neutropenia in GSD1b.

Ireene Hoogeveen shared her study with members. It has recently been shown that nutritional ketosis can improve muscle function in athletes. Her work hopes to show if the same improvement can be seen in those with GSD3.

The following day saw a talk on pain management by Dr Jonathon Rajan. Members attending were keen to talk about their experiences, commenting that it was a topic that needed to be bought higher up the agenda.

Guieppe Ronzitti's talk on gene therapy in GSD3 demonstrated the obstacles and difficulties when researching. Optimism was tempered by realism.

Bec Halligan introduced us to her multi-centre survey of GSD1b in England. Her summary showed a severe condition that varied from person to person and was a challenge to manage.

Dr Gisela Wilcox talked about the importance of a healthy and well managed diet, done in conjunction with a doctor and a dietician.

Finally, AGSD-UK member and patient, Ciara Harkins gave us a talk on managing her GSD 1 whilst at university. The health professionals in the audience were particularly delighted to hear her, having had the time to listen in detail to a patient's life and experience.

Pompe Disease Workshop Report

Pompe Support Team Welcome

A great opportunity to meet those living with Pompe, families and friends. On the welcome table there was a range of foods items to try. Most unusual were products made with insect proteins, 'chocolate' bars, crisps and savoury snacks.

Dr Mark Roberts – Research Update and locating the undiagnosed

Salford Royal Mark Holland Metabolic Unit

There are 3 stages in symptomatic patients.

1. Symptom onset e.g. fatigue.
2. Falling behind peers and noticing walking pattern, declining mobility.
3. Diagnosis and ERT with continual assessment. MRI scans can show muscle myopathy which is common in hamstrings, buttocks and the spine.

Summary on the next steps for Pompe treatments including current trials;

- new enzymes
- enzymes with chaperones
- gene therapy

The actual number of people with Pompe disease could be as many as 10x those currently known. Conservatively there could be as many as 3,000 people in the UK undiagnosed or mis-diagnosed. Suggestions for locating them include;

1. Test siblings of diagnosed patients
2. Communicate with rheumatologists or other specialists who are likely to see people on the diagnostic odyssey.

Dr Paul McIntosh – Gastrointestinal symptoms and Pompe disease

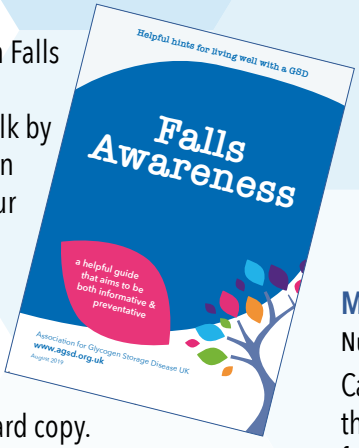
Duke University

Dr McIntosh spoke about his life living with Pompe disease. He has researched gastrointestinal symptoms in GSD2. His research provides conclusive evidence of something previously undocumented; urinary and bowel incontinence, constipation and diarrhoea.

Meditation Taster

For the first time at the conference an open invitation parallel session was offered for those who wanted a change of pace. The leader took two short sessions offering guided meditation with a focus on breathing and visualisation.

Falls Prevention – John Foxwell PST Member



A new booklet on Falls Prevention was launched via a talk by PST Member John Foxwell. Go to our website for an online copy to download or contact Jane Lewthwaite who will post you a hard copy. **www.agsd.org.uk**

Roundtable Discussion Summaries

PHYSIOTHERAPY: Andrew Oldham,

Physiotherapist, Salford Royal Hospital

Practical tips for falls prevention

- Adequate lighting, appropriate footwear and avoiding clutter and trip hazards in the home
- Adaptations can increase independence and safety in the home

Exercising

- Safe exercising in water, particularly hydrotherapy, are modes of exercise that patients have found benefit from.
- Motivation and finding time for yourself was discussed. Setting realistic goals in terms of frequency and duration of exercise can help. Varying the type of exercise completed and selecting exercise or activity that is enjoyable helps.
- Effective use of walking aids was discussed. Use of both manual and electric wheelchairs. Some patients expressed that once they decided to use a wheelchair they often feel that it positively impacts their quality of life and they wish that they had done so sooner.

MENTAL WELLBEING: Tracey McGrae

Nurse, Salford Royal Hospital

Carers: are there services for them? Is there practical support such as days out for young carers as well as emotional support and signposting. We talked about how local authorities can offer support/respite for young carers and the theme was around doing things that their parents can't do as easily, such as climbing, adventure days etc.

Raising awareness of Pompe and mental health: Reducing the stigma generally around mental health, how does society do this? Social media was mentioned and considered as an online peer support group.

At home, does empathy wain? Is it ok to talk about what is going on for you or should you just try to manage? Spouses and children are carers and may feel burnt out by everything. We recognised that therapy, looking at the underlying feelings and schemas that make up our personality, have a big part to play in coping and mood.

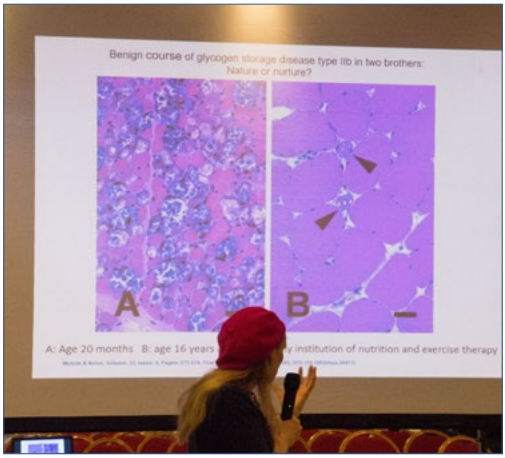
Routine and structure are essential to mental well-being but people have

differing and also fluctuating levels of motivation to engage in this. We agreed this was dependent on where people are in their journeys with their mental well-being and health. This led to discussion about the cycle of change. (Reference is Prochaska and DiClemente 1983).

The cycle of change explains that some mental health difficulties reflect where people are in their lives. It is a good tool to assess someone's readiness to engage in therapy.

Mental health service access issues were discussed.

Adapting: Common sense adjustments to illness minimises the risks caused by reduced mobility. However, avoiding risks can cause reduced confidence. Counselling, especially cognitive behavioural therapy, could work well to boost confidence by providing graded exposure and anxiety management.



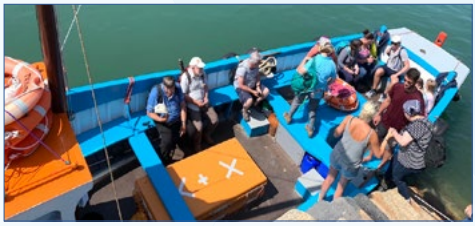
McArdle's Workshop Report

We always have an open door to our workshop for those with even more rare muscle GSDs but this year it turned out to be all GSD5 patients. We had 11 diagnosed McArdlites, plus four partners. We were particularly pleased to welcome Brendan O'Connell from Dublin, who had been diagnosed for over 20 years but until the conference had never met anybody else with McArdle's.

We had a meet and greet session on Saturday morning for those who arrived early. Then, after the opening of the conference, we started our workshop with a quick ***Get to know you*** session, everybody giving their name, where they were from and sometimes a little anecdote about their experience.

Andrew Wakelin gave a presentation titled ***Pain? What pain***. This looked at the avoidance of pain, what pain was caused by McArdle's and what might have other causes. He then covered the management of pain if we do make a mistake and get hurt.

Andrew Chalmers talked about his experience on the walking course this summer, and showed a selection of his photographs. He had been putting off the course for several years, but finally having done it he could highly recommend it.



McArdle's walking course, Pembrokeshire

We had an international research update with information on the sodium valproate and triheptanoin trials, the studies on third wind and rowing ergonometry, IamGSD's international workshop on nutrition for McArdle's, and the various studies on low carb and ketogenic diets.

We seemed to run out of time, but squeezed in a short Q&A session before closing Saturday's workshop.

On Sunday Andrew presented a talk by Terri Chambers of IamGSD on advocacy, which really emphasised how, with an ultra rare disease, we have to be ready to

speak up for ourselves. The presentation gave many examples and ideas for different situations. We then looked at what the future holds discussing the possibilities of projects which are being driven by IamGSD. These included trying to get the age of diagnosis below 10, the potential for gene therapy, patient registries to help source participants for trials, and the drafting of international standards of care.

We had an update on the website and publications, with news of the planned *Improving Life with McArdle Disease* from IamGSD.

We had a presentation from IamGSD on the top tips for day-to-day management, which focused on the half-dozen topics which underpin almost everything else that we do. The immediate energy reservoir, 30 for 80, the six second rule and second wind being perhaps the most important.

We closed with a very brief Q&A session and thanks to the speakers for a very constructive workshop. Many felt that it was the best workshop to date.

Andrew's 70th birthday gift painted by Edd Bush

Social Media and Glycogen Storage Disease Survey Report

Two of our highly valued younger members have continued to advocate for GSD and provide guidance for other young patients. Last June, Ciara Harkins, who has GSD1, gave an excellent talk during a family event (organised by AGSD-UK at Newcastle RVI) called 'Moving on to further education with GSD1'.

Lauren Thompson, who has GSD3, joined Ciara at our conference to gather views on social media and GSD. They found some interesting headlines.

93% use social media

86% follow GSD websites

Which ones?

AGSD-UK website, MDUK, Pompe (Girls Only), GSD UK &Ireland, GSD Fitness + Motivation, Pompe Friends, Hope Travels, Cure Pompe Disease, Glucogenesis, Pompe Speakeasy, Pompe Alliance, Pompe Brothers, GSD Recipes, GSD Italia, GSD Type 3, McArdle's Disease.

Do you feel that social media has helped you understand GSD?

Yes: 37% No: 57% Unknown: 6%

Do you feel that the GSD community uses social media to its full advantage?

Yes: 13% No: 69% Unknown: 18%

What are your positive experiences of social media for GSD?

- Used by family
- Tell your own experiences to help
- Friendly + Supportive
- Speaking to others + hearing stories
- Make friends
- Helped others
- Meet Others
- Receive Updates
- Info on events
- Sharing tips
- No questions are 'stupid'

What are your negative experiences of using social media for GSD?

- Misinformation
- No doctors
- Some people get offensive
- Opinions not welcome
- Too intense
- Only occasionally useful
- People 'preach' and take word as 'gospel'
- Narrow minded
- Some people dominate the threads
- Need more info on certain topics
- Arguments
- Facebook not suitable

Other Suggestions:

- Create private sites
- Better Facebook outreach
- Promote on social media
- Regular Content
- Get Doctors involved
- Preferred GSDNET (the historic online Q&A portal, now closed)

CARe ADVISOR

The Care Advisor role will soon be entering its 5th year! Jane Lewthwaite joined in March 2016.

Good news about PIP

Since the Government announcement mid-2019 that people with ongoing conditions would not be subject to three-yearly PIP reviews, our members with Pompe have had all had awards of ten years.

If you need help completing forms please get in touch.

Care Navigating

If you feel stuck with a problem or query, contact Jane on 07484 055 334. She has extensive experience of the care system and Pompe disease. She can make referrals for home aids or home care and help obtaining equipment and grants. She can talk over your issue in detail, listening sensitively and helping you to locate solutions. Recently, one newly diagnosed person with Pompe disease had been waiting eight months for occupational therapy assessment, Jane was able to intervene, make a re-referral emphasising the urgent needs, and an assessment was done with four weeks.

Reaching out to the newly diagnosed

The Care Advisor speaks to all new members with a diagnosis of Pompe disease, sending information and offering a home visit.

Pompe Support Team

PST goes from strength to strength and welcomed a new volunteer member Donna Beresford, who has been a creative and jolly addition to the team.

Quarterly PST newsletters are emailed to everyone.

Our enthusiastic team is fundraising, helping to organise the conference and continually writing new information materials as well as monitoring Facebook.

Get in touch with them!

info@agsd.org.uk

Specialist Healthcare Alliance Meeting Report

Luke Fraser January 2020

The Specialist Healthcare Alliance is a board of representatives from charities for people with rare and complex conditions. It's chaired by Lord Sharkey and meets quarterly.

It seems a rather dry agenda but this is where we learn about NHS developments and, down the line, this impacts on treatment for everyone with a GSD.

AGSD-UK keeps a watchful eye and ensures you to have your say.

If you would like to attend as a rep, contact us at info@asgd.org.uk. We could contribute to travel costs.

Topics covered:

1. NHS Reform bill to be introduced after April
2. NHS Long Term Plan - Final version due in April
3. 'National Conversation on Rare Diseases'. Launched 2018. Has been on back burner due to Brexit, but an announcement is expected around the time of Rare Diseases Day (Feb)
4. Devolved countries. All Wales Medicines Strategy Group is currently considering whether to continue to assess drugs independently of NICE or simply go with them.

Gareth Arthur – NHS England Speaking on Genomics

Genomics developments have led to:

- Better diagnosis / prognosis
- Better treatment and monitoring
- Better research

There is a move towards:

- Healthcare driven by data rather than by ministerial policy
- More personalisation of medicine
- Thinking about the nation's health rather than its illness

NHS Long Term Plan

Set the focus on Genomics for the next 10 years. Commitment to sequencing 500k genomes by 2024. Offer all children with cancer genome testing.

History of 100k Genome Project

Announced 2012 13 Genomics Medical Centres. Project was not as straightforward as had been anticipated. Lots of NHS processes had to be changed. It was also difficult to get people enthused about a project where the delivery was not yet tangible. Patients who had searched for many years finally got a diagnosis.

What next?

- NHS Genomics Medicines Service.
- Improve lab infrastructure.
- Make sure test results are clear.
- Offer Genetic Counselling.
- Introduce whole genome sequencing as part of routine care (initially a small number of candidates will be eligible, but these numbers should

increase over time as costs reduce etc.)

- Plan for 7 'Genomics Laboratory Hubs'. High throughput testing. Operational 24/7 so faster turnover.
- 'Phased clinical implementation' of whole genome sequencing operational by 2021.
- 'Genomics Medicines Alliances' – to be based at Genomics Lab Hubs.

Next SCHA meeting to be held on 19 March in London

Lysosomal Storage Disease Service Peer Review

Report from a volunteer reviewer John Foxwell Jan 2020

John attended the training and a review as a volunteer from the PST.

LSD relates only to those with GSD2 Pompe disease.

The National Quality Surveillance Programme (NQSP) is an important part of 'getting it right' for medical professionals, its role is to be a critical friend. Each review must have a minimum of three reviewers; a clinician, nurse and patient representative.

The NQSP is independent and its only aim is to ensure quality care for patients through reviewing the care offered by hospital services. If you have the opportunity, complete any patient surveys and feedback, highlight what your service is doing well or could do better. Every trust, hospital and clinic must undergo a peer review of their services. The aim of the review is to look at;

- what is being offered,
- what is being delivered
- whether aims are being achieved

On the review day there is the opportunity for the reviewers to ask questions and follow up any points that may need clarifying. Once a review is completed the findings are agreed with the CCGs and Commissioning teams and a report added to the trust's website. Look for yours to see how your LSD service is performing.

The outcomes of these reviews can trigger several responses, the main three being:

- **routine surveillance,**
- **enhanced surveillance**
- **another peer review visit**

Craft from Newcastle RVI Family day

WHAT'S NEW IN GSD?

HEPATIC GSD

Ultragenyx and Arcturus Therapeutics made an announcement on June 19th in California, USA. Their existing collaboration now expands to include up to 12 rare disease targets and includes Arcturus' nucleic acid technologies to enable mRNA, DNA, and siRNA therapeutics. GSD3 is one of the 12 targets. Ultragenyx also have a gene therapy in development for GSD1a which has completed preclinical studies.

Ultragenyx becomes Arcturus' largest shareholder with $30 million of upfront payments to Arcturus, including $6 million cash for collaboration agreement amendment and a $24 million equity investment at $10 per share.

Emil D. Kakkis, MD, PhD, Chief Executive Officer and President of Ultragenyx said:

"We are pleased with the progress of our ongoing collaboration. Our most advanced mRNA program, UX053 for the treatment of Glycogen Storage Disease Type III, is expected to move into the clinic next year, and we look forward to further building upon the initial success of this partnership."

AGSD-UK understands this to indicate that a clinical trial in GSD3 may start before the end of 2020.

GSD9

Please take a look at our website. It is constantly being kept up to date with the latest news and information. Our GSD type 9 page is being renewed. It works hand in hand with the personal stories on type 9 to give an all round picture.

POMPE DISEASE

Jan 2020 News from Valerion Tx

VAL – 1221, a trial for a potential new treatment for GSD2, has been halted. VAL-1221 was delivered intravenously in ambulatory and ventilator-free participants with late-onset Pompe disease.

Initially four people in the UK started the trial at the Charles Dent Metabolic Unit at the National Hospital for Neurology and Neurosurgery, one had to leave half way through, so there were three remaining. In late January they were informed the trial was stopping.

Further reading: Challenges in treating Pompe disease: an industry perspective. July 2019 by Do, Khanna & Gotschall.

Jan 2020 News from Amicus

Amicus Therapeutics has completed and exceeded patient enrolment for its Phase 3 PROPEL trial of AT-GAA, its investigational chaperone therapy for the treatment of Pompe disease. The study now has 123 participants recruited from 59 clinical sites worldwide.

AT-GAA contains an artificial, optimized form of the enzyme acid alpha-glucosidase (GAA) called cipaglucosidase alfa (ATB200) that is administered together with an oral small molecule called miglustat (AT2221) that works as a pharmacological chaperone. Together, these two molecules aim to restore function and increase the stability of GAA, which is faulty in patients with Pompe.

The safety and effectiveness of AT-GAA are currently being investigated in the Phase 3 PROPEL trial (NCT03729362) in adults with late-onset Pompe disease.

PROPEL is a 52-week, randomized, double-blind, Phase 3 trial designed to assess and compare the safety, tolerability and effectiveness of AT-GAA to alglucosidase alfa (marketed as Myozyme by Sanofi Genzyme in the UK), an enzyme replacement therapy (ERT) that is currently considered the standard of care for patients with late-onset Pompe.

The study will assess whether AT-GAA may be superior to a combination of alglucosidase alfa with an oral placebo in patients who previously had been treated with ERT, as well as in those who had not (ERT naïve).

Long-term effectiveness of ERT

Long-term enzyme replacement therapy (ERT) to treat people with Pompe disease loses effectiveness in maintaining walking ability, muscle strength, and lung function, a new study shows.

Despite these results, ERT improved lung function when compared to the predicted outcome without ERT, and some patients responded well to the long-term therapy while others did not.

The paper, ***Large variation in effects during 10 years of enzyme therapy in adults with Pompe disease***, was published in the journal Neurology.

To understand the long-term outcome of ERT researchers from the Netherlands and France collaborated in following 30 patients (14 men and 16 women) who continued ERT for 10 years. The median age of the group was 49 years, and they were followed for a median length of 9.8 years. The team investigated the effects of ERT on walking ability, muscle strength, and pulmonary function, and additionally looked at each individual's response to treatment.

The findings:

- Walking ability (determined using the 6-minute walking test (6MWT) - at the beginning of ERT, the average 6MWT was 49% predicted (compared to similar healthy people). During ERT, the walking distance increased over the first three years, then significantly declined until the average 6MWT was lower than it was at the start of treatment.

- Lung Function (assessed by measuring the forced vital capacity (FVC), or the total volume of air that can be blown forcefully following a full inhalation) - the analysis showed an initial percent-predicted FVC of 54% when patients were sitting upright, and 33% when lying down (supine). Overall, the FVC in the upright position remained stable for the first five years, and significantly declined over the next five years. The supine FVC was found to decline from the start of ERT. However, relative to the predicted FVC decline without ERT, patients had significantly better pulmonary function after 10 years of ERT.
- Both these results were independent of sex, or disease duration and severity.
- Muscle strength scores (strength around the neck, shoulders, elbows, hips, and knees) also reflected this trend; they were lower after ERT than they were before the treatment. However, muscle strength scores were found to be dependent on the sex and walking ability of the patient. Men that had better walking abilities before treatment showed less decline in muscle strength compared to women.
- Response to treatment - a high degree of variability was observed between patients and therefore predicting their change in responsiveness was difficult. While most patients responded well at the beginning of ERT (93%), some patients responded well for up to eight years while others declined after one or two years. Outcomes also differed among the individuals. Some patients had improved walking abilities but lost lung function, and others experienced the opposite. At the end of 10 years on ERT, half of the patients had improved walking abilities or lung function, or both.

A safety assessment of ERT for 10 years found that it was well-tolerated with two patients stopping the treatment due to injection-related issues or high levels of anti-GAA antibodies.

Although more than 90% of patients benefit from ERT for the first 3 to 5 years, they observed secondary decline, suggesting diminished therapeutic efficacy over time, this raises concerns and stresses the need for next-generation therapies.

McArdle Disease

There are currently two joint studies being conducted between CNMC Copenhagen and the McArdle Clinic in London.

Modified ketogenic diet in patients with McArdle disease

This is the second in a series of studies. The first was an open interventional pilot study to investigate three different modified ketogenic diet regimes, to find an optimal composition of such a diet, to ensure an adequate degree of ketosis yet at the same time being well tolerated.

This is a placebo-controlled, blinded, cross over study. Subjects will first receive either a modified ketogenic diet (75% fat, 15% protein, 10% carbohydrates) or a placebo diet (>100 grams of carbohydrates per day). They will follow the diet for four weeks, followed by two to four weeks wash-out, followed by four weeks on the opposite diet.

The UK participants will visit the trial site in London five times. Evaluation will be on exercise capacity during a submaximal exercise test on a cycle ergometer, and by questionnaires and a dietary diary.

To evaluate the safety and tolerability of treatment with a developmental drug REN001

REN001 is a new drug currently under development. It has been given to 53 healthy volunteers and 30 obese patients with high lipid levels in controlled clinical trials (these did not involve anyone with McArdle's). The drug was considered safe and well tolerated. Laboratory and clinical trial data have indicated that REN001 improves energy production by mitochondria within muscle cells and may improve muscle function. It is thought that boosting the function of the mitochondria in this way could be of benefit to people with McArdle disease.

This is now a Phase 1B trial in patients with McArdle disease. It involves a 12 week, open-label study to determine whether oral treatment with REN001 is safe and well tolerated in this patient group.

Other studies

At our conference in October we had reports on the Sodium Valproate, Third Wind and Rowing Ergonometry studies. We received a slide presentation and two poster presentations respectively. These are available for viewing on the IamGSD web site, (**www.iamgsd.org.uk**) under Publications - Presentations, and under Research - Current research.

WILL YOU JOIN A GSD1 SUPPORT TEAM?

If you have a few hours a month to spare, you could be part of a new GSD1 team of volunteers.

The Cori Action Support team (CATS) and the Pompe Support team (PST) have been very successful in providing help, advice and linking with AGSD-UK staff.

They choose what they want to do, there really is no pressure.

We know the power of working together….phone us on 0300 123 2790 or 07484 055334 to talk it over.

- Phone call with someone newly diagnosed
- Opinions on conference content
- Perhaps a separate get-together
- Suggest information materials
- Help develop the website content
- A few conference calls per year
- Hear feedback on developments

Living with a GSD?

You are warmly invited to join us for our

FAMILY DAY

WHO?
Evelina Patients

WHAT?
Meet others, learn about diet and exercise for GSD, share tips, activities for children, face painter, entertainer & lunch

WHERE?
Evelina Atrium, 3rd Floor, Evelina London Hospital, Westminster Bridge Road, London SE1 7EH

PLEASE...
Just RSVP to Clare Warnes on 0207 188 0848 so we know numbers for lunch.

11.00 Registration
Magical Design Face Painter
Diet & Exercise Workstations:
Know Your Carbs, Supermarket Sweep, Pin the PEG on the Liver, Just Dance, Corn Starch Cocktail Corner
12.30 Lunch provided
Afternooon Mr Marvel Entertainer (1.30pm)
Q&A Session to ask anything from your Evelina London Metabolic team
Interview with an Adult with GSD

Saturday 7th March
11.00am - 3.00pm

- Nurses & dietitians to answer your questions
- Share ideas, meet friends old & new
- AGSD UK advisor will be ready to talk about Education & Health Care Plans, benefits & other queries

FREE EVENT

AGSD UK
Association for Glycogen Storage Disease

Bring friends & family
Lots of useful information

DATES FOR 2020

February 29th	Rare Disease Day
March 7th	Evelina Hospital GSD Family Day In the Atrium. Fun for everyone. All Evelina GSD patients invited
March 14th	GSD 3 meeting with Cori Action Team Support All welcome (See p30)
March 21st	Pompe Support Team planning meeting Coventry. For PST members only
April 4th	Pompe Social in Premier Inn, Trentham Gardens, ST4 8JG 1pm start, lunch and meeting Stay overnight, contact Jane 07484055334
April 15th	International Pompe Day Meetings Both meetings start with lunch at 1pm Venue 1: Swansea, all welcome. Towers Hotel, SA10 6JL Venue 2: Southampton, all welcome. Holiday Inn Express, Botley Road, SO30 3XA
August 6th-13th	Walking with McArdle's Course, Snowdonia
August 13th-17th	Children & Parents Event, Snowdonia
October 17th & 18th	AGSD-UK Conference - Wyboston Lakes Centre. MK44 3AL

PROFESSIONALS MEETINGS

Feb 29th	European Pompe Consortium Meeting, Hamburg (Trustee Rob Seaborne attending)
May 19th	Hepatic Guidelines Expert meeting (Trustee Ailsa Arthur attending)
October 17th	Hepatic Guidelines Expert meeting at Wyboston Lakes

AGSD UK

Association for Glycogen Storage Disease

FREE EVENT!

GSD 3 Get-together

Meet the Cori Action Support Team

SATURDAY MARCH 14th

12:30 - 3:00

Curdworth Village Hall

Curdworth

BS76 9HH

M42/M6 Junction

Level access, large car park

Anyone affected by GSD3, Cori disease, is welcome to come along to this informal meeting.
Bring family, children and friends.
Your opportunity to talk and share ideas.

Please RSVP for lunch numbers to
Jane Lewthwaite 07484 055334

Take away from this Glisten...

- Conference date October 17th and 18th at Wyboston Lakes – check website soon
- Help by donating or fundraising
- Join with Jeans for Genes
- Your views are needed, contact us at **info@agsd.org.uk** if you would like to speak out or attend a meeting
- If you are invited to complete a survey as feedback on NHS services, DO IT, you will be heard
- As a team, we all deliver more than more than the charity's income might indicate
- We are a member-led self-help group, the only one dedicated to all GSDs in the UK

AGSD UK
Association for Glycogen Storage Disease

AGSD-UK BRACELETS & CHARMS

£5.00 – AGSD-UK Charm cord or keyring +£1 P&P

£4.00 – plain AGSD-UK knotted wrist band + £1 P&P

For sale, these beautiful fundraisers all made and donated by member Julie Garfield

£6.00 – silver plated charm bracelet in gauze pocket + £1 P&P

Email **info@agsd.org.uk** or phone 07484 055 334

Overseas postage rates can be calculated on an individual basis. All prices quoted are suggested donations.

OUR NEW OFFICE CONTACT DETAILS:

AGSD-UK, PO Box 1232,
Bristol, BS48 4DD
Phone 0300 123 2790

Charity number
1132271

Emma Grove Design 07990 520 807

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