Poster Session Abstracts

Poster sessions will be in the Harbor Ballroom on:

Tuesday, February 14 from 4:30-6:30pm Wednesday, February 15 from 4:30-6:00pm.

Poster presenters with a last name starting with A-L (First Author Last Name) will be assigned to present their poster on Tuesday, February 14, 2017 from 4:30-6:30 PM. Posters must be mounted by 4:00 PM on Tuesday, and will need to be removed after the Tuesday poster sessions ends.

Poster presenters with a last name starting with M-Z (First Author Last Name) will be assigned to present their poster on Wednesday, February 15, 2017 from 4:30-6:30 PM. Posters must be mounted by 4:00 PM on Wednesday, and will need to be removed after the poster sessions ends.

All late-breaking abstracts will be assigned to the poster session on Wednesday, February 15, 2017 from 4:30-6:30 PM. Posters must be mounted by 4:00 PM on Wednesday, and will need to be removed after the poster sessions ends.

No photos or videos are permitted of any oral or poster sessions. The only exception is at the official poster sessions if the author is present and gives permission.

Any poster numbers not listed will **not** be presented as the author is unable to attend the conference.

It is the policy of WORLDSymposium to publish all abstracts with the list of authors exactly as the abstract was submitted to WORLDSymposium. The first author of the submitted abstract will be listed as the presenting author on the Preliminary Program, Agenda, and Poster List.

Tuesday, February 14 – Poster Presentations

Poster #	First Author	Abstract Title
1	Magy Abdelwahab	Cardiac assessment in Egyptian type 3 Gaucher disease and report of calcifications in homozygous L444P mutation
2	Patricio Aguiar	MicroRNAs in Fabry disease: role as biomarkers and a possible pathophysiological pathway
3	Patrício Aguiar	Increase synthesis of collagen type I: an early event in Fabry cardiomyopathy. New biomarkers?
4	Amelia Ahern-Rindell	Characterization of a secondary deficiency of neuraminidase activity in a unique ovine model of GM1 gangliosidosis
5	Alia Ahmed	Neurocognitive and behavioral longitudinal trajectory of Hurler-Scheie patients with L238Q mutation
6	Rebecca Ahrens-Nicklas	Small molecule therapies for juvenile neuronal ceroid lipofuscinosis
8	Kyrieckos Aleck	Urinary glycosaminoglycan levels in a mucopolysaccharidosis type II pediatric population receiving idursulfase therapy: data from the Hunter Outcome Survey (HOS) for patients aged <18 months
9	Nadia Ali	Preliminary validation of telecounseling for depression in patients with Fabry disease
10	Carlos Almeciga-Dlaz	Human recombinant N-acetylgalactosamine-6-sulfate sulfatase (GALNS) produced in a glycoengineered Escherichia coli strain
11	Carlos Almeciga-Diaz	Understanding the metabolic consequences of human arylsulfatase A deficiency through a computational systems biology study
12	Carlos Almeciga-Diaz	Interaction between the human GALNS crystal structure and different ligands using computational molecular docking
13	Moeenaldeen AlSayed	High dose alglucosidase alfa to reverse ventilator dependence during clinical deterioration in a patient with Pompe disease
14	Moeenaldeen AlSayed	Response to high dose escalation therapy with sebelipase alfa in a patient with severe infantile lysosomal acid lipase deficiency (ILALD) and further insight into this disease
15	Nicole Anderson	Short-term longitudinal cognitive and neuroimaging studies of untreated fucosidosis

16	Marcio Andrade-Campos	Assessing underlying chronic inflammation status in Gaucher disease type 1
		patients (GD1): involvementof lipocaline (lcn2) and other monocyte
47	Vara Anstatt	cytokines
17	Kara Anstett	Incidental diagnosis of a 35 year old pregnant woman with presymptomatic Pompe disease by expanded carrier screening
18	Carolina Aranda	Hypersensitivity reactions to enzyme replacement therapy for lysosomal
		diseases in Brazil: outcomes and safety of 1140 rapid desensitizations
19	Christiane Auray-Blais	Diurnal variation of Fabry biomarkers during enzyme replacement therapy
22	Lauren Bailey	A newborn screening dilemma: when to treat Pompe disease with c32-
	L. C. B. H.	13T>G IVS splice site mutation
23	Laurie Bailey	Could it be something else? Patients with Gaucher disease, chronic pain, and
		fatigue found to also meet diagnostic criteria for another inherited
24	Suolon Pasgalunn	condition, Ehlers-Danlos syndrome, hypermobility type
24	Suelen Basgalupp	Relation between homocysteine and vitamin B12 levels in Brazilian patients with Gaucher disease
25	Brendan Beaton	The role of mesenchymal stem cells in the development of bone pathology
		and myeloma in Gaucher disease
26	David Bedwell	Identification of drugs to treat MPS I caused by nonsense mutations
27	Soraya Bekkali	Design and rational of the natural history study in preparation for the pivotal
		clinical trial for the treatment of Sanfilippo syndrome type A
28	Soumeya Bekri	Development, analytical validation and implementation of a next generation
		sequencing panel to assess lysosomal diseases
30	Bruno Bembi	Investigation on acute effects of ERT and influence of clinical severity on
		physiological variables related to exercise tolerance in late onset Pompe disease
32	Donna Bernstein	Rapidly progressive hepatosteatosis and liver failure five years after liver
-		transplantation in a patient with lysosomal acid lipase deficiency
34	Brian Bigger	Neurological correction of mucopolysaccharidosis IIIB mice by
		haematopoietic stem cell gene therapy
35	Tobias Boettcher	Biochemical and genetic data in a large, worldwide Fabry cohort
36	Constanza Bondar	Osteocytes contribute to bone pathology in Gaucher disease
37	Line Borgwardt	Improvement in pulmonary function and serum immunoglobulin G in long-
		term enzyme replacement therapy with velmanase alfa (human recombinant
		alpha-mannosidase) in alpha-mannosidosis patients
38	Line Borgwardt	Improvement in fine and gross motor proficiency after long-term enzyme
		replacement therapy with velmanase alfa (human recombinant alpha
		mannosidase) in alpha-mannosidosis patients
40	Araceli Borja-Borja	Ophthalmologic findings in Fabry disease patients: relation to disease
	Candan Brandt	severity and to enzyme replacement therapy in a Mexican family
41	Gordon Brandt	Messenger RNA (mRNA) delivery to the liver corrects ornithine
42	Heydy Bravo-Villalta	transcarbamylase deficiency in a mouse disease model Investigation of newborns screened in a pilot program for four lysosomal
42	Tieydy Bravo-villaita	diseases in Brazil
43	Joanna Brokowska	Sulfpraphane induces autophagy and reduces the level of mutated
		huntingtin in human fibroblasts
44	Alexander Broomfield	Rapid progressive leukodystrophy in early childhood: a new phenotype for
4-	Alovandor Droomfield	treated infantile onset Pompe patients?
45	Alexander Broomfield	Combined therapeutic approach to protein losing enteropathy complicating type 3 Gaucher disease using eliglustat
46	Alexander Broomfield	A single center's 10-year experience of idursulfase in MPS II
47	Barbara Burton	Long-term benefit of sebelipase alfa over 76 weeks in children and adults
7/	20.00.00	with lysosomal acid lipase deficiency (LAL-D) (ARISE)

49	Gustavo Cabrera	Long term enzyme replacement therapy for Fabry disease: effectiveness on heart, kidney and brain
50	Stephanie Cagle	A case report of a Hispanic male with mucolipidosis III gamma with mild disease in the presence of a homozygous nonsense mutation
51	Carolina Cardona	Iduronate-2-sulfatase proteome isolation from mouse brain and identification of changes in the proteomic profiling in murine model for Hunter syndrome
52	Fu-Pang Chang	Accumulation of globotriaosylceramide (GL3) in cardiomyocytes (CM) is progressive with age and inversely correlates with baseline alpha galactosidase A (AGALA) activity in enzyme replacement therapy (ERT)-naïve Fabry patients with IVS4 + 919G>A mutation
53	Parapoj Changsila	Mechanism and efficiency of delivery of therapeutic enzymes in different cell models of Fabry disease
55	Anu Cherukuri	Immunogenicity to cerliponase alfa, an enzyme replacement therapy for patients with CLN2 disease: results from a phase 1/2 study
56	Yin-Hsiu Chien	Risk assessments in infants suspect having later-onset Pompe disease identified through newborn screening
59	Don Clarke	Development of a stem cell gene therapy for Sanfilippo syndrome type B
60	Jonathan Cooper	The glial contribution to pathogenesis differs between forms of Batten disease: implications for therapy
61	Jason Cournoyer	Six-plex MS/MS method to measure I2S, NAGLU, GALNS, ARSB, GUSB and TPP1 enzyme activities in dried blood spots
62	Timothy Cox	Maintenance of quality of life in adults with Gaucher disease type 1 previously stabilized on enzyme therapy who were switched to oral eliglustat: 4 year results of the ENCORE trial
63	Claudia Cozma	C26-ceramide is a new and sensitive biomarker for Farber disease
64	Claudia Cozma	Lyso-SM-509 is an easy-measurable and sensitive biomarker for Niemann-Pick disease: a two year study
65	Marco Curiati	The impact of the disease burden on the quality of life of patients with lysosomal diseases: preliminary data of adult patients under enzyme replacement therapy
66	Amauri Dalla-Corte	An algorithm to assess the need for CSF shunting in mucopolysaccharidosis patients
69	Talita de Carvalho	CRISPR/Cas9-directed genome editing of human MPS I fibroblasts
70	Patrick Deegan	Treatment patterns from 647 patients with Gaucher disease: an analysis from the Gaucher Outcome Survey
71	Russell DeKelver	ZFN-mediated in vivo genome editing results in phenotypic correction in murine MPS I and MPS II models
72	Dolores del Pino	PReFiNe project: strategic plan to improve knowledge & recognition of Fabry disease among Spanish nephrologists
73	Robert Desnick	The Fabry Disease genotype-phenotype database (dbFGP): an international expert consortium
74	Hung Do	Stabilized next-generation recombinant human acid alpha-glucosidase ATB200 clears accumulated glycogen and reverses cellular dysfunction to increase functional muscle strength in a mouse model of Pompe disease
75	Dana Doheny	Fabry disease: prevalence of affected males and heterozygotes with pathogenic GLA mutations identified by screening renal, cardiac, and stroke clinics
76	Aimee Donald	A retrospective review of the neurocognitive profile of patients with neuronopathic Gaucher disease in the UK: data from the GAUCHERITE study
77	Danielle Dong	Evolving observational registries: an evidence based approach to understanding data availability in the "Sanofi Genzyme Rare Disease Registries"

78	Halil Dündar	In vitro translational readthrough by gentamicin and geneticin improves GLA activity in Fabry disease
79	Berendine Ebbink	Neuropsychological profile of long-term treated patients with classic infantile Pompe disease
80	N. Matthew Ellinwood	Preliminary findings of a twenty-six week or longer intracerebroventricular infusion study of BMN 250 administered once every 2 weeks in a canine model of mucopolysaccharidosis type IIIB
82	Deborah Elstein	Medical histories in Gaucher disease: a descriptive analysis from 852 patients in the Gaucher Outcome Survey (GOS)
83	Andressa Federhen	Sanfilippo disease type B: a review of patients diagnosed by the MPS Brazil Network
84	Ulla Feldt-Rasmussen	Efficacy and safety of migalastat, an oral pharmacologic chaperone for Fabry disease: results from two randomized phase 3 studies, FACETS and ATTRACT
85	Can Ficicioglu	Intrafamilial variability in the clinical presentation of mucopolysaccharidosis type II: data from the Hunter Outcome Survey (HOS)
86	Veronica Finn	Cardiovascular mortality and potential predictors in patients with Fabry disease treated with agalsidase alfa
87	Michael Flanagan	Echocardiographic assessment of Morquio syndrome type A mice
88	Michael Flanagan	Impact of miglustat therapy on the hypophosphatasia mouse model
90	Joaquin Frabasil	Improving the detection of heterozygous females for Fabry disease
91	Mark Friedman	Effect of sebelipase alfa on survival to 3 years of age and liver function in infants with rapidly progressive lysosomal acid lipase deficiency
92	Andrea Frustaci	Immune mediated myocarditis in Fabry disease cardiomyopathy
93	Haiyan Fu	Global metabolomics profiling reveals profound metabolic impairments in patients with mucopolysaccharidosis III
95	Katie Gallagher	Fabry disease symptoms confined to the kidney in a large family with the M296V genotype
96	Jaya Ganesh	Late-onset Pompe disease with atypical presentation - what else is going on?
97	Jose Garcia Fernandez	Fluorinated chaperone-β-cyclodextrin formulations for neuronopathic Gaucher disease
98	Roselyne Garnotel	In vivo Raman micro-spectroscopy: a new way to screen Fabry disease
99	Michael Gelb	Newborn screening and post-screening diagnosis of lysosomal diseases
100	Dominique Germain	A Fabry genotype-phenotype working group initiative: classifying GLA mutations for male patients in the Fabry Registry
101	Dominique Germain	The phenotypic characteristics of the p.N215S Fabry disease genotype in male and female patients: a multi-center Fabry Registry study
102	Dominique Germain	Efficacy of migalastat in a cohort of male patients with the classic Fabry phenotype in the FACETS phase 3 study
103	Dominique Germain	Effects of treatment with migalastat on the combined endpoint of kidney globotriaosylcermide accumulation and diarrhea in patients with Fabry disease: results from the phase 3 FACETS study
104	Arunabha Ghosh	Plasma oxysterols as a putative biomarker for infantile onset lysosomal acid lipase deficiency (Wolman disease)
105	Arunabha Ghosh	Haematopoietic stem cell transplantation alongside enzyme replacement therapy in infantile onset lysosomal acid lipase deficiency (LAL-D, Wolman disease)
106	Vicente Giner-Galvañ	Home enzymatic therapy administration for Gaucher disease in Spain: first national experience
107	Vicente Giner-Galvañ	Proposal of a tool for the asessement of quality of Gaucher disease clinical management
108	Vicente Giner-Galvañ	Home enzymatic therapy administration program for lysosomal diseases in Spain: first national experience

109	Vicente Giner-Galvañ	Qualitative evaluation of home therapy administration of enzymatic
		treatment for patients with Gaucher and Fabry disease in the Comunitat
		Valenciana in Spain: point of view of patients and health care professionals
110	Vicente Giner-Galvañ	Home enzymatic infusion program for Gaucher and Fabry diseases: economic impact evaluation of the experience in the Comunitat Valenciana in Spain
111	Pilar Giraldo	Is there an increased incidence of neoplasia in Spanish Gaucher disease patients?
113	Roberto Giugliani	Long-term galsulfase treatment associated with improved survival of patients with mucopolysaccharidosis VI (Maroteaux-Lamy syndrome): 15 year follow-up from the survey study
114	Roberto Giugliani	Clinical outcomes after 3 years of idursulfase treatment in patients with MPS II: data from the Hunter Outcome Survey (HOS)
115	Hélène Gleitz	Whole body correction of severe mucopolysaccharidosis type II by lentiviral-mediated stem cell gene therapy with blood-brain barrier-crossing peptides
116	Esteban Gonzalez	Losartan improves cardiovascular disease in mucopolysaccharidosis type I
118	Alexandra Gossler	Natural history of siblings with mucopolysaccharidosis type IIIA - Sanfilippo syndrome type A
120	Richard Grey	Looking for diamonds in the rough: identifying differentially expressed modifier genes in mouse models for type 2 Gaucher disease
121	Karen Grinzaid	Impact of education and the facilitation of carrier screening in a population at increased risk for lysosomal diseases
122	Nicolas Guérard	Lucerastat, an iminosugar for substrate reduction therapy: pharmacokinetics, tolerability, and safety in subjects with mild, moderate, and severe renal function impairment
123	Nicolas Guérard	Lucerastat, an iminosugar for substrate reduction therapy: safety, tolerability, pharmacodynamics, and pharmacokinetics in adult subjects with Fabry disease
124	Nathalie Guffon	MPS I and carpal tunnel syndrome: analysis using the MPS I Registry
125	Punita Gupta	Early initiation of prophylactic immune tolerance induction and enzyme replacement therapy in prenatally diagnosed infantile onset Pompe disease with a CRIM-negative mutation
126	Punita Gupta	Infantile Tay-Sachs disease: a case report
127	Christine Ha	Outside the fiber: interstitial pathology of skeletal muscle in infantile Pompe disease
128	Aleksandra Hac	Functions of lysosomes are impaired during prolonged stress conditions in cells devoid of S6K1/2
130	Alaa Hamed	A conceptual framework of patient-reported outcomes for Gaucher disease type 3
131	Alaa Hamed	PRO instrument development for late-onset Pompe disease
132	Alaa Hamed	Modeling of changes in forced vital capacity and late-onset Pompe disease related outcomes
133	Sang-oh Han	Beneficial effects of carvedilol with enzyme replacement therapy in Pompe disease
134	Paul Harmatz	Characteristics of patients with mucopolysaccharidosis type II (MPS II) diagnosed aged <5 years: data from the Hunter Outcome Survey (HOS)
135	Paul Harmatz	A novel, randomized, placebo-controlled, blind-start, single-crossover phase 3 study to assess the efficacy and safety of UX003 (rhGUS) enzyme replacement therapy in patients with MPS VII
137	Coy Heldermon	Dietary effects on glycosaminoglycan storage in MPS IIIB
138	Nadene Henderson	The Pennsylvania newborn screening experience for Pompe disease
139	Chris Hendriksz	Identification of relevant clinical niches in rare inherited metabolic diseases: Niemann-Pick disease type C as a model

140	Christian Hendriksz	Elosulfase alfa treatment and changes in physical functioning and disability in Morquio syndrome type A
141	Julia Hennermann	Arterial tortuosity is a new clinical feature in patients with mucopolysaccharidosis type IVA
142	Robert Hopkin	Burden of Fabry disease in young patients (≤30 years of age) who were initiated on enzyme replacement therapy with agalsidase beta: a Fabry Registry analysis
145	Mohammad Hossain	The severity of phenotype for a heterozygous Fabry female patient correlates to the methylation of non-mutated allele
146	Audrey Hou	Two-year postmarketing safety experience with oral eliglustat in adults with Gaucher disease type 1
147	Jeffrey Huang	Generation of infantile- and late-onset Pompe disease models using CRISPR-Cas9 genome editing
148	Derralynn Hughes	Sub-analysis of long-term elosulfase alfa treatment outcomes in adults with Morquio syndrome type A
149	Derralynn Hughes	One-year follow up of Fabry disease patients treated by IV administration of a plant derived alpha-Gal-A enzyme: safety and efficacy
150	Derralynn Hughes	Response of patients with Fabry disease with the amenable GLA mutation p.N215S to treatment with migalastat
151	Marshall Huston	Liver-based expression of the human alpha-galactosidase A gene (GLA) in a murine Fabry model results in continuous supra-physiological enzyme activity and effective substrate reduction
152	Kohji Itoh	A transgenic silkworm overexpressing human lysosomal enzyme as a novel resource for producing recombinant glycobiologics and its application to development of enzyme replacement therapy for lysosomal diseases
153	Margarita Ivanova	Personalized medicine strategies in lysosomal diseases: cell models for in vitro screening in Gaucher disease
154	Marlene Jacobson	Patient derived phenotypic high throughput assay to discover treatments for Tay-Sachs disease
155	Era Jain	Injectable microgels development for sustained GALNS enzyme replacement therapy for Morquio syndrome type A
156	James Jarrett	The patient experience of elosulfase alfa treatment for MPS IVA (Morquio syndrome type A): beyond traditional measures
157	Prakrit Jena	Optical non-invasive detection of Niemann-Pick disease in vitro and in vivo
158	Rui-Ru Ji	Novel NAGLU variants associated with MPS IIIB and in vitro analysis of residual enzymatic activities
159	Franklin Johnson	Migalastat exposures in Japanese healthy volunteers and non-Japanese subjects provide evidence that they are similar to Japanese patients with Fabry disease
161	Olive Jung	Novel molecular tools to advance the evaluation of Gaucher disease therapeutics in live cells
162	Chanchala Kaddi	Quantitative systems pharmacology model of acid sphingomyelinase deficiency and the enzyme replacement therapy olipudase alfa is an innovative tool for linking pathophysiology and pharmacology
163	Ayfer Kahraman	The effects of sub-maximal aerobic exercise in adults with late-onset Pompe disease (LOPD)
164	Shih-hsin Kan	AAAV5-mediated gene therapy with choroid plexus-directed α-n-acetyl- glucosaminidase expression in Sanfilippo syndrome type B mice
165	Ilkka Kantola	PQ-interval and QRS duration increased in Fabry patients treated by enzyme replacement therapy for 12 years
166	Reena Kartha	Role of oxidative stress and inflammation in type 1 Gaucher disease (GD1): Potential use of antioxidant/anti-inflammatory medications
167	Yoo-Mi Kim	Successful treatment with eliglustat in unexpected gastrointestinal involvement in a patient with type 1 Gaucher disease

168	Kelly King	Age and social functioning in individuals with MPS I, II, and VI
170	Priya Kishnani	Sequence variants and genotypes among 898 patients with Pompe disease: data from the Pompe Registry
171	Anja Koehn	Clinical course in a MPS IIIA patient following hematopoietic stem cell transplantation: an eight-year follow up and comparison with the natural history in patients with identical mutations in the SGSH-gene
172	Tiago Koppe	Gaucher disease patients show increased levels of hepcidin - evidence for iron-mediated injury
173	Konstantinos Koulousios	Screening of the Greek population for Fabry disease via pedigree analysis
174	Francyne Kubaski	Glycosaminoglycan levels in dried blood spots of patients with mucopolyasccharidoses and mucolipidoses
175	Francyne Kubaski	Hematopoietic stem cell transplantation for patients with mucopolysaccharidosis type II
176	Francyne Kubaski	LC/MS/MS measurement of glycosaminoglycans in amniotic fluid of a MPS VII fetus
177	Francyne Kubaski	Newborn screening for mucopolysaccharidoses: a pilot study of measurement of glycosaminoglycans by tandem mass spectrometry
178	Gé-Ann Kuiper	Incomplete biomarker response in mucopolysaccharidosis type I after successful hematopoietic cell transplantation
179	Thomas Kukar	Lysosomal production of granulins: implications for the pathogenesis of neuronal ceroid lipofuscinosis and frontotemporal dementia
180	Ludmila Kuzenkova	Subdural hematomas in a boy with mucopolysaccharidosis type IIIB
181	Heechun Kwak	MPS II model cell line by CRISPR-Cas9 technique
182	Florian Lagler	Interprofessional simulation training for emergencies in mucopolysaccharidoses
183	Dawn Laney	Sudden, pronounced height increase for adolescent and young adult males with Fabry disease
184	Heather Lau	Reported outcomes of 453 pregnancies in patients with Gaucher disease: an analysis from the Gaucher Outcome Survey
185	Heather Lau	Profile of patients with mucopolysaccharidosis type II without cognitive impairment who started idursulfase treatment aged >20 years: data on late treatment initiation from the Hunter Outcome Survey (HOS)
186	Lucia Lavalle	Heterogeneity in Fabry disease
187	Steven Le	Corpus callosum white matter myelination by neuroimaging and myelin composition analysis in murine mucopolysaccharidosis type I
188	Malte Lenders	Immunosuppressive effect on ERT inhibition in transplanted patients with Fabry disease
189	Malte Lenders	Renal function at ERT-naïve baseline predicts long-term outcome in Fabry disease
190	Malte Lenders	Treatment and clinical survey of females with Fabry disease in Germany
191	Valerie Lew	Fibrointimal thickening, elastin fragmentation and activated macrophages observed in coronary vasculature of a human mucopolysaccharidosis type VII patient
192	Sarah Lewis	Neurocognitive profiles of untreated Hunter syndrome
195	Renuka Limgala	Alterations in alpha-synuclein and parkin expression within PBMCs in patients and carriers of Gaucher disease with Parkinsonism
196	Renuka Limgala	Role of dendritic cells and NK cells in immune hypersensitivity reactions in patients with Fabry disease
197	Renuka Limgala	Effect of two different therapeutic interventions: SRT in comparison to ERT on immune aspects and bone involvement in Gaucher disease
198	Gloria Lin	Diffusion of intrathecally injected AAV9 in canine MPS VII: a peripheral nerve study

199	Ales Linhart	Prompt agalsidase alfa therapy initiation after symptom onset is associated with improved renal and cardiovascular outcomes in the Fabry Outcome Survey
201	Valynne Long	Identification of lysosomal acid lipase (LAL) deficiency patients using key existing clinical data points focused on BMI, type 2 hyperlipidemia, and/or fatty liver disease
202	Laura López de Frutos	Comparison between several splicing bioinformatic predictors
203	Laura López de Frutos	A clinical case with a new damaging variant associated to Niemann-Pick disease type C
204	Jan Lukas	Ambroxol and bromhexine derivatives as pharmacological chaperones for mutant glucocerebrosidase
205	Su Han Lum	Long term survival and cardiopulmonary outcome in children with Hurler syndrome after haematopoietic stem cell transplantation in Manchester
206	Su Han Lum	A 20-year review of the changing pattern of graft failure in cord blood transplant for Hurler syndrome
207	Yi Lun	A novel recombinant human acid alpha-glucosidase, ATB200, leads to greater substrate reduction and improvement in Pompe disease-relevant markers compared to alglucosidase alfa in Gaa KO mice
208	Allen Lund	Long-term enzyme replacement therapy with velmanase alfa (human recombinant alpha-mannosidase) improves mobility in alpha-mannosidosis patients

Wednesday, February 15 – Poster Presentations

Poster #	First Author	Abstract Title
210	Bernardus Machielse	VTS-270 for the treatment of Niemann-Pick type C disease
211	Christoffer Madsen	Fabry disease: renal function during long-term enzyme replacement therapy evaluated by gold standard GFR 51Cr-EDTA clearance
213	Elina Makino	Discovery of novel endogenous biomarkers in MPS I
215	Samantha Marcellus	Detection of three families with GLA p.A143T mutation and low α-galactosidase levels by newborn screening for Fabry disease
216	Reid Martin	Receptor-independent mechanisms of RTB lectin-mediated ERT delivery provide unique advantages in enzyme uptake capacity, transcytosis, and lysosomal correction
217	Ana Maria Martins	Natural history data from 182 female patients with Fabry disease in Latin America: A Fabry Registry analysis of disease burden
219	Ryuichi Mashima	Enzyme activities of six lysosomal diseases in a Japanese neonatal population
220	Maria Mattera	Validation of the shortened "Hunter Syndrome-Functional Outcomes for Clinical Understanding Scale" (HS-FOCUS) questionnaire
222	Casey McKenna	Expansion of the N215S phenotype in Fabry disease: a report of a large family with multi-organ symptoms in young adulthood
223	Benjamin McMahon	Impaired phagosome maturation in Gaucher macrophages provides a new target for therapeutic intervention target
224	Blanca Medrano Engay	Health outcomes research study on patients with type 1 Gaucher disease under substrate reduction therapy (SRT)
225	Julio Medrano-Montes de Oca	Pregnancy in a Fabry patient on enzyme replacement therapy - a case report
226	Atul Mehta	A global Delphi consensus initiative to facilitate early diagnosis of Gaucher disease type 1 and type 3: what are the phenotypic commonalities?
227	Olga Meijer	Processing and trafficking of N-acetyl-α-glucosaminidase in fibroblasts of patients with mucopolysaccharidosis type IIIB
228	Estrella Lizbeth Mellin Sanchez	Successful bone marrow transplantation treatment for a 10-year-old patient with late onset Krabbe disease

229	Roman Melnyk	A novel platform to deliver lysosomal enzymes
230	Jaromir Mikl	Health care resource utilization by patients with Hunter syndrome in the UK
		hospital episode statistics (HES) database
231	Jaromir Mikl	The challenge of using Hospital Episode Statistics (HES) to identify a Hunter
		syndrome cohort in the UK
232	James Miller	The early stages of Fabry disease in an α -galactosidase A-deficient rat model
233	Weston Miller	Post-transplant intravenous laronidase augmentation for Hurler syndrome:
		anti-drug antibody, biochemical and donor hematopoietic graft response
234	Pramod Mistry	Long-term results of ENGAGE: a phase 3, randomized, double-blind, placebo- controlled, multi-center study investigating the efficacy and safety of eliglustat in adults with Gaucher disease type 1
235	Takashi Miyajima	Lysosomal acid lipase deficiency high-risk screening of patients with fatty liver and dyslipidemia using DBS in Japan
236	Derek Moen	Scale-up processing of recombinant human glucosamine (n-acetyl)-6-sulfatase for the treatment of mucopolysaccharidosis type IIID
237	Lina Moreno	Pathogenic mutation at IDS gene on a newborn girl with clinical symptoms of Hunter syndrome (MPS II)
238	Lina Moreno	Short term impact from enzyme replacement therapy on patients with attenuated Hunter syndrome (MPS II) showing complex heart disease
239	Nina Movsesyan	Intravenous and intrathecal treatment with HP-β-CD reduced disease
		biomarkers in a patient with Niemann-Pick disease type C1
240	Joseph Muenzer	A long-term extension study evaluating intrathecal idursulfase-IT in children
	No. 12 co. N.A. co. co.	with Hunter syndrome and cognitive impairment
241	Neslihan Mungan	Successful cardiovascular surgery experience and enzyme replacement therapy in type 3C Gaucher disease
242	Behzad Najafian	Podocyte globotriaosylceramide (GL-3) content strongly impacts age-
243	Denzaa Najanan	dependent podocyte loss in ERT-naïve male Fabry patients
244	Kimitoshi Nakamura	High-risk screening trial of Gaucher disease for patients with neurological
		symptoms
245	Leyla Namazova-	14 novel mutations of GLA gene as a result of selective Fabry disease
	Baranova	screening in Russian Federation
246	Juana Navarrete	Multiple lysosomal diseases - newborn screening in a Mexican cohort of patients
247	Igor Nestrasil	White matter alterations in mucopolysaccharidosis type I assessed by automated DTI analysis
248	Stephanie Newman	Defective macrophage phagocytosis and particle clearance in Niemann-Pick disease type C1 mice
249	Kim Nickander	Oligosacchariduria profiles by MALDI-TOF mass spectrometry and post-
		analytical interpretation using multivariate pattern recognition software
250	Stephanie Nijmeijer	Phenotypic severity in MPS IIIA strongly correlates with increase in residual SGSH activity in skin fibroblasts cultured at 30 ^o C
251	Dau-Ming Niu	Reevaluate current routine histopathologic examinations for Fabry disease- not sensitive enough to identify early globotriaosylceramide accumulation in cardiomyocytes
253	Albina Nowak	Plasma lyso-Gb3: a useful biomarker for the diagnosis and treatment of Fabry disease heterozygotes
256	Burcu Öztürk Hişmi	Investigation of total oxidant status, antioxidant status and thiol/disulphide homeostasis in mucopolysaccharidosis type III patients
258	Samantha Parker	From testimonials to qualitative research embedded in an MPS IIIA observational study
259	Livia Paskulin	Taliglucerase alfa and type 1 Gaucher disease: a south Brazilian experience
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260	Gabriela Pasqualim	MicroRNA and gene expression studies provide novel information to

261	Maria Pedrose	What would be the real prevalence & etiopathogeny of chronic liver diseases in patients with type 1 Gaucher disease?
262	Jordi Pérez-López	Clinical characteristics of patients with lysosomal diseases in a Spanish cohort of patients of 499 adult patients with inborn errors of metabolism from university hospitals
264	Karolina Pierzynowska	Stimulation of autophagy by genistein reduces levels of mutant huntingtin in cellular models of Huntington disease
266	Lynda Polgreen	Pilot study of the effect of adalimumab on pain, physical function, and musculoskeletal disease in mucopolysaccharidosis types I and II
267	Juan Politei	Chronic intestinal pseudo-obstruction: consider Fabry disease?
268	Juan Politei	Is joint pain a criteria for ERT indication in adult patients with MPS IVA and VI, even without significant visceral involvement?
269	Juan Politei	Dose-dependent response in Fabry treatment: decrement in plasma lyso-GI3 after switching from alfa to beta
270	Laura Pollard	Novel UPLC-MS/MS oligosaccharide analysis for the diagnosis and monitoring of patients with glycoproteinoses
271	Fabiano Poswar	Aortic root dilatation in patients with mucopolysaccharidoses and the effect of enzyme replacement therapy
272	Anna Potier	Long-term stability of I2S, NAGLU, GALNS, ARSB, GUSB and TPP1 enzymes in frozen dried blood spots
273	Brianna Pruniski	Impact of newborn screening on families in the case of Pompe disease
274	Michael Przybilla	Quantification of ganglioside in brain tissue in the murine model of Hurler syndrome
276	Yana Puckett	Epidemiology of mucopolysaccharidoses (MPS) in the United States: challenges and opportunities
277	Ana Cristina Puga	Olipudase alfa for the treatment of acid sphingomyelinase deficiency (ASMD): safety and efficacy in adults treated for 30 months
279	Cathy Qin	Genotype/phenotype relationships in Fabry disease: developing an online interactive web-based data collection system
281	Uma Ramaswami	A randomized, phase 3B, open-label, parallel-group study of agalsidase beta in treatment-naive male pediatric patients with Fabry disease without severe symptoms (FIELD study): GL-3 clearance from superficial skin capillary endothelium
282	Uma Ramaswami	Non-neuronopathic Gaucher disease: a retrospective review comparing therapeutic outcomes of 2-week and 4-week enzyme replacement therapy
283	Uma Ramaswami	A randomized, phase 3B, open-label, parallel-group study of agalsidase beta in treatment-naive male pediatric patients with Fabry disease without severe symptoms (FIELD study): GL-3 clearance from kidney cells
284	Vanessa Rangel Miller	ConnectMPS: the global patient insights network for MPS, ML and related disorders
285	John Reynders	Novel LIPA mutations resulting in lysosomal acid lipase deficiency
286	Ross Ridsdale	Newborn screening (NBS) for metachromatic leukodystrophy (MLD): results from a study of 100,000 deidentified NBS samples
287	Charlotte Roberts	Multi-stakeholder engagement leading to access to treatment for MPS IVA (Morquio syndrome type A) - a model for the ultra rare disease community
289	Alexander Rodríguez- López	Cell uptake evaluation of human recombinant N-acetylgalactosamine-6-sulfate sulfatase (GALNS) produced in Pichia pastoris
290	Arndt Rolfs	Glucosylsphingosine concentration in the blood of Gaucher patients reflects the severity of GBA mutations
291	Tamanna Roshan Lal	Type 2 Gaucher disease - Where do we go from here?
292	Alejandra Rozenberg	Early intrathecal gene therapy extends lifespan and improves quality of life in a mouse model for infantile neuronal ceroid lipofuscinosis
293	Frank Rutsch	Expression of the lysosomal membrane protein LMBD1 is essential for the initiation of gastrulation

296	Valentina Sanghez	Characterization on the cellular distribution of enzyme replacement therapy
230	0	(ERT) under the influence of humoral immune response in MPS I mouse
		model
298	Andrea Schenone	Performance evaluation of alpha iduronidase assay in dried blood spots for
		the diagnosis of mucopolysaccharidosis type I
299	Raphael Schiffmann	Migalastat improves diarrhea in patients with Fabry disease: results from the
		FACETS double-blind, placebo-controlled phase 3 study
300	Raphael Schiffmann	Is Fabry disease frequently undiagnosed in patients with common heart
		disease?
303	Ida Vanessa Schwartz	Characteristics of 27 patients with type 3 Gaucher disease: a descriptive
		analysis from the Gaucher Outcome Survey
304	Susanne Seemann	Pharmacological intervention of ERAD partially restores the activity of
		mutant α-galactosidase A in Fabry disease
305	Caroline Sevin	Intrathecal delivery of recombinant human arylsulfatase A in children with
		late-infantile metachromatic leukodystrophy: an update following extended
		treatment
308	Adam Shaywitz	Design and rationale of ongoing observational and treatment studies for
		BMN 250: a novel enzyme replacement therapy for Sanfilippo syndrome
		type B
309	Rania Sheikh	Unrecognized immune thrombocytopenia in patients with Gaucher disease
		on long term therapy
310	Jin-Song Shen	Tetrahydrobiopterin deficiency in the pathogenesis of Fabry disease
311	Morgan Simmons	ThinkGenetic: identification of misinformation and educational gaps using an
		innovative and interactive website
312	Calogera Simonaro	Evaluation of pentosan polysulfate in mucopolysaccharidosis type IIIA mice
313	Cynthia Smith	Improvement of Fabry disease pain with calcium gluconate infusions given at
313	,	time of agalsidase beta therapy
314	Elizabeth Smith	Please proceed with caution: a case series of the perils and pitfall of making
J		a Fabry diagnosis
316	Alexander Solyom	Farber disease (acid ceramidase deficiency) epidemiology: literature review
0_0		and patient cohort data indicate moderate and attenuated phenotypes are
		likely underrepresented in the medical literature and are underdiagnosed
317	Alexander Solyom	Farber disease: design of the first observational and cross-sectional cohort
		study capturing retrospective and prospective data on the natural history
		and phenotypic spectrum of patients, including novel methodologies for
		assessment of disease-specific symptoms
319	Hiroyuki Sonoda	Correction of central nervous system deficits in the mouse model of Hunter
		syndrome by recombinant iduronate 2-sulfatase crossing the blood-brain
		barrier
320	Russell Soon Jr.	Development of an electrochemiluminescent assay to measure LAMP2 in
		canine cerebrospinal fluid samples
321	Eser Sozmen	False positive diagnosis of lysosomal disease with dried blood spot (DBS)
	0.14	sample; leukocyte number as a challenging factor
323	S. Kaye Spratt	Comparison of systemic routes of administration for CLN3 delivery via
	Manaline Charl	scAAV9
324	Karolina Stepien	A review of serum lipid profile in patients with mucopolysaccharidoses
325	Alta Steward	Sibling pairs with Gaucher disease discordant for Parkinsonism
326	David Stockton	Impact of earlier treatment on respiratory function in patients with late-
		onset Pompe disease: data from the Pompe Registry
327	Dean Suhr	Measuring sulfatide in blood enables newborn screening for metachromatic
		leukodystrophy (MLD)
328	Esteban Symonds	Fabry disease in adult dialysis patients in a community hospital

330	Mireille Tallandier	In vitro and in vivo activity of IVA336, a potential substrate reduction therapy, in mucopolysaccharidosis models
331	Daisy Tapia	Variable clinical features in patients with Fabry disease
334	Abdellah Tebani	Implementation of an untargeted liquid chromatography ion mobility-mass spectrometry-based metabolomics method for inherited metabolic diseases investigation
336	Beth Thurberg	Autopsy pathology of infantile neurovisceral ASMD (Niemann-Pick disease type A): clinicopathologic correlations of a case report and review of the literature
337	Shunji Tomatsu	Activities of daily living for patients with Morquio syndrome type A
338	Shunji Tomatsu	Etiology of mucopolysaccharidoses
339	Takahiro Tsukimura	From diagnosis to follow-up of Fabry patients receiving enzyme replacement therapy in Japan
340	Anirudh Ullal	Flexible digital microfluidic platform to multiplex various combinations of enzymatic assays for newborn screening of Pompe, mucopolysaccharidosis types I and II, biotinidase deficiency and galactosemia disorders
341	Jeanine Utz	Infantile gangliosidoses: candidate outcome measures for future treatment trials
342	Filippo Vairo	The prevalence of lysosome-related diseases in a cohort of undiagnosed patients
343	Dora Vallejo Ardila	Regulatory units reconstruction approach identifies candidates for genetic risk of associated HCC in Gaucher disease
344	Ans van der Ploeg	Long-term efficacy of alglucosidase alfa in late-onset Pompe disease
345	Patricia Varela	Presence of the mutation c.1-769G>C in the promoter region of the GLA gene could be responsible for the α -galactosidase-A deficiency in Fabry patients
347	Corey Vural	A novel α-galactosidase A mutation in Fabry disease
348	Michael Wajnrajch	Occurrence of adverse bone events in adults and children with Gaucher disease treated with taliglucerase alfa
349	Stephen Waldek	New and improved therapy for cystinosis
350	Vanessa Wall	Carotid intima-media thickness and arterial stiffness are altered in patients with mucopolysaccharidosis type IVA
351	Susanne Walls	Improving home infusion follow-up
352	Hua Wang	Diagnosis, management and follow up of mucopolysaccharidosis: a five year review from a single mid-level institute
353	Ping Wang	Different ARSB variants causing mucopolysaccharidosis type VI in dogs
354	Ping Wang	Canine GM2-gangliosidosis (Sandhoff disease) caused by a 3 base pair deletion in the HEXB gene
355	David Warnock	PRX-102 for treating Fabry disease - immunogenicity and PK results from a phase 1-2 study
357	Melissa Wasserstein	Consensus recommendation on a diagnostic guideline for acid sphingomyelinase deficiency
359	Neal Weinreb	Transformation in pre-treatment presentations of Gaucher disease during the first two decades of imiglucerase enzyme replacement therapy: a report from the International Collaborative Gaucher Group Gaucher Registry
360	Richard Welford	Lucerastat, an iminosugar for substrate reduction therapy in Fabry disease: preclinical evidence
362	Kristen Wigby	Diagnosis of alpha mannosidosis after incidental finding of foamy cells on surgical specimen
363	Gisela Wilcox	Conventional measures of body composition may be less predictive in adult mucopolysaccharidoses patients - a small case series
364	Adina Wise	Parkinson's disease penetrance in obligate carriers of SMPD1 mutations

365	JIII Wood	How our approach for Sanfilippo syndrome could be a prototype for industrializing rare disease drug discovery and development
366	Michelle Wood	Guided growth surgery for genu valgum in mucopolysaccharidosis type VI
367	Michelle Wood	Assessment of functional mobility post haematopoietic cell transplant (HCT)
307		in mucopolysaccharidosis type I using validated measures
368	Michelle Wood	Adjuvant oral salbutamol in treatment of juvenile Pompe disease: novel
260	Kara Madaar	outcome assessment tool and initial report one-year efficacy in single case.
369	Kara Woolgar	Premedication and dose regimen for Gaucher type 1 patient with severe ERT intolerance
370	Amy Yang	Clinical characterization of variants of uncertain significance discovered
		through newborn screening for Pompe disease at one referral center
371	Shoji Yano	Detection of early end-organ damage by endothelial dysfunction with
		reactive hyperemia-digital peripheral arterial tonometry in patients with Fabry disease
372	Kwangchae Yoon	Identifying unmet needs for patients with Fabry disease through
3/2	Kwangenae 10011	motivational interviewing
373	Elena Zaklyazminskaya	Prevalence of lysosomal diseases in the group of cardiac hypertrophy
	,	patients requiring cardiac surgery
375	Ari Zimran	Taliglucerase alfa: safety and efficacy across 6 clinical studies in children and
		adults with Gaucher disease
376	Ari Zimran	Pharmacokinetics, safety, and efficacy of rapid infusions of velaglucerase alfa
277	Karim Zuberi	in adult patients with Gaucher disease Cervical spine surgery in MPS IVA: a single center experience
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LB-01	Walla Al-Hertani	Effect of ambroxol chaperone therapy on lyso-Gb1 levels in two Canadian patients with type 3 Gaucher disease
LB-02	Jeff An	Messenger RNA therapy for MUT methylmalonic acidemia (MMA):
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LB-03	Erika Augustine	Short-term administration of mycophenolate mofetil is well-tolerated in
		juvenile neuronal ceroid lipofuscinosis (CLN3) disease
LB-04	Edgar Barajas	Kidney injury in a family with Fabry disease due to mutation c.352c ≥
	Elizabath Dagonilia	t(p.arg118cys)
LB-05	Elizabeth Braunlin	Cardiovascular risk in severe mucopolysaccharidosis type I after hematopoietic cell transplantation
LB-07	Selda Bulbul	Relationship between risk perception and treatment compliance
LB-06	Selda Bulbul	Identification of mutations in Turkish patients with Fabry disease
LB-08	Sharon Byers	Hepatic IGF1 production but not growth plate IGF1 production is altered in
		MPS VII mice in response to growth hormone stimulation
LB-09	Lisa Chalmers	The Australian ATYOURSIDE patient support experience
LB-10	Anthony Conway	In vivo genome editing via non-viral delivery of zinc finger nucleases results in supra-physiological levels of human iduronate 2-sulfatase in adult mice
LB-11	Glyn Dawson	Quantum dot delivery of enzyme for Batten disease therapy
LB-12	Maria de Castro Lopez	Preliminary safety and pharmacodynamic response data from a phase 1/2
LD-12	Widila de castro Espez	study of ICV BMN 250, a novel enzyme replacement therapy for the
		treatment of Sanfilippo syndrome type B (MPS IIIB)
LB-13	Mireia del Toro	Unfarovable evolution of intracranial hypertension in pediatric patients with cystinosis
LB-14	Derrick Deming	Structural basis for the rational design of pharmacological chaperones for
LD-14	Derrick Derring	Pompe disease
LB-15	Shivakumar Devaiah	The RTB-lectin delivery module provides broad in vivo biodistribution and
		correction in multiple lysosomal disease mouse models
LB-16	Jordi Díaz-Manera	Quantitative muscle MRI is useful to follow-up late onset Pompe patients
		treated with enzyme replacement therapy

ID 17	Ayse Eren	Pharmacological chaperone search for arylsulfatase A : in silico comparison
LB-17	Ayse Lien	of wild type and mutant structures
LB-18	Kaoru Eto	Neuronal ceroid lipofuscinosis (NCL) type 1 associated with type 2 diabetes
LB-19	Natalie Fraser	The Australian ATHOMETM infusion service experience
LB-20	Caio Gomes	PSAP and SCARB2 genes analysis as a differential diagnosis for Gaucher disease
LB-21	Abigail Hata	Gait analysis in children and adults with MPS IVA
LB-22	Wendy Heywood	Targeted proteomics of bloodspots for disease stratification of lysosomal storage disorders
LB-23	Sharon Hrynkow	Intravenous cyclodextrin trials and compassionate use in Niemann-Pick disease type C
LB-24	Pilar Irún	Comparison of glucosylsphingosine concentration and chitotriosidase activity as surrogated biomarkers in Gaucher disease, the Spanish experience
LB-25	Jinlong Jian	Progranulin recruits HSP70 to beta-glucocerebrosidase and is therapeutic against Gaucher disease
LB-26	Franklin Johnson	First-in-human preliminary pharmacokinetic and safety data on a novel recombinant acid-α-glucosidase, ATB200, co-administered with the pharmacological chaperone, AT2221, in ERT-experienced Pompe patients
LB-27	Nesrin Karabul	First German experiences with migalastat treatment in Fabry disease
LB-28	Zoheb Kazi	A prediction model to identify patients at high-risk of developing significant anti-drug antibodies (ADA): experience with infantile Pompe disease (IPD) on alglucosidase alfa utilizing acid α-glucosidase (GAA) mutations and HLA-type
LB-29	Jorge López	First report of late onset Pompe disease in an adult Mexican mixed-race patient
LB-30	Kira Lukina	Inherited thrombophilia in kidney transplant patient with Fabry disease and multiple thrombotic complications
LB-31	Maryana Marins	MAN2B1 gene analysis as a differential diagnosis for mucopolysaccharidosis types I, II and VI in the Brazilian population
LB-32	Sergey Moiseev	Clinical features of Fabry disease in dialysis patients
LB-33	Vagishwari Murugesan	Glycoprotein non-metastatic melanoma B as a novel biomarker to assess disease severity in Gaucher disease
LB-34	Jun Okada	A Fabry male patient associated with recurrent giant skin ulcer in lower extremity
LB-35	Guillem Pintos-Morell	Evaluation of the effects of a ketogenic diet on mucopolysaccharidosis type IIIB mice
LB-36	Daniel Rob	Uric acid as a marker of mortality and morbidity in Fabry disease
LB-37	Volkan Seyrantepe	Abnormal brain ganglioside accumulation triggers neuroinflammation in early onset Tay-Sachs disease mice model
LB-38	Joseph Shen	A perplexing case of presumed lysosomal acid lipase deficiency - phenotypic and biochemical information, and response to enzyme replacement therapy, are consistent with this diagnosis, but enzymatic studies are equivocal
LB-39	Lachlan Smith	Targeting wnt/β-catenin signaling to enhance bone formation in mucopolysaccharidosis type VII dogs
LB-40	Denize Souza	Cognitive findings of a series of patients with mucopolysaccharidosis
LB-41	Ying Sun	Tissue localization of glycosphingolipid accumulation in a Gaucher disease mouse brain by LC-ESI-MS/MS and high resolution MALDI imaging mass spectrometry
LB-42	Kazuya Tsuboi	Efficacy and safety of enzyme replacement therapy with agalsidase alfa in 36 treatment-naïve Fabry disease patients
LB-43	Alfredo Uribe Ardila	Enzymatic assays for alfaglucosidase in patients with Pompe disease, results from ten years of high risk screening in Colombia
LB-44	Christine White	Multidisciplinary approach to diagnosis and clinical management of Gaucher patients transitioning to adult care

LB-45	Chester Whitley	First-in-human clinical trial of intravenous SBC-103 in patients with mucopolysaccharidosis type IIIB: safety, tolerability, cerebrospinal fluid, heparan sulfate levels, brain structural MRI, and neurocognitive evaluations
		after 1 year of the open-label phase I/II study
LB-46	Hunter Wilson	Characterization of the early cardiac phenotype in Fabry disease