

Programme Key:

I	Invited Speaker
O/LBO	Selected Oral Presentation/Late Breaking Selected Oral Presentation
P/LBP	Poster Presentation/Late Breaking Poster Presentation (on display at the venue and on the virtual platform)
VP/LBVP	Virtual Poster Presentation/ Late Breaking Virtual Poster Presentation (on display on the virtual platform and on ePoster boards at the venue)

Please note, all times stated in the programme are in local Prague, Czechia (CET) time.

WMS 2024 Full Programme

Version: 041024

Monday 7th October 2024

08:30-19:00	Pre-Congress Teaching Course 📍 Congress Venue, Club D+E (separate registration required)
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Tuesday 8th October 2024

08:00-11:00	Pre-Congress Teaching Course 📍 Congress Venue, Club D+E (separate registration required)	
11:00-16:00	WMS Executive Board Meeting 📍 South Boardroom 1	
14:30-18:00	Registration and poster set up 📍 Congress Venue, Second Floor Foyers	
14:30-16:00	Meet the Exhibitors 📍 Congress Venue, Second Floor Foyers (Catering provided)	
16:30-17:30	Industry Symposium 1 📍 South Hall 1	Industry Symposium 2 📍 South Hall 2 Catering provided by the sponsor for this session, available from 30 minutes prior to the start of the symposium
18:00-18:45	Opening Ceremony 📍 Congress Hall (separate registration required) <i>Moderators: Jana Haberlová, University Hospital Motol, Czechia & Radim Mazanec, Charles University, Czechia</i>	
18:45-21:00	Networking Reception 📍 Congress Venue, Panorama Hall and Zoom Room, First Floor (separate registration required)	

Wednesday 9th October 2024

06:30-19:30	Congress desk open	
07:45-08:45	Industry Symposium 3 📍 South Hall 1 Catering provided by the sponsor for this session, available from 30 minutes prior to the start of the symposium	Industry Symposium 4 📍 South Hall 2 Catering provided by the sponsor for this session, available from 30 minutes prior to the start of the symposium
09:00-09:15	Congress Welcome - Message from the President 📍 Congress Hall	
09:15-10:45	Topic 1: Acquired Muscle Disorders 📍 Congress Hall <i>Moderators: Suur Biliciler, Uthealth Science Center Houston, Mcgovern Medical School, USA & Heřman Mann, Institute of Rheumatology Prague, Czechia</i>	

09:15-09:45	01INV Acquired muscle disorders: Introduction to CART cells and Tregs <u>Villalta, A</u>^{1,2,3} ¹Physiology and Biophysics, ²Muscle Biology and Disease Research Center, ³Institute for Immunology, University of California Irvine
09:45-10:15	02INV Current and prospective uses of CAR and CAAR T-cell therapies in muscle disorders <u>Mozaffar, T</u>¹ ¹University of California Irvine
10:15-10:30	010 Response to rozanolixizumab across treatment cycles in patients with generalised Myasthenia Gravis: A post hoc analysis <u>Vissing J</u>¹, Grosskreutz J², Habib A³, Mahuwala Z⁴, Mantegazza R⁵, Pascuzzi R⁶, <u>Sacconi S</u>⁷, Vu T⁸, Beau Lejdstrom R⁹, Greve B¹⁰, Grimson F¹¹, Tarancón T¹², Bril V¹³ ¹University of Copenhagen, ²University of Lübeck, ³University of California, ⁴Department of Neuromuscular Medicine and Clinical Neurophysiology, University of Kentucky, USA, ⁵Istituto Nazionale Neurologico Carlo Besta, ⁶Indiana University School of Medicine, ⁷Université Côte d'Azur, ⁸University of South Florida Morsani College of Medicine, ^{9,10,11,12}UCB Pharma, ¹³University Health Network Canada
10:30-10:45	020 Characterization of a mouse model for Jo-1, PL-7 and PL-12 associated Anti-synthetase syndrome <u>Bachir D</u>¹, Preusse C², Lichtenberg S¹, Koch-Hölsken K¹, Umatham V^{3,4}, Herrmann A¹, Schaenzer A³, Meuth S¹, Stenzel W², Ruck T¹ ¹Heinrich Heine University, ²Charité-Universitätsmedizin Berlin, ³Justus Liebig University, ⁴German Armed Force Hospital
10:45-11:15	Morning refreshments, exhibition and posters 📍 Congress Hall Foyer, Forum Hall and Forum Foyer
10:45-11:15	Myology Café - Meet the WMS EDI Committee 📍 Congress Hall Foyer
11:15-13:15	Topic 1: Acquired Muscle Disorders 📍 Congress Hall Moderators: Ichizo Nishino, National Institute of Neuroscience, Japan & Corinna Preusse, Charité-universitätsmedizin Germany
11:15-11:45	03INV Idiopathic inflammatory myopathies: current state of the field, new insights and treatment <u>Vencovský J</u>¹, Mann H¹ ¹Institute of Rheumatology, Czechia
11:45-12:15	04INV Acquired muscle disease - a paediatric perspective <u>Ramdas S</u>¹ ¹Oxford University Hospitals NHS foundation Trust, Oxford, UK, ²University of Oxford, Oxford, UK
12:15-12:30	030 Identification of Class I HLA genetic predispositions and prediction of autoantigenic epitopes in dermatomyositis patients of Indian origin <u>Jassal B</u>¹, Deepak R², Venugopalan Y V³, Suri V¹, Sharma M¹ ¹Neuropathology Lab, All India Institute of Medical Sciences, ²Department of Transplant Immunology and Immunogenetics, All India Institute of Medical Sciences, ³Department of Neurology, All India Institute of Medical Sciences
12:30-12:45	040 In-silico Interactomics as a way to elucidate Inclusion Body Myositis <u>De Los Reyes F</u>¹, Hayashi S¹, Noguchi S¹, Nishino I¹ ¹Department of Neuromuscular Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry
12:45-13:00	050 Unravelling the role of early mitochondrial dysfunction in Inclusion Body Myositis: a chicken or egg dilemma reloaded <u>Kleefeld F</u>¹, Cross E², Lagos D², Preusse C¹, Roos A^{3,4,5,6}, Horvath R², Stenzel W¹ ¹Charité - Universitätsmedizin Berlin, ²University of Cambridge, ³Department of Neurology, University Hospital Düsseldorf, Heinrich Heine University, ⁴Brain and Mind Research Institute, Children's Hospital of Eastern Ontario Research Institute, ⁵Leibniz-Institut für Analytische Wissenschaften-ISAS e.V., ⁶Department of Pediatric Neurology, Centre for Neuromuscular Disorders, Centre for Translational Neuro- and Behavioural Sciences, University Duisburg-Essen
13:00-13:15	060 NLRP3 inflammasome activation and altered mitophagy are key pathways in Inclusion Body Myositis. <u>Naddaf E</u>¹, Nguyen T¹, Watzlawik J², Gao H³, Hou X², Fiesel F^{2,4}, Mandrekar J^{1,5}, Kokesh E¹, Harmsen W⁵, Lanza I⁶, Springer W^{2,4}, Trushina E^{1,3} ¹Department of Neurology, Mayo Clinic, ²Department of Neuroscience, Mayo Clinic, ³Department of Molecular Pharmacology and Experimental Therapeutics, Mayo Clinic, ⁴Neuroscience PhD Program, Mayo Clinic Graduate School of Biomedical Sciences, ⁵Department of Quantitative Health Sciences, Mayo Clinic, ⁶Division of Endocrinology and Metabolism, Mayo Clinic

13:15-14:30	Lunch, exhibition and posters 📍 Congress Hall Foyer, Forum Hall and Forum Foyer
13:15-14:30	Meet the Experts Lunch 📍 Zoom and Panorama Rooms, 1st Floor (separate registration required and lunch is provided)
14:30-15:30	Poster Session 1 📍 Forum Hall (lunch is provided) 113P-146P, 147VP: SMA Clinical 113P Quality of life and participation of adults with spinal muscular atrophy: QOLSMA <u>Ribault S¹</u>, Rippert P¹, Lopinet T¹, Le Goff L¹, Barrière A¹, Morard M¹, Theuriet J¹, Pegat A¹, Boyer F², Vuillerot C¹ ¹Hospices Civils De Lyon, ²CHU de Reims 114P Epidemiology and therapeutic outcomes of patients with Spinal Muscular Atrophy: results from a 12-year real-world study based on the French National Healthcare database (SNDS) <u>Quijano-Roy S¹</u>, Bourget I², Lot A¹, Desguerre I³, Urtizberea J⁴, de Chasteigner A⁵, Leiba G⁵, Affinito S⁵, Panes A⁶, Denis H⁶, Schmidt A⁶ ¹APHP Raymond Poincaré Hospital, ²Gustave Roussy Hospital, ³APHP Necker Enfants Hospital, ⁴GH Pitie Salpetriere, ⁵Novartis GT France SAS, ⁶HEVA 115P MRI of whole-body muscles and tongue of patients with Spinal Muscular Atrophy <u>Froelich S¹</u>, Receveur N¹, Scharff Poulsen N¹, Espe Hansen A², Vissing J¹ ¹Copenhagen Neuromuscular Center, (CNMC), Department of Neurology, Rigshospitalet, ²Department of Radiology, Rigshospitalet 116P Exploring neurobehavioral disorders in type 1 and presymptomatic patients with Spinal Muscular Atrophy <u>Buchignani B^{1,2}</u>, Coratti G^{2,3}, Cutri C³, Palermo C², Leone D², Antonaci L², Pera M^{2,3}, Pane M^{2,3}, Mercuri E^{2,3} ¹Università Di Pisa, ²Centro Clinico Nemo Pediatrico, ³Università Cattolica del Sacro Cuore 117P Prevalence of neurodevelopmental anomalies in patients with Spinal Muscular Atrophy Type I registered in CUIDAME <u>Alvarez Molinero M¹</u>, Gómez Andrés D¹, Garcia Uzquiano R², Expósito Escudero J², Costa Comellas L¹, Garcia Romero M³, Martínez Salcedo E⁴, Nungo Garzón C⁵, Grimalt Calatayud M⁶, Lopez Lobato M⁷, Munell Casadesús F¹, Fernández Ramos J⁸, Calzada, Garcia-Mora C⁹, Gómez Martín H¹⁰, Calvo R¹¹, Toledo Bravo de Laguna L¹², González Barrios D¹³, Navarro Abia V¹⁴, Fernández Garcia M³, CUIDAME Investigators Group¹⁵ ¹Vall Hebron University Hospital, ²Sant Joan de Deu Hospital, ³La Paz University Hospital, ⁴Virgen de la Arrixaca University Hospital, ⁵La Fe Valencia Hospital, ⁶Son Espases University Hospital, ⁷Virgen del Rocio Hospital, ⁸Reina Sofía Hospital, ⁹Toledo University Hospital, ¹⁰Salamanca University Hospital, ¹¹Regional University Hospital of Malaga, ¹²Materno-Infantil Hospital of Las Palmas de Gran Canaria, ¹³Nuestra Señora de Candelaria University Hospital, ¹⁴University Hospital of Burgos, ¹⁵Cuidame Investigators Group 118P Characterization of patients with Type 1 Spinal Muscular Atrophy in advanced disease state treated with Nusinersen <u>Balkenhol J¹</u>, <u>Beytia M¹</u>, Jofre J², Suarez B², Hervias C³, Calcagno G³, Castiglioni C² ¹Pontificia Universidad Católica De Chile, División Pediatría, Unidad Neurología Pediátrica, ²Clinica Meds, Neurology Service, ³Clinica Meds, Neurokinesiology Service 119P Evaluation of physical function before and after medical treatment in patients with Spinal Muscular Atrophy aged 11-25 years <u>Werlauff U¹</u>, Busk L¹, Drivsholm P¹, Heiden B¹, Iversen R¹, Laustsen H¹, Mahoney A¹, Olesen L¹, Handberg C^{1,2} ¹The Danish National Rehabilitation Centre for Neuromuscular Diseases, ²Department of Public Health, Faculty of Health, Aarhus University 120P Diagnostic delay in Korean adults with Spinal Muscular Atrophy <u>Kim S¹</u>, Choi Y¹, Cho J², Choi Y¹, Park H¹ ¹Department Of Neurology, Gangnam Severance Hospital, Yonsei University College of Medicine, ²Department of Neurology, National Health Insurance Service Ilsan Hospital 121P Insulin resistance and liver fibrosis and - steatosis in adult patients with Spinal Muscular Atrophy <u>Receveur N¹</u>, Frølich S¹, Scharff Poulsen N¹, Ewertsen C², Espe Hansen A², Vissing J¹ ¹Copenhagen Neuromuscular Center, Department of Neurology, Rigshospitalet, ²Department of Radiology, Rigshospitalet 122P A retrospective review of changes in upper limb function following spinal surgery in Spinal Muscular Atrophy <u>Martineau O^{1,2}</u>, Milev E^{1,2}, Main M¹, Scoto M^{1,2}, Muntoni F^{1,2}, Baranello G^{1,2} ¹Great Ormond Street Hospital, ²University College London

123P The difficult path to diagnosis of the patient with spinal muscular atrophy

Bolano Diaz C^{1,2}, Morosini M¹, Chloca F¹, Mesa L¹, Jauregui A¹, Pirra L¹, Vazquez G¹, Flores D¹, Dubrovsky A¹

¹Favaloro Foundation - Neurosciences Institut, ²John Walton Muscular Dystrophy Research Centre

124P Hidden in plain sight: genome reanalysis to identify an intragenic novel variant in the SMN locus in a patient with an undiagnosed lower motor neuron disease

Haliloğlu G¹, Donkervoort S², Weisburd B^{3,4}, Öz Yıldız S¹, Ceylaner S⁵, Pais L^{3,6}, O'Donnell-Luria A^{3,6},

Bönnemann C²

¹Hacettepe University Faculty of Medicine, Department of Pediatrics, Division of Pediatric Neurology,

²Neuromuscular and Neurogenetic Disorders of Childhood Section, National Institute of Neurological Disorders

and Stroke, ³Program in Medical and Population Genetics, Broad Institute of MIT and Harvard, ⁴Center for

Genomic Medicine, Massachusetts General Hospital, ⁵Intergen Genetic Diagnosis and Research Center, ⁶Division

of Genetics and Genomics, Boston Children's Hospital, Harvard Medical School

125P A review of the management and outcomes of children with SMA in the West Midlands, UK during 2017-2022

Willis T^{1,2}, Kulshrestha R¹, Alhaswani Z³, Parasuraman D³, Kuiper J¹, Jones J¹, Perry C¹

¹Robert Jones and Agnes Hunt hospital, ²University of Chester Medical School, ³University Hospitals Birmingham

126P Retrospective assessment of feeding and nutrition after 2 years of risdiplam treatment in children with Type 1 SMA using a novel scale

Baranello G^{1,2}, Conway E¹, Li Y³, Gorni K⁴

¹Dubowitz Neuromuscular Centre, NIHR Great Ormond Street Hospital Biomedical Research Centre, UCL Great

Ormond Street Institute of Child Health & Great Ormond Street Hospital Trust, ²Developmental Neurology Unit,

Fondazione IRCCS Istituto Neurologico Carlo Besta, ³Pharma Development, Data Sciences, F. Hoffmann-La

Roche Ltd, ⁴PDMA Neuroscience and Rare Disease, F. Hoffmann-La Roche Ltd

127P UK real-world longitudinal data collection and analysis in adult SMA: theAdult SMA REACH Data collection study

Karkkainen E^{1,2}, Murphy L^{1,2}, Muni Lofra R^{1,2}, Segovia S^{1,2}, Page J^{1,2}, Verdu-Diaz J¹, Michell-Sodhi J^{1,2}, Alvarez G^{1,2},

Marini-Bettolo C^{1,2}

¹The John Walton Muscular Dystrophy Research Centre, ²Newcastle University and Newcastle Hospitals NHS

Foundation Trust

128P Treatment with gene therapy in patients with spinal muscular atrophy. Current experience in CuidAME registry

Exposito Escudero J¹, Costa Comellas L², García Romero M³, Toledo Bravo De Laguna L⁴, Gomez Martin H⁵,

Calvo Medina R⁶, Navarro Abia V⁷, Nungo Garzón C⁸, Martinez Gonzalez M⁹, Martínez Salcedo E¹⁰, Grimalt

Calatayud M¹¹, Martínez González M¹², Álvarez Molinero M², Fernández García M³, Puig Ram C¹, García Uzquiano

R¹, Hervás D⁸, **Nascimento Osorio A**¹, CUIDAME investigators Group¹³

¹Hospital Sant Joan De Deu, ²Hospital Vall d'Hebron, ³Hospital Universitario La Paz, ⁴Hospital Materno-Infantil

de Canarias, ⁵Complejo Asistencial Universitario de Salamanca, ⁶Hospital Regional Universitario de Malaga,

⁷Hospital Universitario de Burgos, ⁸Hospital Universitario y Politecnico la Fe, ⁹Hospital Universitario de Cruces,

¹⁰Hospital Clínico Universitario Virgen de la Arrixaca, ¹¹Hospital Son Espases, ¹²Complejo Universitario Hospital de

Albacete, ¹³CUIDAME investigators Group

129P Newborn screening for Spinal Muscular Atrophy in Poland – a summary of 3-year experience

Gos M², Wasiluk J², Landowska A², Jurzyk M², Wawer W², Kubiszyn P², Wieczorek J², Kordowska O², Nosarieva

L², Durda K³, Fraczyk M², **Jedrzejowska M**¹, Ołtarzewski M²

¹Medical University of Warsaw, ²Institute of Mother and Child, ³Pomeranian Medical University

130P Real-life outcome data on Risdiplam therapy for Spinal Muscular Atrophy

Lavi R^{1,2}, Sagi L^{1,2}, Katzenellenbogen S¹, Shtamler A¹, Weizman A¹, Opincariu I^{1,3}, Fattal-Valevski A^{1,2}

¹Sourasky Medical Center, ²Faculty of Medicine Tel Aviv University, ³Schonbrunn Academic School of Nursing,

Sourasky Medical Center

131P Social communication abilities in treated children with Spinal Muscular Atrophy type 1 (SMA1): a cross-sectional study from two tertiary neuromuscular centres

Brusa C^{1,2}, Buchignani B^{3,4}, Cutri C⁵, Coratti G^{3,5}, Weststrate H^{1,2}, Clark E², Johnson E², Barritt E², Antonaci L³,

Leone D³, Palermo C³, Cornelli N^{1,2}, Munot P², Manzur A², Scoto M^{1,2}, Pane M^{3,5}, Mercuri E^{3,5}, Muntoni F^{1,2},

Baranello G^{1,2}

¹UCL - Great Ormond Street Institute of Child Health, ²Great Ormond Street Hospital for Children, ³Centro Clinico

Nemo, Fondazione Policlinico Universitario Agostino Gemelli, IRCCS, Rome, ⁴University of Pisa, ⁵Pediatric

Neurology, Università Cattolica del Sacro Cuore

132P Early-onset motor neuropathies and novel genetic causes: a Chilean series

Castiglioni Toledo C¹

¹Clinica Meds-Inrpac

133P Description of UK SMA cohorts since the introduction of disease modifying therapies

Muni Lofra R^{1,2}, Rowher A³, Muntoni F³, Marini-Bettolo C^{1,2}, SMAREACH UK Steering Group, Adult SMAREACH Steering Group

¹John Walton Muscular Dystrophy Research Centre-Newcastle University, ²Newcastle Hospitals NHS Foundation Trust, ³Dubowitz Neuromuscular Centre, UCL Great Ormond Street Institute of Child Health

134P Beyond the "walker" label: functional diversity and disease impact in spinal muscular atrophy patients with walking ability

Cattinari M¹, Hervás D², de Lemus M^{1,3,4}, Tizzano E^{1,5}

¹Fundame, Madrid, Spain, ²Department of Applied Statistics and Operations Research and Quality, Universitat Politècnica de València, ³SMA Europe Germany, ⁴Committee of Advanced Therapies at the European Medicines Agency, ⁵Department of Clinical and Molecular Genetics and Rare Diseases Unit and Medicine, Genetics Group, VHIR, Hospital Vall d'Hebron

135P Use of electrophysiologic data and physical therapy assessments in SMA monitoring

Wright M^{1,2}, Yang M^{1,2}, Moore Burk M², Kelley C², Stratton A^{1,2}, Apkon S^{1,2}, Gibbons M^{1,2}, Browning K^{1,2}, Kupfer O^{1,2}, Watne L², Foster H², Parsons J^{1,2}

¹University of Colorado School of Medicine, ²Children's Hospital Colorado

136P Medical treatment of children with spinal muscular atrophy - An investigation of parents' experiences of hopes, worries and need for rehabilitation for their child

Handberg C^{1,2}, Werlauff U¹, Drivsholm P^{1,2}, Lorenzen S¹, Mahoney A¹

¹National Rehabilitation Center for Neuromuscular Diseases, ²Department of Public Health, Faculty of Health, Aarhus University

137P Mortality in Spinal Muscular Atrophy in the era of disease-modifying therapies

Finnegan R¹, Rohwer A¹, Scoto M^{1,2}, Main M¹, Baranello G^{1,2}, Manzur A¹, Muntoni F^{1,2}, Munot P¹

¹Dubowitz Neuromuscular Centre, Great Ormond Street Hospital for Children, ²NIHR Great Ormond Street Hospital Biomedical Research Centre

138P Long-term motor responses to disease-modifying therapies in Spinal Muscular Atrophy (SMA) adults: a prospective study

Duong T¹, Tang W¹, Gu B¹, Dunaway Young S¹, Corraiti G², Pasternak A⁴, Glanzman A, de Monts C¹, Rodriguez-Torres R³, Maczek E⁴, Martens B⁵, Salvator S¹, Smith S¹, Yatsu L¹, Hailu R¹, Park T¹, He Z¹, Mercuri E², Day J¹

¹Stanford University, ²Catholic University of Sacred Heart, ³Columbia University, ⁴Boston Children's Hospital, ⁵University of Rochester, ⁶Children's Hospital of Philadelphia,

139P Treatment effects on ambulation loss in Spinal Muscular Atrophy Type III: insights from the Italian ISMAC registry

Coratti G¹, D'Amico A², Sansone V³, Masson R⁴, Maggi L⁵, Mongini T⁶, Pegoraro E⁷, Pini A⁸, Vacchiano V⁹, Coccia M¹⁰, Filosto M¹¹, Ticci C¹², D'Errico E¹³, Nigro V¹⁴, Bruno C¹⁵, Messina S¹⁶, Pera M¹, Pane M¹, Mercuri E¹

¹Child Neurology Unit E Centro Nemo, IRCCS Fondazione Policlinico Gemelli, Università Cattolica del Sacro Cuore, ²Unit of Neuromuscular and Neurodegenerative Disorders, Bambino Gesù Children's Hospital IRCCS, ³Centro Clinico NeMo, ⁴Pediatric Neurology and Myopathology Units, Neurological Institute "Carlo Besta", ⁵Neurology IV, Neuroimmunology and Neuromuscular Diseases Unit, Fondazione IRCCS Istituto Neurologico Carlo Besta, ⁶Neuromuscular Center, "Rita Levi Montalcini" Department of Neuroscience, University of Turin, ⁷Department of Neurosciences DNS, University of Padova, ⁸Department of Biomedical and Neuromotor Sciences, IRCCS Istituto delle Scienze Neurologiche di Bologna, University of Bologna, ⁹UOC Clinica Neurologica, IRCCS Istituto delle Scienze Neurologiche di Bologna, ¹⁰Centro NeMO Ancona, ¹¹Department of Clinical and Experimental Sciences, University of Brescia; NeMO-Brescia Clinical center for Neuromuscular Diseases, ¹²SOC Malattie Metaboliche e Muscolari Ereditarie, Meyer Children's Hospital IRCCS, ¹³Neurology Unit, Azienda Ospedaliero-Universitaria, Policlinico of Bari, ¹⁴Medical Genetics and Cardiomyology, Department of Precision Medicine, University of Campania "Luigi Vanvitelli", ¹⁵Center of Translational and Experimental Myology and Department of Neuroscience, Rehabilitation, Ophthalmology, Genetics, Maternal and Child Health, IRCCS Istituto Giannina Gaslini and University of Genoa, ¹⁶Department of Clinical and Experimental Medicine, University of Messina

140P Need for tube feeding in SMA type I patients treated with disease modifying therapies: bulbar function before treatment matters

Coratti G¹, Pane M¹, Stanca G¹, D'Amico A², Sansone V³, Berti B¹, Fanelli L¹, Albamonte E³, Ausili C¹, Cerchiari A⁴, Catteruccia M², De Sanctis R¹, Leone D¹, Palermo C¹, Buchignani B¹, Tosi M², Pera M¹, Bertini E², Mercuri E¹

¹Child Neurology Unit e Centro Nemo, IRCCS Fondazione Policlinico Gemelli, Università Cattolica del Sacro Cuore, ²Unit of Neuromuscular and Neurodegenerative Disorders, Bambino Gesù Children's Hospital IRCCS, ³Centro Clinico NeMo, ⁴Feeding and Swallowing Services Unit, Bambino Gesù Children's Hospital IRCCS

141P Spinal Muscular Atrophy is also a disorder of spermatogenesis

Magot, A¹, Reignier, A², Binois, O³, Vuillerot, C^{4,5}, Yann, P¹ and the Fermasi Study Group

¹Centre de Référence des Maladies Neuromusculaires AOC, CHU de Nantes, Filnemus, Euro-NMD, Nantes,

²Service de Médecine et Biologie de la Reproduction, gynécologie médicale, CHU de Nantes, ³Service de Biologie de la Reproduction - CECOS, Hôpital Antoine Béchère, AP-HP, Université Paris Saclay, ⁴Centre de Référence PACA Réunion Rhône Alpes, Hospices Civils de Lyon, Hôpital Femme-Mère-Enfant, L'Escale, Service de Médecine Physique et de Réadaptation Pédiatrique, Bron, ⁵NeuroMyogen Institute, CNRS UMR 5310 - INSERM U1217, University of Lyon

142P A preliminary machine learning retrospective observational study to predict treatment response to nusinersen in non-sitter Spinal Muscular Atrophy

Stimpson G^{1,2,6}, O'Reilly E^{1,2}, Coratti G^{3,4}, Ridout D⁵, Chakraborti T^{6,7}, Mitra R^{6,8}, Mercuri E^{3,4}, Scoto M^{3,4}, Muntoni F^{3,4}, Baranello G^{3,4}

¹Dubowitz Neuromuscular Centre, UCL Great Ormond Street Institute of Child Health, ²National Institute for Health Research Great Ormond Street Hospital Biomedical Research Centre, ³Pediatric Neurology Unit, Catholic University, ⁴Centro Clinico Nemo, U.O.C. Neuropsichiatria Infantile Fondazione Policlinico Universitario Agostino Gemelli IRCCS, ⁵Population, Policy & Practice Department, UCL Great Ormond Street Institute of Child Health, ⁶Turing-Roche Strategic Partnership, Alan Turing Institute, ⁷Dept of Medical Physics and Biomedical Engineering and the Dept of Pathology, UCL Cancer Institute, ⁸Department of Statistical Science, University College London

143P Swallowing physiology and function in untreated patients with Spinal Muscular Atrophy type 1: establishing natural history reference values

McGrattan K¹, Graham R², Miles A³, Allen J³, Hofelich Mohr A¹, Rao V⁴, Alfano L⁵, Smith L¹¹, Brandesma J⁶, Leon Astudillo C⁷, Levy D⁸, Tang W¹⁰, Brown A¹³, Spoden A¹, Schenck G⁹, Darras B²

¹University Of Minnesota, ²Boston Children's Hospital, ³University of Auckland, ⁴Lurie Children's Hospital, ⁵Nationwide Children's Hospital, ⁶Children's Hospital of Philadelphia, ⁷University of Florida, ⁸Hospital de Clínicas de Porto Alegre, ⁹Gillette Children's Hospital, ¹⁰Stanford University, ¹¹Primary Children's Hospital, ¹²Texas Children's Hospital

144P Gene therapy for Spinal Muscular Atrophy amid the dengue outbreak in Brazil: a case report

Graca F¹, C França Jr M¹

¹University Of Campinas

145P Efficacy of SMA NBS: 4-year comparative study with control group

Dangouloff T¹, De Waele L², Beysen D³, Smeets N⁴, Vanlander A⁵, Benmhammed N¹, Tychon C¹, Daron A¹, Deconinck N⁶, Dontaine P⁶, Servais L^{1,7}

¹Division of Child Neurology, Reference Center for Neuromuscular Diseases, Department of Paediatrics, University Hospital Liège & University of Liège, ²Department of Child Neurology, University Hospitals Leuven, ³Division of Paediatric Neurology, Department of Paediatrics, Antwerp University Hospital/University of Antwerp, ⁴Vrije Universiteit Brussel, Universitair Ziekenhuis Brussel, Department of Pediatrics, Child Neurology Unit, ⁵Ghent University Hospital, Pediatric neurology and metabolism; Ghent University, Pediatric and internal medicine, ⁶Neuromuscular Reference Center and Paediatric Neurology Department, Hôpital des Enfants Reine Fabiola (HUDERF), Hôpital Universitaire de Bruxelles (H.U.B), Université Libre de Bruxelles, ⁷MDUK Neuromuscular Centre, Department of Paediatrics, University of Oxford

146P Investigation of bone health in a large cohort of naïve SMA patients

Panicucci C¹, Brolatti N¹, Casalini S¹, Coratti G², Pedemonte M¹, Ricci F³, Mongini T⁴, Sansone V⁵, Filosto M⁶, Bello L⁷, Pegoraro E⁷, Bruno I⁸, Verriello L⁹, Ricci G¹⁰, D'Amico A¹¹, Mercuri E², Maghnie M¹, Di Iorgi N¹, Bruno C¹, working group ITASMAC¹²

¹IRCCS Gaslini Institute, ²Fondazione Policlinico Gemelli Centro clinico Nemo, ³Città della Salute, ⁴Università di Torino, ⁵Centro NEMO Milano, ⁶Centro NEMO Brescia, Brescia, Italy, ⁷Università di Padova, Padova, Italy, ⁸IRCCS Burlo Garofolo Trieste, ⁹Santa Maria della Misericordia Ospedale Univ. Udine, ¹⁰Azienda Osped. Univ. Pisana, ¹¹IRCCS Ospedale Pediatrico Bambin Gesù

147VP Efficacy and safety of Nusinersen in the treatment of Spinal Muscular Atrophy in adolescents and adults

Ningning W^{1,4,5}, Hu Y², Yu L³, Zhu W^{1,4,5}

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204P-231P, 232VP-233VP: Clinical trials, access to health care and outcome measures

204P A phase 1 study of antisense oligonucleotide NS-035 in patients with Fukuyama Congenital Muscular Dystrophy

Fujino G¹, Kitamura A¹, Takahashi A¹, Maeda M¹, Kubota A¹, Tokuyama Y², Wada I², Kobayashi K³, Komaki H⁴, Taniguchi-Ikeda M⁵, Ishigaki K⁶, Toda T¹

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205P Early diagnosis for Duchenne muscular dystrophy (DMD) to shape and influence the model of care to support children and families following an early diagnosis of DMD

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¹TREAT-NMD Services Ltd, ²The Children's Hospital at Westmead, ³University of Oxford and University of Liège, ⁴Children's Hospital Colorado

206P A quality improvement proposal: improving care management of complex neuromuscular patients – establishing a neuromuscular complex care centre as part of the translational neuromuscular pathway

Marini Bettolo C¹, Wong K¹, Segovia S¹, Muni Lofra R¹, Elseed M¹

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207P Mobile muscle clinics operating from a UK centre of excellence: report of patient experience and quality of care

Kulshrestha R¹, Emery N¹, Strachan K¹, Willis T¹, Bassie C¹

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208P Are people living with neuromuscular disorders in the north of England satisfied with National Health Service wheelchair service provision?

Michell-Sodhi J¹, Moat D¹, Dias T¹, Mason J¹, Robinson E¹, Schiava M¹, Barr E¹, Bolano C¹, Doaa S¹, Wong K¹, Maha E¹, Emma G¹, Michela G¹, Michelle M¹, Tasca G¹, Diaz-Manera J¹, James M¹, Straub V¹, Marini-Bettolo C¹, Muni-Lofra R¹

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209P Custom orthosis improves mobility and caregiver experience in an adolescent with Congenital Myasthenic syndrome and Myofibrillar Myopathy

Varghese V¹, Rajadurai I¹, Paul M¹, Banavara Shyamprasad S², Mathew A A^{1,2}

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210P Advancing upper limb motor function evaluation in Duchenne muscular dystrophy and Spinal Muscular Atrophy via kinematic parameterization with the wearable device "ArmTracker"

Natera De Benito D¹, Favata A², Expósito-Escudero J¹, Gallart R³, Moya O¹, Roca S¹, Marzabal Gatell A², van Noort L², Ortez C¹, Torras C³, Nascimento A¹, Medina-Cantillo J¹, Pàmies Vilà R², Font-Llagunes J²

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211P Following patient mobility in daily life: the EJP-DT4RD project

Hogrel J¹, Muni-Lofra R², Santmarty P¹, Decostre V¹, Marques T¹, Haf Davies E³, Straub V², the DT4RD Project Group

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212P Identifying biomarkers for prediction of fall-risk in patients with Inclusion Body Myositis (IBM)

Hunn S¹, Wehl C¹

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213P Sensitivity to change of the Motor Function Measure (MFM) in myotonic dystrophy type 1

Ribault S¹, Rippert P¹, Bassez G², Duong T³, Vuillierot C¹

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214P The 10-meter model: predicting the 6-minute walk test in Pompe disease

El Kaim A¹, Fer F¹, Hogrel J¹

¹Institute Of Myology

215P Evaluating the responsiveness of patient reported outcome measures (PROs) to change in valosin-containing protein multisystem proteinopathy (MSP1) over 24 months

Iammarino M¹, Reash N¹, Lowes L^{1,2}, Pietruszewski L³, Adderley K¹, Humphrey L¹, Beale A¹, Steiner C¹, Smith M¹, Alfano L^{1,2}

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216P A questionnaire-based investigation into levels physical disability and of physical activity in adults with neuromuscular disease in a UK neuromuscular centre

Willis T^{1,2}, Strachan K¹, Emery N¹

¹Robert Jones and Agnes Hunt hospital, ²University of Chester Medical School,

217P Comparing IBMFRS and sIFA as progression indicators in Inclusion Body Myositis patients from the INSPIRE-IBM trial

Gaid P¹, Wencil M¹, Hernandez I¹, Goyal N¹, Dimachkie M², Lloyd T³, Mohassel P³, Wehl C⁴, Freimer M⁵, Shaibani A⁶, Wicklund M⁷, Dixon S⁸, Chahin N⁹, Wang L¹⁰, Shieh P¹¹, Amato A¹², Quinn C¹³, Carbanar O¹⁴, Mozaffar T¹, INSPIRE-IBM Study Group¹

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218P Inter-rater reliability of adapted test of neuromuscular disorders (ATEND) wheelchair-based assessment

Nelson L¹, Tang W², Pasternak A³, Glanzman A⁴, Muni Lofra R⁵, Duong T²

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219P Enhancing clinical trial eligibility criteria in FSHD: validating whole-body MRI as a key outcome measure

Widholm P^{1,2,3}, Karlsson M¹, Pini J^{4,5}, Puma A⁴, Villa L⁴, Cavali M⁴, Ezaru A⁴, Bassez G⁶, Marty B⁶, Evangelista T⁶, Thomas R^{7,8}, Danjoux L^{7,8}, Tard C^{7,8}, Sacconi S^{4,5}

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220VP Wearable sensors to evaluate and monitor neuromuscular patients in real world environment

Diella E¹, Storm F¹, Molteni L¹, Delle Fave M¹, Canella G¹, Meola G², Biffi E¹, D'Angelo M¹

¹IRCCS E Medea, ²University of Milan

221P Initial data from the achieve trial of DYNE-101 in adults with myotonic dystrophy type 1 (DM1)

Wolf D¹, Lilleker J², Bassez G³, Diaz-Manera J⁴, **Kools J⁵**, Pane M⁶, Roxburgh R⁷, Schoser B⁸, Turner C⁹, Mix C¹, Ray S¹, Han B¹, Farwell W¹, Sansone V¹⁰

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222P Development of a standardized information model for rare neuromuscular diseases

Gazzerro E¹, Hübner M², Nyongui E³, Krefting D³, Spuler S¹, Zschüntzsch J³, Schepers J², Röttger R⁴

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223P Mental health support for children and young people with Duchenne muscular dystrophy – who, when and how across the UK

Geagan C¹, Sandhu A¹, Bouquillon L², Conn R³, Bindman D², Pattni J², Turner C¹, McDonald R², Alex J⁵, Rodney S⁴, Quinlivan R², Guglieri M¹, Straub V¹

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224P Psychosocial discussions in neuromuscular clinics from a professional lens: evidence from a service evaluation regarding barriers to discussions

Geagan C¹, Sandhu A¹, Mason J¹, McCallum M¹, Muni-Lofra R¹, Moat D¹, Wong K¹, Robinson E¹, Grover E¹, Michel-Sodhi J¹, Bolaño Diaz C¹, Schiava M¹, Salman D¹, James M¹, Tasca G¹, Diaz Manera J¹, Guglieri M¹, Straub V¹, Elseed M¹, Marini Bettolo C¹

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225P Initial data from the DELIVER trial of DYNE-251 in males with DMD Mutations amenable to Exon 51 skipping

De Waele L¹, Campbell C², Deconinck N³, Flanigan K⁴, Lorentzos M⁵, Phan H⁶, Shieh P⁷, Mix C⁸, Ray S⁸, Wang D⁸, Farwell W⁸, Dugar A⁸, Naylor M⁸, Guglieri M⁹, on behalf of the DELIVER study investigators

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⁵Children's Hospital at Westmead, ⁶Rare Disease Research, ⁷University of California Los Angeles, ⁸Dyne

Therapeutics, Inc., ⁹Royal Victoria Infirmary, Newcastle University

226P Phase 3, randomized, global study assessing efficacy and safety of del-desiran for the treatment of Myotonic Dystrophy Type 1: HARBOR trial design

Fowler M⁵, Johnson N¹, Thornton C², Day J³, Sansone V⁴, McEvoy B⁵, Tai L⁵, Knisely B⁵, Brandt T⁵, Gallagher K⁵, Hughes S⁵, Ackermann E⁵

¹Virginia Commonwealth University, ²University of Rochester, ³Stanford University Medical Center, ⁴University of Milan, ⁵Avidity Biosciences

227P Advancing neuromuscular education and care within physiotherapy: POD-NMD (Physiotherapy Online Delivery - Neuromuscular Diseases)

Slim C¹, Mayhew A²

¹TREAT-NMD, ²The John Walton Muscular Dystrophy Research Centre, Translational and Clinical Research Institute, Newcastle University and Newcastle Hospitals NHS Foundation Trust

228P Don't lose your HEAD: a quality improvement proposal for early recognition of neuromuscular diseases in floppy neonates in the North of England

Reeves T^{1,2}, Muni-Lofra R¹, Harris L¹, Richardson R², Guglieri M¹, Marini-Bettolo C¹

¹John Walton Muscular Dystrophy Research Centre, ²Newcastle upon Tyne Hospitals, NHS Foundation Trust

229P Home mechanical ventilation in paediatric neuromuscular disorders in a resource limited setting

Ramesh Babu R^{1,2}, Kinimi I³, Shinde S³, Mohan Rao N³, Sahoo A³, Maganthi M¹, Agnes Mathew A^{1,2}

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230P Physiotherapy for rare hereditary NMDs- an open and free e-learning course for physiotherapists. Results after 18 months online at sjelden.no

Rosenberger A¹, Schandy R², Lysne S², Hæstad H¹

¹National Neuromuscular Centre Norway, University Hospital of North-Norway, ²National advisory unit on rare disorders, Oslo University Hospital

231P Efficacy of tranilast in preventing exacerbating cardiac function and death from heart failure in Muscular dystrophy patients with advanced-stage heart failure: a single-arm, open-label, multicenter study

Matsumura T¹, Fukudome T², Motoyoshi Y³, Nakamura A⁴, Kuru S⁵, Segawa K⁶, Kitao R⁷, Watanabe C⁸, Tamura T⁹, Takahashi T¹⁰, Hashimoto H¹¹, Sekimizu M¹¹, Saito A¹¹, Asakura M¹², Kimura K¹³, Iwata Y¹⁴

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232VP Patient knowledge of the risks of glucocorticoid management in a specialist adult muscle clinic

Kent L¹, Begeti F¹, Turner H¹, Brady S¹

¹Oxford University Hospitals NHS Foundation Trust

233VP Review of inpatient care of children affected by neuromuscular disorders or complex neurodisability from the carer perspective

Thomas S^{1,2}, Gallagher S^{1,2}, Khalid A^{1,2}, Alhaswani Z^{1,2}

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267P-279P: Cell insights, muscle homeostasis

267P Circulating alpha-Klotho combats TGF-beta-induced sarcopenia

Ohsawsa Y¹, Nishimatsu S¹, Saito F², Sunada Y¹

¹Kawasaki Medical School, ²School of Medicine, Teikyo University

268P Age and sex affect human skeletal muscle secretome

Crisol B¹, Pinzon N¹, Orio J¹, Gaut-Serey L¹, Ohana J¹, Bensalah M¹, Peterson C², Butler-Browne G¹, Mouly V¹, Bigot A¹, Trollet C¹

¹Sorbonne Université, Inserm, Institut de Myologie, Centre de Recherche en Myologie, ²University of Kentucky

269P Human neuroblastoma cell-derived neurons and iPSC-derived neurons as models for neuromuscular disorders

Wang H¹, Pommerenke C¹, Hauer V¹, Rand U¹, Eberth S¹, Nagel S¹, Dirks W¹, Werr L^{2,3}, Fischer M^{2,3}, Steenpaß L¹

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270P Single nucleus RNA sequencing reveals unique myonuclei populations in Late-Onset Myopathy

Soule T¹, Pontifex C¹, Rosin N^{1,2}, Joel M¹, Lee S¹, Nguyen M^{1,3}, Chhibber S³, Pfeffer G^{1,3,4}

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271P Exploring the effects of the epi-drug Remodelin on murine myoblasts differentiation

Sian V^{1,2}, Sarparanta J^{1,3}, Hentschel A⁴, Jonson P^{1,3}, Roos A^{5,6}, Natraj Gayathri S^{1,3}, Udd B^{1,7}, Savarese M^{1,3}, Nebbioso A²

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272P High phosphate levels induce atrophy and FGF23 expression in skeletal muscle

Heitman K¹, Fajol A¹, Thomas M¹, Li Q¹, Campos I¹, Westbrook D¹, Komarova S¹, Alexander M¹, White K²

¹University of Alabama Birmingham, ²Indiana University

273P Estrogen deficiency results in reduced maximal running capacity without changes in the phosphorylation of myosin regulatory light chain in female rats

Karvinen S¹, Lee E^{1,2}, Nissinen T¹, Ylä-Outinen L¹, Jalkanen A³, Karppinen J^{1,4}, Vieira-Potter V⁵, Lipponen A¹

¹University of Jyväskylä, ²University of Montréal, ³University of Eastern Finland, ⁴University of Helsinki, ⁵University of Missouri

274P Generation of cardiac organoids from DuchenneMuscularDystrophy patient-derived induced pluripotent stem cells: a novel approach to understanding cardiomyopathy

Przymuszała M¹, Stępniewski J¹, Florczyk-Soluch U¹, Dulak J¹

¹Jagiellonian University

275P Feasibility of assessing muscle oxygenation in patients with neuromuscular disease using near-infrared spectroscopy

Tang W¹, Salvatore S¹, Khonde S¹, Montalvo S¹, de Montes C¹, Smith S¹, Hageman N¹, Blumberg Y¹, Ataide P¹, Ni Ghiollagain N¹, Parker D¹, Wheeler M¹, Day J¹, Christle J¹, Duong T¹

¹Stanford University

276P Exploring muscle endurance in a neuromuscular population: insights from the assisted 6-minute cycling test combined with cardiopulmonary exercise testing and near-infrared spectroscopy

Tang W¹, de Montes C¹, Montalvo S¹, Dunaway Young S¹, Salvatore S¹, Khonde S¹, Smith S¹, Hageman N¹, Blumberg Y¹, Ataide P¹, Ni Ghiollagain N¹, Parker D¹, Wheeler M¹, Day J¹, Wheeler M¹, Duong T¹

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277P Single-nuclei RNAseq in myotonic dystrophy type I: DMPK accumulation and myofiber repair

Todorow V¹, Hayashi S², Meinke P¹, Schoser B¹, Nishino I²

¹Friedrich-Baur-Institute, LMU, ²Department of Neuromuscular Research, National Center of Neurology and Psychiatry (NCNP)

278P Mapping human skeletal muscle enhancers to increase rates of genetic diagnosis

Taylor R^{1,2}, Taylor J^{1,2}, Denisenko E^{1,2}, Jones M^{1,2}, Clayton J^{1,2}, Laing N^{1,2}, Forrest A^{1,2}, Alinejad-Rokny H³, Ravenscroft G^{1,2}

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279P Exploring myogenic tremor in an animal model of MYBPC1-Associated Myopathy: a comprehensive study

Inashkina I¹, Zdanovica A¹, Lunge M¹, Zayakin P¹, Upite J², Dzirkale Z², Alnis J⁴, Lace B³, Jansone B², Stavusis J¹

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of Latvia, ³Riga East University Hospital, ⁴Institute of Atomic Physics and Spectroscopy, University of Latvia

361P-400P: DMD - imaging and outcome measures

361P Development of a next-generation multiplex ddPCR assay for measurement of in-frame dystrophin mRNA in people with DMD treated with BMN 351

Tamura S¹, Sidhu I¹, Ilagan J¹, Yu A¹, Byer A¹, Kamath S¹, Staskus L¹, Russell C¹, Melton A¹, **Larimore K**¹

¹BioMarin Pharmaceutical Inc

362P Whole-body MRI reveals common and distinctive muscle involvement in “clinically asymptomatic” female carriers of pathogenic DMD variants

Giliberto F^{1,2}, Vigliano A³, Luce L^{1,2,4}, Pastor Rueda J³, Chaves H³, Mesa L⁵, Carcione M^{1,2}, Mazzanti C^{1,2},

Llames Massini C^{1,2}, Radic P⁶, Cejas C³

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363P A cross-sectional survey upper limb functional using PUL 2.0 at large clinical centers and registries in patients with Duchenne muscular dystrophy

Coratti G¹, Niks E², van der Holst M³, Tian C⁴, Mercuri E¹, Muntoni F^{5,6}, Servais L^{7,8}, Ward S⁹

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364P Gross motor delays in boys with Duchenne muscular dystrophy are seen in infancy

Lowes L^{1,2}, Reash N¹, Iammarino M¹, Connolly A², Pietruszewski L³, Smith M¹, Peng J⁴, Steiner C¹, Tsao C², Waldrop M^{1,2}, Flanigan K^{1,2}, Chagat S¹, Meyer A¹, Mendell J⁵, Alfano L^{1,2}

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365P Duchenne video assessment 2.0 scorecard performance: evaluation of inter-item and inter-scorecard relationships

Contesse M¹, Sapp A¹, Zigler C², Chen W¹, Marshall J¹, Gensler G¹, Brown C¹, Barnes R¹, King D¹, Wilson S¹, **Leffler M**¹

¹Emmes, ²Duke University School of Medicine

366P Social Vulnerability and Fluid Cognition in Duchenne Muscular Dystrophy: The Impact on Boys and Carrier Mothers

Penumalee V¹, Karra H², Javalkar S¹, Arun S¹, Kaat A³, Thangarajh M¹

¹Virginia Commonwealth University, ²University of Virginia, ³Northwestern University

367P Mortality among males with muscular dystrophy in the USA: estimation from whole-population cause-of-death records

Hayes E¹, Giafaglione J¹, Signorovitch J², Sajeev G², Zhu A², Shell R¹, Waldrop M³, Cripe L¹, Wright L¹, Nandi D¹

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368P Ankle contractures in Duchenne muscular dystrophy: using real world data to study the influence of the gastrocnemius and soleus muscles on functional decline

Fleerackers E^{1,2,3}, Pelsma M⁴, Krom Y^{1,3}, Hoek R^{1,3}, Kan H⁵, van Zwet E⁶, Houwen-van Opstal S^{3,4}, Niks E^{1,3}, van der Holst M^{2,3}

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369P Elbow function and thumb pinch strength are relevant for activities of daily living for non-ambulant DMD patients

Michaëls M^{1,2}, Naarding K^{1,2}, van der Holst M^{1,2}, van Zwet E¹, Kan H^{2,3}, Niks E^{1,2}

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370P Gait analysis in children with Duchenne muscular dystrophy: overground vs. treadmill walking

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371P Screening for psychosocial needs in adults with Duchenne muscular dystrophy: preliminary findings on using the GAD7 and PHQ9

Bouquillon L¹, Pattni J¹, Bindman D¹, Geagan C², Conn R³, McDonald R¹, Turner C², Rodney S⁴, Johnson A⁵, Guglieri M², Straub V², Quinlivan R¹

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372VP MRI fat fraction in Duchene muscular dystrophy (DMD): inter-reader variability of the 90th percentile fat fraction value

Hammond M¹, Harris J¹, Mesbah S¹, Roche F², Berger M¹, Zabbatino S¹, Scheyer R³, Holland S¹

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373P Association between the time of diagnosis and muscle breakdown in DMD patients diagnosed under two years of age

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374P Relationship between the Pediatric Outcomes Data Collection Instrument (PODCI) and EQ-5D-3L utility score in Duchenne muscular dystrophy

Posner N¹, Merla V¹, Aslam Z¹, Bushmakina A¹, Cappelleri J¹

¹Pfizer, Inc.

375P Relationship between Pediatric Outcomes Data Collection Instrument (PODCI) and North Star Ambulatory Assessment (NSAA)

Posner N¹, Merla V¹, Aslam Z¹, Bushmakina A¹, Cappelleri J¹

¹Pfizer, Inc.

376P Ataluren in patients with nonsense mutation DMD (nmDMD): retrospective evaluation from a tertiary referral center in Turkey

Öz Yıldız S^{1,3}, Bulut N², Gürbüz İ², Öztoprak Ü¹, Tunca Yılmaz Ö², Haliloğlu G¹

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377P Patterns of disease progression in Duchenne muscular dystrophy: heterogeneous changes in motor function tasks among patients with similar trajectories over one year

Posner N¹, Talaga A¹, Johnson M², Gomez-Lievano A², Akbarnejad H², Ma Y², Aslam Z¹, Kane A¹, Bhambri R¹, Dukacz S³, Cappelleri J¹, Signorovitch J²

¹Pfizer New York, ²Analysis Group, ³Pfizer Toronto

378P Geospatial driver of cognition in biological mothers of sons with Dystrohinopathy

Javalkar S¹, Penumalee V¹, Arun S¹, Karra H^{1,2}, Kaat A³, Thangarajh M¹

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379P A qualitative study on people with Duchenne muscular dystrophy and caregivers' experiences during the transition process from pediatric to adult healthcare

Marcassoli A¹, Moroni I², Guastafierro E¹, Brigliadori B², Nardocci N², Leonardi M¹, De Angelis F³, Langer T⁴, Rodger S⁴, Willems J⁴, Kraus De Camargo O⁵, Frei J⁵, Swain A⁵, Ringer D⁵, Gorter J⁵, Pozniak K⁵, Rajapakse N⁵, Fournier A⁶, Gutierrez R⁶, Osman H⁷, Reeskau G⁸, McCauley D⁵, Wang E⁵, Friedrich S⁴

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380VP Assessment of lung function and respiratory muscles using ultrasonography in Duchenne muscular dystrophy

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381P Survey results for use of the Performance of the Upper Limb Module in patients with Duchenne muscular dystrophy: UK North Star national registry

Wolfe A^{1,2}, Brooke M², Aslam N², Manzur A^{1,2}, Muntoni F^{1,2}, Baranello G^{1,2}

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382P Decreased quality of life in Duchenne muscular disease patients related to functional neurological and cardiac impairment

Jurikova L¹, Masarova L^{2,11}, Panovsky R^{2,3}, Pesl M^{2,3,4}, Zondra Revendova K^{5,6}, Volny O^{2,5,6}, Feithova V^{2,7}, Holecek T^{2,7,8}, Kincil V^{2,3}, Danhofer P¹, Vohanka S⁹, Haberlova J¹⁰, Podolska K¹⁰

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383P A qualitative evaluation of meaningful change on the north star ambulatory assessment and performance of upper limb in Duchenne muscular dystrophy

Murphy A¹, Ciobanu T², Davies E², Gillman A³, Barrett L³, Johnson A⁴, Mills J³, Heinrich P³, Przydzial K³, Ewens B³, Vandenberg G³, Cano S³, Mayhew A⁵

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384P Functional Outcome Measures (FOMs) guiding clinical care of children with Duchenne muscular dystrophy

Khandekar G¹, Banavara Shyamprasad S¹, Ramesh Babu R^{1,2}, Kumar A², Satyam P^{1,2}, Maganthi M², Krishna G¹, Mathew A^{1,2}

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385P Quantitative magnetic resonance of masticatory muscles in adolescents with Duchenne muscle dystrophy

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386P Dark-adaptation visual thresholds in Duchenne muscular dystrophy patients with genetic backgrounds affecting different dystrophin proteins

Dias S¹, Barboni M^{1,2}, Brasil A¹, Lima K³, Camelo C³, Sindeaux R³, Resende M³, Albuquerque M³, Zanoteli E³, Ventura D¹

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387P Quantifying function from birth through adulthood in Duchenne muscular dystrophy: a cross-sectional evaluation of the Neuromuscular Gross Motor Outcome

Iammarino M¹, Reash N¹, Smith M¹, Steiner C¹, Beale A¹, Humphrey L¹, Lowes L¹, Alfano L¹

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388P Remote evaluation of functional outcomes in Duchenne muscular dystrophy: navigating opportunities and obstacles

Banavara Shyamprasad S¹, Khandekar G¹, Ramesh Babu R^{1,2}, Krishna G¹, Mathew A^{1,2}

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389P Natural history of bone health in Duchenne muscular dystrophy: A systematic review and implications for the design of a clinical trial

De Ford C¹, Guridi M¹, Chen Y², Murphy A³, Wood C⁴, McMillan H⁵, Mercuri E⁶, Crabtree N⁷, Ward L^{8,9}

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390P Assessing biomarkers of bone metabolism and the role of the IL-6 signalling pathway in patients with Duchenne muscular dystrophy

De Ford C¹, Guridi M¹, Fruechtenicht C¹, See C¹, Houghton R¹, Chen Y², Murphy A³, Wood C⁴, Ward L^{5,6}, Crabtree N⁷, Mercuri E⁸, McMillan H⁹

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391P Agreement and accuracy of ambulatory definitions in Duchenne muscular dystrophy (DMD): a cross-sectional analysis

Macedo A¹, Logan J¹, Dai D¹, Ricchetti-Masterson K¹

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392P Investigating the data landscape of Duchenne muscular dystrophy: Answering your research questions with the right data source

Furby H¹, Johnson M¹, Signorovitch J², Moride Y³, Castillon G³, Simpson A⁴

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393P Understanding oropharyngeal dysphagia in Duchenne muscular dystrophy: A 10-year longitudinal cohort study

Scholten S¹, Lagarde M¹, Knuijt S², Houwen-van Opstal S¹, Erasmus C³, Groothuis J²

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394P Longitudinal changes in the North Star Ambulatory Assessment and leg muscle fat fraction in DMD

Forbes S¹, Nair K², Willcocks R¹, Barnard A¹, Lott D¹, Senesac C¹, Rock K¹, Finanger E³, Brandsema J⁴, Subramony S¹, Wang D⁴, Rooney W⁵, Walter G¹, Vandenborne K¹

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395P Age at loss of ambulation in patients with nmDMD from the STRIDE Registry: sensitivity analyses

Muntoni F¹, Buccella F², Nascimento Osorio A³, Tulinius M⁴, Bernadete Dutra de Resende M⁵, Johnson S⁶, Werner C⁷, Anbu B⁸, Liu E⁶, Mercuri E⁸

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396P 6-year follow-up on muscle affection in female carriers of Dystrophinopathy

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397P 6-year follow-up on cardiac affection in female carriers of Dystrophinopathy

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398P Magnetic resonance imaging detects bone alterations in corticosteroid treated boys with DMD

Kunnath Ravindranunni R¹, Grewal R², Cottrell C², Bernier A¹, Tuna I¹, Vandenborne K¹, Walter G¹, Rajapakse C², Willcocks R¹

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399P MRI assessment of microdystrophin gene therapy in DMD: a five year longitudinal study

Willcocks R¹, Lott D¹, Forbes S¹, Vandenborne K¹, Walter G¹

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400P Longitudinal evaluation of ambulatory function with ankle wearable technology in ambulant DMD

Poleur M¹, Parinello G², Vrščaj E³, Kumhera M⁴, Bisson C², Aragon-Gawńska K⁵, Anghelescu C⁶, Daron A¹, Szabo L⁷, Leanca M^{8,9,10}, Mirea A^{8,9,10}, Kody S¹¹, Saleh A¹¹, Osredkar D³, Haberlova J⁴, Potulska-Chromik A⁵, Butoianu N^{6,8}, Eggenspieler D², Strijbos P¹², Servais L^{13,14}

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538P-577P, 578VP: Acquired, inflammatory, myositis

538P Muscle haptoglobin biomarkers cachexia induced by anti-acute myeloid leukemia chemotherapy

Rybalka E^{1,2,3}, Campelj D^{1,4}, Spiesberger G^{1,2}, Formosa L⁵, Steele J⁶, Zhang H⁶, Schittenhelm R⁶, Leow L³, Bhandari N¹, Goodman C⁷, Timpani C^{1,2,3}

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539P A late-onset multiple-acyl-CoA-dehydrogenase deficiency-like condition is more common in West of Scotland than primary genetic MADD, and is likely multifactorial

Watson-Fargie T¹, Coomber A², Barr M³, Brennan K¹, Dale J⁴, Fletcher E⁵, Gallagher P¹, Molinari E¹, Miller-Hodges E⁶, O'Sullivan D⁷, Stewart K⁸, Taylor R⁹, Topf A¹⁰, Straub V¹⁰, Edwards R³, Stewart W¹¹, Farrugia M¹, Longman C⁸

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540P Assessing the effect of chronic nitrate supplementation on muscle mass and physical function outcomes

Edwards H^{1,2}, Morton J², Moseley J³, Marshall T³, Berry A², Igwesi-Chidobe C³, El-Khamisy S², Jones H², Farrow M⁴

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541P Comparative evaluation of pulmonary function tests and self-reported respiratory function in Inclusion Body Myositis based on NT5c1A antibody serology status

Wencel M¹, Bjazevic K¹, Goyal N¹, Carbunar O², Freimer M¹⁴, Dimachkie M³, Quinn C⁴, LLoyd T⁵, Mohassel P⁵, Wehl C⁶, Shaibani A⁷, Wang L⁸, Chahin N⁹, Amato A¹⁰, Wicklund M¹¹, Shieh P¹², Herbelin L¹³, Barohn R¹³, Mozaffar T¹

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542P INSPIRE-IBM: an NIH-funded, two-year, multicenter, observational study in inclusion body myositis (IBM)-an update

Wencel M¹, Goyal N¹, Carbunar O², Freimer M³, Dimachkie M⁴, Quinn C⁵, Lloyd T⁶, Mohassel P⁶, Wehl C⁷, Shaibani A⁸, Wang L⁹, Nizar C¹⁰, Amato A¹¹, Wicklund M¹², Dixon S¹², Shieh P¹³, Herbelin L¹⁴, Herbelin L¹⁴, Mozaffar T¹

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543P Riboflavin-responsive MADD, a modern day problem?

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544P A single center Indian cohort of Inclusion Body Myositis

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545P Capillary abnormalities in Immune-Mediated Necrotizing Myopathy: more than collateral damage?

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546VP Deep immunoprofiling in inclusion body myositis and trajectory analysis

Roy B¹, DiStasio M¹, Hackbarth R², Bahrassa F¹, Joo D¹, Pham M¹, O'Connor K¹

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547P The diagnostic value of serum periostin for myocardial involvement in immune-mediated necrotizing myopathy

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548P A role of heparin-binding epidermal growth factor-like growth factor in myocardial involvement in immune-mediated necrotizing myopathy

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549VP High dose intravenous corticosteroids in refractory Immune Checkpoint Inhibitor-related Myocarditis/Myositis/Myasthenia overlap syndrome

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550P Immune checkpoint inhibitor-induced myositis in a patient with cholangiocarcinoma

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551P BiP (GRP78) as potential blood and tissue biomarker in systemic sclerosis

Preusse C^{1,2,3}, Dobelmann V⁴, Kleefeld F¹, Hentschel A⁵, Holla E⁶, Ruck T⁴, Stenzel W³, Siegert E⁷, Roos A^{4,6,8}

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552P Binding immunoglobulin protein (BiP) abundance and distribution in Idiopathic Inflammatory Myopathies (IIM)

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553P Brachio-cervical Inflammatory Myopathy, an unknown disease with diverse serological and histopathological findings and poor response to treatment

Kapetanovic Garcia S^{1,2}, Jimenez-Almonacid J³, Toldos-Gonzalez O³, Ruiz-Lucea E⁴, Rodrigo-Armenteros P^{1,2}, Hernandez-Lain A³, Dominguez-Gonzalez C^{5,6}

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554P Mitochondrial pathology in Myositis: a multicentric case series

Lauletta A¹, Bosco L², Merlonghi G¹, Falzone Y², Cheli M³, Bencivenga R⁴, Léonard-Louis S⁵, Benveniste O⁶, Ruggiero L⁴, Maggi L³, Previtali S², Garibaldi M¹

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555P Assessment of IBM-FRS total score and specific domains in a large cohort of Inclusion Body Myositis patients

Vicino A^{1,2}, Lauletta A³, Barbaccia A⁴, Valentino L⁵, Cheli M⁶, Sacconi E⁷, Grandis M⁸, Coccia M⁹, Barp A¹⁰, Ravaglia S¹¹, Bortolani S¹², Ruggiero L¹³, Mongini T¹⁴, Verriello L¹⁵, Vattemi G⁶, Filosto M¹⁶, Liguori R⁵, Rodolico C⁴, Garibaldi M³, Maggi L¹

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556P Contractile properties of permeabilised single muscle fibres from female patients with Idiopathic Inflammatory Myopathies

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- 557P Skin manifestations of immune-mediated necrotizing myopathy with anti-HMGCR antibody**
Kurashige T¹, Nakamura R², Murao T¹, Mine N⁴, Sato M³, Katsumata R¹, Kanaya Y¹, Dodo Y¹, Sugiura T¹, Ohshita T¹
¹Nho Kure Medical Center and Chugoku Cancer Center, ²Hiroshima City North Medical Center Asa Citizens Hospital, ³Hiroshima University Hospital, ⁴Chugoku Rosai Hospital
- 558P Contactin-1 antibody-associated chronic inflammatory demyelinating polyneuropathy (CIDP) in a pediatric patient: beyond the tip of an iceberg**
Özel E¹, Öncel İ¹, Öztoprak Ü¹, Temuçin Ç², Haliloğlu G¹
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- 559P Immunological biomarkers in immune-mediated and hereditary polyneuropathies**
Kodal L¹, Krag T¹, Dysgaard T¹
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- 560VP Immune-mediated necrotizing myopathy in 14 Polish patients – clinical course and treatment outcome**
Rajczewska Oleszkiewicz C¹, Kierdaszuk B¹, Kostera-Pruszycki A¹
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- 561P PDGFRα as a reliable surface marker for fibro-adipogenic progenitor (FAP) cells**
Park J¹, Walli S¹, Bachir D¹, Dobelmann V¹, Preuß C², Stenzel W², Brunn A³, Meuth S¹, Ruck T¹, Nelke C¹
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- 562P Rare mimics of idiopathic inflammatory myopathies – a single centre cohort from India**
Sivaraman Nair S¹, George J¹, Poyuran R¹
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- 563P Abatacept, the solution for a patient with immune-mediated necrotizing myopathy**
Calabria Gallego M¹
¹Hospital Universitario De Salamanca
- 564VP Investigating motor and bulbar severity in NT5c1A seropositive and seronegative IBM participants in the INSPIRE-IBM trial**
Herrera M¹, Wencil M¹, Hernandez I¹, Goyal N¹, Dimachkie M², Lloyd T³, Mohassel P³, Wehl C⁴, Freimer M⁵, Shaibani A⁶, Wicklund M⁷, Dixon S⁸, Chahin N⁹, Wang L¹⁰, Shieh P¹¹, Amato A¹², Quinn C¹³, Carbanar O¹⁴, Mozaffar T¹, INSPIRE-IBM Study Group¹
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- 565VP Investigating highly differentiated cytotoxic T cells and functional severity in participants with Inclusion Body Myositis in the INSPIRE-IBM trial**
Herrera M¹, Wencil M¹, Hernandez I¹, Goyal N¹, Dimachkie M², Lloyd T³, Mohassel P³, Wehl C⁴, Freimer M⁵, Shaibani A⁶, Wicklund M⁷, Dixon S⁸, Chahin N⁹, Wang L¹⁰, Shieh P¹¹, Amato A¹², Quinn C¹³, Carbanar O¹⁴, Mozaffar T¹, INSPIRE-IBM Study Group¹
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- 566P CIC-1 chloride channel inhibition improves disease symptoms and survival in a rat model of muscle-specific kinase (MuSK) Myasthenia Gravis**
Skals M¹, Morgen J¹, Huus N¹, Skov M¹, Kelly N¹, Broch-Lips M¹
¹NMD Pharma A/S
- 567P A prospective observational study on the effect of intravenous immunoglobulin on small fiber neuropathy after SARS-CoV-2 infection or vaccination**
Shin J¹, Lee J²
¹Hallym Medical Center, Dongtan Sacred Heart University, ²Kyungpook National University Hospital

568P Unraveling interferon-related autophagic signatures in Immune Myopathies

Authier F¹, Hou C¹, Periou B¹, Souvannanorath S¹, Malfatti E¹, Martin L¹

¹Paris Est-creteil University

569P Revisiting Systemic Sclerosis Myopathy: unveiling unique histopathological signatures and overlaps with immune myopathies features

Authier F¹, Zaidan L¹, Le Gouvellec N², Periou B³, Relaix F¹, Mouthon L⁴, Hachulla E⁵

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570P Physiological and molecular mechanisms underlying chronic alcoholic-related myopathy

Baumann C¹, Ganjavi M¹, Brown A¹, Willis C²

¹Ohio University, ²University of Bradford

571P Muscular metabolic plasticity in 3D in vitro models against systemic stress factors in ME/CFS and long COVID-19

Mughal S^{1,4}, Andújar-Sánchez F^{3,4}, Sabater-Arcis M¹, Fernández-Costa J¹, Ramón-Azcón J^{1,2}

¹Institute For Bioengineering Of Catalonia BIST, ²ICREA Institució Catalana de Recerca i Estudis Avançats, ³Institut d'Investigacions Biomèdiques August Pi i Sunyer, ⁴Universitat de Barcelona

572P Dysphagia pattern in Inclusion Body Myositis as a distinguishing feature: insight from a patient initially presenting with rapidly progressing dysphagia

Park Y^{1,2}, Bae J^{3,4}, Jung Y^{3,4}

¹Department of Neurology, Pusan National University Hospital, ²Department of Neurology Pusan National University School of Medicine, ³Department of Neurology Kangdong Sacred Heart Hospital, ⁴Department of Neurology Hallym University College of Medicine

573P The interlocation of autophagy and interleukin-6 in immune-mediated necrotizing myopathy

Liang W^{1,2,3}, Chang S¹, Lin P⁵, Jong Y^{1,3,4}, Liu H⁵

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574P Infectious muscles diseases: a comprehensive case study of 7 patients from Indian cohort

Sharma M¹, Bhatia R¹, Venugopalan Y V¹

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575P FORTIFY: a phase 3 study to evaluate efficacy & safety of BBP-418 in individuals with Limb-Girdle muscular dystrophy 2I, LGMDR9 FKRP-related (LGMD2I/R9)

Sproule D¹, Reddy D¹, Blankenbiller T¹, Rainey A¹, Reklis L¹

¹ML Bio Solutions, A BridgeBio Company

576P High precision quantification of ICAM-1 highlights similarities and differences between subgroups of Idiopathic inflammatory myopathies

Nishimura A¹, Nelke C², Huber M³, Mensch A⁴, Roth A¹, Oberwittler C⁵, Zimmerlein B⁶, Krämer H^{7,8},

Neuen-Jacob E⁹, Stenzel W¹⁰, Müller-Ladner U³, Ruck T², Schänzer A¹

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577P Evaluation of mitochondrial dysfunction as a potential mediator of inflammatory pathways in inclusion body myositis

Walli S¹, Abdennebi D¹, Görg B², Bachir D¹, Dobelmann V¹, Preuße C³, Stenzel W³, Schoser B⁴, Roos A^{1,6,7},

Brunn A⁵, Meuth S¹, Ruck T¹, Nelke C¹

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578VP Recurrent rhabdomyolysis as the presenting feature of mixed connective tissue disease

Kent L¹, Butterworth R², Hofer M¹, Giavri E², Brady S¹

¹Oxford University Hospitals NHS Foundation Trust, ²Milton Keynes University Hospital

644P-655P: Muscle MRI & new imaging techniques

644P Muscle MRI in Glycogen Storage disease type 5 (McArdle disease) – single centre experience

Mohamed K¹, Pula S¹, Finnigan P¹, Godfrey R¹, Hammam A¹, Morrow J¹, Løkken N², Quinlivan R¹

¹Centre for Neuromuscular Diseases, National Hospital for Neurology and Neurosurgery; UCL Institute of Neurology, ²Copenhagen Neuromuscular Center, Department of Neurology, Rigshospitalet, Copenhagen University Hospital

645P The utility and limitations of artificial intelligence in diagnosing rare disorders

Alawneh J¹, Gonorazky H¹, Repalo A², Mashouri P²

¹The Hospital for Sick Children, ²University of Toronto

646P Towards integration of quantitative MRI in the diagnostic protocol of neuromuscular disorders in three Dutch NMD expert centers

Rauh S¹, Cameron D², Heskamp L³, van Doorn J², Kruit M¹, Nievelstein R³, Becks R², Niks E¹, van der Pol L³, Houwen S², Braakman H², Erasmus C², van Alfen N², Bartels B³, Froeling M³, Kan H¹

¹Leiden University Medical Center, ²Radboud University Medical Center, ³University Medical Center Utrecht

647P Tongue volume evaluation in Spinal and Bulbar Muscular Atrophy (SBMA) by AI-assisted automatic MRI-analysis

Rosenbohm A¹, Vernikouskaya I², Müller H¹, Chadraabal K¹, Gadelkareem M¹, Ludolph A^{1,3}, Rasche V^{2,4}, Kassubek J^{1,3}

¹Department of Neurology, University of Ulm, ²Department of Internal Medicine II, Ulm University Medical Center, ³German Center for Neurodegenerative Diseases (DZNE), ⁴Core Facility Small Animal MRI, University of Ulm

648P MRI demonstrates altered skeletal muscle membrane permeability in Becker muscular dystrophy, representing a potential biomarker for disease activity

Schrama E¹, Hooijmans M², Niks E^{1,3}, Kan H^{3,4}, Cameron D⁵

¹Department of Neurology, Leiden University Medical Center, ²Biomedical Engineering and Physics, Amsterdam University Medical Center, ³Duchenne Center Netherlands, ⁴C.J. Gorter MRI Center, Department of Radiology, Leiden University Medical Center, ⁵Department of Medical Imaging, Radboud University Medical Center

649P Comparing unsupervised AI techniques for visualizing MRI fat infiltration patterns in muscular dystrophies

Pizarro-Gallequillos B¹, Gómez-Andrés D², Tobar F³, Andía M⁴, Díaz-Manera J⁵, Verdú-Díaz J⁵, Suazo Rojas L⁶, Díaz Jara J⁶, Bevilacqua J⁷

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650VP Development and implementation of enhanced AI-derived DTI features for precision mapping of neural tract damage in Myotonic dystrophy

Kamali T¹, Hageman N¹, Yazdavar T¹, C Piccolli¹, Day JW¹, Sampson J¹, Wozniak J²

¹Department of Neurology and Neurological Sciences, Stanford University School of Medicine, ²Department of Psychiatry & Behavioural Sciences, University of Minnesota

651VP Quantitative MRI pre- and post-skeletal muscle biopsy reveals correlations with histopathological findings

Schlaffke L¹, Forsting J¹, Kneifel M¹, Rehmann R¹, De Lorenzo A¹, Enax-Krumova E¹, Froeling M², Vorgerd M^{1,3}, Güttches A^{1,3}

¹BG Universitätsklinikum Bergmannsheil gGmbH | Department of Neurology, ²University Medical Center Utrecht, Utrecht, Netherlands, ³Heimer Institute for Muscle Research

652P Muscle MRI-phenotyping of patients with likely pathogenic anoctamin 5 variants

Poulsen N¹, Palmio J², Jokela M^{2,3}, Claeys K^{4,5,15}, Iterbeke L^{5,15}, De Bleecker J⁶, De Vos E⁶, Domínguez-González C⁷, Bermejo-Guerrero L⁷, Muelas N^{8,9,10}, Vilchez J^{8,9}, Gonzalez-Chamorro A¹¹, Diaz-Manera J¹¹, Straub V¹¹, Straathof C¹², Niks E¹², Voermans N¹³, Cameron D¹⁴, Vissing J¹, On behalf of the study group

¹Copenhagen Neuromuscular Center, ²Neuromuscular Research Center, Tampere University and Tampere University Hospital, ³Clinical Neurosciences, University of Turku, ⁴Department of Neurology, University Hospitals Leuven, ⁵Department of Neurosciences, Laboratory for Muscle Diseases and Neuropathies, ⁶Department of Neurology, Ghent University Hospital, ⁷Neuromuscular Disorders Unit, Hospital 12 de Octubre, ⁸Neurology Department, Hospital Universitari i Politècnic La Fe, ⁹Neuromuscular Research Group, Instituto de Investigación Sanitaria La Fe, ¹⁰(CIBERER), U763, Instituto de Salud Carlos III, ¹¹John Walton Muscular Dystrophy Research Centre, ¹²Department of Neurology, Leiden University Medical Center, ¹³Donders Institute for Brain, Cognition and Behaviour, Radboud University Medical Center, ¹⁴Department of Medical Imaging, Radboud University Medical Center, ¹⁵Leuven Brain Institute (LBI)

653P Rapid quantitative assessment of sodium dynamics after exercise using ²³Na-MRI in dysferlinopathy and healthy controls

Bolano Diaz C¹, Neal M^{2,3}, Richardson M¹, Muni Lofra R¹, Michell-Sodhi J¹, James M¹, Mayhew A¹, Hilsden H¹, Wilson I^{2,3}, Hollingsworth K^{2,3}, Blamire A^{2,3}, Straub V¹, Thelwall P^{2,3}, Diaz-Manera J^{1,4,5}, **Diaz-Manera J^{1,4,5}**

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654P Different lower limb muscle MRI patterns in autosomal dominant titinopathies

Gomez Andres D¹, Costa Comellas L¹, Díaz-Manera J², Ōunap K³, Álvarez-Molinero M¹, Urcuyo G¹, Savarese M⁴, Munell F¹, Udd B⁵

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655P Predictive modelling of dysferlinopathy progression: a longitudinal fat fraction analysis

Bolano Diaz C¹, Wilson I², Hilsden H¹, James M¹, Araujo E³, Reyngoudt H³, Blamire A², Jain COS Consortium⁴, Carlier P³, Straub V¹, Diaz Manera J¹

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688P-704P: Therapies for NMD

688P Sleep and health-related quality of life in rare neuromuscular disorders

Fjermestad K¹, Brørs E

¹Frambu Resource Centre for Rare Disorders, ²University of Oslo

689P Highlights and key learnings from 15 years of the TREAT-NMD Advisory Committee for Therapeutics (TACT)

Turner C¹, Robertson L², Bushby K¹, Csimma C³, De Luca A⁴, Heslop E¹, Wells D⁵, Aartsma-Rus A⁶, Straub V¹

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690P The prospect of direct benefit in first-in-human gene therapy studies in minors - an ethical analysis

Pirson I¹, Niks E¹, de Vries M¹, de Graeff N¹

¹Leids Universitair Medisch Centrum

691P Substantial improvement of shoulder function with a new physiotherapy approach in children with LGMD, MD and FSHD

Pelsma M^{1,2}, Ijspeert J², Braakman H¹, Houwen S^{1,2}, Hendrix- van der Stegen A^{1,2}

¹Radboud University Medical Centre-Amalia Children's Hospital, ²Radboud University Hospital – Rehabilitation

692P Determination of in vitro phenotype of Myofibrillar myopathy type 6 (MFM6), caused by the P209L mutation in the BAG3 gene, using patient-derived fibroblasts, and the role of autophagy stimulators in the cell recovery

Snoch W¹, Rintz E¹, Węgrzyn G¹

¹University Of Gdańsk

693P Proposed NIH core for advanced genetic therapies: spotlight on clinical development of AAV products for neuromuscular disorders

Todd J^{1,2}, Reoma L², Nath A², Martin S², Brooks K², Ano S³, Dukhanina O³, Lawal T⁴, Brooks P⁵, Ottinger E⁵, Lomash R⁵, Stan R⁵, Goldfeder L⁶, Venditti C⁷, Bönnemann C¹

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694P AAV-based gene replacement for SELENON-related myopathy

Moghadaszadeh B¹, Troiano E¹, Barraza-Flores P¹, Lee W¹, Beggs A¹

¹Division of Genetics and Genomics, The Manton Center for Orphan Disease Research, Boston Children's Hospital, Harvard Medical School

695P Unveiling the mosaic of quality of life in muscular dystrophy: an analysis of PROMIS survey data in adults

Dixon M¹, Vordos K¹, Krikov S¹, Reeder M¹, Butterfield R¹

¹University Of Utah, Department of Pediatrics

696P ADAPT-NMD: a hybrid II study exploring the feasibility of delivering, evaluating, and implementing a self-management programme for people with neuromuscular disorders at a specialist neuromuscular centre

Lee L¹, Kulnik S², Curran G³, Boaz A⁴, Ramdharry G¹

¹University College London, ²Ludwig Boltzmann Institute for Digital Health and Prevention, ³University of Arkansas for Medical Sciences, ⁴King's College London

697P Clinicians' perspectives on a new self-management support programme for people living with neuromuscular disorders

Lee L¹, Kulnik S², Boaz A³, Ramdharry G¹

¹University College London, ²Ludwig Boltzmann Institute for Digital Health and Prevention, ³King's College London

698P Adapting to life with a neuromuscular disorder: a qualitative exploration of the patient perspective

Lee L¹, Kulnik S², Boaz A³, Ramdharry G¹

¹University College London, ²Ludwig Boltzmann Institute for Digital Health and Prevention, ³King's College London

699P Exon skipping for the second Calponin Homology Domain of dystrophin using AAV.U7snRNA - In vitro & Intramuscular studies using a novel murine model of Duchenne muscular dystrophy

Brinkman A¹, Lesman D¹, Li D¹, Rajakumar D¹, Atre C¹, Rodriguez Y¹, Almeida C¹, Wein N¹

¹Nationwide Children's Hospital

700P Alternative delivery of adeno-associated virus 9 for the treatment of Duchenne muscular dystrophy to target CSF and muscles- GFP Biodistribution study in WT mice

Iyer A¹, Gomez C¹, Rodriguez Y¹, Almeida C¹, Bobbili P², McGovern V², Arnold D², Burghes A², Meyer K¹, Wein N¹

¹Nationwide Children's Hospital, ²The Ohio State University

701P AAV.U7.ex44 Mediates Efficient Exon Skipping, Protein Restoration & Phenotype Rescue - Pre-Clinical Intramuscular and Dose Escalation Study for a Mutational Hotspot of the Duchenne Muscular Dystrophy (DMD)

Rajakumar D¹, Almeida C¹, Atre C¹, Lesman D¹, Li D¹, Rodriguez Y¹, Young C², Spencer M², Flanigan K¹, Wein N¹

¹Nationwide Children's Hospital, ²University of California, Los Angeles

702P SEPNI/SELENON-related myopathy depends on the oxidoreductase ERO1A and is druggable with the chemical chaperone TUDCA

Ferreiro A^{1,2}, Germani S^{3,4}, Tri Van Ho A¹, Cherubini A³, Varone E³, Chernorudskiy A³, Renna G³, Fumagalli S³, Bolis M⁵, Rastelli G⁶, Nogara L^{7,8}, Poggio E⁹, Brini M^{9,10}, Cattaneo A¹¹, Bachi A¹¹, Simmen T¹², Cali T⁷, Boncompagni S⁶, Blaauw B^{7,14}, Zito E^{3,4}

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703P Integrated Organ-on-Chip platform with PINP plasmonic biosensor for fibrosis monitoring in Duchenne muscular dystrophy

Fernández-Costa J¹, Ruíz-Gutiérrez M¹, Ninfali C¹, Torabi M¹, Fernández-Simón E², Díaz-Manera J², Ramón-Azcón J^{1,3}

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704P Translating RNAi-based gene therapy for Facioscapulohumeral muscular dys-trophy

Wallace L¹, Camp J¹, Neal K¹, Zender G¹, Taylor N¹, Zhou B¹, Ye F¹, Price B², Triplett M², Harper S^{1,3}

¹Nationwide Children's Hospital, ²Armatus Bio, ³Department of Pediatrics, The Ohio State University College of Medicine

15:30-16:00	Short Oral Presentations 1 📍 North Hall 146P, 145P, 231P, 576P, 577P Moderator: Werner Stenzel, Charité University Hospital	Short Oral Presentations 2 📍 Terrace 2A 278P, 703P, 702P, 279P, 704P Moderator: Perry Shieh, University of California	Short Oral Presentations 3 📍 Terrace 2B 400P, 399P, 654P, 655P, 653P Moderator: Krista Vandeborne, University of Florida
16:15-17:00	Debate: Can the costs of gene therapies in neuromuscular disorders be justified? 📍 Congress Hall Moderators: Francesco Muntoni, University College London, Great Ormond Street Hospital, UK & Teresinha Evangelista, Institut de Myologie, France		
	14INV Olga Germanenko, SMA Family Foundation, Russia 15INV Josie Godfrey, JG Zebra Consulting, United Kingdom		

01P-51P, 52VP-54VP: CM - CMD**01P Structural variation in nebulin and its implications on phenotype and inheritance: establishing a dominant distal phenotype caused by large deletions**

Sagath L^{1,2}, Kiiski K^{1,3}, Naidu K^{4,5}, Djordjevic D⁶, Yoon G^{6,7}, Rogers C⁸, Scherer K⁹, Koparir E¹⁰, Kunstmann E¹¹, Davis M¹², Purwa J¹³, Zygmunt A¹⁴, Bönnemann C^{15,16}, Biancalana V¹⁷, Echaniz-Laguna A^{18,19}, Beggs A²⁰, Henning F⁴, Wallgren-Pettersson C^{1,2}, Pelin K^{1,2,21}, Lehtokari V^{1,2}

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02P Exploring genotype-phenotype correlations in NEB-related Myopathies

Ogasawara M¹, Nishimori Y¹, Eura N¹, Yoshioka W¹, Yae Y¹, Yamanaka A¹, Hashizume L², Miyazaki N², Sugie K², Hayashi S¹, Noguchi S¹, Iida A¹, Nishino I¹

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03P Modulation of the cyclin inhibitor p27 can ameliorate muscular dystrophy in LAMA2-RD

Bonaccorso R¹, Porrello E¹, Tonlorenzi R¹, **Previtali S**¹

¹Irccs San Raffaele Scientific Institute

04P Characterising patient iPSC-derived models of RYR1-related myopathies

Crane J^{1,2}, Clayton J^{1,2}, Vo C^{1,2}, Driver K^{1,2}, Malfatti E^{3,4}, Romero N^{5,6}, Laing N^{1,2}, Ravenscroft G^{1,2}, Taylor R^{1,2}

¹Harry Perkins Institute of Medical Research, ²Centre for Medical Research, University of Western Australia, ³APHP, Centre de Référence de Pathologie Neuromusculaire Nord-Est-Ile-de-France, ⁴Université Paris Est, U955, INSERM, IMRB, F-94010, ⁵Sorbonne Université, Myology Institute, Neuromuscular Morphology Unit, Center for Research in Myology, ⁶Centre de Référence de Pathologie Neuromusculaire Paris-Est

05P Pediatric cardiomyopathy may be more prevalent amongst ACTA1 mutation related myopathies: a single center case-series

Nandi D¹, Meyer A², Connolly A^{3,4}, Waldrop M^{3,4}, Flanagan K^{3,4}, Cripe L¹, Hayes E¹

¹Division of Cardiology, Department of Pediatrics, Nationwide Children's Hospital, ²Division of Genetics, Department of Pediatrics, Nationwide Children's Hospital, ³Division of Neurology, Department of Pediatrics, Nationwide Children's Hospital, ⁴Center for Gene Therapy, Abigail Wexner Research Institute, Nationwide Children's Hospital

06VP In vivo modulation of novel modifier genes for LAMA2-RD

Pini V^{1,2}, Bonaccorso R¹, Porrello E¹, Burris T³, Morgan J², Muntoni F², Previtali S¹

¹Neuromuscular Repair Unit, Institute of Experimental Neurology, Ospedale San Raffaele, ²Dubowitz Neuromuscular Centre, UCL Great Ormond Street Institute of Child Health, ³University of Florida Genetics Institute

07P Development of cell therapy for Ullrich congenital muscular dystrophy by iPSC-derived mesenchymal stromal cell

Sakurai H¹, Goto M¹, Takenaka-Ninagawa N¹, Harada A¹, Ikeya M¹

¹Center for iPS Cell Research and Application (CiRA), Kyoto University

08P SRPK3-TTN related myopathy: early clinical characteristics and muscle imaging findings

Orbach R¹, Donkervoort S¹, Saade D², D'Souza P³, Haugland J¹, Foley A¹, Bharucha Goebel D^{1,4}, Potticary A¹, Chao K⁵, Macnamara E³, Finkel R⁶, Beggs A⁷, Tiffet C³, Bönnemann C¹

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09P Delineating collagen VI genes expression patterns in mice skeletal muscles using RNAscope

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10P Characterization of the severe phenotype of COL6-related dystrophy due to the recurrent deep intronic pseudoexon-inducing variant COL6A1 c.930+189C>T

Foley A¹, Bolduc V¹, Guirguis F¹, Donkervoort S¹, Hu Y¹, Orbach R¹, Mohassel P¹, Zhou H², Aguti S³, Jimenez-Mallebrera C⁴, Lamandé S⁵, Allamand V⁶, Gualandi F⁷, Ferlini A⁷, Wilton S^{8,9}, Wagener R¹⁰, Bertini E¹¹, Muntoni F^{12,13}, Bönnemann C¹, The COL6A1 Intron 11 Study Group

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11P Autosomal dominant centronuclear myopathy caused by variants in the DNM2 gene – Results of an international, prospective natural history study

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12P Female carriers of X-linked Myotubular Myopathy (XL-MTM) in Germany – extending the knowledge about the impact of heterozygous variants in the MTM1 gene

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13P Centronuclear Myopathy in DNM2 E368K mice: behavioral and pathological insights

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14P X-linked myotubular myopathy: 3-year follow-up of a prospective international natural history

Seferian A¹, Annoussamy M², Fer F², Lilien C^{1,3}, Gidaro T¹, Schara-Schmidt U⁴, Braun F^{4,5}, D'Amico A⁶, Daron A⁷, Hernández González A⁸, de Lattre C^{9,10}, Villerot C¹¹, Behin A¹², Arnal J¹³, Mayer M¹⁴, Bellance R¹⁵, Davion J¹⁶, Hogrel J¹⁷, Servais L¹, on behalf of NatHis CNM Study Group

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15P Prospective, longitudinal study of the natural history of paediatric patients in France with LAMA2 related dystrophies

Seferian A¹, Gasnier E², Peretti M², Duchene D², Lagrue E², Vuillerot C³, Walther-Louvier U⁴,

Gómez García-de-la-Banda M⁵, Grange A², Carlier R⁶, Reynoudt H⁷, Marty B⁷, Colella M¹, Quijano-Roy S⁵

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16P Limitation of short-reads NGS sequencing on genomic DNA: interest of functional studies in the diagnosis of congenital Ullrich muscular dystrophy

Metay C^{1,2}, Ghanem R¹, Toutain A³, Bloch A¹, Blin E¹, Jobic V¹, Pham T⁴, Lejeune E⁵, Buratti J⁵, Keren B⁵, Ader F^{1,6,7,8}, Richard P^{1,6,7}

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17P Decoding TTN gene mutations in Indian cohort: detection and characterization using insights from sequencing and structural analysis

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18P Cohort of Czech patients with RYR1-related disorders

Lauerová B¹, Zidkova J^{2,3}, Rohlenova M¹, Dolanska A¹, Gloser M¹, Kumhera M¹, Lassuthova P⁴, Kramarova T^{2,3}, Kopcilova J², Fajkusova L^{2,3}, Haberlova J¹

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19P Recurrent TTN missense variants in biallelic titinopathies: collecting all the puzzle pieces

Di Feo M^{1,2}, Rees M³, Gautel M³, Jungbluth H^{3,4}, Fiorillo C^{1,5}, Bruno C^{5,6}, Udd B^{2,6}, Savarese M², On behalf of the Titin Study Group⁷

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20P A novel DNM2 variant causing Centronuclear Myopathy with respiratory involvement

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21P Tongue ultrasound assessment in patients with Nemaline myopathy

Moreno C¹, Moreira A¹, Gontijo Camelo C¹, Zanoteli E¹

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22P Clinical and ultrasonographic evaluation of dysphagia in patients with LAMA2-CMD

Camelo C¹, Sampaio P¹, Moreira A¹, Moreno C¹, Artalheiro M¹, Silva A¹, Reed U¹, Zanoteli E¹

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23P Establishing the genetic diagnosis in patients with suspected recessive Titinopathy

Mueller J¹, Savarese M², Lillback V², Perry L¹, Zaharieva I¹, Pini V¹, Sagath L³, Steyaert W³, Hoischen A³, Yopez V⁴, Esteve-Codina A⁵, Neveling K³, Topf A⁶, Muntoni F¹, Sarkozy A¹

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24P Improving gross motor function in pediatric Centronuclear Myopathy with acetylcholinesterase inhibitors: a case report

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25P Data trends and highlights from The Global Registry for COL6-related Dystrophies

McDonald S¹, Allamand V², Alvarez R³, Dziewczapolski G³, Boddy H⁴, Deconinck N⁵, Ferré X⁶, McAlister B⁴, Mejat A⁷, Sarkozy A⁸, Copier J⁹, Straub V¹

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26P Is oral salbutamol a possible treatment for congenital myopathies?

Michael E^{1,2}, Hedberg-Oldfors C³, Gudmundsson M⁴, Weichbrodt J⁴, Oldfors A³, Darin N²

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27P Muscle ultrasound findings in paediatric patients with TTN gene related congenital myopathy

Sarkozy A¹, Perry L¹, Cicala G^{1,2}, Manzur A¹, Vanegas M³, Khries M³, Sudhakar S⁴, Clark C⁵, Muntoni F^{1,6}, Jungbluth H³, Baranello G¹

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28P CHKB muscular dystrophy: beyond Megamitochondria

Codina Bergada A^{1,2}, Nascimento A¹, Lavilla R², Orteiz C¹, Natera-de Benito D^{1,3}, Expósito J¹, Estévez-Arias B^{1,4}, Carrera L¹, Martorell L⁵, Isai A¹, Colomer J¹, Jou C^{1,2,3,6}

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29P Temporal requirement of dystroglycan glycosylation during brain development and rescue of cortical dysplasia via gene delivery in the fetal stage

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30P Nemaline Myopathy-linked TNNT1 mutations are associated with aberrant thin filament extensibility and myofibre hyper-contraction

Laitila J^{1,2}, Lewis C², Hessel A^{3,4}, Primiano G^{5,6}, Hernandez-Lain A^{7,8}, Fiorillo C⁹, Lawlor M¹⁰, Ottenheim C¹¹, Ochala J²

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31P Nutritional status of patients with nemaline myopathy and related congenital myopathies in Finland

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32P Investigating myosin dysregulation in X-linked myotubular myopathy

Rostedt F^{1,2}, Gerlach Melhedegaard E¹, Zanoteli E³, Primiano G⁴, Nishino I⁵, Laporte J⁶, Gineste C⁶, Romero N⁷, Lawlor M⁸, Wallgren-Pettersson C^{2,9}, Laitila J^{1,2}, Ochala J¹

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33P Description of natural history baseline characteristics of a paediatric cohort of recessive TTN myopathy patients in the UK – a prospective study

Wolfe A^{1,2}, Cicala G^{1,2}, Joefield T², Sheehan J³, Main M¹, Vanegas M³, Khries M³, Clark C^{1,2}, Sudhakar S¹, Perry L¹, Bilby J¹, Jungbluth H³, Muntoni F^{1,2,4}, Baranello G^{1,2,4}, Sarkozy A^{1,2}

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34P Investigating sarcomeric changes in Cullin-3 knockout muscles

Fochi V¹, Blondelle J², Medelyte B¹, Seto J^{3,4}, Jones Y², Castillon G², Ghassemian M⁵, Singer J⁶, Lange S^{1,2,7}

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35P Generation of a zebrafish knock-in model of Exertional Heat Stroke

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36P Liver involvement in Myotubular and Centronuclear Myopathy: review of one year's data collected by the MTM & CNM Patient Registry

Bohill J¹, Ward E², Lennox A³, Lawlor M⁴, Jungbluth H^{5,6}, Beggs A⁷, Graham R⁸, Heidemann M⁹, Wood M², Ward M², Page J¹, Cowling B¹⁰, Haselkorn T¹¹, Voermans N¹², Foley A¹³, Kyrana E¹⁴, Marini-Bettolo C¹, Dhawan A¹⁴, Dowling J¹⁵

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37P TreatMYPN: In vivo mouse characterization and in vitro 3D muscle studies followed by 15P AAV gene therapy for the ultrarare myopalladin-related Congenital Myopathy

Onnée M¹, Taglietti V¹, Gicquel E², Bastu S¹, Periou B^{1,3}, Banos G¹, Mignot J¹, Bleuzen A¹, Roudaut C², Tired L¹, Didier N¹, Richard I², Relaix F¹, Malfatti E^{1,3}

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38P Collablot, a new immunodetection assay for the quantification of collagen VI expression and secretion in cell culture

Sendino M¹, Martín-Gonzalez S¹, Oseguí-Barcenilla N¹, López-Márquez A², González-Moro I¹, Benito-Agustino A¹, López-Martínez A¹, Jimenez-Mallebrera C², **Arechavala Gomeza V^{1,3}**

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39P Studying markers of metabolism, apoptosis, and necrosis in cullin-3 skeletal muscle knockouts

Herskind J¹, Fujita K², Dato V², Fochi V¹, Blondelle J², Medelyte B¹, Seto J^{3,4}, Jones Y², Castillon G², Ghassemian M⁵, Singer J⁶, Lange S^{1,2,7}

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40P Muscle ultrasound pattern in Merosin-deficient muscular dystrophy

Costa Comellas L^{1,2,3}, Gómez-Andrés D^{1,2,3}, Urcuyo G^{1,3}, Toro-Tamargo E¹, López-López J⁴, Álvarez-Molinero M^{1,5}, Munell F^{1,2,3}

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41P Rigid spine syndrome revealing nemaline myopathy caused by a novel mutation in cofilin-2 gene (CFL2)

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42P Characterizing MRI brain abnormalities in X-linked Myotubular Myopathy

Vogt L¹, **Amburgey K¹**, Widjaja E², Dowling J¹

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43P Characterization of RYR1 variants in congenital myopathy zebrafish models

Sinclair J¹, Todd J¹, Feldman B¹, Lawal T¹

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44P Novel TTN mutation causing a congenital onset, slowly progressive myopathy with contractures in two siblings

Figuerola Bonaparte S¹, Martínez -Viguera A¹, Juanola-Mayos E¹, Lucente G¹, Almendrote M¹, Gasch-Navalon E², Corral-Juan M², Matilla-Dueñas A², Martínez-Piñero A¹

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45P Strategies to improve the design of gapmer antisense oligonucleotide on allele-specific silencing in COL6-related congenital muscular dystrophies

Aguti S¹, Cheng S¹, Briggs S¹, Ala P¹, Muntoni F¹, Zhou H¹

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46P Congenital Myopathies and Muscular Dystrophies in the UK: a comprehensive next generation sequencing analysis of frequencies over an 8-year period (2016-2023)

Cicala G^{1,2}, Mccauley J³, Mein R⁴, Walsh C³, Muntoni F^{1,5}, Sarkozy A¹

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47P MYBPC1 mutation in a family: spectrum of phenotype in three generations

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48P Digging into histological-genetic correlations in MYH2-myopathy: a case series and review of the literature

Labella B^{1,2}, Brochier G^{1,3}, Beuvin M¹, Méneret A³, Leonard-Louis S³, Maisonobe T³, Stojkovic T¹, Métay C³, Evangelista T^{1,3}

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49P Epidemiologic study of XLMTM and clinical expression in the liver (EXCEL): study design of an observational, patient-centric study

Beggs A¹, Haselkorn T², Dhawan A³, Lawlor M⁴, Kim J², Ward E⁵, Hughes Z⁶, Baima J², James L², Coats J², Gentyala R², Brandon T², Jesus Perez Inigo Garcia-Malo M⁷, Marini Bettolo C⁸, Graham R⁹, Dowling J¹⁰

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50P Monoallelic DAG1 truncating variants in patients with hyperCKemia

Segarra-casas A^{1,2}, Trainor C¹, Polavarapu K³, Díaz-Manera J¹, Gonzalez-Quereda L^{2,4}, Kirschner J⁵, López de Munain A^{6,7,8,9}, Nascimento A^{4,10,11}, Roos A^{3,12,13}, Dowling J^{14,15}, Muntoni F^{16,17}, DAG1 Study Group, Töpf A¹, Straub V¹

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51P Clinical characterization of Collagen XII-related disease caused by biallelic COL12A1 variants

Donkervoort S¹, McCarty R¹, Saade D¹, Munot P², Laverty C³, Pinz H⁴, Zou Y¹, McNally M¹, Yun P¹, Tian C⁵, Töpf A⁶, Phadke R⁷, Malicki D³, Friedman J³, Foley A¹, Gleeson J⁸, Lotze T⁹, Muntoni F², Straub V⁶, Study Group, Bönnemann C¹

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52VP Muscle ultrasound as a potential biomarker in patients with LAMA2-related dystrophy under 6 years of age

Haugland S¹, Orbach R¹, McAnally M¹, Donkervoort S¹, Foley A¹, Bonnemann C¹

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53VP A 5-year natural history study in LAMA2-related muscular dystrophy and SELENON-related myopathy: the extended last strong study

De Laat I¹, Bouman K^{1,2}, van de Camp S¹, Dittich A³, van Tilburg W⁴, Cameron D⁵, Doorduyn J¹, van Alfen N¹, Kamsteeg E⁶, Houwen S⁷, Groothuis J⁷, Erasmus C², Voermans N¹

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54VP Emerging muscle ultrasound patterns as a diagnostic aid in TTN-related myopathy

Potticary A¹, McAnally M¹, Donkervoort S¹, Bonnemann C¹

¹NIH NINDS

79P-97P: LGMD

79P Profiling of pathogenic variants in Japanese patients with Sarcoglycanopathy

Shimazaki R¹, Saito Y^{1,2}, Awaya T^{3,4}, Minami N², Kurosawa R³, Hosokawa M³, Ohara H³, Hayashi S¹, Takeuchi A⁵, Hagiwara M³, K. Hayashi Y⁶, Noguchi S¹, Nishino I^{1,2}

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80P Evaluating the clinical significance of single heterozygous likely pathogenic and pathogenic variants for autosomal recessive limb-girdle muscular dystrophies in a highly specialised service for rare neuromuscular disorders

Oliwa A¹, Hudson J¹, Topf A¹, Graham E¹, Salman D¹, Straub V¹, Harris E¹, Marini-Bettolo C¹

¹The John Walton Muscular Dystrophy Research Centre, Translational and Clinical Research Institute, Newcastle University and Newcastle upon Tyne Hospitals NHS Foundation Trust

81P Minimal clinically important differences in Dysferlinopathy from the 10-year, multicenter Jain Clinical Outcome Study

Gordish-Dressman H^{1,2}, James M³, Rufibach L⁴, Hilsden H³, Day J⁵, Mendell J⁶, Fernandez-Torron R⁷, Harms M⁸, Pestronk A⁹, Vissing J¹⁰, Desai U¹¹, Yoshimura M¹², Shin J¹³, Mozaffar T¹⁴, Stojkovic T¹⁵, Pegoraro E¹⁶, Bevilacqua Rivas J¹⁷, Olive M¹⁸, Paradas C¹⁹, COS consortium on behalf of the Jain Foundation, Straub V³

¹Children's National Hospital, ²George Washington University School of Medicine and Health Sciences, ³The Newcastle upon Tyne Hospitals NHS Foundation Trust and Newcastle University, ⁴The Jain Foundation, ⁵Stanford University School of Medicine, ⁶Nationwide Children's Hospital, ⁷Donostia University Hospital, ⁸Columbia University Irving Medical Center, ⁹Washington University School of Medicine, ¹⁰University of Copenhagen, ¹¹Carolinas MDA Care Center, ¹²National Center Hospital, ¹³Pusan National University Yangsan Hospital, ¹⁴University of California – Irvine, ¹⁵Groupe Hospitalier Pitié-Salpêtrière, ¹⁶University of Padova, ¹⁷Clínica Dávila, ¹⁸Hospital de la Santa Creu i Sant Pau, ¹⁹Hospital U. Virgen del Rocío/Instituto de Biomedicina de Sevilla

82P Diagnostic approach to ANO5-Related Muscular Dystrophy in a series of female siblings: an interdisciplinary perspective

Correa Arrieta C¹, Castellar Leones S^{1,2,3}, Calderon Castro A^{1,2,3}, Rodriguez P^{1,2}, Saldaña D¹, Maradei Anaya S^{1,2}

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83P Should we include HACD1 variants in the differential diagnosis of slowly progressive adult-onset limb-girdle weakness?

Da Silveira Massaro C¹, Ferreira W¹, Farias I¹, Oliveira H¹, Serrano P¹, Badia B¹, Souza P¹, Bezerra M¹, Pinto W¹, Nunes K¹, Oliveira A¹

¹Universidade Federal de São Paulo- UNIFESP - EPM

84P A rare homozygous CAPN3 variant with distinct clinical features in unrelated families of Iraqi Jewish descent

Aharoni S^{2,4}, Assia Batzir N¹, Orenstein N^{1,2}, Yaron Y^{2,3}, Kuzminsky A⁴, Nevo Y^{2,4}, Konen O^{2,5}, Bazak L, Lidzbarsky G⁶, Basel-Salmon L^{2,6,7}

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85P Myopathy secondary to SCN4A C.3502C>T variant

Calabria Gallego M¹

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86P Muscle 3D models to investigate LGMD2 Transportin 3 Related Deficiency: insights into myogenic processes and contractile dysfunction

Pacilio S^{1,4}, Costa R¹, Rodia M¹, Lombardi S¹, Di L², Banos G³, Didier N³, Malfatti E⁴, Focarete M², Cenacchi G¹

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87P MRI characterization of the cardiac involvement in LGMD2i/R9

Fromes Y¹, Olivier S², Zanfongnon R³, Thevenot E³, Stojkovic T^{1,4}, Marty B¹, Reyngoudt H¹

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88P Clinical progression of 43 patients with Sarcoglycanopathy at a single centre

Kocak G¹, Michel-Sodhi J¹, Marini-Bettolo C¹, Moat D¹, Guglieri M¹, Robinson E¹, Schiava M¹, Bolano-Díaz C¹, Wong K¹, Grover E¹, James M¹, Segovia S¹, Elseed M¹, Salman D¹, Harris E¹, Topf A¹, Luce L¹, Hudson J², Henderson M², Parkhurst Y², Graham E², Straub V¹, Tasca G¹, Muni Lofra R¹, Diaz-Manera J¹

¹Newcastle University, ²Newcastle upon Tyne Hospitals NHS Foundation Trust

89P The LGMD2A/Calpainopathy Registry: A patient-powered natural history study and trial recruitment tool

Levy J¹, Boslego J¹, Guglieri M², Martin A³, Mathews K⁴, Wrubel M¹

¹Coalition To Cure Calpain 3, ²John Walton Muscular Dystrophy Research Centre, Translational and Clinical Research Institute, Newcastle University and Newcastle Hospitals NHS Foundation Trusts, ³Parent Project Muscular Dystrophy, ⁴University of Iowa Carver College of Medicine,

90P Genetic heterogeneity of limb girdle myopathies in Tunisia: more than sarcoglycanopathies

Farhat E¹, Miladi N¹, Chaabouni M^{1,2}, Amouri R³, Leturcq F⁴

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91P Determination of gene/protein expression and protein functionality in carriers of Limb-Girdle Muscular Dystrophy (LGMD)

Gaynor A¹

¹Virginia Commonwealth University

92P Development and characterization of induced pluripotent stem cells derived from Calpainopathy patients, carrying the CAPN3 c.1746-20C>G variant

Inashkina I¹, Goluba K², Tvoronoviča A¹, Parfejevs V², Lāce B^{2,3}, Riekstiņa U²

¹Latvian Biomedical Research and Study Centre, ²Pharmaceutical sciences centre, Faculty of Medicine, University of Latvia, ³Riga East Clinical University Hospital

93P The International Clinical Outcome Study for Dysferlinopathy II: validation of motor outcome measures in a new patient cohort

Hilsden H¹, James M¹, Gordish Dressman H², Rufibach L³, Day J⁴, Mendell J⁵, Fernandez Torron R⁶, Harms M⁷, Pestronk A⁸, Vissing J⁹, Desai U¹⁰, Yoshimura M¹¹, Shin J¹², Mozaffar T¹³, Stojkovic T¹⁴, Pegoraro E¹⁵, Bevilacqua Rivas J¹⁶, Olive M¹⁷, Paradas C¹⁸, Straub V¹

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94P JOURNEY: a natural history study of Limb Girdle muscular dystrophies R3-R5: baseline characteristics of study cohort

Lowes L¹, **Ortez Gonzalez C²**, Claeys K³, Laverty C⁴, Gangfuss A⁵, Proud C⁶, Manera J⁷, James M⁷, Alfano L¹, Stevenson H⁸, Yu L⁸, Comi G^{9,10}

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95P Development of a myotropic gene therapy towards a first treatment for LGMDR7

Heier C¹, Fiorillo A¹, Provenzano M¹, McMichael G¹, Crumbaugh C¹, Hawkins E¹, Johnson N¹, Hale M¹

¹Virginia Commonwealth University

96P The impact of losing the ability to sit to stand on social participation in people with Dysferlinopathy: clinical outcome study for Dysferlinopathy

Robinson E¹, James M¹, Hilsden H¹, Rufibach L², Roper W³, Holsten S⁴, Lowes L⁵, De Monts C⁶, Yochai C⁷, Zabala Pardo A⁸, Ogasawara Y⁹, Rudolph K¹⁰, Weber J¹¹, Montiel Morillo E¹², Birnbaum S¹³, Rojas Rojas J¹⁴, Mayhew A¹, Straub V¹, COS Consortium on behalf of the Jain Foundation³

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97P Spectrum of limb girdle muscular dystrophies in a cohort of inherited myopathies with limb girdle weakness

Venugopalan Y V¹, Macken W^{2,3}, Dalal A⁴, Rani N¹, **Reyaz A¹**, Ahmad T¹, Tarane K¹, Danish M¹, ICGNMD Consortium⁵, Bhatia R¹, Wilson L², Bugiardini E², Vandrovцова J², Houlden H², Pitceathly R^{2,3}, Thangaraj K^{4,6}, Topf A⁷, Straub V⁷, Hanna M², Srivastava P¹

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401P-436P, 437VP: DMD – treatments

401P Moderate-term dimethyl fumarate treatment reduces fibrosis of skeletal and cardiac muscle in the mdx mouse model of Duchenne muscular dystrophy

Timpani C^{1,2,3}, Kourakis S^{1,2}, Bagaric R^{1,2}, Qi B^{1,2}, Ali B^{1,2}, Spiesberger G^{1,2}, Boyer R¹, Kandhari N⁴, Yan X^{1,5}, Stupka N^{3,2,1}, van Putten M⁶, Aartsma-Rus A⁶, Deveson-Lucas D⁴, Fischer D⁷, Rybalka E^{1,2,3}

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402P Faecal microbiota transplantation: a potential novel therapeutic avenue for Duchenne muscular dystrophy

Timpani C^{1,2,3}, Debrincat D¹, Van Der Beek J¹, Eri R^{4,5}, Diwakarla S^{6,3}, McQuade R^{6,3,2}, Rybalka E^{1,2,3}

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403P CONNECT1-EDO51: A 12-week open-label Phase 2 study to evaluate PGN-EDO51 safety and efficacy in people with Duchenne amenable to exon 51 skipping

Mellion M¹, McMillan H², Chrestian N³, Gonorazky H⁴, O'Connell C⁵, Vacca S¹, Peterson M¹, Marcos B¹, Batra S¹, Lonkar P¹, Holland A¹, Foy J¹, Lamore S¹, Garg B¹, Yu S¹, Larkindale J¹

¹Pepgen Inc., ²Children's Hospital of Eastern Ontario, ³CHU De Quebec-Universite Laval, ⁴Hospital for Sick Children, ⁵Stan Cassidy Centre for Rehabilitation

404P CONNECT2-EDO51: A Phase 2 placebo-controlled study to evaluate PGN-EDO51 safety and efficacy in people with Duchenne amenable to exon 51 skipping

Mellion M¹, Marcos B¹, Vacca S¹, Peterson M¹, Batra S¹, Lonkar P¹, Holland A¹, Foy J¹, Lamore S¹, Garg B¹, Yu S¹, Larkindale J¹

¹Pepgen Inc.

405P Single- and repeat-dose nonclinical data for PGN-EDO51 demonstrated favorable pharmacology and safety profiles for the treatment of DMD

Sweeney C¹, Gilbert J¹, Lamore S¹, Lonkar P¹, Foy J¹, **Holland A**¹

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406P Effects of telerehabilitation-based motor imagery training on motor imagery ability and motor function in children with Duchenne muscular dystrophy

Bora Zereyak M¹, **Bulut N**¹, Yilmaz Ö¹, Gürbüz İ¹, Haliloğlu G²

¹Hacettepe University, Faculty of Physical Therapy and Rehabilitation, ²Hacettepe University, Faculty of Medicine, Department of Pediatrics, Division of Pediatric Neurology

407P RGX-202, an investigational gene therapy for the treatment of Duchenne muscular dystrophy: interim clinical data

Dastgir J¹, Veerapandian A², Rao V³, Tesi-Rocha C⁴, Harper A, Iannacone S⁶, Falabella P¹, Pakola S¹, Philips D¹, Wilson C¹, Boulous N¹, Gilmor M¹, Yang L¹, Patel H¹, Fiscella M¹, Danos O¹

¹Regenxbio, ²Arkansas Children's Hospital, ³Lurie Children's Hospital, ⁴Stanford School of Medicine, ⁵Children's Hospital of Richmond at Virginia Commonwealth University, ⁶The University of Texas Southwestern Medical Center

408P Dose escalation and repeatability for ultrasound-guided intramuscular administration of local treatment in Duchenne muscular dystrophy

Findik Sener O¹, Sage F¹, Niks E^{1,2}, de Ruiter M¹, Engelse M¹, Geijsen N¹, Burgmans M¹, **Kan H**^{1,2}

¹Leiden University Medical Center, ²Duchenne Center

409P Short-term and long-term safety profile of Givinostat in Duchenne muscular dystrophy

Vučinić D¹, Nascimento A², Finkel R³, Brandsema J⁴, Finanger E⁵, Harper A⁶, Acsadi G⁷, Nevo Y⁸, Houwen-van Opstal S⁹, Blaschek A¹⁰, Coceani N¹¹, Cazzaniga S¹¹, Bettica P¹¹, Muelas N¹²

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410P GNT0004, Genethon's AAV8 vector-delivered microdystrophin gene therapy of Duchenne muscular dystrophy, first data of the phase I/II part of the GNT-016-MDYF all-in-one clinical trial in ambulant boys

Laugel V¹, De Lucia S², Davion J³, Daniele N⁴, **Cao F⁴**, Sanz M⁴, Buscara L⁴, Blaie S⁴, Thibaut L⁴, Sagot M⁴, Riviere A⁴, Creoff E⁴, Lelait M⁴, Valent A⁴, Perret G⁴, Braun S⁴, Muntoni F⁵

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411P Phenotypical differences in 2 immortalized dystrophic cell lines from pediatric patients: a glimpse into pharmacological personalized therapy

Cappellari O¹, Quarta R¹, Cristiano E¹, Boccanegra B¹, Cerchiara A¹, Marinelli M¹, Barile S², Mouly V³, Lasorsa M², Imbrici P¹, **De Luca A¹**

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412P Duchenne muscular dystrophy fibro-adipogenic progenitors impair muscle function of co-cultured healthy myotubes in a functional 3D model

Ninfali C¹, Fernández-Garibay X¹, Tejadera-Villafranca A¹, Díaz-Manera J², Ramón-Azcón J^{1,3}, Fernández-Costa J¹

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413P Natural history of renal dysfunction in Duchenne muscular dystrophy

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¹Nho Omuta Hospital

414P Pulmonary function in Colombian non-ambulatory patients with Duchenne muscular dystrophy treated with Ataluren

Gordillo Gonzalez G^{1,2}, Villamil-Osorio M³, Restrepo-Gualteros S⁴, Vallejo-Mesa D^{5,6}, Rivera-Nieto C⁷, Contreras-García G^{8,9}, Guerra-Araujo V¹⁰, Ospina-Lagos S^{11,12}, Paredes-Brijaldo Á⁴, Hernández-Forero M¹³, Becerra-Ortíz P¹⁴, Silvera-Redondo C¹⁵, Arias C¹⁶, Campo-Ternera C^{17,18}, Curiel-Acosta J¹⁹

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415P Cardiac function in Colombian non-ambulatory patients with Duchenne muscular dystrophy treated with Ataluren

Gordillo Gonzalez G^{1,2,10}, Huertas-Quñones V³, Silvera-Redondo C⁴, Vallejo-Mesa D^{5,6}, Gómez-Castillo C⁷, Rivera-Nieto C³, Contreras-García G^{8,9}, Guerra-Araujo V, Ospina-Lagos S^{11,12}, Paredes-Brijaldo Á¹³, Hernández-Forero M¹⁴, Becerra-Ortíz P¹⁵, Campo-Ternera C^{16,17}, Curiel-Acosta J¹⁸

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416P Effect of ataluren on upper limb function in nmDMD patients from the STRIDE Registry

Muntoni F¹, Buccella F², Nascimento Osorio A³, Tulinius M⁴, Bernadete Dutra de Resende M⁵, Johnson S⁶, Werner C⁷, Anbu B⁶, Liu E⁶, Mercuri E⁸

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417P Comparison of changes in 6-minute walk distance for Colombian patients with Duchenne muscular dystrophy treated with Ataluren with different rates of decline

Ruiz Ospina E^{1,2}, Castellar Leones S^{1,3}, Bobadilla Quesada E², Bolaños Almeida C², Ladino Cortes L², Ruiz Arbelaez C², Maradei Anaya S², Parra Dugarte N⁴, Contreras García G^{5,6}, Ramírez Rodríguez S^{7,8}, Gomez Castillo C⁹, Ospina Lagos S¹, Sierra del Villar G⁴, Becerra Ortiz P¹⁰, Silvera Redondo C¹¹, Sierra Rosales G¹²
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418P Ambulatory function in Colombian patients with Duchenne muscular dystrophy treated with Ataluren after a baseline 6-minute walk distance <300m

Ruiz Ospina E^{1,2}, Castellar Leones S^{1,3}, Vallejo Mesa D^{4,5}, Contreras García G^{6,7}, Acosta Aragón M⁸, Ospina Lagos S¹, Guerra Araújo V⁹, Becerra Ortiz P¹⁰, Silvera Redondo C¹¹, Campo Terner C^{12,13}, Gomez Castillo C⁵, Curiel Acosta J¹⁴, Ramírez Rodríguez S^{15,16}
¹Universidad Nacional De Colombia, ²Fundación Hospital La Misericordia, ³Hospital Universitario Nacional, ⁴Universidad de Antioquía, ⁵Hospital Alma Máter de Antioquía, ⁶Hospital Universitario de Santander, ⁷Universidad Industrial de Santander, ⁸Hospital Universitario San José de Popayán, ⁹Psicokids And Teens, ¹⁰Somefy, ¹¹Universidad del Norte, ¹²Hospital San Vicente Fundación, ¹³Hospital Infantil Concejo de Medellín, ¹⁴Medical Center, Santa Marta, ¹⁵Universidad Von Humboldt, ¹⁶Neuroimágenes S.A.

419P A stapled inhibitory core peptide of myostatin improves dystrophic pathology in DBA/2-mdx mice

Sunada Y¹, Nishimatsu S¹, Fujino M¹, Ohsawa Y¹
¹Kawasaki Medical School

420P Potential benefits of JMV2894, a growth hormone secretagogue, in Duchenne muscular dystrophy: insights from a preclinical study in the D2-mdx mouse

Mantuano P¹, Boccanegra B¹, Cappellari O¹, Mele A¹, Marinelli M¹, Cristiano E¹, Tulimiero L¹, Conte E¹, Torsello A², Denoyelle S³, Liantonio A¹, De Luca A¹
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421P Early therapeutic benefit of delandistrogene-moxeparvovec-rokl in Duchenne muscular dystrophy

Acsadi G¹, Stolgitis N¹, Ng E¹
¹Connecticut Children's Hospital

422P U7snRNA-mediated exon 17 skipping restores dystrophin expression in cells and in a novel mouse model of Duchenne muscular dystrophy

Gushchina L¹, Dufresne G¹, Saylam E¹, Bradley A¹, Rohan N¹, Lowery A¹, Suhaiba A¹, Lin H¹, Wein N¹, Flanigan K¹
¹The Abigail Wexner Research Institute, Nationwide Children's Hospital

423P Safety and efficacy of delandistrogene moxeparvovec versus placebo in Duchenne muscular dystrophy: phase 3 EMBARK primary results

Mendell J^{1,2}, Muntoni F³, McDonald C⁴, Mercuri E⁵, Ciafaloni E⁶, Komaki H⁷, Leon-Astudillo C⁸, **Nascimento A**⁹, Proud C¹⁰, Schara-Schmidt U¹¹, Veerapandiyan A¹², Zaidman C¹³, Murphy A¹⁴, Reid C¹⁴, Asher D¹⁵, Darton E¹⁵, Mason S¹⁵, Fontoura P¹⁶, Elkins J¹⁵, Rodino-Klapac L, on behalf of the EMBARK Study Group¹⁵
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424P Micro-dystrophin expression and safety with delandistrogene moxeparvovec gene therapy for DMD in a broad population: phase 1B trial (ENDEAVOR)

Proud C¹, Zaidman C², McDonald C³, Day J⁴, Thrasher P⁵, Asher D⁵, Murphy A⁶, Guridi M⁷, Ding K⁵, Reid C⁶, Lewis S⁵, Magistrado-Coxen P⁵, Palatinsky E⁵, Wandel C⁷, Potter R⁵, Rodino-Klapac L⁵, Mendell J^{8,9}

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425P Five-year outcomes with delandistrogene moxeparvovec in patients with Duchenne muscular dystrophy (DMD): a phase 1/2a study

Mendell J^{1,2}, Sahenk Z^{1,2}, Lowes L^{1,2}, Reash N¹, Iammarino M¹, Alfano L¹, Signorovitch J³, Jin J⁴, Gao P⁴, **Mason S⁴**, Elkins J⁴, Rodino-Klapac L⁴

¹Center for Gene Therapy, Nationwide Children's Hospital, ²The Ohio State University, ³Analysis Group, ⁴Sarepta Therapeutics, Inc.

426P Ankle foot orthosis prescription for Duchenne muscular dystrophy patients: a retrospective study

Prufer De Q. C. Araujo A¹, Ferreira Rebel M¹, Almeida Pereira J¹, Mello Brasil L¹, Chacon Pereira A¹, Horokoski Kovacs A¹, Pereira Dias Drumond Fortes C¹, Nardes dos Santos F¹, de Fatima Landgraaf J¹, Stajnbock F¹

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427P An open-label study to collect long-term safety and efficacy data from boys with DMD who have completed prior studies with vamorolone (GUARDIAN Study)

Nip K¹, de Vera A¹, Hasham S¹, Charef P¹, Wong S

¹Santhera Pharmaceuticals, ²Royal Hospital for Children

428P Cardiac MRI outcomes in patients with Duchenne muscular dystrophy treated with delandistrogene moxeparvovec: findings from EMBARK Part 1

Walter G¹, Vandenborne K², Bourke J³, Soslow J⁴, Mason S⁵, Palatinsky E⁵, Wandel C⁶, Ding K⁵, Reid C⁷, Murphy A⁷, Manfrini M⁶, Richardson J⁵, Elkins J⁵

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429P Givinostat in Duchenne muscular dystrophy: natural history comparison applying propensity score matching

Gomez Andres D¹, Sansone V², Phan H³, Willis T⁴, Guglieri M⁵, Scoto M⁶, Vandenborne K⁷, Cazzaniga S⁸, Coceani N⁸, Bettica P⁸, McDonald C⁹

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430P The damaged lysosome is a therapeutic target for combined therapy in Duchenne muscular dystrophy

Jaber A^{1,2}, Bakour R^{1,2}, Palmieri L^{1,2}, Bourg N^{1,2}, Albini S^{1,2}, Richard I^{1,2}, Israeli D^{1,2}

¹Genethon, ²Paris-Saclay University, Inserm, Integrare Research Unit UMR_S951

431P Exon 45 skipping and dystrophin production with ENTR-601-45 in preclinical models of Duchenne muscular dystrophy

Girgenrath M¹, Estrella N¹, Kumar A¹, Hicks A¹, Brennan C¹, Blake S¹, Li X¹, Pathak A¹, Kheirabadi M¹, Dougherty P¹, Lian W¹, Liu N¹, Gao N¹, Wang D¹, Streeter M¹, Stadheim A¹, Dhanabal M¹, Qian Z¹

¹Entrada Therapeutics

432P Hydrogen sulfide attenuates skeletal muscle abnormalities in a murine model of Duchenne Muscular Dystrophy

Łoboda A¹, Myszk A^{1,2}, Mucha O¹, Hajok K¹, Jakubczak E¹, Waśniowska U¹, Dulak J¹

¹Department of Medical Biotechnology, Faculty of Biochemistry, Biophysics and Biotechnology, Jagiellonian University in Krakow, ²2 Doctoral School of Exact and Natural Sciences, Jagiellonian University

433P Therapeutic potential of ENTR-601-44, an Endosomal Escape Vehicle (EEV™) - Oligonucleotide Conjugate for the treatment of exon 44 skip amenable DMD

Oldham M¹, Estrella N¹, Kumar A¹, Hicks A¹, Brennan C¹, Blake S¹, Li X¹, Pathak A¹, Kheirabadi M¹, Dougherty P¹, Lian W¹, Liu N¹, Gao N¹, Streeter M¹, Stadheim A¹, Dhanabal M¹, Qian Z¹, Girgenrath M¹

¹Entrada Therapeutics

434P SAT-3247: an oral small molecule inhibitor targeting AAK1, a critical effector of skeletal muscle regeneration

Mitchell R¹

¹Satellos Bioscience

435P Correction of a common Duchenne muscular dystrophy mutation by CRISPR/Cas9 gene editing using homology-independent targeted integration

Nicolau S^{1,2}, Sarff J¹, Vetter T^{1,2}, Stephenson A¹, Flanagan K^{1,2}

¹Nationwide Children's Hospital, ²Ohio State University

436P Optimizing the efficacy of antisense oligonucleotides for the treatment of Duchenne muscular dystrophy

Aghaeipour A^{1,2}, Torres-Masjoan L¹, Aguti S¹, Zhou H^{3,4}, Muntoni F^{1,2,4}

¹Neurodegenerative Diseases, UCL Queen Square Institute of Neurology, ²The Dubowitz Neuromuscular Centre, Molecular Neuroscience Section, Developmental Neurosciences Research and Teaching Department, ³Genetics and Genomic Medicine Research and Teaching Department, UCL Great Ormond Street Institute of Child Health, ⁴National Institute for Health Research, UCL Great Ormond Street Institute of Child Health

437VP Cystatin C monitoring in DMD boys with viltolarsen therapy

Gremiakova T¹, Gremiakova O¹, Stepanov A²

¹Charity Fund "Gordey", ²Federal State Budget Institution, Central Clinical Hospital with Ambulance

472P-496P: Genetics of NMD (new genes and NGS, diagnostic etc.)

472P Utilizing next-generation sequencing for pediatric-onset neuromuscular patients unidentified by traditional diagnostic techniques

Kulsirichawaroj P^{1,2}, Sanmaneechai O^{1,2}

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473P Using RNAseq analysis in a cohort of undiagnosed congenital myopathy patients

Barraza-Flores P¹, Genetti C¹, Shao W¹, French C¹, Rockowitz S¹, Beggs A¹

¹Boston Children's Hospital

474P Identifying biological pathomechanisms of TTN-affected Myopathies using RNA-sequencing data

Natraj Gayathri S^{1,2}, Jonson P^{1,2}, Oghabian A¹, Lillback V¹, Sian V¹, Roos A^{3,4}, Hackman P^{1,2}, Udd B^{1,5}, Savarese M^{1,2}

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475P A novel clinic to resolve variants of uncertain significance in neuromuscular patients

Johnson K¹, Schneider T¹, Babaian N¹, Azage M¹, McIntosh P¹

¹University Of Pennsylvania

476P Functional studies of three novel CASQ1 variants

Laarne M^{1,2}, Sarparanta J^{1,2}, Wallgren-Pettersson C^{1,2}, Jokela M⁴, Udd B^{1,2,3}, Hackman P^{1,2}, Lehtokari V^{1,2}, Pelin K^{1,2,5}

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477P An integrated transcriptomics and genomics approach to detect an X/autosome translocation in a female with Duchenne muscular dystrophy

Segarra-Casas A^{1,2}, Yépez V³, Demidov G⁴, Laurie S⁵, Esteve A⁵, Gagneur J^{3,6,7}, Parkhurst Y⁸, Muni-Lofra R¹, Harris E¹, Marini-Bettolo C¹, Straub V¹, Töpf A¹

¹John Walton Muscular Dystrophy Research Centre, ²Genetics Department, Institut de Recerca Sant Pau, ³School of Computation, Information and Technology, Technical University of Munich, ⁴Universitätsklinikum Tübingen- Institut für Medizinische Genetik und angewandte Genomik, ⁵Centro Nacional de Análisis Genómico (CNAG), ⁶Institute of Human Genetics, School of Medicine, Technical University of Munich, ⁷Computational Health Center, Helmholtz Center Munich, ⁸Muscle Immunoanalysis Unit, Newcastle upon Tyne Hospitals NHS Foundation Trust,

478P RNA sequencing as a diagnostic tool in a cohort of 54 undiagnosed patients with neuromuscular diseases

Segarra-casas A¹, Domínguez-González C^{2,3}, Natera-de-Benito D⁴, Ortez C^{3,4}, Nascimiento A^{3,4}, Hernández-Lalín A⁵, Kapetanovic S⁶, Rodríguez M¹, González-Mera L⁷, Nedkova V⁷, Fernández-Torrón R⁸, López-de Munain A⁸, Jimenez-Mallebrera C^{3,4}, Rodríguez-Santiago B^{1,3}, Gallardo E^{3,9}, Olivé M^{3,9}, Gallano P^{1,3}, González-Quereda L^{1,3}
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479P Hereditary Sensory & Autonomic Neuropathy Type 2A (HSAN2A): insights into genetic aetiology and variant classification

Shekhar L¹, Lazarova A², Berry I², Majumdar A¹

¹Bristol Royal Hospital for Children, ²Bristol genetics laboratory

480P Comparative analysis of CRISPR/Cas9-targeted Nanopore long-read sequencing approaches in repeat expansion disorders

Bonne G^{1,2}, Benarroch L¹, Boëlle P³, Labrèche K³, Madry H², Mohand-Oumoussa B², Eura N⁴, Nishino I⁴, Gourdon G¹, Tomé S¹

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481P Acute respiratory failure revealing DNAJB4 myopathy: a case report

Chitimis D¹, Adam C², Cauquil C³, Amthor S⁴, Heming N⁴, Annane D⁴, Keren B⁵, Nicolas G^{1,6}, Laforêt P^{1,6}, Metay C⁷, Lefeuvre C¹

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482P Closing the gap in diagnosis of neuropathies and late-onset neurological disorders – a trans-Australia collaboration

Laing N^{1,2}, Kennerson M^{3,4}, Lamont P⁵, Vucic S³, Davis M^{1,6}, Bryson-Richardson R⁷, Ravenscroft G^{1,2}, Perez-Siles G^{3,4}, Ghaoui R⁸, Narayanan R^{3,4}, McCombe P⁹, Deveson I¹⁰, Bryen S¹¹, Grosz B^{3,4}, Johari M^{1,2}, Rick A^{1,2}, Folland C^{1,2}, Scriba C^{1,2}, Parmar J^{1,2}, Ellis M^{3,4}

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483P Comprehensive investigation of neuromuscular manifestations in Triple-A syndrome: A combined clinical, molecular genetic and proteomic study

Oeztuerk M¹, Nelke C¹, Hentschel A², Schänzer A³, Meuth S¹, Weis J⁴, Ruck T¹, Roos A^{5,6}

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484P New IRF2BPL variant in a patient with a neuromuscular phenotype

Winkler M¹, Kornblum C¹, Reimann J¹

¹Clinic Of Neuromuscular Diseases

485P Familial case of Bethlem myopathy caused by an ALU insertion in COL6A2

Luca L¹, Demidov G², Duff J¹, McFarlane A¹, Segarra Casas A^{1,3}, Laurie S^{4,5}, de Visser M⁶, van der Kooi A⁶, Straub V¹, Töpf A¹

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486P Spatial analysis of skeletal muscle identifies markers of histopathological tissue alterations in Duchenne mouse models

Heezen L¹, Abdelaal T^{2,3,4}, van Putten M¹, Aartsma-Rus A¹, Mahfouz A^{1,4,5}, Spitali P¹

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487P 2024 update of the national French consensus on gene lists for the diagnosis of muscular diseases using high-throughput sequencing

Gorokhova S¹³, Pion E¹, Cossée M², Biancalana V³, Acquaviva Bourdain C⁴, Bouchet-Seraphin C⁵, Fauré J⁶, Leturcq F⁷, Menassa R⁸, Metay C⁹, Michel-Calemard L⁸, Nectoux J⁷, Petit F¹⁰, Rendu J⁶, Richard P⁹, Sternberg D¹¹, Vuillaumier-Barrot S⁵, Attarian S¹², Krahn M¹³

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488P SEPN1-Related Myopathy with acute respiratory onset in middle age: a clinical and genetic study

Risi B¹, Caria F¹, Damioli S¹, Labella B^{2,3}, Bertella E¹, Giovanelli G¹, Ferullo L^{2,3}, Olivieri E^{2,3}, Poli L³, Padovani A¹, Filosto M^{1,2}

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489P PIEZO2-associated distal arthrogryposis: phenotypic spectrum and genotype-phenotype correlations in a multicenter case series

Akinci G¹, Cinar E¹, Gunay C², Ardicli D³, Degerliyurt A³, Ozyilmaz B⁴, Ceylan A⁵, Yis U², Topaloglu H⁶

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490P Reclassification of missense variant pathogenicity from a hereditary spastic paraplegia gene panel using ClinGen recommendations for in silico predictor scores

Dube J¹, Kim S^{2,3}, Lau L^{2,3}, Higginbotham T^{2,3}, Marshall C^{2,3}, Jobling R^{1,3}

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491P **PIEZO2 loss of function syndrome: a highly specific and recognizable phenotype**

Bharucha-Goebel D^{1,2}, Lee M¹, Saade D^{1,3}, Donkervoort S¹, Yun P¹, Mohassel P^{1,4}, Neuhaus S^{1,5}, Ogata T^{1,6}, Averion G¹, Mendoza C¹, Alter K⁷, Matsubara J⁷, Stanley C⁷, Zampieri C⁷, Lehky T⁸, Nickolls A^{9,10}, Chesler A^{10,11}, Foley A¹, Bonnemann C¹, and the PIEZO2 Study Team¹

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492P **Mass spectrometry as a technique for robust quantification of titin and other large muscle disease-associated proteins**

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493P **Gene prioritization for enhancing molecular diagnosis in rare muscle diseases of singletons**

Lillback V¹, Bergant G², Di Feo M¹, Bozović I², Torella A³, Johari M^{1,4}, Maver A², Pelin K¹, Santorelli F⁵, Nigro V³, Hackman P¹, Peterlin B², Udd B¹, Savarese M¹

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494P **Evaluation of transcriptome forward computational strategies to improve molecular diagnosis in rare pediatric neuromuscular disease**

Silverstein S^{1,2,3}, Ganapathy K⁴, Donkervoort S¹, Moy J⁵, Uapinyoying B^{1,6}, Gorokhova S^{7,8}, Ganesh V⁹, Weisburd B⁹, Orbach R¹, Foley A¹, Mohammadi P^{4,10,11,12}, Adams D², Bonnemann C¹

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495P **Genetic mosaicism, an underestimated event in genetically unsolved neuromuscular patients: study of two families**

Estévez-Arias B^{1,2}, Segarra-Casas A³, Orteiz C^{1,4,5}, Matalonga L⁶, Carrera-García L^{1,4}, Expósito-Escudero J^{1,4}, Jou C^{4,5,7}, Codina A^{4,7}, Jiménez-Mallebrera C^{4,5,8}, Martorell L^{5,9}, Lochmüller H^{6,10,11}, Töpf A¹², Beltran S^{6,8}, Hoenicka J^{2,6}, Palau F^{2,6,9,13,14}, Martí J¹⁵, Gallano P^{3,5}, Nascimento A^{1,4,5}, Natera-de Benito D^{1,4}, González-Quereda L^{3,5}

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496P Recessive missense variants in DARS2 gene as novel cause of axonal Charcot-Marie-Tooth disease

Estévez-arias B^{1,2}, Bonello Palot N^{3,4}, Carrera-García L^{1,5}, Orteiz C^{1,5,6}, Expósito-Escudero J^{1,5}, Yubero D^{6,7}, Muchart J⁸, Delmont E⁹, Nascimento A^{1,5,6}, Hoenicka J^{2,6}, Palau F^{2,6,7,10,11}, Natera-de Benito D^{1,5}

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579P-595P, 596VP-597VP: EDMD, OPDM, autophagic, extramuscular

579P Myopathies associated with the FHL1 gene: a case series

Ferreira W¹, Massaro C¹, Oliveira H¹, Badia B¹, Souza P¹, Serrano P¹, Farias I¹, Bezerra M¹, Pinto W¹, Faria Nunes K¹, Oliveira A¹

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580P SYNE-1 and SYNE-2 mutations: expanding the phenotype and genotype spectrum of Nesprin myopathy

Cheli M¹, Marchetto G¹, Gibertini S², Bruno C³, Filosto M⁴, Lattanzi G⁵, Fiorillo C⁶, Grandis M⁷, Malandrini A⁸, Maioli M⁹, Mandich P¹⁰, Massa R¹¹, Matà S¹², Melani F¹³, Maggi L², Rubegni A¹⁴, Santorelli F¹⁴, Tonin P¹, Cassandrini D¹⁴, Vattermi G¹

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581P Toxic autophagic vacuolar myopathies and the role of human leukocyte antigen class I molecules and membrane attack complex in its pathogenesis

Labella B^{1,2}, Lacene E¹, Chanut A¹, Leonard-Louis S³, Benveniste O³, Lefeuvre C⁴, Lafôret P⁴, Evangelista T^{1,3}

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582P Brain abnormalities in Spinal Muscular Atrophy type 1 with neurodevelopmental disorders

Holanda Mendonca R¹, Diógenes Alencar Sindeaux R¹, Gontijo Camelo C¹, Barbante Casella E¹, Faria Silva Chillon K¹, Jose da Rocha A², Zanoteli E¹

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583P Recurrent pneumothoraces in chronically ventilated adult neuromuscular patients attending the National Hospital for Neurology and Neurosurgery in London

Desikan M¹, Sir B¹, Astin R¹, Quinlivan R¹

¹National Hospital for Neurology and Neurosurgery

584P Nuclear envelope and splicing alterations in selected muscular dystrophies

Meinke P¹, Todorow V¹, Hintze S¹, Schoser B¹

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585P Collagen XIII as the neuromuscular junction organizer

Prasannan A¹, Norman O¹, Heikkinen A¹, Pihlajaniemi T¹

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586P Visualization of degenerative processes of the myofibers on muscle pathology in OPDM based on single nucleus RNA-seq data

Yamanaka A^{1,2}, Eura N^{1,2}, Hayashi S¹, Sugie K², Noguchi S¹, Nishino I¹

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587P White matter lesions and genetic muscular diseases: an overview

Jaubert P¹, Mario G², Stojkovic T¹, **Masique M¹**

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588P Phenotype variability and natural history of X-linked Myopathy with excessive autophagy running head: natural history of XMEA

Fernández-Eulate G¹, Alfieri G², Spinazzi M³, Ackermann-Bonan I⁴, Duval F⁵, Solé G⁵, Caillon F⁶, Mercier S⁷, Pereon Y⁸, Magot A⁸, Pegat A⁹, Salort-Campana E¹⁰, Gorokhova S¹¹, Krahn M¹¹, Biancalana V¹², Evangelista T¹, Behin A¹, Metay C¹³, Stojkovic T¹

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589P Nanopore CRISPR/Cas9-targeted sequencing reveals genetic characteristics and a possible haplotype in oculopharyngodistal myopathy

Eura N^{1,2}, Noguchi S², Yamanaka A^{1,2}, Sonehara K³, Hayashi S², Okada Y³, Sugie K¹, Nishino I²

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590P Genetic heterogeneity in PLIN4 gene: characterization of a new pathogenic expansion causing an autophagic vacuolar myopathy

Carnazzi A^{1,2}, Iannibelli E², Gibertini S², Nicolini De Gaetano L², Riolo G², Salerno F², Čopič A³, Maggi L², Ruggieri A²

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591P DNA damage in LMNA-related congenital muscular dystrophy

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592P A knocked-in mouse model of GNE myopathy maintained physical function up to 70 weeks of age with supplementation of 6'-sialyl lactose

Shin J^{1,3}, Choi J^{1,2}, Seo K¹, Kim H¹, Kim L², Park Y³, Kim D^{1,3}

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593VP Emerging role of muscle and fibrosis-related microRNAs as biomarkers and therapeutic targets in Emery-Dreifuss muscular dystrophies

Bonanno S¹, Malacarne C¹, Tarasco M^{1,2}, Farinazzo G¹, Mattioli E^{3,4}, Schena E^{3,4}, Saraceno F⁵, Fiorillo C⁶, Andreetta F¹, Schirmer E², Maggi L¹, Marcuzzo S^{1,8}, Cavalcante P¹, Lattanzi G^{3,4}

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594P FUS/TLS as a potential regulator of PABPN1 in skeletal muscle?

Mouigni H^{1,2,3}, Altin N^{1,2,3}, Ohana J^{1,2,3}, Kondili M^{1,2,3}, Dhiab J^{1,2,3}, Muraine L^{1,2,3}, Lemaitre M^{1,2,3}, Meunier P^{1,2,3}, Butler-Browne G^{1,2,3}, Mouly V^{1,2,3}, Bigot A^{1,2,3}, Negroni E^{1,2,3}, Trollet C^{1,2,3}

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595P ACTA1-related cardiomyopathy: emerging genotypic and phenotypic patterns among patients with ACTA1-related myopathy with cardiac involvement

McAnally M¹, Potticary A¹, Hayes L², Clayton J³, Haliloğlu G⁴, Donkervoort S¹, Yang M⁵, Gibbons M⁶, Gross B⁷, Foley A¹, Guglieri M⁸, Lee T⁹, Munot P¹⁰, Sarkozy A¹⁰, Muntoni F^{10,11}, Straub V⁸, Laing N^{3,12}, Beggs A¹³, Bönnemann C¹, for the ACTA1-Cardiomyopathy Study Group^{14,15,16,17,18,19,20,21,22}

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596VP Elevated VCP ATPase activity correlates with disease onset in multisystem proteinopathy-1

Robinson S¹, Findlay A¹, Schiava M², Daw J¹, Diaz-Manera J², Chou T³

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597VP Vacuolar myopathy with permanent weakness: case report with imaging, muscle biopsy, and molecular features

Cotta A¹, Carvalho E¹, da-Cunha-Júnior A¹, da Silveira E², Costa-e-Silva C², Nunes-Neves S¹, Valicek J¹, Vargas A¹

¹The Sarah Network of Rehabilitation Hospitals, ²The Sarah Network of Rehabilitation Hospitals

619P-642P, 643VP: FSHD

619P Normal and borderline-sized D4Z4 alleles in FSHD1-mimics: a multicentric Italian review of cases

Gadaleta G¹, Vercelli L¹, Urbano G¹, Rolle E¹, Torri F², Pugliese A³, Maggi L⁴, Tupler R⁵, Filosto M⁶, Rodolico C³, Ruggiero L⁷, Ricci G², Siciliano G², Mongini T¹

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620P Novel outcome measures to quantify longitudinal changes in motor function in FSHD

Hayward L¹, Andrade E¹, Ridout B², Penka J², Stauffer J², Tulchin-Francis K³, Lowes L³, King O¹, Watts G¹

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621P The rarest subtype of a rare disease: Infantile Facio-Scapulo-Humeral Dystrophy

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622P An unusual case of double trouble of Facioscapulohumeral dystrophy (FSHD) and coexisting congenital myopathy uncovered by whole genome sequencing

Kulshrestha R¹, Emery N¹, Strachan K¹, Willis T^{1,2}, Sewry C¹, Morley-Davies A³

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623P Muscular Dystrophy in the Japanese nationwide registry of muscular dystrophy (Remudy)

Takizawa H¹, Yoshioka W², Mori-Yoshimura M¹, Saito Y², Nishino I², Nakamura H³, Matsumura T⁴

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624P A new double-trouble phenotype: fascioscapulohumeral muscular dystrophy and familial amyotrophic lateral sclerosis

Alonso-pérez J¹, León-Hernández J¹, Henao-Ramírez M¹, Méndez-Hernández L², Sánchez R²,

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625P From phenotype to genotype: diagnosis pitfalls in atypical FSHD cases

Torri F¹, Strafella C², Vercelli L³, Gadaleta G³, Risi B⁴, Colantoni L², Giardina E², Filosto M⁴, Mongini T³, Siciliano G¹, Ricci G¹

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626P Disability questionnaire of FSHD1 correlates with the in-person examination

Lee J¹, Shin J², Shin J³

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627P The FORCE(TM) platform achieves robust and durable DUX4 suppression and improves muscle function in Facioscapulohumeral muscular dystrophy mouse model

Picariello T¹, Natoli T¹, Yoder N¹, Yao M¹, Valdivia B¹, Tahaei E¹, Johnson J¹, Qiu Q¹, More P¹, Schlaefke L¹, Yang S¹, Basiri B¹, Weeden T¹, Beskrovnaya O¹, Zanotti S¹

¹Dyne Therapeutics

628P Development of a CRISPR/CasX 4q telomeric region ablation strategy for FSHD1 using an isogenic hiPSC line and a FSHD1 fibroblast cell line

Lama C¹, de Graaf N^{1,2}, Bou Akar R¹, Danaus P³, Suel-Petat L⁴, Nectoux J³, Authier F^{1,5}, Relaix F¹, Richard I⁴, Malfatti E^{1,5}

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629P Co-producing UK care quality standards in Facioscapulohumeral muscular dystrophy (FSHD) in partnership with people with FSHD, carers and healthcare professionals: a qualitative focus group study

Leone E¹, Pandyan A², Rogers A¹, Kulshrestha R³, Hill J¹, Philp F⁴

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⁴University of Liverpool

630P Genetic diversity and clinical implications of Facioscapulohumeral muscular dystrophy in the Indian population

Lemmers R¹, Venugopalan Y V², van der Vliet P¹, Reyaz A², Mishra R², Ahmad T², Kretkiewicz M¹, Macken W³, Efthymiou S³, Bhatia R², Dominik N³, Houlden H³, Morrow J³, Wilson L³, Hanna M³, Bugiardi E³,

van der Maarel S¹, Padma Srivastava M²

¹Leiden University Medical Centre, ²All India Institute of Medical Sciences, ³University College London

631P Respiratory function and trajectories in Facioscapulohumeral muscular dystrophy (FSHD): a clinical audit

Robinson E¹, Lees E¹, Moat D¹, Michell-Sodhi J¹, Richardson M¹, Wong K¹, Grover E¹, Schiava M¹, Bolano C¹, Salman D¹, Guglieri M¹, Elseid M¹, McCallum M¹, Diaz-Manera J¹, James M¹, Straub V¹, Marini Bettolo C¹, Pace F¹, Muni-Lofra R¹, Tasca G¹

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632P A human skeletal muscle-on-chip model for Facioscapulohumeral muscular dystrophy: improving maturation and complexity

Augustinus R¹, Franken M¹, van der Maarel S¹, Pijnappel P², de Greef J¹

¹Leiden University Medical Center, ²Erasmus Medical Center

633P Penetrance of 5RU founder allele and correlation of D4Z4 methylation levels to severity in large kindred with FSHD

Butterfield R¹, Dunn D², Duval B², Moldt S¹, Weiss R²

¹University of Utah, Department of Pediatrics, ²University of Utah, Department of Human Genetics

634P Retrospective analysis of muscle biopsy findings in a cohort of patients with Facioscapulohumeral Dystrophy Type 1

Ruggiero L¹, Pezzella M¹, Di Leo R¹, Vitale F¹, Russo R¹, Grasso C¹, Iapoe M¹, Boemia V¹, Tupler R², Fiorillo C³, Zoppi D¹

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635P Pain impacts quality of life, psychological disorders and exercise in a large international cohort of patients with facioscapulohumeral muscular dystrophy

Knox R¹, Wang L², Elsheikh B³, LoRusso S⁴, Zhao S⁵, Eichinger K⁵, Higgs K⁶, Lewis L⁵, Walker M⁶, Sansone V⁷, Leung D⁸, Sacconi S⁹, Mul K¹⁰, Shieh P¹¹, Butterfield R¹², Johnson N¹³, Bugiardini E¹⁴, McDermott M⁵, Tawil R⁵, Statland J⁶

¹Washington University School Of Medicine, ²University of Washington, ³The Ohio State University, ⁴Kaiser Permanente, ⁵University of Rochester Medical Center, ⁶University of Kansas Medical Center, ⁷The NEMO Clinical Center, University of Milan, ⁸Kennedy Krieger Institute, ⁹Nice University, ¹⁰Radboud University, ¹¹University of California, ¹²University of Utah, ¹³Virginia Commonwealth University, ¹⁴University College London

636P Longitudinal insights into childhood onset Facioscapulohumeral dystrophy: a five-year natural history study

Dijkstra J^{1,2}, Boon H^{1,2}, Koekkoek A², Goselink R³, Pelsma M⁴, Houwen-van Opstal S⁴, Van Alfen N⁵, Van Engelen B¹, Voermans N¹, Erasmus C²

¹Department of Neurology, Donders Institute for Brain, Cognition and Behaviour, Radboud University Medical Center, ²Department of Pediatric Neurology, Donders Institute for Brain, Cognition and Behaviour, Amalia Children's Hospital, Radboud University Medical Centre, ³Department of Neurology, Jönköping, Region Jönköping County, and Department of Biomedical and Clinical Sciences, Linköping University, ⁴Department of Rehabilitation, Donders Institute for Brain, Cognition and Behaviour, Amalia Children's Hospital, Radboud University Medical Center, ⁵Department of Neurology, Clinical Neuromuscular Imaging Group, Donders Institute for Brain, Cognition and Behaviour, Radboud University Medical Center

637P RelnForce: A bicentric, randomized, double blind, placebo-controlled pilot study to evaluate the efficacy and safety of satralizumab in FSHD1

Pini J^{1,2}, Aleman A³, Breiner A³, Cavalli M¹, Puma A¹, Villa L¹, Gaki E⁴, McIver T⁴, Okumu S⁵, Sidiropoulos P⁵, Lochmüller H³, **Saconni S^{1,2}**

¹Peripheral Nervous System and Muscle Department, University Côte d'Azur, CHU Nice, ²University Cote d'Azur, Inserm, CNRS, Institute for Research on Cancer and Aging of Nice (IRCAN), ³Ottawa Hospital Research Institute, ⁴Roche Products Ltd, 5F. Hoffmann-La Roche Ltd

638P Interleukin-6 as a Biomarker for Disease Activity, Progression and Muscle Composition in Facioscapulohumeral Dystrophy: Insights from Longitudinal Studies

Saconni S^{1,2}, Pini J^{1,2}, Martinuzzi E³, Puma A¹, Villa L¹, Cavalli M¹, Ezaru A¹, Garcia J¹, Glaichenhaus N³

¹Peripheral Nervous System and Muscle Department, University Côte d'Azur, CHU Nice, ²University Cote d'Azur, Inserm, CNRS, Institute for Research on Cancer and Aging of Nice (IRCAN), ³University Cote d'Azur, CNRS, Inserm, Institute of Molecular and Cellular Pharmacology, Sophia Antipolis, France

639P The other face of Facioscapulohumeral Muscular Dystrophy: exploring facial weakness using muscle ultrasound

Vincenten S¹, Van Doorn J¹, Teeselink S¹, Rasing N¹, Padberg G¹, Voermans N¹, van Engelen B¹, van Alfen N¹, Mul K¹

¹Radboudumc, department of Neurology

640P Efficacy and safety of EPI-321, an investigational single dose Epigenome editing therapy targeting D4Z4 in Facioscapulohumeral Muscular Dystrophy (FSHD)

Boregowda S¹, Zheng H¹, Agrawal V¹, Norton A¹, Wasala N¹, Collin de l'Hortet A¹

¹EPICRISPR Biotechnologies, Inc.

641P Modeling cell type specific and sporadic DUX4 gene expression in FSHD

Sasaki-Honda M^{1,2}, Sakurai H¹, Rada-Iglesias A²

¹CiRA, Kyoto University, ²IBBTEC, University of Cantabria

642P 4qA D4Z4 methylation test as a valuable complement for differential diagnosis in patients with FSHD-like phenotype

Xia X¹, Cheng N¹, Liu Y¹, Zhu W¹, Zhao C¹

¹Huashan Hospital, Fudan University

643VP Molecular imaging of muscle involvement in Facioscapulohumeral Muscular Dystrophy using multispectral optoacoustic tomography

Monforte M¹, Bortolani S¹, Ravera B², Marchese D², Qiu Y³, Burton N³, Torchia E², De Spirito M², Ricci E², Tasca G⁴

¹Fondazione Policlinico Universitario A. Gemelli IRCCS, ²Università Cattolica del Sacro Cuore, ³iThera Medical GmbH, ⁴John Walton Muscular Dystrophy Research Centre, Newcastle University

677P-686P, 687P: RNA in NMD: clinical insights, pathomechanisms and treatments

677P The Splice Index as a prognostic biomarker of strength and function in Myotonic Dystrophy type 1

Provenzano M^{1,2}, Ikegami K^{1,2}, Bates K^{1,2}, Hartman J^{1,2}, Jones A^{1,2,3}, Butler A^{1,2,3}, Berggren K^{1,2}, Hung M⁴, Kiefer M^{1,2,5}, Thornton C^{6,7}, Johnson N^{1,2}, **Hale M^{1,2}**, on behalf of the Myotonic Dystrophy Clinical Research Network (DMCRN)

¹Department of Neurology, Virginia Commonwealth University, ²Center for Inherited Muscle Research, Virginia Commonwealth University, ³Children's Hospital of Richmond at Virginia Commonwealth University, Pediatric Therapy Services, ⁴College of Dental Medicine, Roseman University of Health Sciences, ⁵Department of Physical Therapy, Virginia Commonwealth University, ⁶Department of Neurology, University of Rochester School of Medicine and Dentistry, ⁷Center for RNA Biology, University of Rochester School of Medicine and Dentistry

678P Unraveling calcium dysregulation and autoimmunity in immune mediated Rippling muscle disease

Nath S¹, Dasgupta A², Dubey D¹, Kokesh E¹, Liewluck T¹, Beecher G³, Pittock S¹, Doles J², Litchy W¹, Milone M¹

¹Mayo Clinic Department of Neurology, ²Department of Anatomy, Cell Biology, & Physiology, Indiana University, ³Faculty of Medicine & Dentistry - Medicine Dept, University of Alberta

679P Clinical and molecular characterization of DMD pseudo-3'-terminal exons

Frair E¹, Nicolau S^{1,2,3}, Meyer A^{1,2,4}, Vetter T^{1,2}, Dunn D⁵, Gabel L¹, Waldrop M^{1,2,3}, Weiss R⁵, Flanigan K^{1,2,3}

¹Center for Gene Therapy, Abigail Wexner Research Institute, Nationwide Children's Hospital, ²Department of Pediatrics, The Ohio State University College of Medicine, ³Department of Neurology, The Ohio State University, ⁴Division of Genetic and Genomic Medicine, Nationwide Children's Hospital, ⁵Department of Human Genetics, The University of Utah

680P Developing effective RNA editing approaches to target the nonsense mutation in the key functional region of DMD

Lam H^{1,2}, Uzwyshyn-Jones K¹, Ma S¹, Muntoni F², Meng J^{1,3}, Zhou H^{1,3}

¹Genetic and Genomic Medicine Department, Great Ormond Street Institute of Child Health, University College London, ²The Dubowitz Neuromuscular Centre, UCL Great Ormond Street Institute of Child Health, ³NIHR Great Ormond Street Hospital Biomedical Research Centre, University College London

681P A novel COL11A1 variant in a child with neuromuscular findings: expanding the genotypic and phenotypic spectrum of COL11A1-related disease

Mcanally M¹, Potticary A¹, Donkervoort S¹, Hu Y¹, Huryan L³, Pais L², Harper A⁴, Foley A¹, Bönnemann C¹

¹Neuromuscular and Neurogenetic Disorders of Childhood Section, National Institute of Neurological Disorders and Stroke, NIH, ²Program in Medical and Population Genetics, Broad Institute of MIT and Harvard, ³National Eye Institute, NIH, ⁴Department of Neurology, Division of Child Neurology, Children's Hospital of Richmond at VCU

682P Differential splicing of OBSCN throughout human cardiac and skeletal muscle development

Oghabian A^{1,2}, Jonson P^{1,3}, Johari M^{1,12}, Andres D⁴, Munell F⁵, Soriano J⁶, Duran M⁷, Sinisalo J⁸, Tolppanen H⁹, Tolva J¹⁰, Hackman P^{1,3}, Savarese M^{1,3}, Udd B^{1,3,4,11}

¹Folkhälsan Research Center, ²Research Program for Clinical and Molecular Metabolism, Faculty of Medicine, University of Helsinki, ³Department of Medical Genetics, Medicum, ⁴Department of Neurology, Vaasa Central Hospital, ⁵Child Neurology Unit, Hospital Universitari Vall d'Hebron, Vall d'Hebron Research Institute (VHIR), ⁶Unitat De Malalties Neuromusculars Pediàtriques, Hospital Universitari Vall D'hebron, ⁷Histology Department, Vall D'hebron University Hospital, ⁸Maternal Fetal Medicine Unit, Department of Obstetrics, Universitat Autònoma de Barcelona, Hospital Vall D'hebron, ⁹Helsinki University Central Hospital, ¹⁰Transplantation Laboratory, Department of Pathology, ¹¹Neuromuscular Research Center, Department of Neurology, Tampere University and University Hospital, ¹²Harry Perkins Institute of Medical Research, Centre for Medical Research, University of Western Australia

683P Phase IIa trial assessing the efficacy and safety of Enpatoran in patients with Dermatomyositis and Polymyositis: NEPTUNIA rationale and study design

Aggarwal R¹, Roy S², Thömmes G³, Weinelt D³, Chitkara D⁴, Denis D⁵

¹University of Pittsburgh, ²Ares Trading SA, an affiliate of Merck KGaA, ³Merck Healthcare KGaA, ⁴EMD Serono Research & Development Institute, Inc., an affiliate of Merck KGaA, ⁵EMD Serono, Inc., an affiliate of Merck KGaA

684P Complex duplications containing terminal exon duplications in the DMD gene

Meyer A^{1,2}, Nicolau S¹, Dunn D³, Gabel L¹, Frair E¹, Weiss R³, Flanigan K^{1,2}

¹Nationwide Children's Hospital, ²The Ohio State University, ³University of Utah

685VP Reduction of dystrophin-targeting microRNAs increases expression of clinically relevant dystrophin isoforms

Fiorillo A^{1,2}, McCormack N², Calabrese K², Sun C², Tully C², Heier C^{1,2}

¹Virginia Commonwealth University, ²Children's National Hospital

686P Identification and characterization of actionable deep intron 8 IGHMBP2 hotspot pathogenic variants through motor neuron RNAseq and whole genome

Silverstein S^{1,2,3}, Donkervoort S¹, Cassini T⁴, Vetrini F^{5,6}, Conboy E^{5,6}, Comer A⁷, Treat K^{5,6}, Liaqat K^{5,6},

Mantcheva L^{5,6}, Patankar A⁸, Bharucha-Goebel D^{1,9}, Foley A¹, Chao K¹⁰, Neuhaus S¹, Grunseich C⁸, Bonnemann C¹

¹Neuromuscular and Neurogenetics Disorders of Childhood Section, NINDS, NIH, ²Rutgers New Jersey Medical School, ³Undiagnosed Diseases Program, NIH, ⁴Vanderbilt University Medical Center, ⁵Department of Medical and Molecular Genetics, Indiana University School of Medicine, ⁶Undiagnosed Rare Disease Clinic, Indiana University School of Medicine, ⁷Department of Neurology, Indiana University School of Medicine, ⁸Neurogenetics Branch, NINDS, NIH, ⁹Department of Neurology, Children's National Hospital, ¹⁰The Broad Institute of MIT and Harvard

687P Splicing switching of alternative last exons due to a deletion including canonical polyadenylation site in COL6A2 gene causes recessive UCMD

Saito Y¹, El Sherif R^{2,3}, Awaya T⁴, Hayashi S¹, Noguchi S¹, Nishino I¹

¹Department of Neuromuscular Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry, ²Myo-Care Neuromuscular Center, Myo-Care National Foundation, ³School of Medicine, New Giza University, ⁴Department of Anatomy and Developmental Biology, Graduate School of Medicine and Faculty of Medicine, The University of Kyoto

18:15-18:45

Short Oral Presentations 4

📍 North Hall

641P, 630P, 638P, 639P, 640P

Moderator: Nicol Voermans,
Radboud University Medical Centre

Short Oral Presentations 5

📍 Terrace 2A

586P, 50P, 97P, 96P, 51P

Moderator: Piera Smeriglio, Institut
de Myologie

Short Oral Presentations 6

📍 Terrace 2B

496P, 686P, 594P, 595P,

403P

Moderator: Nigel Laing,
Harry Perkins Institute of Medical
Research

19:00-20:00

Industry Symposium 5 📍 South Hall 1

Catering provided by the sponsor for this session,
available from 30 minutes prior to the start of the
symposium

Industry Symposium 6 📍 South Hall 2

Catering provided by the sponsor for this session,
available from 30 minutes prior to the start of the
symposium

07:00-15:00	Congress desk open	
07:15-08:15	NMD Board Meeting 📍 Club E (separate registration required)	
08:15-09:15	Industry Symposium 7 📍 South Hall 1 Catering provided by the sponsor for this session, available from 30 minutes prior to the start of the symposium	Industry Symposium 8 📍 South Hall 2 Catering provided by the sponsor for this session, available from 30 minutes prior to the start of the symposium
09:30-11:00	Topic 2: NMD Around the World 📍 Congress Hall Moderators: <i>Hernan Gonorazky, The Hospital for Sick Children, Canada & Rasha El Sherif, Newgiza University, Egypt</i> 06INV What about management of neuromuscular diseases in Latin America? <u>Monges S¹</u> ¹ Hospital de Pediatría J.P. Garrahan 07INV Neuromuscular disorders in India: New World meets the Old <u>Venugopalan Y V¹</u> ¹ All India Institute of Medical Sciences 05INV Advancing neuromuscular disorders in Senegal, West Africa, through collaborative networks and available resources <u>Rodriguez Cruz P^{1,2,3}</u> , ¹ Centro Nacional de Análisis Genómico (CNAG), ² Neurology Department, CHNU de Fann, ³ Université Cheikh Anta Diop de Dakar 08INV An African perspective on muscle diseases <u>Heckmann J¹</u> ¹ University of Cape Town	
11:00-11:30	Morning refreshments, exhibition and posters 📍 Congress Hall Foyer, Forum Hall and Forum Foyer	
11:00-11:30	Myology Café - Meet the WMS Myology Developments Across the World Committee 📍 Congress Hall Foyer	
11:30-13:30	Topic 2: NMD Around the World 📍 Congress Hall Moderators: <i>Sharon Aharoni, Schneider Children's Medical Center, Israel & Jorge Bevilacqua, Hospital Clínico Universidad De Chile & Clínica Dávila, Chile</i>	
11:30-11:45	070 Rare neuromuscular disease specific mega clinics: a proposal to bridge the gap in resource limited settings <u>Ramesh Babu R^{1,2}</u> , Krishna G ^{1,2} , Satyam P ^{1,2} , Rao S ³ , Maganthi M ² , Agnes Mathew A ^{1,2} ¹ Synapse Neuro Centre & Child Development Centre, Bangalore Baptist Hospital, ² Bangalore Baptist Hospital, ³ Organization of Rare Diseases	
11:45-12:00	080 To manually or mechanically cough: that is the question. Cough augmentation in children with neuromuscular disorders: a feasibility study <u>Human A⁵</u> , Corten L ³ , Morrow B ⁴ ¹ Department of Physiotherapy, School of Health Care Sciences, Sefako Makgatho Health Sciences University, ² Department of Health and Rehabilitation Sciences (Division Physiotherapy), ³ School of Sport and Health Sciences (Physiotherapy), University of Brighton, ⁴ Department of Paediatrics and Child Health, University of Cape Town, ⁵ Department of Physiotherapy, School of Health Care Sciences, University of Pretoria	
12:00-12:15	090 The clinical and molecular landscape of genetic neuromuscular disorders in Senegal, West Africa <u>Rodriguez Cruz P^{1,2,3}</u> , Diagne R ^{2,3} , Diop A ⁴ , Diouf A ⁵ , Ndong M ⁶ , Senghor H ² , Dieng S ⁶ , Oko C ² , Traoré M ⁷ , Mbaye K ⁸ , Seck L ² , Sy M ² , Sow A ^{2,9} , Diagne N ² , Martorell Sampol L ¹⁰ , Nacimiento A ¹⁰ , Beltran S ¹ , Ndiaye R ³ , Ndiaye M ^{2,3} , Diop A ^{2,3} ¹ Centro Nacional de Análisis Genómico (CNAG), ² Neurology Department, CHNU de Fann, ³ Université Cheikh Anta Diop de Dakar, ⁴ Neurology Department, Centre Hospitalier National de Pikine, ⁵ Centre Talibou Dabo, ⁶ Centre Hospitalier National d'Enfants Albert Royer, ⁷ Centre Hospitalier Roi Baudouin, ⁸ Centre Hospitalier Régional de Ziguinchor, ⁹ Centre Hospitalier National pour Enfants de Diamniadio, ¹⁰ Hospital San Joan de Deu	

12:15-12:30	100 The neonatal screening of SMA in Ukraine: the 18 months of experience Olkhovych N⁶, Servais L², Makukh H³, Grechanina O⁴, Veropotvelyan M⁵, Samonenko N⁶, Mytsyk N², Barvinskaya O², Kormoz S², Shklyarskaya T⁶, Gorovenko N⁷ ¹Expert Centre of Neonatal Screening, ²MDUK Oxford and NIHR, University of Oxford, ³Lviv Regional Centre of Neonatal Screening, ⁴Kharkiv Regional Centre of Neonatal Screening, ⁵Kryviy Rig Regional Centre of Neonatal Screening, ⁶National Children's Specialized Hospital "OHMATDYT" MoH, ⁷National University of Health Care named after P.L. Shupika
12:30-12:45	110 Genetic profile of Brazilian patients with LAMA2-related dystrophies Camelo C¹, Moreno C¹, Artilheiro M¹, Fonseca A¹, Gianetti J², Barbosa A³, Donis K⁴, Saute J⁴, Pessoa A⁵, VanderLinden H⁶, Gonçalves A⁷, Kulikowski L¹, Kok F¹, Zanoteli E¹ ¹University Of Sao Paulo, ²Universidade Federal de Minas Gerais, ³Fundação Hospitalar do Estado de Minas Gerais, ⁴Hospital de Clínicas de Porto Alegre, ⁵Children's Hospital Albert Sabin, ⁶Rehabilitation Center Dr. Henrique Santillo, ⁷University of Porto
12:45-13:00	120 Clinical, paraclinical features and classification of myositis in Vietnam Le S¹, Nguyen Le Trung H² ¹University Medical Center of Hochiminh, ²University of Medicine and Pharmacy of Hochiminh
13:00-13:15	130 Genomic neuromuscular disorders in Turkey originate from a vast background Topaloğlu H¹ ¹Yeditepe University, Pediatrics
13:15-13:30	140 Inherited Neuromuscular disorders in India: Outcomes of 1000 probands in the ICGNMD study at AIIMS New Delhi Venugopalan Y V¹, Macken W^{2,3}, Wilson L², Rani N¹, Reyaz A¹, Ahmad T¹, Dalal A⁴, Vandrovcova J², Dominik N², Consortium ICGNMD-Consortium⁵, Tallapaka K⁶, Lemmers R⁷, Reilly M², Hanna M^{2,3}, Bhatia R¹, Pitceathly R^{2,3}, Houlden H², Thangaraj K^{4,6}, Straub V⁸, Srivastava P¹ ¹All India Institute of Medical Sciences, ²Department of Neuromuscular Diseases, UCL Queen Square Institute of Neurology, ³NHS Highly Specialised Service for Rare Mitochondrial Disorders, Queen Square Centre for Neuromuscular Diseases, The National Hospital for Neurology and Neurosurgery, ⁴Centre for DNA Fingerprinting and Diagnostics, Hyderabad, ⁵https://www.ucl.ac.uk/genomic-medicine-neuromuscular-diseases/global-contributor-list, ⁶Centre for Cellular & Molecular Biology, ⁷Department of Human Genetics, Leiden University Medical Center (LUMC), ⁸John Walton Muscular Dystrophy Research Centre, Newcastle University and Newcastle Hospitals NHS Foundation Trust
13:30-14:45	Lunch, exhibition and posters 📍 Congress Hall Foyer, Forum Hall and Forum Foyer
13:30-14:45	Career Development Session - Engagement with industry 📍 Zoom and Panorama Rooms, 1st floor (separate registration required and lunch is provided)
15:00-17:30	Poster viewing / Group activity (separate registration required) Please refer to your joining instructions for further details of group activities and schedules.
17:30-20:00	Group activity networking reception 📍 Kaiserstein Palace (separate registration required)

06:45-17:15	Congress desk open
07:00	Light refreshments available
07:30-08:30	Interesting Case Discussions 📍 South Hall 2 <i>Moderators: A. Reghan Foley, National Institutes of Health, USA & Hans-Hilmar Goebel, Charité – Universitätsmedizin Berlin, Germany</i> Case 1: HIV-associated inclusion body myositis in a young woman <i>Jeannine Heckmann, University of Cape Town, South Africa</i> Case 2: A muscle disorder presenting with Resistant Hypercalcaemia <i>Ashirwad Merve, University College London Hospitals, UK</i> Case 3: TUBA4A associated congenital myopathy with centronuclear findings and protein aggregates <i>Cristiane Moreno, Universidade de São Paulo, Brazil</i> Case 4: Proximal and facial weakness: Beyond FSHD <i>Carmen Paradas Lopez, Virgen del Rocío Hospital, Spain</i> Case 5: ADSSL1 -associated myopathy presented with EDMD like phenotype <i>Hacer Durmus, Istanbul Faculty of Medicine, Turkey</i>
08:30-08:45	Comfort break
08:45-10:15	Topic 3: RNA in NMD: Clinical Insights, Pathomechanisms and Treatments 📍 Congress Hall <i>Moderators: Liubov Gushchina, The Abigail Wexner Research Institute, Nationwide Children's Hospital, USA & Emma Rybalka, Victoria University, Australia</i>
08:45-09:15	09INV An overview of the RNA pathomechanisms in neuromuscular diseases, <u>Swanson M</u>¹ ¹University of Florida College of Medicine
09:15-09:45	10INV Clinical and diagnostic utility of RNA/transcriptome: An overview of role of RNA in disease gene discovery and diagnostics <u>Yoon G</u>¹ ¹The Hospital for Sick Children
09:45-10:00	15O Spatial transcriptomics analysis of Becker and Duchenne skeletal muscle to decipher histopathological alterations in dystrophinopathies <u>Heezen L</u>¹, Mao Q¹, van Putten M¹, Diaz Manera J², Kan H³, Niks E⁴, Aartsma-Rus A¹, Nicolau S⁵, Flanagan K^{5,6,7}, Mahfouz A^{1,8,9}, Spitali P¹ ¹Department of Human Genetics, Leiden University Medical Center, ²Faculty of Medical Sciences, Newcastle University, ³Department of Radiology, Leiden University Medical Center, ⁴Department of Neurology, Leiden University Medical Center, ⁵Center for Gene Therapy, The Abigail Wexner Research Institute at Nationwide Children's Hospital, ⁶Department of Pediatrics, The Ohio State University, ⁷Department of Neurology, The Ohio State University, ⁸Delft Bioinformatics Lab, Delft University of Technology, ⁹Leiden Computational Biology Center, Leiden University Medical Center
10:00-10:15	16O Lost in translation: pathogenic translation of GGC repeats in novel and toxic proteins in Oculopharyngodistal myopathy (OPDM) <u>Boivin M</u>¹, Schmitt L¹, Grandgirard E¹, Morlet B¹, Negroni L¹, Goetz-Reiner P¹, Lefebvre E¹, Maglott A¹, Eberling P¹, Oulad-Abdelghami M¹, Deng J², Charlet-Berguerand N¹ ¹IGBMC, ²Peking University First Hospital
10:15-10:45	Morning refreshments, exhibition and posters 📍 Congress Hall Foyer, Forum Hall and Forum Foyer
10:15-10:45	Myology Café - Meet the WMS Sustainability Committee 📍 Forum Hall Foyer
10:45-12:15	Topic 3: RNA in NMD: Clinical Insights, Pathomechanisms and Treatments 📍 Congress Hall <i>Moderators: Gisèle Bonne, Institut de Myologie, France & Silvere Van Der Maarel, Leiden University Medical Center, The Netherlands</i>
10:45-11:15	11INV RNA as biomarkers in neuromuscular diseases, including monitoring progression, in clinical trial design, as outcomes <u>Spitali P</u>¹ ¹Leiden University Medical Center
11:15-11:45	12INV RNA therapeutics in neuromuscular diseases, including new developments, and challenges <u>Arechavala Gomez V</u>^{1,2} ¹Biobizkaia Health Research Institute, ²Ikerbasque, Basque Foundation for Science

11:45-12:00	170 Schwann cell transduction and PMP22 target engagement in non-human primates supports translation of RNAi-based gene therapy for CMT1A <u>Wallace L¹</u>, Thangaraj M¹, Stavrou M², Price B³, Zender G¹, Bayazit M¹, Taylor N¹, Kleopa K², Harper S^{1,4} ¹Nationwide Children's Hospital, ²The Cyprus Institute of Neurology & Genetics, ³Armatas Bio, ⁴Department of Pediatrics, The Ohio State University College of Medicine
12:00-12:15	180 Breaking ground in CMT1B treatment: AAV9-mediated dual RNAi and gene replacement therapy targeting schwann cells improves myelination and peripheral nerve function in mice <u>McCulloch M^{1,2}</u>, Munezero D¹, Paripati A¹, Zhu J¹, Amini Chermahini G¹, Chuah R¹, Rashnonejad A^{1,2,3} ¹Nationwide Children's Hospital (Center for Gene Therapy), ²The Ohio State University (Molecular, Cellular, and Developmental Biology Graduate Program), ³The Ohio State University (Department of Pediatrics)
12:30-13:30	WMS General Assembly / Poster viewing for non-members 📍 South Hall 2
12:30-14:00	Lunch, exhibition and posters 📍 Congress Hall Foyer, Forum Hall and Forum Foyer
13:45-14:15	Sponsor Meeting 📍 South Boardroom 1
14:15-15:15	Poster Session 3 📍 Forum Hall (refreshments provided) 55P-75P, 76VP-78VP: Distal myopathies, MFM 55P Novel mutations and genotype-phenotype correlation in a multicenter cohort of GNE myopathy in China <u>Jiao K¹</u>, Zhang J¹, Li Q², Lv X³, Hong D⁶, Zhao Z⁴, Wang Z⁵, Zhu W¹ ¹Department of Neurology and Rare Disease Center, Huashan Hospital, Fudan University, and National Center for Neurological Disorders (NCND), ²Xiangya Hospital, Central South University, ³Department of Neurology and Research Institute of Neuromuscular and Neurodegenerative Diseases, Qilu Hospital of Shandong University, ⁴Department of Neuromuscular Disease, Third Hospital of Hebei Medical University, ⁵The First Affiliated Hospital of Fujian Medical University, ⁶Department of Neurology and Department of Medical Genetics, The First Affiliated Hospital of Nanchang University 56P Mutational screening of Distal Myopathy gene ACTN2 reveals an aggregation hot-spot in the actin-binding domain <u>Ranta-aho J^{1,2}</u>, Jonson P^{1,2}, Sarparanta J^{1,2}, Udd B^{1,3}, Savarese M^{1,2} ¹Folkhälsan Research Center, ²University of Helsinki, ³Tampere University and Tampere University Hospital 57P Phenotypic description of 40 patients with p.Ser55Phe variant in the MYOT gene: MYOT-MUR study <u>Martínez Marín R¹</u>, Aledo Serrano M¹, Mena Bravo A¹, Lorenzo Diéguez M¹, García Leal A¹, Zmork Martínez G¹, Pérez Lucas J², Pérez García E¹ ¹Hospital Universitario La Paz, ²Hospital Universitario Del Tajo 58P ADSSL1 myopathy in a neuromuscular cohort in Northern India <u>Reyaz A¹</u>, Macken W^{2,3}, Rani N¹, Ahmad T¹, Tarane K¹, Danish M¹, ICGNMD Consortium⁵, Bhatia R¹, Pitceathly R^{2,3}, Thangaraj K^{4,6}, Topf A⁷, Straub V⁷, Srivastava P¹, Hanna M^{2,3}, Venugopalan Y V¹ ¹All India Institute Of Medical Sciences (AIIMS), ²Department of Neuromuscular Diseases, UCL Queen Square Institute of Neurology, ³NHS Highly Specialised Service for Rare Mitochondrial Disorders, Queen Square Centre for Neuromuscular Diseases, The National Hospital for Neurology and Neurosurgery, ⁴Centre for DNA Fingerprinting and Diagnostics, ⁵https://www.ucl.ac.uk/genomic-medicine-neuromuscular-diseases/global-contributor-list, ⁶Centre for Cellular & Molecular Biology, Hyderabad, India, ⁷John Walton Muscular Dystrophy Research Centre, Newcastle University and Newcastle Hospitals NHS Foundation Trust 59P Clinical and genetic spectrum of GNE myopathy in a neuromuscular cohort in northern India <u>Rani N¹</u>, Macken W^{2,3}, Reyaz A¹, Ahmad T¹, Tarane K¹, Danish M¹, Consortium ICGNMD-Consortium⁵, Bhatia R¹, Pitceathly R^{2,3}, Thangaraj K^{4,6}, Topf A⁷, Straub V⁷, Srivastava P¹, Hanna M^{2,3}, Venugopalan Y V¹ ¹All India Institute Of Medical Sciences, ²Department of Neuromuscular Diseases, UCL Queen Square Institute of Neurology, London, UK, ³NHS Highly Specialised Service for Rare Mitochondrial Disorders, Queen Square Centre for Neuromuscular Diseases, The National Hospital for Neurology and Neurosurgery, ⁴Centre for DNA Fingerprinting and Diagnostics, ⁵https://www.ucl.ac.uk/genomic-medicine-neuromuscular-diseases/global-contributor-list, UCL, UK, ⁶Centre for Cellular & Molecular Biology, ⁷John Walton Muscular Dystrophy Research Centre, Newcastle University and Newcastle Hospitals NHS Foundation Trust

60P Evaluation of aggrephagy markers in genetically defined Myofibrillar Myopathies

Iannibelli E¹, Gibertini S¹, Maruotti A², Salerno F¹, Cheli M³, Vattemi G³, Tonin P³, Tasca G⁴, Bortolani S⁵, Pegoraro E⁶, Previtali S⁷, Garibaldi M⁸, Merlonghi G⁸, Filosto M^{9,10}, Carnazzi A^{11,1}, Nicolini De Gaetano L¹, Riolo G¹, Ruggieri A¹, Maggi L¹

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61P Characteristics of muscle computed tomography in a family with HSPB8-related rimmed vacuolar myopathy

Kobayashi M¹, Abe E¹, Wada C¹, Yokoyama E², Hara K³, Nakayama T⁴, Inoue-Shibui A⁵, Suzuki N⁶, Izumi R⁵, Aoki M⁵, Nishino I⁷, Ishihara T¹, Toyoshima I¹

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62P Axial involvement as a prominent feature in SMPX-related distal myopathy

Omar Mohamed Salman D¹, C. Bolano-Diaz C¹, Muni-Lofra R¹, Wong K¹, Elseed M¹, Harris E^{1,2}, Diaz-Manera J¹, Guglieri M¹, Marini-Bettolo C¹, Straub V¹, Tasca G¹

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63P Identifying the disease-causing variant in a large family, with a late-onset dominant distal myopathy

Turku T¹, Savarese M¹, Johari M^{1,2}, Soininen M¹, Hoischen A^{3,4}, Steehouwer M³, Roos A^{5,6}, Preuße C^{7,8}, Stenzel W⁷, Wallgren-Pettersson C¹, Pelin K¹, Udd B¹, Hackman P¹

¹The Folkhälsan Research Center, ²Harry Perkins Institute of Medical Research, Centre for Medical Research, ³Department of Human Genetics, Radboud University Medical Center, ⁴Department of Internal Medicine, Radboud Institute for Molecular Life Sciences, Radboud Expertise Center for Immunodeficiency and Autoinflammation and Radboud Center for Infectious Disease (RCI), Radboud University Medical Center, ⁵Pediatric Neurology, Faculty of Medicine, University Children's Hospital, University of Duisburg-Essen, ⁶Brain and Mind Research Institute, Children's Hospital of Eastern Ontario Research Institute, ⁷Department of Neuropathology, Charité-Universitätsmedizin Berlin, Corporate Member of Freie Universität Berlin, Humboldt-Universität Zu Berlin, Berlin Institute of Health (BIH), ⁸Department of Neuropediatrics, Charité-Universitätsmedizin Berlin, Corporate Member of Freie Universität Berlin, Humboldt-Universität Zu Berlin, Berlin Institute of Health (BIH)

64P Effects of autophagy stimulation in the Tibial muscular dystrophy mouse model

Sarparanta J^{1,2}, Suel-Petat L³, Luque H^{1,2}, Jonson P^{1,2}, Deste G⁴, Vihola A¹, Barresi R⁴, Udd B^{1,2,5}, Richard I³

¹Folkhälsan Research Center, ²Medicum, University of Helsinki, ³Généthon, ⁴San Camillo IRCCS, ⁵Neuromuscular Research Center, Tampere University Hospital

65P Striking periscapular muscle hypertrophy as the presenting symptom in a 5-month old infant diagnosed with a MYH7 congenital myopathy: report of a case

Deconinck N¹, Coppens S², Vilain C², Remiche G³, Semal B², Presiozi M⁴, Lecomte S⁵, Dontaine P¹

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66P Clinical and molecular complexity in Desminopathy: description of a novel variant in DES gene

Torri F¹, Torella A², Ricci G¹, Ciurli B¹, Piluso G², Demidov G³, Onore M², Spampanato C², Zanolio M², Rahman S², Cetrangolo V², Nigro V², Siciliano G¹

¹Department of Clinical and Experimental Medicine, University Of Pisa, ²Department of Precision Medicine, University of Campania "Luigi Vanvitelli", ³Institute of Medical Genetics and Applied Genomics, University of Tübingen

67P ADSS1 Myopathy in Korea: a comprehensive analysis of clinical, laboratory, radiological, pathological, and genetic features

Kim S¹, Choi Y¹, Kim W², Park H¹, Choi Y¹

¹Department of Neurology, Gangnam Severance Hospital, Yonsei University College of Medicine, ²Department of Neurology, Kangdong Sacred Heart Hospital, Hallym University College of Medicine,

68P Induced muscle and liver absence of Gne in postnatal mice does not result in structural or functional muscle impairment

Mitrani-Rosenbaum S¹, Harazi A¹, Yakovlev L¹, Ilouz N¹, Selke P², Horstkorte R², Argov Z³

¹Goldyne Savad Institute of Gene Therapy, Hadassah Hebrew University Medical Center, ²Institute for Physiological Chemistry, Medical Faculty, Martin-Luther-University Halle-Wittenberg, ³Department of Neurology, Hadassah Hebrew University Medical Center

69P Medaka fish *Oryzias latipes* a new vertebrate model for Titinopathies: the HMERF case study

Cetrangolo V^{1,2}, Savarese M^{1,5}, Linari M⁴, Polishchuk E², Conte I⁷, Nigro V^{2,3}, Udd B^{1,5,6}

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70P Defining the landscape of TIA1 and SQSTM1 Digenic Myopathy

Fernández-eulate G¹, Panos-Basterra P², Theuriet J³, Nadaj-Pakleza A⁴, Magot A⁵, Lannes B⁶, Marcotelles P⁷, Behin A¹, Masingue M¹, Caillon F⁸, Malek Y³, Fenouil T⁹, Bas J¹⁰, Menassa R¹¹, Michel-Calemard L¹¹, Streichenberger N⁹, Simon J¹², Bouhour F³, Evangelista T¹, Métay C¹³, Pegat A³, Stojkovic T¹

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71P Phase II/III and efficacy confirmation study of aceneuramic acid for GNE myopathy in Japan

Suzuki N^{1,10}, Mori-Yoshimura M², Katsuno M^{3,4}, Takahashi M⁵, Yamashita S⁶, Oya Y², Hashizume A^{3,4}, Yamada S³, Nakamori M⁵, Izumi R¹, Kato M¹, Warita H¹, Tateyama M¹, Kuroda H¹, Asada R⁷, Yamaguchi T⁸, Nishino I⁹, Aoki M¹

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72P Skeletal muscle pathology in plectinopathies

Winter L¹

¹Medical University of Vienna

73P Peripheral Neuropathy in Myofibrillar Myopathies (MFM) and MFM gene-related myopathies

Wannarong T¹, Milone M¹, Selcen D¹, Dyck P¹, Liewluck T¹

¹Mayo Clinic

74P Update on GNE-myopathy: introduction of tissue and blood biomarkers and a novel homozygous missense variant associated with early disease onset and proximal involvement

Roos A^{1,7,10}, Dobelmann V¹, Hentschel A², Hagenacker T³, Derksen A⁴, Osmanovic A⁵, Evangelista T⁶, Gangfuss A⁷, Kaiser F⁸, Schara-Schmidt U⁷, Ruck T¹, Savarese M⁹, Lochmüller H⁴

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75P Evaluation of clinico-pathological and genetic spectrum of FLNC mutations in Indian cohort

Sharma M¹, Dhall A¹, Jassal B¹, Suri V¹, Faruq M¹, Shamim U¹, Bhatia R¹, Venugopalan Y V¹, Chakarwari B¹, Gulati S¹

¹Neuropathology Lab, AIIMS

76VP Myofibrillar Myopathy with cardiomyopathy, lipid accumulation and sarcoplasmic reticulum dilation

Cotta A¹, Carvalho E¹, da-Cunha-Júnior A¹, Menezes M¹, da Silveira E², Costa-e-Silva C², da-Silva-Neto R¹, Cauhi A¹, Valicek J¹, Vargas A¹

¹The Sarah Network of Rehabilitation Hospitals, ²The Sarah Network of Rehabilitation Hospitals

77VP GNE myopathy: Phenotypic diversity in 10-year study of National registry in Japan and correlation of the diaphragm with respiratory function

Yoshioka W¹, Mori-Yoshimura M¹, Oba M¹, Saito Y¹, Oya Y¹, Eura N¹, Hayashi S¹, Kimura Y¹, Sato N¹, Nakamura H¹, Noguchi S¹, Nishino I¹

¹National Center of Neurology and Psychiatry

78VP Pathogenic NARS1 mutations identified as the cause of neurodevelopmental delay, microcephaly and peripheral neuropathy in two related patients

Vlachou V¹, Abed Alrahman R¹, Majumdar A¹

¹Bristol Royal Hospital for Children

182P-203P: SMA outcome measures and registries

182P Impact of nusinersen on the health-related quality of life and caregiver burden in patients with Spinal Muscular Atrophy with symptom onset before age 6 months

Lee Y¹, Bae H¹, Shim Y², Cho J³, Yun J⁴, Lee H⁵, Chae J⁶, Kwon S¹

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183P CuidAME: The Spanish longitudinal Registry of SMA patients. A global view in 2024

Nascimento Osorio A¹, García Uzquiano R¹, Puig C¹, Fernandez M², Nungo N³, Exposito J¹, Calvo R⁴, Alvarez M⁵, Lopez M⁶, Martinez E⁷, Grimalt M⁸, Fernandez J⁹, Navarro V¹⁰, Urbano M¹¹, Martinez M¹², Gonzalez D¹³, Sarriego A¹⁴, Sardina M¹⁵, Marti I¹⁶, CuídAME Study Group¹

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184P The integration of PROMs and clinician reported data: a holistic approach to characterise disease burden and treatment impact

Walker H¹, Page J¹, Murphy L¹, Segovia S¹, Karkkainen E¹, Cavalcante E², Madden M², Adcock K³, Farrugia M⁴, Irwin J⁵, Lilleker J⁶, McConville J⁷, Merrison A⁸, Parton M⁹, Ryburn L¹⁰, Muni-Lofra R¹, Scoto M², Marini-Bettolo C¹

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185P Spinal Muscular Atrophy diagnosis in Latin American: The LATAM RegistrAME clinical registry

Carneiro Batista E¹, Zanoteli E², Rodrigues Sant'Anna V¹, Miranda Duarte F¹, de Piano L¹, de Pedri E¹, de Albuquerque C¹, Pedro I¹, Serapião A¹, Moia D¹, Carioca A¹, Sampaio B¹, Monfardini F¹, dos Santos G¹, Soares R¹, Silva G¹, Berwanger O³, Rizzo L¹, Fonseca H¹, Medical team at the centers T⁴

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186P Demographic and clinical characteristics of risdiplam-treated and untreated adult patients with SMA

Gorni K¹, Batech M², Guittari C³, Carmona A², Lee S⁴, Poll A⁴, Sutherland C⁵, Marini-Bettolo C⁶, Walter M⁷, Jagut M⁸, Haberlová J⁹, Hodgkinson V¹⁰, Yiu E¹¹, Murphy L⁶, TREAT-NMD Global Data systems Oversight Committee (TGDOC)⁴, TREAT-NMD Global Registry Network for SMA⁴, Gordish-Dressman H¹², Simpson A⁵

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187P French HCPs approach to evaluating SMA adult patients with severe disabilities: a qualitative study

Laforêt P^{24,23}, Montagu G⁴, Boyer F^{5,6}, Gargiulo M^{7,8}, Pouplin S^{9,10}, Barrière A¹¹, Berling E^{1,2}, Bonnyaud C^{9,10}, Cintas P¹², Hogrel J⁷, Le Goff L¹³, Marchadier B¹⁴, N'Dah Sékou G^{1,2}, Orlikowski D^{2,15,16,17}, Prigent H^{2,17,18}, Ropars J^{19,20}, Salort-Campana E^{21,22}, Stojkovic T^{7,23}, Attarian S^{21,22}

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188P Easy neurocognitive and social evaluation could detect abnormal neurodevelopment in SMA Type 1

Alvarez Molinero M¹, Pires N², Garcia Uzquiano R², Gómez Garcia de la Banda M², Costa Comellas L¹, Ventura Expósito L¹, Munell Casadesús F¹, Benezit A², Gómez Andrés D¹, Quijano Roy S²

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189P Diagnostic journey of SMA patients in a reference center in Brazil

Rodrigues M¹, Piaulino Santos Falcão A¹, Franco Graça F¹, Cavalcanti França M¹

¹Unicamp

190P Spectrum of phenotypes in SMA patients with four SMN2 copies in France (Registre SMA France)

Gomez Garcia De La Banda M¹, Gerin L¹, Ropars J², Garcia-Uzquiano R¹, Saugier-Weber P³, Desguerre I⁴, Salort-Campana E⁵, Espil C⁶, Barnerias C⁴, Laugel V⁷, Cancès C⁸, Audic F⁵, Cintas P⁸, Tard C⁹, Le Goff L¹⁰, Dieterich K¹¹, Drunat S¹², Grimaldi L¹³, Quijano-Roy S¹

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191P Characterization of patients SMA diagnosed in Algeria

Hallal S¹, Benchaabi O², nouioua s², Yargui L¹

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192P A community-based experience with the new 12-Tier functional ability scale for Evolving Spinal Muscular Atrophy (EVOLVE-SMA)

Moore Burk M^{1,2}, Johnson K^{2,3}, Crawford T⁴, Apkon S¹, Duong T⁵, Krosschell K⁶, EVOLVE-SMA Working Group^{1,4,6}

¹Children's Hospital Colorado, University of Colorado School of Medicine, ²Rocky Mountain University of Health Professions, ³Hawai'i Pacific University, ⁴The Johns Hopkins Hospital, ⁵Stanford University, ⁶Feinberg School of Medicine Northwestern University

193P Use of European rare disease registries to describe the natural history and disease progression of Spinal Muscular Atrophy (SMA) over time

Bennett N¹, Deltour N⁴, Garry E², Ferreras A⁴, Jacquot E⁴, McElwee S², Sajedian R², Kurteva S⁴, Boin E⁴, Poll A¹, Davies R¹¹, Walter M⁵, Jagut M⁶, Haberlová J⁷, Cattinari M⁸, Marini-Bettolo C⁹, Ekström A¹⁰, de Lemus Belmonte M³, Breen K³, Servais L¹²

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194P Longitudinal assessment of the Adapted Test for Neuromuscular Disease (ATEND) in individuals living with Spinal Muscular Atrophy (SMA)

Duong T¹, Muni-Lofra R², Pasternak A³, Tang W¹, Gu B¹, Dunaway Young S¹, Wilson A⁷, Harrington A⁴, de Monts C¹, Jeworek A⁵, Moore Burke M⁸, Maczek E³, McIntyre M⁷, Salvatore S¹, Smith S¹, Smith R⁴, Hsu L¹, He Z¹, Glanzman A⁶, Day J¹

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195P Real-world data on the effectiveness and safety of Onasemnogene abeparvovec in Spinal Muscular Atrophy

Weiß C¹, Becker L¹, Garbade S², Johannsen J³, Ziegler A²

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196P Profiling neuroinflammatory markers in CSF from paediatric SMA patients in response to nusinersen treatment

Zhang Q¹, Hong Y², Brusa C³, Scoto M³, Cornell N³, Patel P¹, Boukhlofi I³, Baranello G³, Muntoni F^{3,4}, Zhou H^{1,4}

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197P Survival of SMA type 1 and type 0 infants at the time of disease modifying therapies: results of a 8-year nationwide registry

Coratti G¹, Pera M¹, Agosto C², D'Amico A³, Ricci F⁴, Sansone V⁵, Masson R⁶, Bruno C⁷, Varone A⁸, Pane M¹, Mercuri E¹

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198P Longitudinal evaluation of fatigue in adult patients with Spinal Muscular Atrophy and the impact of treatment with disease-modifying drugs

Graca F¹, Iwabe C¹, C França Jr. M¹

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199P The use of the Motor Unit Number Index (MUNIX) as a biomarker for disease progression in Late-Onset 5q-Spinal Muscular Atrophy treated with Nusinersen

Holanda Mendonca R¹, Pedro Soares Baima J¹, Jorge Polido G¹, Otto Heise C¹, Zanoteli E¹

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200P Minimal detectable change of the Revised Hammersmith Scale in patients with Spinal Muscular Atrophy

O'reilly E^{1,2}, Stimpson G², Rohwer A^{1,2}, Baranello G^{1,2,3}, Muntoni F^{1,2,3}, Scoto M^{1,2,3}, On behalf of SMA REACH UK²

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201P Natural history of Spinal Muscular Atrophy patients with 3 and 4 copies of SMN2 gene – data from the national Spanish registry (CUIDAME)

Aragon Gawinska K¹, Fernández García M², Nascimento Osorio A³, Paradas C⁴, Sotoca J⁵, Povedano M⁶, Moreno A⁷, Henao M⁸, Gil C⁹, Rojas R¹⁰, Gómez Caravaca M¹¹, Grimalt M¹², Fernández Torron R¹³, Jericó I¹⁴, García Campos O¹⁵, Toledo Bravo de Laguna L¹⁶, Hervás D¹⁷, Tizzano E¹⁸, Vázquez Costa J^{1,19,20}, on behalf of CUIDAME Investigators Group

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202P Descriptive analysis of the Spinal Muscular Atrophy population treated with Nusinersen included in the CuidAME project

Sotoca Fernandez J¹, Puig C², García-Uzquiano R², García-Romero M³, Pitarch-Castellanos I⁴, Vázquez-Costa J⁴, Paradas C⁵, Povedano M⁶, Gómez-Caravaca M⁷, Álvarez-Molinuevo M⁸, Gómez-Andrés D⁸, Munell F⁸, Grimalt M⁹, Calvo R¹⁰, Henao M¹¹, Jericó I¹², Fernández-García M³

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203P Towards a better analysis of SMN2 structures and variants by complete sequencing of the SMN locus in an international cohort of 564 SMA patients

Tizzano E^{1,2}, Costa-Roger M^{1,2}, Blasco-Pérez L^{1,2}, Tenés A¹, Martínez-Cruz D¹, Leno-Colorado J^{1,2}, Civit D^{1,2}, Codina-Sola M^{1,2}

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247P-265P, 266VP: Neuromuscular disorders around the world

247P A population-based survey on the knowledge, perception and attitudes towards rare diseases and gene therapy in Belgium: focus on Duchenne Muscular Dystrophy

Van Stappen T¹, Verschelden M¹, Samyn W², Minnebo J², Mommen M¹

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248P Spinal Muscular Atrophy in Latin American: patient journey observed in regional registry

Carneiro Batista E¹, Zanoteli E², Rodrigues Sant'Anna V¹, Miranda Duarte F¹, de Piano L¹, de Pedri E¹, de Albuquerque C¹, Pedro I¹, Serapião A¹, Moia D¹, Carioca A¹, Sampaio B¹, Monfardini F¹, dos Santos G¹, Soares R¹, Silva G¹, Berwanger O³, Rizzo L¹, Fonseca H¹, Medical team at the centers T⁴

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249P Clinical characteristics of the Spinal Muscular Atrophy patients identified in the Brazilian public health system

Batista EC¹, Zanoteli E², Ortega AB³, Junior MCF⁴, .Saute JAM⁵, Oliveira ASB⁶, Giannetti JG⁷, Pessoa ALS⁸, Prufer A⁹, Boy R¹⁰, . Junior FGB¹, de Albuquerque CSN¹, Moia DDF¹, Monfardini F¹, Santos GP¹, Soares RVP¹, SilvaGS¹, Rizzo LV¹, . Berwanger O¹¹, Fonseca HAR¹

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250P Prevalence of Duchenne Muscular Dystrophy in Italy: a nationwide survey

Cicala G^{1,2}, Capasso A¹, Ricci M¹, Pane M¹, D'Amico A³, Bruno C⁴, Sansone V⁵, Messina S⁶, Bello L⁷, Masson R⁸, Berardinelli A⁹, Pini A¹⁰, Ricci F¹¹, Mongini T¹², Nigro V¹³, Comi G^{14,15}, Battini R^{16,17}, Arpaia C¹, Coratti G¹, Mercuri on behalf of the Italian DMD group E¹

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251P Latin-SEQ: a collaborative network to provide genetic diagnosis to patients with neuromuscular diseases in Latin America – project update

Topf A¹, Gonzalez-Chamorro A¹, Laurie S^{2,3}, Papakonstantinou Ntalis A^{2,3}, Latin-SEQ Consortium¹, Diaz-Manera J¹

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252P Natural history and quality of life study on muscular dystrophies in adulthood (Muskel-LIV): study design and conduct

Nordström S^{1,2}, Wahlgren L^{1,2}, Lindberg C^{1,2}, Tulinius M¹, Sofou K^{1,2}

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253P International Centre for Genomic Medicine in Neuromuscular Diseases: analysis and characterization of the muscular dystrophy cohort from India

Luce L¹, Vengalil S³, Nashi S³, Srivastava K³, Manoj R³, Reyaz A⁴, Chaudhary N⁴, Ahmad T⁴, Naveena M⁵, Vandrovцова J², ICGNMD Consortium, Yareeda S⁵, Bhatia R⁴, Venugopalan VY⁴, Srivastava P⁴, Nalini A³, Töpf A¹, Straub V¹

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254P "Where can I find a specialized physiotherapist for someone like me?" - A Norwegian innovation project

Ramberg C¹, Hevnskjel Ringvold G¹, Ladehaug T², Stokke S³, Ørstavik K⁴, Dybesland Rosenberger A¹

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255P Relevance of muscle biopsies in the neonatal period: a 52-year retrospective study in the gene-sequencing era

Bui M¹, Fernández-Eulate G², Evangelista T¹, Lacène E¹, Brochier G¹, Labasse C¹, Madelaine A¹, Chanut A¹, Beuvin M¹, Borsato-Levy F¹, Biancalana V³, Barcia G², De Lonlay P², Laporte J⁴, **Bohm J⁴**, Romero N¹

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256P Establishing healthy muscle references and cutoff values for quantitative muscle ultrasound as a foundation for future diagnostic and research use in the neuromuscular clinic

Haestad C¹, Ramberg C¹, Rosenberger A¹, Arntzen K^{1,2}

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257P Interim analysis of an integrated interdisciplinary diagnostic pathway in a cohort of unsolved pediatric neuromuscular disorders

Haliloğlu G¹, Donkervoort S², Öz Yildiz S¹, Özel E¹, Pais L^{3,4}, Ganesh V^{3,4,5}, O'Donnell-Luria A^{3,4}, Bönnemann C²

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258P Safety and tolerability of Onasemnogene Apeparvovec for patients with Spinal Muscular Atrophy weighing ≤17 kg and ≤24 months old: phase 4 OFELIA study

Zanoteli E¹, Muntadas J², Gurgel-Gianetti J³, Monges S⁴, Aliberti P⁵, Alecu I⁶, Ritter S⁷, Martins de Lana J⁸, Mumneh N⁷, Saute J^{9,10}

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259P The 'muscle toolbox': harmonising diagnosis and follow-up for neuromuscular disorders across three Dutch academic hospitals

Cameron D¹, van Doorn J¹, Heskamp L², Rauh S³, Becks R¹, Kruit M³, Nievelstein R², Tromp S³, Tannemaat M³, Braakman H¹, Erasmus C¹, Houwen-van Opstal S¹, Niks E³, van der Pol L², Kan H³, Froeling M², Bartels B², van Alfen N¹

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260P NEUROMYODredger – 3 billion megaproject: expanding the accessibility of exome sequencing for the diagnosis of neurodevelopmental and neuromuscular disorders in nine countries

Malfatti E¹, Caramizaru A², Lee H³, Kim J³, Shoaib H⁴, Pennisi A¹, Fahmi N⁵, Escobar-Cedillo R⁶, Miranda-Duarte A⁶, Nouioua S⁷, Benchaabi O⁷, Martinez P⁸, Castiglioni C⁹, Dobrescu A², Tajsharghi H¹⁰

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261P Insights into Facioscapulohumeral dystrophy in African individuals: clinical and molecular findings from a collaborative study

Rodriguez Cruz P^{1,2,3}, Diagne R^{2,3}, Henning F⁴, Naidu K⁴, Heckmann J⁵, Floudiotis N⁵, Malfatti E⁶, Kamissoko Y⁷, Leturcq F⁸, Urtizberea A⁹, Tellez M¹⁰, Elsheikh B¹⁰, Beltran S¹, Diop A^{2,3}, Ndiaye M^{2,3}, Hodes R¹¹, Voermans N¹², Van der Vliet P¹³, Van der Maarel S¹³, Lemmers R¹³

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262P A global analysis of the CMT1A locus: implications for the origin and susceptibility to Charcot- Marie-Tooth disease type 1A across populations

Rodriguez Cruz P^{1,2,3}, Alitsiou A¹, Diagne R^{2,3}, Lia-Baldini A⁴, Ghorab K⁵, Gallo Diop A^{2,3}, Ndiaye M^{2,3}, Beltran S¹, Lao O⁷

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263P Updated genetic testing in heart-transplant recipients in Norway between 1983-2022 uncovering genes relevant to neuromuscular disorders

Benterud A^{1,2}, Haug Popperud T^{1,3}, Broch K⁴, Hasselberg N⁴, Prøven Bogsrud M⁵, Berge K⁵, Haugaa K^{4,6}, Ørstavik K^{1,3}

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264VP A nationwide register study on the epidemiology of Duchenne Muscular Dystrophy (DMD) in Finland

Auranen M¹, Kyttälä M², Vesikansa A³, Mehtälä J³, Isohanni P^{4,5}, Kosunen M²

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265P Effective supplementation of 6'-sialyllactose in GNE Myopathy: the results from a placebo-controlled, pilot study

Park Y^{1,2}, Kim D^{2,3}, Choi J⁴, Jung J⁴, Kim L⁴, Shin J^{2,3}

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266VP Cardiovascular comorbidities in Myasthenia Gravis: a systematic review and meta-analysis

Tahir S¹, Iguh C¹, Sadik O², Duggirala N³, Ezenwa V¹, Ahmed S¹

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280P-315P, 316VP-317VP: Dystrophinopathies (animals models, biomarkers, brain, genetics)

280P Technology-enabled assessment of cognition to facilitate democratization of brain health in Duchenne Muscular Dystrophy

Thangarajh M¹

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281P Prognostic significance of ACTN3 genotype in Duchenne Muscular Dystrophy: findings from an Argentine patient cohort

Luca L^{1,2,3}, Mazzanti C^{1,2}, Carcione M^{1,2}, Llamas Massini C^{1,2}, Buonfiglio P⁴, Dalamón V⁴, Bolaño Díaz C^{3,5}, Mesa L⁵, Dubrovsky A⁵, Cotignola J^{6,7}, Giliberto F^{1,2}

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282P Biomarker panel for Duchenne Muscular Dystrophy clinical trials

Tsioutsias I¹, Bautista A¹, Terrill J¹, Bakker A¹, Pinniger G¹, Arthur P¹

¹The University of Western Australia

283P Generation of cardiomyocyte cell models for personalized medicine

Nhi P¹, Åstrand C¹, Hedhammar M¹, Al-Khalili Szigyarto C¹

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284P Suspension bead array profiling of 1018 serum proteins in search for disease progression biomarkers for Duchenne Muscular Dystrophy

Jiménez-Requena Carrasco A¹, Ajeenah A¹, Johansson C¹, Naveed A⁵, Tobin R², Degan C³, de Vries S³, van der Burgt Y³, Díaz-Manera J⁴, Guglieri M⁴, CINRG-DNHS Investigators C, for DMD investigators, Dang U², Tsonaka R³, Spitali P³, Hathout Y⁵, Al-Khalili Szigyarto C¹

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⁴Newcastle University, ⁵Binghamton University

285P AAV-delivered U7snRNA restores full-length dystrophin in patient cell lines with DMD intronic pseudoexon mutations

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286P Cognitive deficits in Duchenne muscular dystrophy: Analysis of assessment, mutation location, and social vulnerability

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287P Localisation of Dystrophin isoforms in the mouse brain: insights into neuropsychiatric comorbidities in Duchenne Muscular Dystrophy

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288P In patients with Duchenne Muscular Dystrophy fragmented QRS in the lateral lead of the electrocardiography is associated with reduced cardiac function

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289P Non-tandem duplications in DMD: impacts on genetic counseling and medical decision making

Gross B¹, Higginbotham E², Lau L², Sung W², Moran O³, Hasnain A^{2,4}, Stavropoulos D^{2,4}, Beaulieu Bergeron M^{5,6}, Boycott K^{7,8}, McNiven V⁹, Liu R¹⁰, Matesanz S^{1,11}

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290P Developing a non-invasive, in vivo method for evaluating muscle inflammation longitudinally in two mouse models of Duchenne Muscular Dystrophy

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291P Novel insights into the expression and the epigenetic modulation of LKB1, a potential diagnostic and therapeutic player in Duchenne muscular dystrophy

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292P Phenotypic characterization of the D2-mdx mouse for Duchenne Muscular Dystrophy: updates from a natural history study

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293P Evaluation of creatine/creatinine ratio and myostatin as monitoring biomarkers for DMD patients using real-world data

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294P Identification of disease-specific extracellular vesicle-associated plasma biomarkers for Duchenne muscular dystrophy (DMD) and Facioscapulohumeral Muscular Dystrophy (FSHD)

Bayazit M¹, Henderson D³, Tawil R³, Flanigan K^{1,2}, Harper S^{1,2}, **Saad N^{1,2}**

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295P Diagnostic yield of next-generation sequencing compared with muscle biopsy for diagnosis of MLPA negative Duchenne Muscular Dystrophy

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296P Development of monitoring biomarker signatures in Duchenne Muscular Dystrophy

De Vries S¹, Degan C¹, Tobin R², Jimenéz-Requena A³, Ajeenah A³, Johansson C³, Van der Burgt Y¹, Diaz-Manera J⁴, Guglieri M⁴, Al-Khalili Szigartyo C³, Spitali P¹, Hathout Y⁵, Tsonaka R¹, Dang U², on behalf of Team: CINRG-DNHS Investigators, on behalf of Team: DMD Investigators

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297P In-depth behavioral characterization of Duchenne Muscular Dystrophy mouse models lacking one, multiple or all dystrophin isoforms in the brain

Van Putten M¹, Verhaeg M¹, van der Pijl L¹, van de Vijver D¹, Tanganyika-de Winter C¹, Stan T¹, Aartsma-Rus A¹

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298P Magnetic resonance imaging analyses of the brain of Duchenne Muscular Dystrophy mouse models lacking one, multiple or all dystrophin isoforms

Van Putten M¹, Verhaeg M¹, Suidgeest E¹, Kan H¹, van der Weerd L¹, Aartsma-Rus A¹

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299P Detailed natural history study of the D2-mdx and BL10-mdx models for Duchenne Muscular Dystrophy

Van Putten M¹, Mantuano P², Boccanegra B², Tanganyika-de Winter C¹, Putker K¹, Schneider A¹, Tulumiero L², Mele A², van de Vijver D¹, Gordiss-Dressman H³, Cappellari O², Aartsma-Rus A¹, De Luca A²

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300P Brain involvement in Duchenne Muscular Dystrophy (BIND)

Tetorou K^{1,2}, Aghaeipour A^{1,2}, Gileadi T^{1,2}, Ma S^{1,2}, Perdomo Quinteiro P³, Saoudi A^{5,6}, Ceschi L⁵, Zarrouki F⁵, Mitsogiannis M⁷, Fergus C⁹, Kelly V⁹, Zhang L⁴, Spitali P³, Aoki Y⁸, Morgan J^{1,2}, Montanaro F^{1,2}, Vaillend C⁵, Goyenvalle A⁶, Muntoni F^{1,2}

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301P Interactome analysis of dystrophin isoforms in the mouse brain

Tetorou K¹, Aghaeipour A^{1,2}, Gileadi T^{1,2}, Pablo P³, Zhang L⁴, Spitali P³, Morgan J^{1,2}, Montanaro F^{1,2}, Muntoni F^{1,2}

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302P Dystrophin quantification by capillary western immunoassay and western blot across the dystrophinopathy spectrum

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303P A longitudinal study on cognitive and behavioural functioning in Duchenne Muscular Dystrophy

Govaarts R¹, Weerkamp P², de Vreede M¹, Marini-Bettolo C³, Geagan C³, Hollingsworth K⁴, Hendriksen J^{2,5}, Kan H^{1,5}, Niks E^{1,5}, Straub V³

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304P Multi-modal magnetic resonance imaging protocols in the multi-site Brain Involvement in Dystrophinopathies (BIND) study

Govaarts R¹, Doorenweerd N^{1,2}, Brogna C⁴, Clark C³, Guliaeva I³, Hollingsworth K⁵, MacDonald Fisher P⁶, Mercuri E⁴, Niks E¹, Parikh J⁵, Seunarine K³, Smythe L³, Stemmerik M⁶, Straub V², Verdolotti T⁴, Vissing J⁶, Würzler Slipsager A⁶, Muntoni F³, Kan H¹, Kerkelä L³

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305P Investigation of the clinical significance of serum titin in Duchenne Muscular Dystrophy

Nambu Y¹, **Awano H²**, Sonehara S¹, Bo R¹, Osawa K³, Shirakawa T³, Matsuo M⁴

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306P Evaluating genetic therapies targeting the central nervous system in Duchenne Muscular Dystrophy using high-resolution spatial transcriptomics

Mao Q¹, Ahmadi A¹, van Doorne L¹, de Vries S¹, Heezen L¹, Vacca O², Aartsma-Rus A¹, van Putten M¹, Goyenvalle A², Mahfouz A^{1,3,4}, Spitali P¹

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307P Uncovering the genomic basis of cognitive comorbidities in Duchenne Muscular Dystrophy using spatial transcriptomics in mouse models

Mao Q¹, Heezen L¹, de Vries S¹, van Doorne L¹, Aartsma-Rus A¹, van Putten M¹, Mahfouz A^{1,2,3}, Spitali P¹

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308P Nephrological parameters in boys with Muscular Dystrophy

Rohlenová M¹, Zieg J², Lauerová B¹, Kumhera M¹, Gloser M¹, Dolanská A¹, Haberlová J¹

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309P Cholesterol defects in Muscular Dystrophy patients and mice cause ambulation dysfunction: insight into statin- and anti-HMGCoAR-induced myopathies

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310P Stress exacerbates glucose intolerance in the mdx mouse model of Duchenne Muscular Dystrophy

Lindsay A^{1,2,3}, Salimova E^{4,5}, Eliades J⁴, Zheng G⁴, Caeyenberghs K³, de Veer M^{4,5}

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311P Development and pilot validation of the DuMAND checklist to screen for Duchenne Muscular Dystrophy-Associated Neurobehavioral Difficulties (DuMAND)

Geuens S^{1,2}, Goemans N¹, Lemiere J^{3,4}, Doorenweerd N⁵, De Waele L^{1,2}

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312P Genotype and corticosteroid treatment are associated with distinctive variations in gray matter characteristics among patients with Duchenne Muscular Dystrophy

Geuens S^{1,2}, Van Dessel J³, Kan H^{4,5}, Govaarts R^{4,5}, Niks E^{5,6}, Goemans N¹, Lemiere J^{7,8}, Doorenweerd N⁴, De Waele L^{1,2}

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313P Validation lab: allowing standardized in vitro and in vivo experiments for candidate treatments for Duchenne Muscular Dystrophy

Stan T¹, Van De Vijver D¹, Tanganyika-de Winter C¹, van der Pijl L¹, Aartsma-Rus A¹

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314P Protein biomarkers predicting clinical milestones in Duchenne Muscular Dystrophy combining natural history and real-world data

Spitali P^{1,2}, Ikelaar N^{2,3}, Barnard A⁴, Eng S⁵, Hosseini Vajargah S⁵, Ha K⁵, Kan H^{2,6}, Vandenborne K⁴, Niks E^{2,3}, **Walter G⁷**

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315P Cardio-metabolic and cytoskeletal proteomic signatures differentiate fear sensitivity in dystrophin-deficient mdx mice

Major G¹, Herbold C¹, Cheng F², Lee A², Russell A³, Lindsay A^{1,3,4}

¹University of Canterbury, ²Macquarie University, ³Deakin University, ⁴University of Otago

316VP What you see is what it is: The tales of two brothers with rare intronic dystrophin gene duplication

Khries M¹, Gowda V¹

¹Evelina London Children's Hospital

317VP Overview of a cohort of 35 manifesting dystrophinopathy females – and addressing the forthcoming challenges

Goncalves A^{1,2,3}, Sousa A^{3,4}, Garrido C^{3,5}, Cardoso M^{3,4}, Pinto M^{3,6}, Vieira E^{1,2}, Oliveira M^{1,2}, Taipa R^{2,3,6}, Coelho T^{3,4}, Santos M^{3,5}, Santos R^{1,2,3}

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438P - 440P, 442P - 471P: Myotonic dystrophy

438P Knockdown of DMPK in Myotonic Dystrophy Type 1 using CRISPR Cas13

Oh H^{1,2}, Todorow V¹, Hintze S¹, Schoser B¹, Meinke P^{1,2}

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439P Cardiac abnormalities and management in children with myotonic dystrophy type 1

Bovenkerk D¹, Van Den Akker R², Klinkenberg S¹, Louw J³, Udink Ten Cate F⁴, Braakman H²

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440P Nonclinical data for PGN-EDODM1 demonstrated nuclear delivery, mechanistic and meaningful activity for the potential treatment of DM1

Gilbert J¹, Klein A², Lonkar P¹, Gutnick A¹, Foy J¹, Yu S¹, Reid T³, Sarkar K³, Cleary J³, Berglund J³, Furling D², **Holland A¹**

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442P Cognitive diversity in Congenital Myotonic Dystrophy: implications for early intervention

Dixon M¹, Butterfield R¹

¹University Of Utah, Pediatric Neurology

443P Assessing inter and intra-rater reliability of video hand opening time in Myotonic Dystrophy

McIntyre M¹, de Monts C², Wilson A¹, Massey C^{3,4}, Olson S¹, Nelson L⁵, Hageman N², Tang W², Dekdeburn J⁶, Duong T²

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444P Exploring Hand Myotonia: assessing hand opening and individual finger movements through machine learning

Duong T¹, de Monts C¹, McIntyre M³, Karatsidis A², Juraver A², Ataide P¹, Hageman N¹, Erb K², Meilleur K², Day J¹, Burton L², Kanzler C²

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445P Utilization and costs of healthcare services and labour market affiliation of persons with adult-onset Myotonic Dystrophy – a Danish Register-Based Study (Study II)

Handberg C^{1,2}, Rudolfson J³, Andersen H⁴, Vissing J⁵, Rossau C⁶, Dreyer P⁶, Olsen J³, Bengtsson S³, Aagaard H¹, Werlauff U¹

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446P Comorbidities and mortality of persons with adult-onset Myotonic Dystrophy – a Danish Register-Based Study (Study I)

Werlauff U¹, Rudolfson J², Andersen H³, Vissing J⁴, Rossau C⁵, Dreyer P⁶, Olsen J², Bengtsson S², Aagaard H⁷, Handberg C^{6,7}

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447P Atrio-ventricular conduction in a mouse model with Myotonic Dystrophy Type-1: a preliminary study in hDMPK-77Tg mice

Kimura K¹, Minegishi K², Motohashi N², Morita H³, Nakanishi K³, Daimon M³, Takeda N³, Echigoya Y⁴, Nakamori M⁵, Aoki Y²

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448P Quantitative analysis of brain atrophy in patients with myotonic dystrophy (DM1) using MRI –multi center analysis

Nakayama T¹, Matsumura T², Kuru S³, Kobayashi M⁴, Suwazono S⁵, Takahashi M⁶

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449P Molecular biomarkers in myotonic dystrophy type 1

Slipsager A¹, Hildonen M², Godtfeldt Stemmerik M¹, Tümer Z², Dunø M², Birkedal U², Vissing J¹

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450P A review of the symptom control clinic, advance care planning and mortality in myotonic dystrophy 1 in a UK neuromuscular centre

Willis T^{1,2}, Bassie C¹, Fox H³, Kulshrestha R¹, Willis D^{2,3}

¹Robert Jones and Agnes Hunt hospital, ²University of Chester Medical School, ³Severn Hospice

451P Gait parameters / cognitive function correlation in a cohort of patients with myotonic dystrophy type 1: a single-center sensor-based gait analysis

Risi B¹, Pilotto A^{2,3,4}, Rizzardi A^{2,3}, Ferrari E¹, Labella B^{2,3}, Zatti C^{2,3}, Hansen C⁵, Romijnders R⁵, Caria F¹, Damioli S¹, Bertella E¹, Poli L³, Ferullo L^{2,3}, Olivieri E^{2,3}, Maetzler W⁵, Padovani A^{2,3}, Filosto M^{1,2}

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452P Genetic confirmation of myotonic dystrophy type II after allogeneic stem cell transplant

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453P Characterisation of cell culture models of myotonic dystrophy type I for drug screening by in-cell western and digital droplet PCR

López-Martínez A¹, Sendino M¹, Torres-Conde N¹, Al-Ani A¹, Martínez-Gonzalez S¹, Nuñez-Manchón J², Nogales-Gadea G², **Arechavala Gomez V^{1,3}**

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454P Myotonic dystrophy type 1 with progressive supranuclear palsy showing responsiveness to levodopa

Indrawati L^{1,2}, Tunjungsari D^{1,2,3}, Nagpal C², Muljono W¹, Ariarini N^{2,3}

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455P Psoriasis and myotonic dystrophy type 1: another cutaneous manifestation of a multisystemic disorder

Tufano L¹, Bucci E¹, Antonini G¹, Garibaldi M¹

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456P Gait analysis by IMU sensor in myotonic dystrophy type 1

Tufano L¹, Bianchini E¹, Bucci E¹, Antonini G¹, Garibaldi M¹

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457P Mortality rate and predictors of death in the DM1 population, a registry-based study

Bassez G¹, Kachal A¹, Gyenge M¹, Hamroun D¹, French Myotonic Dystrophy Study Group

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458P The iDM-Scope Registry: an innovative France-Canada framework to advance Myotonic Dystrophy translational research

Bassez G¹, Gyenge M¹, Hamroun D², Kachal A¹, Evangelista T¹, Rodrigue X³, Nury M³, Lochmüller H⁴, Gagnon C⁵

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459P Correlation of minimally invasive blood biomarkers with muscle-derived molecular signatures in myotonic dystrophy type 2

Kleefeld E¹, Hentschel A⁵, Preusse C¹, Schoser B³, Stenzel W¹, Roos A^{2,5,7}

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460P Understanding the clinical heterogeneity in myotonic dystrophy type 1: identifying clinical phenotypes using unsupervised clustering

la Fontaine L¹, Imkamp M¹, 't Hoen P², van As D², Smulders F², Bruijnes J¹, de Kok J¹, Faber C¹, Merkies I¹, van Kuijk S¹

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461P Evaluation of PGN-EDODM1: FREEDOM-DM1 and FREEDOM2-DM1 clinical trials in myotonic dystrophy type 1

Larkindale J¹, Shoskes J¹, Garg B¹, Song G¹, Lonkar P¹, Babcock S¹, Vacca S¹, Yu S¹, Mellion M¹

¹PepGen Inc.

462P Evaluating EEG as an outcome measure for CNS Symptoms in myotonic dystrophy type 1: a clinical trial analysis

Allen S¹, Kamali T¹, Parker D¹, Seto A², Ehrich E², Wang E³, Sampson J¹

¹Stanford University, ²Expansion Therapeutics, ³University of Florida

463P Longitudinal progression of motor function in individuals with myotonic dystrophy type 1: insights from the END-DM1 study

Johnson N¹, Hung M¹, Sansone V¹, Subramony S¹, Statland J¹, Hamel J¹, van Engelen B¹, Mul K¹, Elsheikh B¹,

Roxburgh R¹, Day J¹, Swenson A¹, Schoser B¹, Ragole T¹, Greene E¹, Shieh P¹, Thornton C¹, On behalf of DMCN

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464P Advancing preclinical research of myotonic dystrophy type 1 with 3D functional human skeletal muscle tissues

Fernández-Garibay X¹, Sabater-Arcís M^{2,3}, Núñez-Manchón J⁴, Tejadera-Villafranca A¹, Artero R^{2,3}, Suelves M⁴, Nogales-Gadea G⁴, Ramón-Azcón J^{1,5}, Fernández-Costa J¹

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465P Factors impacting dysphagia in adult-onset myotonic dystrophy type 1

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466P Multisystemic manifestations in adult patients with classic myotonic dystrophy Type 1

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467P A multicenter retrospective study in Turkish children with myotonic dystrophy type 1

Oz Tuncer G¹, Sanrı A², Kurt Bayir G¹, Erol İ³, Ardiçlı D⁴, Öztürk M⁵, Gazeteci Tekin H⁶, Kutluk G⁷, Hergüner Ö⁸, Tekgül H⁹, Tütüncü Tokar R¹⁰, Per H¹¹, Çavuşoğlu D¹², Pembegül Yıldız E¹³, Kömür M¹⁴, Türkdoğan D¹⁵, Özgör B¹⁶, Ayça S¹⁷, Turkish Myotonic Dystrophy Type 1 Study Group T¹⁸

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Faculty of Medicine, Celal Bayar University, ¹⁸Turkish Myotonic Dystrophy Type 1 Study Group

468P Exploring gut microbiome alteration in children with myotonic dystrophy type 1: a pilot study

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469P Modal allele change as a predictor of skeletal muscle symptoms progression in myotonic dystrophy type 1

Radovanovic N¹, Pesovic J¹, Peric S^{2,3}, Radenkovic L¹, Brkusanin M¹, Brajuskovic G¹, Rakocevic Stojanovic V^{2,3}, Savic-Pavicevic D¹

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470P Splicing is improved using a novel AAV-microRNA delivery platform as a treatment for myotonic dystrophy type 1

Cao S¹, Tomassy G¹, Richards B¹, Fan W¹, Luo Z¹, Jackson R¹, O'Riordan C¹, Goulet M¹, Mueller C¹

¹Genomic Medicine Unit, Sanofi

471P Interfering with CUG toxic repeats using AAV.U7snRNAs rescue myotonia and splicing defects in myotonic dystrophy type 1

Almeida C¹, Brinkman A¹, Wendt C², Blatnik A², Delgado A¹, Gushchina L¹, Arnold W³, Weiss R⁴, Wein N^{1,5}

¹Center for Gene Therapy, Nationwide Children's Hospital, ²Department of Biological Chemistry and

Pharmacology, The Ohio State University, ³Department of Physical Medicine and Rehabilitation, University

of Missouri School of Medicine, ⁴Department of Human Genetics, The University of Utah School of Medicine,

⁵Department of Pediatrics, The Ohio State University

598P-618P: Registries, networks and care of NMD

598P The Canadian Neuromuscular Disease Registry: using real-world evidence to further spinal muscular atrophy research in Canada

Crone M¹, Henley K², Hodgkinson V², Dyck A², Brais B³, Campbell C⁴, Gonorazky H⁵, Lochmüller H⁶, MacKenzie A⁷, McMillan H⁷, Oskoui M⁸, Korngut L⁹, Selby K¹⁰, SMA Investigator Network on behalf of the CNDR Investigator Network

¹Alberta Children's Hospital, University of Calgary, ²Department of Clinical Neurosciences, Hotchkiss Brain

Institute, University of Calgary, ³Montreal Neurological Institute, McGill University, ⁴Western University, ⁵Hospital

for Sick Children, University of Toronto, ⁶Brain and Mind Research Institute, Children's Hospital of Eastern

Ontario, University of Ottawa, ⁷Children's Hospital of Eastern Ontario, University of Ottawa, ⁸Montreal Children's

Hospital, McGill University, ⁹Hotchkiss Brain Institute, University of Calgary, ¹⁰BC Children's Hospital, University

of British Columbia

599P The UK Facioscapulohumeral muscular dystrophy Patient Registry: a powerful tool to support clinical research and patient voice in the translational research pathway

Walker H¹, Muni-Lofra R¹, Orrell R², Graham A³, Norwood F⁴, Roberts M⁵, Willis T⁶, Matthews E⁷, Mencias M⁷, Adcock K⁸, Marini-Bettolo C¹

¹The John Walton Muscular Dystrophy Research Centre, Translational and Clinical Research Institute, Newcastle University, ²UCL Queen Square Institute of Neurology, University College London, ³Patient Representative, ⁴Department of Neurology, Kings College Hospital, ⁵Department of Neurology, Salford Royal NHS Foundation Trust, ⁶Neuromuscular Service, The Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust, ⁷The Atkinson Morley Regional Neurosciences Centre, St George's University Hospital NHS Foundation Trust, ⁸Muscular Dystrophy UK

600P The UK Myotonic Dystrophy Patient Registry - empowering clinical research and patient voice with an effective translational research tool

Walker H¹, Sodhi J¹, Turner C², Adcock K³, Ashley E⁴, Orrell R⁵, Monckton D⁶, Hamilton M⁷, Hewamadduma C⁸, Walker M⁹, Marini-Bettolo C¹

¹The John Walton Muscular Dystrophy Research Centre, Translational and Clinical Research Institute, Newcastle University, ²University College Hospital, National Hospital for Neurology and Neurosurgery, ³Muscular Dystrophy UK, ⁴Cure Myotonic Dystrophy UK Charity (Cure-DM), ⁵UCL Queen Square Institute of Neurology, University College London, ⁶Institute of Molecular Cell and Systems Biology, University of Glasgow, ⁷West of Scotland Clinical Genetics Service, Queen Elizabeth University Hospital, ⁸Sheffield Teaching Hospitals NHS Foundation Trust, ⁹Myotonic Dystrophy Support Group

601P Gap analysis of 4-year data in the Dutch Dystrophinopathy Database

Meijer-Krom Y^{1,3}, Ikelaar N^{1,3}, Bongers J^{1,3}, van de Velden N^{1,3}, Snijder R⁴, Houwen van Opstal S^{2,3}, Niks E^{1,3}

¹Department of Neurology, Leiden University Medical Center, ²Department of Rehabilitation, Donders Institute for Brain, Cognition and Behaviour, Radboud university medical center, Amalia Children's Hospital, ³Duchenne Center Netherlands, ⁴Department of Biobanking, Leiden University Medical Center

602P FISMA for high quality and interoperable real-world data on dystrophinopathies: FAIR from the start, from concept to reality

Meijer-Krom Y^{1,5}, Hoek R^{1,5}, Houwen van Opstal S^{2,5}, van de Velden N^{1,5}, Ikelaar N^{1,5}, van der Holst M^{3,5}, Snijder R⁴, Niks E^{1,5}

¹Department of Neurology, Leiden University Medical Center, ²Department of Rehabilitation, Amalia Children's Hospital, Radboud University Medical Center, ³Department of Orthopedics, Rehabilitation and Physiotherapy, Leiden University Medical Center, ⁴Biobanking Organization, Leiden University Medical Center, ⁵Duchenne Center Netherlands

603P DMD Hub: An established clinical trial accelerator network delivering tools and services to sites, patients and industry in the UK

Heslop E¹, Gaeta A², Reuben E², Johnson A², Cammish P¹, McNiff M¹, Riguzzi P¹, Muntoni F³, Childs A⁴, Straub V¹, Guglieri M¹

¹JWMDRC Newcastle University, ²Duchenne UK, ³UCL Great Ormond Street Institute of Child Health, ⁴Leeds Teaching Hospital

604P Descriptive analysis of Duchenne Muscular Dystrophy patients included in the Swedish National Registry for neuromuscular disorders

Ekström A¹

¹Queen Silvia Children's Hospital, Sahlgrenska University Hospital. University of Gothenburg

605P Dutch LGMD registry: real-world data to facilitate trial readiness

Schrama E¹, Hoek R¹, Bongers J¹, Straathof C¹, Badrising U¹, van Reenen R², van der Kooi A³, van Duyvenvoorde H⁴, Krom Y¹, Niks E¹

¹Department of Neurology, Leiden University Medical Center, ²Spierziekten Nederland, ³Department of Neurology, Amsterdam University Medical Center, ⁴Department of Clinical Genetics, Leiden University Medical Center

606P Burden of illness for male patients with Duchenne Muscular Dystrophy in a real-world setting, a Swedish registry study

Furby H¹, Boudreau D², Ekstrom A³, Freilich J⁴, Kroksmark A⁵, Streja E⁴, Wojtowicz J¹, Yang Q⁴, Zhao J⁴, De Ford C¹

¹F. Hoffmann-La Roche, Ltd, ²Genentech, Inc., ³Department of Pediatrics, Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, ⁴Parexel International Limited, ⁵Department of Health and Rehabilitation, Institute of Neuroscience and Physiology, University of Gothenburg

607P A patient-centered registry for rare neuromuscular disorders with federated FAIR infrastructure: the EURO-NMD Registry Hub

Atalaia A¹, Wandrei D², Lalout N^{3,4}, Tassoni A², A. C. 't Hoen P³, Athanasiou D⁶, D'Angelo C⁸, Mancuso M, Kornblum C¹², Kirschner J¹³, Pareyson D¹⁴, Bassez G¹⁵, Lamy F¹⁷, de Visser M²¹, Silani V²⁵, Vroom E⁶, D. Wilkinson M²⁸, Lochmuller H^{5,13}, **Evangelista T**^{8,28}, ERN EURO-NMD Registry Consortium

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608P Collection of real-world data for Duchenne Muscular Dystrophy patients through a national registry: description of the current cohort in the UK

Brooke M¹, Wolfe A^{1,2}, Aslam N¹, Manzur A², Muntoni F^{1,2}, Baranello G^{1,2}

¹University College London, ²Great Ormond Street Hospital for Children NHS Foundation Trust

609P Integration of healthcare and research to optimize treatment and collect real-world data in neuromuscular disorders

Verschoof M^{1,2}, Slingerland F¹, Roest A³, de Vreede I³, Warmenhoven N^{4,5}, van Beek C⁵, de Witte P⁵, Bot D⁶, van Wageningen H^{4,5}, Atsma D⁷, Straathof C^{1,2}, Kan H⁸, Spitali P^{2,9}, Snijder R¹⁰, Hoek R¹, van der Holst M^{2,5}, Meijer-Krom Y^{1,2}, Niks E^{1,2}

¹Department of Neurology, Leiden University Medical Center, ²Duchenne Center Netherlands, ³Department of Pediatrics, Leiden University Medical Center, ⁴Basalt Rehabilitation Center, ⁵Department of Orthopedics, Rehabilitation & Physical therapy, Leiden University Medical Center, ⁶Department of Dietetics and Social Work, Leiden University Medical Center, ⁷Department of Cardiology, Leiden University Medical Center, ⁸C.J. Gorter MRI Center, Department of Radiology, Leiden University Medical Center, ⁹Human Genetics Department, Leiden University Medical Center, ¹⁰Biobanking Organization, Leiden University Medical Center

610P Facilitating patient/caregiver preparation prior to visit increases quality in neuromuscular care

Edofsson U¹, Weichbrodt J¹, Sofou K¹

¹The Queen Silvia Children's Hospital

611P Empowering patient decision-making and enhancing clinical care through the UK Duchenne Muscular Dystrophy patient data collection platform

Reuben E¹, Gaeta A¹, Johnson A¹, Philippault H¹, Davies E², Ferrer-Mallol E², Cammish P³, Guglieri M³, Ezzamouri B¹

¹Duchenne UK, London, UK, ²Aparito Ltd, ³Institute of Human Genetics International Centre for Life Newcastle University

612P Dystrophinopathy in ACTION; Analysis of the first 500 males enrolled in the Advanced Cardiac Therapies Improving Outcomes Network prospective dystrophinopathy registry

Hayes E¹, Villa C², Nandi D¹, Soslow J³, Mokshagundam D⁴, Shih R⁵, Wisotzkey B⁶, Parent J⁷, Cunningham T⁸, Conway J⁹, Estes P¹⁰, Birnbaum B¹¹, Shugh S¹², Raucci F¹³, Kaufman B¹⁴, Soares N¹⁵, Kirmani S¹⁶, Martinez H¹⁷, Gambetta K¹⁸, Lal A¹⁹, Wittlieb-Weber C²⁰

¹The Children's Hospital, ²Cincinnati Children's Hospital, ³Monroe Carell Jr. Children's Hospital at Vanderbilt, ⁴St. Louis Children's Hospital, ⁵UF Shands Children's Hospital, ⁶Phoenix Children's Hospital, ⁷Riley Hospital for Children, ⁸Arkansas Children's Hospital, ⁹Stollery Children's Hospital, ¹⁰Boston Children's Hospital, ¹¹Children's Mercy, ¹²Joe DiMaggio Children's Hospital, ¹³Children's Hospital of Richmond at VCU, ¹⁴Lucille Packard Children's Hospital, Palo Alto, USA, ¹⁵Children's Medical Center Dallas, Dallas, USA, ¹⁶Children's Wisconsin, ¹⁷Le Bonheur Children's Hospital, ¹⁸Ann & Robert H. Lurie Children's Hospital of Chicago, ¹⁹Primary Children's Hospital, ²⁰The Children's Hospital of Philadelphia

613P Contemporary use of ventricular assist devices in Muscular Dystrophy: a report from the ACTION learning collaborative

Nandi D¹, Hayes E¹, Auerbach S², Bansal N³, Conway J⁴, Esteo P⁵, Kaufman B⁶, Lal A⁷, Law S⁸, Mokshagundam D⁹, Sutcliffe D¹⁰, Absi M¹¹, Raskin A¹², Friedland-Little J¹³, Wittlieb-Weber C¹⁴, Kroschwitz B¹⁵, Lorts A¹⁵, Cripe L¹, Villa C¹⁵

¹Division of Cardiology, Department of Pediatrics, Nationwide Children's Hospital, ²Children's Hospital Colorado, ³Mt Sinai School of Medicine, ⁴University of Alberta, ⁵Boston Children's Hospital, ⁶Lucille Packard Children's Hospital, ⁷Primary Children's Hospital, ⁸Morgan Stanley Children's Hospital of New York, ⁹St. Louis Children's Hospital, ¹⁰Children's Mercy Hospital, ¹¹LeBonheur Children's Hospital, ¹²Children's Hospital of Wisconsin, ¹³Seattle Children's Hospital, ¹⁴Children's Hospital of Philadelphia, ¹⁵Cincinnati Children's Hospital Medical Center

614P Burden on parent caregivers of children with a muscle disease: a qualitative study

Altena-rensens S¹, van Hattum M², Braakman H¹, Erasmus C¹,

¹Radboudumc Amalia Children's Hospital, Netherlands, ²Hogeschool Arnhem en Nijmegen

615P Introducing PaLaDIn: improving the use of rare NMD patient data to inform healthcare decision making

Leary R¹, Allison D², Cogoni S³, Cornet R⁴, Roos M⁵, Davies E⁶, Schoser B⁷, Kahtava K⁸, Ezzamouri B⁹, Straub V¹

¹John Walton Muscular Dystrophy Research Centre (Newcastle University), ²TREAT-NMD Services Ltd., ³Parent Project Italy APS, ⁴Amsterdam University Medical Centre, ⁵Leiden University Medical Centre, ⁶Aparito, ⁷Ludwig-Maximilians-Universität München, ⁸FSHD Society, ⁹Duchenne UK

616P From New Zealand Neuromuscular Disease Registry to Pūnaha Io - the New Zealand NeuroGenetic Registry & Biobank

Rodrigues M^{1,2}, O'Grady G³, Buchanan C¹, Fraser L¹, Stewart C¹, Cleland J⁴, Roxburgh R^{1,2}

¹Health New Zealand - Auckland, ²University of Auckland, ³Starship Children's Hospital, ⁴Health New Zealand

617P Using innovative data modelling methods to improve data quality- learning from Adult SMA REACH a real-world data collection study

Segovia Simon S¹, Verdu-Diaz J¹, Karkkainen E¹, Page J¹, Carver A¹, Alvarez G¹, Muni-Lofra R¹, Mitchell-Sodhi J¹, Marini-Bettolo C¹

¹The John Walton Muscular Dystrophy Research Centre, Newcastle University and Newcastle Hospitals NHS Foundation Trust

618P Global FKRP Registry - the research database for Limb Girdle Muscular Dystrophy 2I/R9

McDonald S¹, Murphy L¹, Alfano L², Brazzo K³, Johnson N⁴, Laurent J⁵, Mathews K⁶, Thiele S⁷, Vissing J⁸, Walter M⁷, Woods L⁹, Ørstavik K¹⁰, Straub V¹

¹The John Walton Muscular Dystrophy Research Centre, Newcastle University, ²Center for Gene Therapy at the Research Institute, Nationwide Children's Hospital, ³CureLGMD2i Foundation, ⁴Virginia Commonwealth University, Department of Neurology, ⁵LGMD2i Research Fund, ⁶Carver College of Medicine, University of Iowa, ⁷Friedrich-Baur-Institute, Department of Neurology, Ludwig-Maximilians-University, ⁸Copenhagen Neuromuscular Center, University of Copenhagen, ⁹Patient representative, ¹⁰Section for Rare Neuromuscular disorders, Department of Neurology, Oslo University Hospital

15:15-15:45

Short Oral Presentations 7

📍 North Hall

69P, 70P, 74P, 71P, 72P

Moderator: Duygu Selcen, The Mayo Clinic

Short Oral Presentations 8

📍 Terrace 2A

469P, 470P, 471P, 468P, 203P

Moderator: Nicholas Johnson, Virginia Commonwealth University

Short Oral Presentations 9

📍 Terrace 2B

315P, 314P, 312P, 265P, 262P

Moderator: Anna Sarkozy, Great Ormond Street Hospital

98P-109P, 110VP-112VP: ALS/neuropathy**98P Biallelic pathogenic PLEKHG5 variants in a girl with childhood-onset lower motor neuron disease****Cavuşoğlu D¹**, Ataseven Kulali M², Guzel A³, Olgac Dunder N⁴¹Departments of Pediatric Neurology, Afyonkarahisar Health Sciences University, ²Departments of Pediatric Genetics, Etlik City Hospital, ³Departments of Neurology, Afyonkarahisar Health Sciences University, ⁴Department of Pediatric Neurology, Faculty of Medicine, İzmir Katip Celebi University**99P Genetic odyssey: a journey through inherited neuropathies in our center****Davarasingi V¹**, Krishna G¹, Ramesh babu R¹, Satyam P¹, Mathew A¹¹Synapse Neuro center and Child Development Centre**100P Case series of three children with SH3TC2-Related Hereditary Sensorimotor Neuropathy****Moore Burk M¹**, Kelley C¹, Silver C¹, Gibbons M², Foster H¹, Browning K^{1,2}, Murphy-Zane M^{1,2}, Apkon S^{1,2}, Yang M^{1,2}¹Children's Hospital Colorado, ²University of Colorado School of Medicine**101P Pediatric Charcot-Marie-Tooth (CMT) Clinic: quality care and preparing for the future****Moore Burk M¹**, Kelley C¹, Silver C¹, Gibbons M², Foster H¹, Browning K², Murphy-Zane M^{1,2}, Yang M^{1,2}, Apkon S^{1,2}¹Children's Hospital Colorado, ²University of Colorado School of Medicine**102P Clinical profiles bulbar and limb onset Amyotrophic Lateral Sclerosis patients: A Retrospective Cohort Study****Yunisova G¹**, Üçem S², Özdağ Acarlı A³, Başak A⁴, Oflazer P³¹Koc University Hospital, ²Koç University, Koç University Hospital, Department of Neurology, ³Koç University, Koç University Hospital, Department of Neurology, Muscle Diseases Center, ⁴Koç University, Research Center for Translational Medicine (KUTTAM), NDAL, Department of Molecular Biology and Genetics**103P NMD670, a first-in-class skeletal muscle CIC-1 Inhibitor in Charcot-Marie-Tooth disease: the SYNAPSE-CMT phase 2 study****Gidaro T¹**, S. Grønnebak T¹, Cornwall C¹, Gupte J¹, Sampson C¹, Kiyasova V¹, H. Pedersen T¹, A. Quiroz J¹¹NMD Pharma**104P RNA Aptamers as a potential drug candidate for ALS****Niu L¹**, Huang Z¹, Akamatsu M¹¹Department of Chemistry, University at Albany, State University of New York**105P Frequency and clinical characterization of SORD-Related Neuropathy in a Belgian cohort****Opsomer M^{1,2}**, Vermeersch P³, Philip V¹, Decru B³, Race V⁴, Dohrn M^{5,6}, Zuchner S⁵, Claeys K^{1,2}¹Department of Neurology, University Hospitals Leuven, ²Laboratory for Muscle Diseases and Neuropathies, Department of Neurosciences, KU Leuven, and Leuven Brain Institute (LBI), ³Clinical Department of Laboratory Medicine, University Hospitals Leuven, ⁴Center for Human Genetics, KU Leuven and University Hospitals Leuven, ⁵Dr. John T. Macdonald Foundation, Department of Human Genetics and John P. Hussman Institute for Hum Genomics, University of Miami, Miller School of Medicine, ⁶Department of Neurology, Medical Faculty RWTH Aachen University**106P Clinical, neurophysiological, and genetic characterization of a 5' UTR PSAP variant: Implications for diagnosis****Donkervoort S¹**, Orbach R¹, Silverstein S^{1,2}, Potticary A¹, Stenton S³, Karachunski P⁴, Bönnemann C¹¹NNDCS, National Institutes of Health, ²Rutgers New Jersey Medical School, ³Broad Institute of MIT and Harvard, ⁴University of Minnesota Medical School**107P Clinical features of FOSMN syndrome in Korea: a comparison with bulbar-onset Amyotrophic Lateral Sclerosis****Choi S¹**, Ju W¹, Sung J¹¹Department of Neurology, Seoul National University Hospital**108P Case series: description of HSBP1 mutations conferring motor neuropathies with overlap features presenting barriers to timely diagnosis****Nardin J¹**, Segall H¹, Jones K², Mehrabyan A¹¹UNC Health, ²Duke University

109P Preserve sense by antisense – a novel allele-specific antisense oligonucleotide therapy for SPTLC1-related Hereditary Sensory Neuropathy

Meng J^{1,2}, Ma S¹, Wong L¹, Lone M³, Zhang Q¹, Cheng S¹, Demetriou C¹, Clark A⁴, Bennett D⁵, Hornemann T³, Reilly M¹, Muntoni F^{1,2}, **Zhou H^{1,2}**

¹University College London, ²NIHR Great Ormond Street Hospital Biomedical Research Centre, ³University of Zürich, ⁴Queen Mary University, ⁵University of Oxford

110VP FIG4 loss of function: Unraveling the phenotypic spectrum for clinical trial readiness

Boyek G¹, Orbach R¹, Gottlieb K², Duff J³, Lenk G⁴, Bönnemann C¹

¹National Institutes of Health, Neuromuscular and Neurogenetic Disorders of Childhood Section, ²Elpida Therapeutics, ³CureCMT4J/Talia Duff Foundation, ⁴University of Michigan, Department of Human Genetics

111P Genotype-phenotype analysis of multisystem proteinopathy with neurological involvement

Xia X¹, Dong Y¹, Chen Y¹, Zhao C¹, Zhu W¹

¹Huashan Hospital, Fudan University

112VP Spinal and Bulbar Muscular Atrophy with easy fatigability and hyperCKemia

Lee J¹

¹Seoul St. Mary's Hospital, College of Medicine, The Catholic University of Korea

148P-181P: SMA Therapies

148P Rapid risdiplam initiation in newborns with Spinal Muscular Atrophy (SMA): A multicenter, retrospective cohort study

Goedeker N¹, Dierker A¹, Felker M², Lakhotia A³, Rogers A³, Zaidman C¹

¹Washington University in Saint Louis School of Medicine, ²Indiana University School of Medicine, ³University of Louisville School of Medicine

149VP 3D stem cell-derived spinal cord/muscle organoid model for studying and treating neuromuscular diseases

Corti S¹, D' Angelo A¹, Beatrice F¹, Ongaro J², Rinchetti P¹, Faravelli I¹, Miotto M³, Lodato S³, Nizzardo M², Comi G¹, Ottoboni L¹

¹University Of Milan, ²Fondazione IRCCS Ca Granda Ospedale Maggiore Policlinico, ³Humanitas University

150P Patient, caregiver and healthcare professionals' perspective on spinal bracing in early onset Spinal Muscular Atrophy in the U.K.: a national survey

Quelch W¹, Taylor F², Thorman P³, Ramjattan H², Ramdas S^{2,4,5}, Ong M¹

¹Department of Paediatric Neurology, Sheffield Children's Hospital, ²Oxford University Hospitals NHS Foundation Trust, ³Spinal Muscular Atrophy UK, ⁴Department of Paediatric Neurology, John Radcliffe Hospital, ⁵MDUK Oxford Neuromuscular Centre, Department of Paediatrics, University of Oxford

151P Real-world treatment with risdiplam in adults with SMA: a multicentre study

Gorni K¹, Guittari C², Candrilli S³, Miles L³, Simpson A⁴, Shapouri S⁵

¹PDMA Neuroscience and Rare Disease, F. Hoffmann-La Roche Ltd, ²PDMA Neuroscience and Rare Disease, Genentech, Inc., ³RTI Health Solutions, ⁴Global Access, F. Hoffmann-La Roche Ltd, ⁵Genentech, Inc.

152P Perceived effects of treatments by SMA adult patients: a French qualitative study

Laforêt P^{2,4,3}, Montagu G⁴, Boyer F^{5,6}, Gargiulo M^{7,8}, Pouplin S^{9,10}, Barrière A¹¹, Berling E^{1,2}, Bonnyaud C^{9,10}, Cintas P¹², Hogrel J⁷, Le Goff L¹³, Marchadier B¹⁴, N'Dah Sékou G^{1,2}, Orlikowski D^{2,15,16,17}, Prigent H^{2,17,18}, Ropars J^{19,23}, Salort-Campana E^{20,21}, Stojkovic T^{7,22}, Attarian S^{20,21}

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153P Long-term effectiveness of risdiplam in non-ambulant SMA patients with prolonged disease duration

Weng W^{1,2}, Shieh J¹, Huang H¹, Tsai L¹

¹National Taiwan University Hospital, ²National Taiwan University College of Medicine

154VP Usage of disease modifying therapies in Spinal Muscular Atrophy and existing disparities: a population-based study from the MDA MOVR database

McLaren N¹, Joo D¹, Nowak R¹, Roy B¹

¹Yale University School of Medicine

155P The experience of parents as they make treatment decisions for their child with Spinal Muscular Atrophy and the factors that influence these decisions: a narrative review

Leach M¹, Finanger E¹, Izumi S¹

¹Oregon Health and Science University

156P Phosphorylated neurofilament heavy chain in cerebrospinal fluid and plasma in clinically silent and childhood-onset SMA individuals from Serbia

Brkusanić M¹, Kosac A², Branković-Srecković V², Jovanović K³, Karanović J¹, Matijasević Joković S¹, Garai N¹, Pesović J¹, Radovanović N¹, Radenković L¹, Dobrijević Z⁴, Nikolić D^{3,5}, Stević Z^{5,6}, Brajković G¹, Milic-Rasić V^{2,5}, Savić-Pavicević D¹

¹University of Belgrade-Faculty of Biology, Centre for Human Molecular Genetics, ²Clinic for Neurology and Psychiatry for Children and Youth, ³University Children's Hospital Tirsova, University Clinical Centre of Serbia, ⁴Institute for the Application of Nuclear Energy-INEP, Department for Metabolism, ⁵University of Belgrade-School of Medicine, ⁶Neurology Clinic, University Clinical Centre of Serbia

157P Functional progression post Nusinersen therapy in Spinal Muscular Atrophy Type 2: a comprehensive 18-month analysis from a South Indian centre

Banavara Shyamprasad S¹, Khandekar G¹, Ramesh Babu R^{1,2}, Maganthi M², Krishna G¹, Kumar A², Mathew A^{1,2}

¹Synapse Neuro Center, Bengaluru, India, ²Bangalore Baptist Hospital

158P Results of the nationwide pilot project of newborn screening for SMA in Czech Republic

Gloster M¹, Lauerova B¹, Rohlenova M¹, Kumhera M¹, Dolanska A¹, Jurikova L², Haberlova J¹

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159P Acute liver failure failure post gene therapy in Spinal Muscular Atrophy

Satyam P^{1,2}, Krishna G^{1,2}, Ramesh Babu R^{1,2}, Maganthi M², K.S L², H.R S³, Mathew A^{1,2}

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160P Risdiplam real-world experience in paediatric patients with Spinal Muscular Atrophy type 2

Nascimento Osorio A¹, Expósito-Escudero J¹, Medina J¹, Valle M¹, Roca S¹, Moya O¹, Natera De-Benito D¹,

Latre C¹, Orteiz C¹, Carrera-García L¹

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161P Long-term safety of Onasemnogene Apeparvovec for patients with Spinal Muscular Atrophy: real-world findings from the RESTORE Registry

Servais L^{1,2}, Alecu I³, Lopez-Leon S⁴, Illic A³, Brueckner A³, Benguerba K⁵, Reyna S⁶, Dabbous O⁶, Mumneh N⁶, Finkel R⁷

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162P Real-world outcomes following Onasemnogene Apeparvovec in patients with SMA and Invasive Ventilatory support: findings from the RESTORE Registry

Servais L^{1,2}, Shieh P³, Goedecker N⁴, Waldrop M^{5,6}, Bo R⁷, Erbas Y⁸, Raju D⁹, Benguerba K¹⁰, Reyna S⁹, Wolff D⁹, Finkel R¹¹

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163P Real-World outcomes following Onasemnogene Apeparvovec in patients with SMA and One SMN2 gene copy: findings from the RESTORE Registry

Servais L^{1,2}, Mathews K³, Bernes S⁴, Lakhotia A⁵, Tizzano E⁶, Raju D⁷, Benguerba K⁸, Reyna S⁷, Dabbous O⁷, Finkel R⁹

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164P Meta-analysis of clinical impact of Onasemnogene Apeparvovec treatment of Spinal Muscular Atrophy patients

Reyna S¹, Dabbous O¹, Wallach S¹, Patel A¹, Toro W¹, Ritter S¹

¹Novartis Gene Therapies, Inc.

165P Health Care Resource Use (HCRU) for patients with Spinal Muscular Atrophy (SMA) Types 2 or 3 in the UK

Reyna S¹, Toro W¹, Patel A¹, Saleh S², Dabbous O¹

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166P Fertility outcomes in risdiplam-treated male patients with Spinal Muscular Atrophy (SMA): a multicenter case series

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167P SnRNAseq analysis of muscle samples of patients with SMA reveals novel pathogenic pathways and open avenues for new therapeutic strategies

Collins C¹, Gokul-Nath R¹, Katsikis P¹, Fernández-Simón E¹, Villalobos E¹, Monceau A¹, Reza M¹, Mehra P¹, Laidler Z¹, Clark J¹, Rojas-García R², Tasca G¹, Marini-Bettolo C¹, Díaz-Manera J¹

¹Newcastle University, ²Neuromuscular Disorders Unit, Hospital Sant Pau

168P Long-term effects of risdiplam in adult Spinal Muscular Atrophy: a 24-month prospective study on clinical, functional, and patient-reported outcome measures

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169P Alteration of LARGE1 abundance in patients and a mouse model of 5q-associated Spinal Muscular Atrophy

Roos A^{1,4,5}, Schmitt L², Hansmann C², Hezel S², Salmanian S², Hentschel A³, Meyer N¹, Della Marina A¹, Kölbel H¹, Kleinschütz C², Schara-Schmidt U¹, Leo M², Hagenacker T²

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170P Apitegromab in Spinal Muscular Atrophy: baseline characteristics of participants enrolled in the phase 3 SAPHIRE study

Crawford T¹, Servais L², Krueger J³, Kölbel H⁴, Gomez Garcia M^{5,6,7}, Cances C⁸, Kuntz N^{9,10}, Finkel R¹¹, Yao B¹², Zhao G¹², Marantz J¹², Darras B¹³, Mercuri E^{14,15}

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171P Newborn Spinal Muscular Atrophy screening: 2-year results of multi-center experience in Turkey

Ünver O¹, Öztürk G¹, Sakarya Güneş A², Özçelik A³, Maraş Genç H⁴, Saltık S⁵, Akbeyaz İ¹, Tekin Orgun L², Karakayalı B¹, Acar Arslan E², Cırdı G², Ceylan A⁶, Gökdemir Y⁷, Özbaş Akkaya A⁸, Erdem Eralp E⁷, Karadağ Saygı E⁹, Karadağ B⁷, Kara B², Topaloğlu H¹⁰, Türkdoğan D¹

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172P FUS protein expression in the myopathology of 5q-associated Spinal Muscular Atrophy type 3

Kölbel H¹, Dobelman V², van Haute L³, Lancene E⁴, Kollipara L⁵, Della Marina A¹, Horvath R⁶, Schara-Schmidt U¹, Ruck T², Schoser B⁷, Evangelista T⁴, Roos A^{1,2,8}

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173P A multidisciplinary approach to address the challenges posed by new phenotypes of symptomatic SMA patients treated with innovative therapies

Gaume M¹, Viallard L², Vialle R¹, Desguerre J³, de Lattre C⁴, Cunin V⁵, **Vuillerot C⁶**

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174P Risdiplam in type 2 and 3 Spinal Muscular Atrophy: results of a cohort of adult Italian patients. A 3-year follow-up

Ruggiero L¹, Russo A¹, Iodice R¹, Dubbioso R¹, Tozza S¹, Esposito G², Zoppi D¹

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175P Thrombospondin-4 as potential cerebrospinal fluid biomarker for therapy response in pediatric 5q-associated spinal muscular atrophy patients

Dobelmann V¹, Roos A^{1,2,3}, Hentschel A⁴, Della Marina A², Leo M⁵, Schmitt L⁵, Maggi L⁶, Schara-Schmidt U², Hagenacker T⁵, Ruck T¹, Koelbel H²

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176P Acceptability, feasibility, safety and potential efficacy of an optimised rehabilitation for treated patients with SMA in UK: ACE SMA

Lilien C¹, Hill S¹, Mavrommati F^{1,2}, Ramjattan H³, Taylor F³, Collett J², Servais L^{1,4}

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177P Effect of gene therapy on the epigenetic and transcriptional stability of SMA

Smeriglio P¹, Grandi F¹, Arnould A¹, Pezet S¹, Marais T¹, Mazzucchi S¹, Astord S¹, Cohen-Tannoudji M¹

¹Sorbonne Université, INSERM, Institut de Myologie, Centre de Recherche en Myologie

178P Spinal muscular atrophy type II skeletal muscle treated with Nusinersen and Risdiplam shows SMN restoration but mitochondrial deficiency

Grandi F¹, Astord S¹, Pezet S¹, Gidaja E¹, Mazzucchi S¹, Chapart M¹, Vasseur S¹, Mamchaoui K¹, Smeriglio P¹
¹INSERM UMR 974

179P Intravenous and intrathecal Onasemnogene Apeparvovec gene therapy in symptomatic and presymptomatic SMA: long-term follow-up study

Darras B¹, Farrar M^{2,3}, Mercuri E⁴, Strauss K^{5,6,7}, Day J⁸, Chien Y⁹, Masson R¹⁰, Bernardo R¹¹, Alecu I¹², Dodd N¹³, Mehl L¹⁴, Connolly A^{15,16}

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180P Interim results from RESPOND: a study of nusinersen in children with Spinal Muscular Atrophy (SMA) previously treated with onasemnogene abeparvovec (OA)

Masson R¹, Proud C², Finkel R³, Parsons J⁴, Kuntz N⁵, Foster R⁶, Li W⁷, Chary S⁷, Sohn J⁷, Fradette S⁷, Youn B⁷, Paradis A⁷

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181P Investigating the developmental expression of the SMN protein in brain in a Spinal muscular atrophy mouse model

Demetriou C¹, Frontzek K³, Zhou H², Muntoni F¹, Baranello G¹

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234P-246P, 497P-513P, 514VP-515VP: Myasthenia Gravis, NMJ1-2, Periodic paralysis

234P Congenital Myasthenic Syndromes in adults: clinical features, diagnosis and long-term prognosis

Theuriet J^{1,2}, Villar-Quiles R², Stojkovic T², Eymard B²

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235P Cross sectional study of 187 patients with Congenital Myasthenia Syndrome, describing the clinical phenotypes, genetic mutations, and single point standardised assessment scores

Ramdas S^{1,2}, Ramjattan H³, Hennehan L⁴, Natera De Benito D⁵, Nascimiento A⁵, Della Marina A⁶, Schara-Schmidt U⁶, Munot P⁷, Simmons E⁷, Maggi L⁸, Gallone A⁹, Nadaj Pakleza A¹⁰, Chanson J¹⁰, Marini-Bettolo C¹¹, Moat D¹¹, Paz Guerrero-Molina M¹², Dominguez-González C^{12,13}, Jungbluth H^{14,15}, Sheehan J¹⁴, Palace J⁴

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236P Real-world experience with C5 complement inhibition and FcRn modulation in Myasthenia Gravis

Huntemann N¹, Nelke C¹, Schroeter C¹, Meuth S¹, Ruck T¹

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237P Advancing the understanding of VAMP1-related Congenital Myasthenic Syndrome: phenotypic insights, favorable response to 3,4-diaminopyridine, and clinical characterization of five new cases

Natera De Benito D¹, Pugliese A², Polavarapu K³, Guergueltcheva V⁴, Tournev I⁵, Todorova A⁶, Ribeiro J⁷, M Fernández-Mayoralas D⁸, Orteiz C¹, Martorell L¹, Estevez-Arias B¹, Matalonga L⁹, Laurie S⁹, Jou C¹, Lau J³, Thompson R³, Shen X¹⁰, Engel A¹⁰, Nascimento A¹, Lochmuller H³, Selcen D¹⁰

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238P NMD670, a first-in-class skeletal muscle CIC-1 Inhibitor in Myasthenia Gravis: the SYNAPSE-MG dose-finding study

Gidaro T¹, S. Grønnebak T¹, Cornwall C¹, Gupte J¹, Sampson C¹, Kiyasova V¹, H. Pedersen T¹, A. Quiroz J¹

¹NMD Pharma A/S, DK-8200

239P The association between disease severity and utilities, mental health, fatigue, sleep disturbances and sick leave in patients with Myasthenia Gravis

Brackx F¹, Goffart B², Linthoudt T², De Ruyck F², Phillips G², Dewilde S¹, **Claeys K^{3,4}**

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240P Late presentation DOK7 Congenital Myasthenia Syndrome (CMS), misdiagnosed as Myasthenia Gravis (MG) – a case series

Henehan L¹, Rossini E^{1,2}, Dong Y³, Beeson D⁴, Ramdas S^{5,6}, Leite I^{1,4}, Palace J^{1,4}

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241P Long term follow-up of CHRNE Congenital Myasthenic Syndrome (CMS) – a retrospective multi-centre cohort study

Henehan L¹, Khries M², Ramjattan H^{3,4}, Dong Y⁵, Everett R¹, Munot P⁶, Jungbluth H^{2,7}, Beeson D⁸, Ramdas S^{3,9}, Palace J^{1,8}

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242P Efgartigimod in AChR and non-AChR generalized Myasthenia Gravis: a single center experience

Antozzi C¹, Frangiamore R¹, Rinaldi E¹, Vanoli F, Bonanno S¹, Maggi L¹, Mantegazza R¹

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243P The effect of Nav1.4 Ile582Val gain-of-function mutation on mouse skeletal muscle excitability is sex specific

Suetterlin K^{1,2,3}, Mannikko R², Matthews E⁵, Maitland S⁴, Greensmith L², Hanna M², Tan S^{2,6}

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244P A natural history study of Congenital Myasthenic Syndromes, to establish reliable outcome measures suitable for clinical and research assessment

Ramjattan H¹, English H¹, Henehan L², Ramdas S^{3,4}, Palace J²

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245P Exploring the relationship between an instrumented walking test and community physical activity in individuals with Congenital Myasthenic Syndrome

Ramjattan H¹, English H¹, Ramdas S^{2,3}, Esser P⁴, Palace J⁵

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246P Factors affecting the diagnostic delay of Myasthenia Gravis

Marlet I¹, Andersen R¹, Axelsen K¹, Andersen L¹, Wissing J¹, Witting N¹

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497P AChR-positive generalized Myasthenia Gravis patients unresponsive to new targeted molecular therapies: a single-centre case series

Rossini E^{1,2}, Marando D¹, Morino S², Leonardi L², Tufano L¹, Lauletta A¹, Forcina F¹, Garibaldi M^{1,2}, Antonini G¹, Fionda L²

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498P Neuromuscular centre effect on prevalence of Congenital Myasthenic Syndrome (CMS) in the UK

Rossini E^{1,2}, Henahan L¹, Everett R¹, Dong Y³, Marini Bettolo C⁴, Munot P⁵, Jungbluth H⁶, Beeson D⁷, Ramdas S^{8,9}, Palace J^{1,7}

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499P Exploring the impact of diet and physical activity on episodic muscle weakness and paralysis in Hypokalemic Periodic Paralysis: a qualitative interview study

Welland N^{1,2}, Hagen Venås B^{1,2}, Ellefsen-Martinsen M¹, Ludt Fossmo H^{1,3,4}, Dybesland Rosenberger A⁵, Dahl H⁶, Ørstavik K³, Nordstrøm M^{1,3}

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500P The 6-minute walk test in a small group of patients with Congenital Myasthenic Syndromes

Bulut N¹, Aydın Yağcıoğlu G², Demir A³, Gürbüz İ¹, Yılmaz Ö¹, Haliloğlu G³

¹Hacettepe University Faculty of Physical Therapy and Rehabilitation, ²University of Health Sciences, Gulhane Faculty of Health Sciences, Orthosis-Prosthesis Program, ³Hacettepe University Faculty of Medicine, Department of Pediatrics, Division of Pediatric Neurology

501P Validation of ME&MG, a novel digital device for patients with Generalized myasthenia Gravis: the DOMYA Study

Berling E¹, Orlikowski D¹, Nicolas G², Prigent H², N'Dah-Sekou G², Carment L³, Gorin C³, Klaeyle L³, Touré Cuq E³, Aras E⁴, Zinaï S³, **Laforêt P²**

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502P Cognitive functioning in Myasthenia Gravis: an Italian cohort study

Marcassoli A¹, Raggi A¹, Lanza M¹, Curatoli C¹, Fornari A¹, Leonardi M¹, Maggi L², Bonanno S², Mantegazza R², Antozzi C², Vanoli F², Frangiamore R²

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503P Corticosteroid dose tapering in patients with generalised Myasthenia Gravis on zilucoplan: an interim analysis of RAISE-XT

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504P Myonuclear abnormalities in Hypokalemic Periodic Paralysis due to ATP1A2 variant

Yae Y^{1,2}, Ogasawara M^{1,3}, Nonaka I¹, Hayashi S¹, Iida A⁴, Okamura-Oho Y⁵, Noguchi S¹, Nishino I^{1,4}

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505VP Safety and effectiveness of ravulizumab in gMG: evidence from a global registry

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506VP Long-term efficacy and safety of ravulizumab in adults with AChR-Ab+ gMG: final results from the phase 3 CHAMPION MG open-label extension

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507P Late-onset and milder phenotypes in a DOK7 Myasthenic Syndrome cohort to rethink the natural history of a perceived severe disease

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508P Clinical and genetic features of patients with Myotonia Congenita in Korea

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509P A real-life experience with Eculizumab and Efgartigimod in generalized Myasthenia Gravis patients

Fionda L¹, Pane C², Di Stefano V³, Cuomo N², Sarnataro A², Vinciguerra C⁴, Bevilacqua L⁴, Brighina F³, Rini N³, Puorro G², Marsili A², Garibaldi M⁵, Saccà F²

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510P Eculizumab versus rituximab for refractory anti-acetylcholine receptor antibody-positive generalized Myasthenia Gravis: a single-center experience

Durmus H¹, Cakar A¹, Parman Y¹

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511P Blood biomarkers in a cohort of patients with CHRNE-associated Congenital Myasthenic Syndrome

Della Marina A¹, Koutsoulidou A², Natera de Benito D³, Tykocinski L⁴, Tomazou M⁵, Georgiou K², Kölbel H¹, Nascimento A³, Orteiz C³, Lochmüller H^{6,7,8,9}, Phylactou L², Ruck T¹⁰, Abicht A^{11,12}, Schara-Schmidt U¹, Kale D¹³, Hentschel A¹³, Roos A^{1,6,10}

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512P Investigating muscle specific kinase agonist antibody treatment for Agrn and ColQ Congenital Myasthenic Syndromes

Ho K^{1,2}, Adjei-Afryie O^{1,2}, Carmona R¹, Ray R², Zeldin J^{1,2}, O'Neil D¹, Vanhauwaert R⁴, Spendiff S¹, Lochmüller H^{1,2,3}

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513P Deposition of MAC and IgG subclasses at the neuromuscular junction in LRP4+ Myasthenia Gravis

Hoffmann S¹, Meisel A¹, Brokamp K¹, Helmig L¹, Schülke-Gerstenfeld M², Rückert J³, Pumberger M⁴, Schömig F⁴, Ruck T⁵, Pawlitzki M⁵, Stenzel W⁶, **Preusse C^{1,2,6}**

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514VP Latent tuberculosis infection in Myasthenia Gravis patients in a low-incidence region

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515VP SCN4A loss of function zebra fish model: insights into myopathy and sudden infant death

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318P-358P, 343VP, 359VP-360VP: DMD - clinical care and cases reports, BMD

318P DMD splice site point mutation in intron 68 maintains the reading frame and almost full-length dystrophin expression with cell-specific pattern

Białobrzęska M¹, Przymuszała M¹, Potulska-Chromik A², Kostera-Pruszczyk A², Stępniewski J¹, Florczyk-Soluch U¹, Dulak J¹

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319P MRI gluteal/thigh muscle fat fraction detects NSAD motor task failures in men with Becker muscular dystrophy

Rock K¹, Willcocks R¹, Barnard A¹, Forbes S¹, Lott D¹, Senesac C¹, Rooney W², Baetscher E², Subramony S¹, Chahin N¹, Kamal O¹, Hinkle J¹, Corwine A¹, Huerta O², Walter G¹, Vandenborne K¹

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320P Clinical characterization of a large single-centre cohort of patients with Becker Muscular Dystrophy

Riguzzi P^{1,2}, Borland H¹, Bourke J¹, Marini Bettolo C¹, James M¹, Muni Lofra R¹, Diaz-Manera J¹, Tasca G¹, Elseed M¹, Grover E¹, Geagan C¹, Schiava M¹, Bolano Diaz C¹, Michell-Sodhi J¹, Moat D¹, Wong K¹, Pegoraro E², Bello L², Straub V¹, Guglieri M¹

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321P A new world: proposed model for physical therapist evaluation and management following implementation of newborn screening for Duchenne Muscular Dystrophy

Smith M¹, Iammarino M¹, Reash N¹, Steiner C¹, Chagat S², Meyer A^{3,1}, Alfano L^{1,4}, Lowes L^{1,4}

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322P Rasch evaluation of North Star Ambulatory Assessment and North Star Assessment for Limb-Girdle type Muscular Dystrophies in Becker Muscular Dystrophy

Lowes L¹, James M², Alfano L¹, Mayhew A², Eagle M³, McDonald C⁴, Vissing J⁵, Phan H⁶, Donovan J⁷, MacDougall J⁷

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323P Caregiver burden with Duchenne and Becker Muscular Dystrophy in Japan

Ishizaki M¹, Kobayashi M², Nakamura A³, Maeda Y¹, Ueyama H¹, Matsumura T⁴

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324P A longitudinal study of creatine kinase, creatinine levels, and appendicular lean mass index in pediatric Becker Muscular Dystrophy

Horn P^{1,2}, Zygmunt A^{1,2}, Vilaisaktipakorn P¹, Sharaf T^{1,3}, Shiuan Y², Rybalsky I¹, Reebals L¹, Bange J¹, Tian C^{1,2}

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325P Is upper extremity contracture progression related to changes in upper extremity function in Duchenne Muscular Dystrophy? An international multicenter natural history study

Van Der Holst M^{1,2}, Italianer M², Wolfe A³, Chesshyre M⁴, Voit T⁵, Straub V⁶, de Lucia S⁷, Servais L^{8,9}, Hogrel J⁷, Pelsma M¹⁰, de Groot I¹⁰, Houwen S¹⁰, Muntoni F³, Niks E¹

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326P Acute adverse events after Zoledronic acid infusion are uncommon in patients with Duchenne Muscular Dystrophy previously treated with oral bisphosphonates

Vilaisaktipakorn P¹, Nasomyont N^{1,2}, Hornung L^{1,2}, Tian C^{1,2}, Wasserman H^{1,2}, Rutter M^{1,2}

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327P Correlation of biomarkers and timed function tests in pediatric Becker Muscular Dystrophy

Vilaisaktipakorn P¹, Zygmunt A^{1,2}, Sharaf T³, Shiuan Y², Horn P^{1,2}, Bange J¹, Reebals L¹, Rybalsky I¹, Tian C^{1,2}

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328P Navigating Dystrophinopathies: dual diagnosis and their implications

Bhimarao Nagaraj C^{1,2}, Reebals L¹, Zygmunt A^{1,2}, Tian C^{1,2}

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329P Siblings with Duchenne Muscular Dystrophy: a chart review to explore associations between age of diagnosis and clinical disease outcomes

Bhimarao Nagaraj C^{1,2}, Brahmandam V^{1,2}, Pilipenko V¹, Armstrong N³, Zygmunt A^{1,2}, Rybalsky I^{1,2}, Reebals L¹, Tian C^{1,2}

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330P Trends in creatine kinase levels and 10-meter walk-run velocity in pediatric Becker Muscular Dystrophy treated with glucocorticoid steroids

Zygmunt A^{1,2}, Vilaisaktipakorn P¹, Sharaf T^{1,3}, Shiuan Y², Horn P^{1,2}, Bange J¹, Reebals L¹, Rybalsky I¹, Tian C^{1,2}

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331P A Phase 1/2 clinical trial of the antisense oligonucleotide BMN 351 now actively recruiting boys with exon 51-skip-amenable Duchenne Muscular Dystrophy

Duis J¹, **Neil D¹**, Qi Y¹, Larimore K¹, Rosen O¹, Robinson M¹, Velazquez P¹, Gupta S¹, Lilienstein J¹, Cosgrove J¹
¹BioMarin Pharmaceutical Inc

332P Physician and caregiver concordance in Duchenne Muscular Dystrophy patients in Europe, Japan, and the USA: a multi-national survey

Posner N¹, Talaga A¹, Strober J³, Ishigaki K², Cappelleri J¹, Dukacz S¹, Aslam Z¹, Morton E⁴, Iqbal H⁴, Chatterton E⁴, DeCourcy J⁴
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333P Real-World symptom progression in Duchenne Muscular Dystrophy patients in Europe, Japan, and the USA: results from a multi-national survey

Posner N¹, Talaga A¹, Strober J³, Ishigaki K², Cappelleri J¹, Dukacz S¹, Aslam Z¹, Morton E⁴, Iqbal H⁴, Chatterton E⁴, DeCourcy J⁴
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334P GrowDMD: an international study on transition of youth with Duchenne Muscular Dystrophy (DMD)

Friedrich S¹, Langer T¹, Reeskau G², Rodger S¹, Willems J¹, de Angelis F³, Brigladori B⁴, Guastafierro E⁴, Leonardi M⁴, Marcassoli A⁴, Moroni I⁴, Nardocci N⁴, Fournier A⁵, Frei J⁶, Gutierrez Rojas R⁵, Kraus De Camargo O⁶, Pozniak K⁶, Swain A⁶, Gorter J⁶, Osman H⁷
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335P Transition in Duchenne Muscular Dystrophy: understanding healthcare providers' roles in an international context

Friedrich S¹, Langer T¹, Reeskau G², Rodger S¹, Willems J¹, de Angelis F³, Brigladori B⁴, Guastafierro E⁴, Leonardi M⁴, Marcassoli A⁴, Moroni I⁴, Nardocci N⁴, Fournier A⁵, Frei J⁶, Gutierrez Rojas R⁵, Kraus De Camargo O⁶, Pozniak K⁶, Swain A⁶, Gorter J⁶, Osman H⁷
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336P Quantifying the burden-of-illness of Duchenne Muscular Dystrophy in Belgium: an interim analysis of a site-based survey

De Waele L^{1,2}, Cremers J³, Debien E³, Gielis E¹, Maenen V¹, Vanoppen I³, Van Stappen T⁴, Beeckman L⁴, Posner N⁵, Dukacz S⁵, Jiang L⁵, Evans J⁶, Wu Y⁶, Jones C⁶, Meeus L⁷, Claeys K^{3,8}
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337P Functional assessments used in routine care for Duchenne Muscular Dystrophy in the USA: a survey of Certified Duchenne Care Centers

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338P Very late-onset Becker Muscular Dystrophy caused by a new DMD variant

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339P Exploring the content validity of Patient-Reported Outcome (PRO) measures to capture the patient experience of Becker Muscular Dystrophy (BMD)

Bronson A¹, Mellor K², Kilburn N¹, Marshall C¹, Al-zubeidi T²
¹Edgewise Therapeutics, ²Clarivate

340P Upper extremity assessment in Becker Muscular Dystrophy: a functional and MRI data approach

Bellam P¹, Rock K¹, Willcocks R¹, Barnard A¹, Forbes S¹, Lott D¹, Senesac C¹, Rooney W², Baetscher E², Subramony S¹, Chahin N¹, Dixon L¹, Walter G¹, Vandeborne K¹
¹University Of Florida, ²Oregon Health and Science University

341P Incidental DMD in-frame deletions identified by prenatal array CGH: inter and intra-familial phenotype variability

Munell F¹, Gomez Andres D¹, Costa Comellas L¹, Alvarez M¹, Rauli¹, Plaja A¹, Castells N¹, Abuli A¹, Rovira E¹
¹Hospital Universitari Vall d'Hebron

342P Use of psychopharmacological drug in Duchenne Muscular Dystrophy: a European multi-centre study

Muntoni F^{1,11}, Weerkamp P^{2,3}, Miranda R⁴, Collin P⁵, Vroom E⁶, Niks E^{7,13}, Vissing J⁸, Desquerre I⁹, Straub V¹⁰, Mercuri E¹², Hendriksen J^{2,3,13}

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343VP Duchenne Muscular Dystrophy: the critical role of pulmonary infection in survival outcomes

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344P DMD-YOUNG: paediatric palliative care for children with a slowly progressive neuromuscular disorder in transition to adulthood

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345P Becker Muscular Dystrophy (BMD): natural history

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346P Cognitive profile of children with Duchenne and Becker Muscular Dystrophies

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347P Project HERCULES – building an evidence base to inform clinical care and access to medicines in DMD

Godfrey J¹, Reuben E², Chandler F³

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348P A national plan of action to raise Awareness and Improve Medical care of Duchenne Muscular Dystrophy (AIM-DMD)

Akinci G¹, Coskun A², Koken O³, Ardicli D⁴, Cinar E¹, Okur T¹, Ayanoglu C⁵, Bektas Ontas H⁴, Ontas E⁶, Cakir T⁷, Komur M⁸, Yuksel D⁹, Yis U¹⁰, Topaloglu H⁵

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349P Comparison of short- and long-term proteomic response to the fast skeletal myosin inhibitor, sevaseten (EDG-5506), in Becker Muscular Dystrophy (BMD)

Barthel B¹, Madden M¹, Thaler L¹, Evanchik M¹, Koch K¹, Donovan J¹, Collins S¹, Phan H², **Russell A**¹

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350P Multi-parametric MRI of lower leg muscle in patients with Becker Muscular Dystrophy

Gerhalter T¹, Schunk V¹, Baudin P², Rauh S³, Tkotz K¹, Zaiss M¹, Roemer F¹, Dörfler A¹, Uder M¹, Gazzzerro E⁴, Nagel A¹

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351P Sevasemten, a fast myosin inhibitor, in adults with Becker Muscular Dystrophy results in reduced muscle damage biomarkers and functional stabilization

Donovan J¹, Phan H², Russell A¹, Barthel B¹, Thaler L¹, Kilburn N¹, Amato M¹, MacDougall J¹

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352P Severe gastrointestinal problems in Duchenne Muscular Dystrophy: a case series

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353P Applying a decision-making framework for expanded access to Duchenne Muscular Dystrophy

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354P 3-Year outcomes in Colombian patients under 7 years old with Duchenne Muscular Dystrophy early treated with ataluren

Toro C¹, Ruiz-Ospina E², Castellar-Leones S³, Ladino-Cortés L², Bolaños-Almeida C², Bobadilla-Quesada E², Maradei-Anaya S², Ortiz-Giraldo B⁴, Acosta-Aragón M⁵, Guerra-Araujo V¹¹, Alvarez-Montañez A⁶, Silvera-Redondo C⁷, Pachajoa H⁸, Londoño-Mesa I⁹, Torres-Nieto M¹¹, Del Río-Ospina L¹⁰

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355P A comprehensive education and training programme for healthcare professionals in care and research for Duchenne Muscular Dystrophy developed from DMD Care UK and the DMD Hub

Turner C¹, Geuens S², Heslop E¹, Johnson A³, Straub V¹, Guglieri M¹

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356P A retrospective review of adult Duchenne Muscular Dystrophy patients in a UK centre of excellence and report the results of adherence to the standards of care guidelines for cardiac management

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357P Correlation between height, weight, and body mass index z-scores and clinical outcome assessments in young boys with Duchenne Muscular Dystrophy

Schiava M¹, Dang U², Wood C³, Wong S⁴, Muni Lofra R¹, Ward L⁵, Mayhew A¹, Tawil R⁶, Willis T⁷, Griggs R⁶, Guglieri M¹

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358P Long-term changes of motor function in Becker Muscular Dystrophy

Bello L¹, Riguzzi P¹, Capece G¹, Penzo M¹, Petrosino A¹, Sogus E¹, Mastellaro S¹, Caroli M¹, Villa M¹, Sabbatini D¹, Gorgoglione D¹, Vianello S¹, Sorarù G¹, Pegoraro E¹

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359VP Social difficulties and care burden of adult Duchenne Muscular Dystrophy in Japan: A questionnaire survey based on the Japanese Registry of Muscular Dystrophy (Remudy)

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360VP Making DMD/BMD research data FAIR: the case of heterogeneous brain (BIND) data

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516P-536P, 537VP: Metabolic and mitochondrial myopathies

516P Fanconi Syndrome-induced severe Osteomalacic Myopathy: an uncommon side effect of Tenofovir Disoproxil Fumarate

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517P Clinical characteristics and genetic analysis of Chronic Progressive External Ophthalmoplegia

Choi S¹, Lee S¹, Choi K¹

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518P Proteomic characterization of polyglucosan bodies in skeletal muscle in glycogenin-1 deficiency

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519P Insights into Primary Mitochondrial Myopathies: baseline characteristics and potential biomarkers from a natural history study

Martín Jiménez P¹, Bermejo Guerrero L¹, Blázquez A², Serrano Lorenzo P², Hernández Lain A³, Lucas Gómez B⁴, Martín M⁵, Domínguez González C¹

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520P Periodic paralysis in a child with Thermosensitive Mitochondrial Trifunctional Protein Deficiency

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521P Methodology and design of a study to characterize the disease course in a large dataset of patients with Thymidine Kinase 2 Deficiency

Domínguez-gonzález C^{1,2,3}, Nascimento A^{3,4}, Ma Y⁵, Panahloo Z⁵, Boudiaf N⁵, Kim R⁶, VanMeter S⁶, Brunnert M⁷, Hirano M⁸

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522P Idiopathic hyperCKemia and myalgia- keep looking till you find a cause

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523P Rare Disease Register: McArdle Disease and Glycogenoses

Finnigan P¹, Godfrey R^{1,2}, Arian E¹, Bythel M³, Aston J³, Mohamed K¹, Quinlivan R¹

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524P Grip strength in McArdle disease

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525P Management of seizures in patients with Primary Mitochondrial Diseases: consensus statement from the inter-ERNs mitochondrial working group

Mancuso M¹, **Evangelista T**⁹, Papadopoulou M², Ng Y^{3,4}, Ardisson A⁵, Bellusci M⁶, Bertini E⁷, Di Vito L⁸, Fons C¹⁰, Hikmat O¹¹, Horvath R¹², Klopstock T^{13,14,15}, Kornblum C¹⁶, Lamperti C⁵, Licchetta L⁸, Molnar M¹⁷, Varhaug K¹⁸, O'Callaghan M¹⁰, Pressler R^{19,20}, Consortium InterERN group on mitochondrial diseases (ERNs NMD, EYE, RND)
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526P Clinical spectrum and treatment in paediatric TANGO2 deficiency disorder

Ortez Gonzalez C¹, Ortuño B¹, Sarquella-Brugada G¹, Meavilla S¹, García-Cazorla Á¹, Expósito-Escudero J¹, O'Callaghan M¹, Natera De-Benito D¹, Darling A¹, Nascimento A¹, Julià N¹, Carrera-García L¹
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527P Small molecule adenylosuccinic acid supports muscle metabolism in Adss1 deficient muscle phenotypes

Rybalka E^{1,2,3}, Kourakis S^{1,2}, Yates T¹, Bagaric R^{1,2}, Qi B^{1,2}, Ali B^{1,2}, Khandari N⁴, Peterson A⁵, Yan X¹, Kuang J¹, Nijagal B⁵, Deveson-Lucas D⁴, Timpani C^{1,2,3}
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528P A novel homozygous variant of uncertain significance in ETFDH suspected of causing severe Metabolic Syndrome and Myopathy

Fajre F¹, González D², Urra A¹, Madariaga G³, Pizarro B⁴, Díaz-Jara J⁴, Bevilacqua J^{1,5}
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529P Paucisymptomatic late onset Pompe disease: lessons from the clinical, radiological and histopathological long-term follow-up of an untreated patient

Fernández-eulate G^{1,2}, Caillaud C³, Lacene E⁴, Labasse C⁴, Brochier G⁴, Carlier R⁵, Evangelista T^{4,6}, Laforêt P⁷
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530P Biallelic missense variants in C2orf69 cause mitochondrial dysfunction associated with early-onset neurodegeneration and autoinflammation

Oh R^{1,2}, Maier M³, Blaser S^{1,4}, Cameron J^{1,5}, Lafreniere A^{1,6}, Hawkins C^{1,6}, Reversade B^{3,7,8,9}, Yoon G^{1,10}

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531P The French Registry of Glycogen Storage Disease Type 3

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532P Clinical, pathological, and genetic characteristics of 27 Spanish patients with POLG-related disorders

Bermejo Guerrero L¹, Restrepo-Vera J^{2,3,4}, Martín – Jiménez P¹, Blázquez A⁵, Serrano-Lorenzo P⁵, Navarro-Riquelme M⁵, Hernández-Lain A⁶, Juntas-Morales R², Martí R^{3,4}, Martín M⁷, Domínguez – González C^{1,4}

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533P Long-term follow-up Deoxynucleoside therapy for Late Onset Thymidine Kinase 2 Deficiency patients

Durmus H¹, Gedikbaşı A¹, Ceylaner S¹, Kıyan E¹, Gulsen Parman Y¹

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534P Clinical and genetic characterization of Brazilian patients with TK2 deficiency

Moreno C¹, Tácio Quadros Santos Monteiro Fonseca A¹, Cunha Artilheiro M¹, Macedo Serafim da Silva A¹, de Paula Estephan E¹, Abdo Paiva M¹, Gontijo Camelo C¹, Santos Pessoa A, Paranhos Miranda Covalesk A, Tomaselli P¹, Scarpellini G¹, Gurgel-Giannetti J¹, Holanda Mendonça R¹, Maroco Cruzeiro M¹, Marques Júnior W¹, Ferreira da Rosa Sobreira C¹, Hirano M¹, Andres Nascimento A¹, Schlesinger D¹, Zanoteli E¹

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535P Cytochrome c oxidase (COX) deficiency due to a novel homozygous COX6B1 pathogenic missense variant

Oldfors C¹, Jennions E², Olsson-Engman M³, Visuttijai K¹, Wiksell Å⁴, Fluriach Dominguez N⁵, Kollberg G¹, Oldfors A¹

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536P Biallelic variants in BCS1L cause a novel neuromuscular phenotype with motor neuronopathy

Orbach R¹, Maio N², Donkervoort S¹, Foley A¹, Chao K³, Lehky T⁴, Silverstein S¹, Potticary A¹, Rouault T², Butterfield R⁵, Bönnemann C¹

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537VP Evaluation of the Scottish rhabdomyolysis and metabolic myopathy gene panel highlights limitations of genetic test criteria and a postcode lottery in access to testing

He Z¹, Longman C¹⁰, Farrugia M⁵, Fletcher E², Robb Y², McWilliam C³, Ross A⁴, Brennan K⁵, Davenport R⁶, Hopkins P⁷, Horrocks I⁸, Joseph S⁸, Harvie J⁹, Kerrigan S⁹, Stewart K¹⁰, Brennan K⁵, Miller-Hodges E¹¹

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656P-676P: Pompe disease

656P AAV gene therapy in the Pompe canine model demonstrates correction of the muscle and CNS disorder with immune tolerance to human GAA

Byrne B¹, Pope M¹, Gentry M¹, Sun R¹, Gurda B¹, Trivedi P¹, Cloutier D¹, Saba S¹, Fuller D¹, Coleman K¹, Corti M¹

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657P Cipaglucosidase alfa + miglustat in late-onset Pompe disease: two non-ambulatory patients switching from high-dose, high-frequency alglucosidase alfa

Byrne B¹, Castelli J², Jain V², Sitaraman Das S², Zhang J²

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658P High-risk screening for Late-Onset Pompe Disease in China: an expanded Multicenter Study

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659P Unlocking long-term insights: antibody formation and efficacy of enzyme replacement therapy in adults with Pompe disease

Theunissen M¹, Ditters I², van Doorn P¹, van den Hout J², Hoogeveen-Westerveld M³, Jacobs E³, van der Ploeg A², van der Beek N¹

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660P Safety and efficacy of switching to avalglucosidase alfa in patients with late-onset Pompe disease previously deteriorating on alglucosidase alfa

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661P Sensitivity to Change and Meaningful Change Thresholds of the Quick Motor Function Test (QMFT) in Pompe Disease

van der Beek N¹, Sjöström-Bujacz A², Daskalopoulou C³, Papageorgiou D³, An Haack K⁴, Gallego V⁵, DasMahapatra P⁵, Thibault N⁵, Zaher A⁶, Armstrong N⁵, Kruijschaar M¹, van der Ploeg A¹

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662P The novel GAA variant p.R190G: expanding the spectrum of late onset Pompe disease and possible implications for screening in the Chinese population

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663P Screening for Pompe disease and its differential diagnoses

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664P From past to present: Pompe disease, pseudodeficiency, and genetic challenges

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665P Spanish Pompe Registry: overview based on the 130 patients included

Martínez Marín R¹, Reyes Leiva D², Nascimento Osorio A³, Muelas N⁴, Domínguez C⁵, Rojas Marcos J⁶, Paradas C⁶, Olivé M⁷, Matas A⁸, Gómez Caravaca M¹⁰, Barba Romero M⁹, Mendoza M¹¹, de León J¹², Gutiérrez A¹³, Rabasa M¹⁴, Segovia S⁷, Díaz Manera J¹⁵

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666P MyoScreen™ Infantile and Late-Onset Pompe human skeletal muscle disease models for drug discovery and development of next-generation gene therapies

Young J¹, Morozzi G¹, Travard L¹, Yennek S², Lagerstedt J², Zablocki A¹, Martin A¹, Flaender M¹, Lorintiu O¹, Dupont A¹, Autier V¹, Ventre E¹, Darimont B¹, Selig L¹

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667P Glycogen response to enzyme replacement therapy in patients with Pompe disease

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668P Pompe Registry: Real-world experience of patients with late-onset Pompe disease who switched therapy from alglucosidase alfa to avalglucosidase alfa

Schoser B¹, Toscano A², Foster M³, Sparks S³, Kishnani P⁴, on behalf of the Pompe Registry sites

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669P The FORCE(TM) platform enables TfR1-mediated delivery of enzyme replacement therapy to muscle and central nervous system, resolving Pompe pathology in mice

Picariello T¹, Vieira B¹, Johnson J¹, Schlaefke L¹, Russo R¹, Chang A¹, Cui J¹, Yang S¹, Rinaldi S¹, Weeden T¹, Zanotti S¹, Beskrovnaya O¹

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670P Post-baseline outcomes of the UK Early Access to Medicines Scheme registry for ciplaglusidase alfa plus miglustat in late-onset Pompe disease

Roberts M¹, Cole D², Geberhiwot T³, Hughes D⁴, Lachmann R⁵, Murphy E⁶, Sharma R⁷, Jain V⁸, Moffat E⁹, Rutecki J⁸, Clarke S⁹, Deegan P¹⁰

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671P Miglustat: a first-in-class enzyme stabiliser for late-onset Pompe disease

Mozaffar T¹, Roberts M², Byrne B³, Dimachkie M⁴, Hopkin R⁵, Kishnani P⁶, Schoser B⁷, van der Ploeg A⁸, Brudvig J⁹, Fox B⁹, Holdbrook F⁹, Jain V⁹, Johnson F⁹, Zhang J⁹, Parenti G¹⁰

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672P New insights into Pompe disease using Raman-microscopy

Hintze S¹, Krois E², Wieland K³, Meinke P¹, Haisch C², Schoser B¹

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673P Magnetization transfer Imaging in Late-Onset Pompe disease

Croce M¹, Naz F², Barzaghi L^{2,3,4}, Paoletti M³, Mongini T⁵, Gasperini S⁶, Filosto M⁷, Maggi L⁸, Sechi A⁹, Grandis M^{10,11}, Sacchini M¹², Sciacco M¹³, Vercelli L⁵, Bonizzoni C³, Bergsland N¹⁴, Santini F^{15,16}, Deligianni X^{15,16}, Gandini in Wheeler-Kingshott C^{1,17,18}, Ravaglia S¹, Pichiecchio A^{1,3}

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674P Quantification of skeletal muscle glycogen in Late Onset Pompe patients using carbon MR spectroscopy at 3 Tesla

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¹The John Walton Muscular Dystrophy Research Centre, Newcastle University, ²The Newcastle Magnetic Resonance Centre, Newcastle University, ³The Newcastle upon Tyne Hospitals NHS Foundation Trust

675P Understanding skeletal muscle pathology and function in Late-Onset Pompe disease: insights from Proteomic and Transcriptomic Analyses

Schaiter A¹, Lohanadan K², van der Ven P², Hentschel A³, Mensch A⁴, Hahn A⁵, Kornblum C⁶, Stenzel W⁷, Krämer H⁸, Rosenbohm A⁹, Bartkuhn M¹⁰, Roos A^{11,12,13}, Schänzer A¹

¹Institute of Neuropathology, Justus Liebig University pathology, ²Institute for Cell Biology, University of Bonn, ³Leibniz-Institute für Analytische Wissenschaften – ISAS – e.V., ⁴Department of Neurology, University Medicine Halle, ⁵Department of Child Neurology Justus Liebig University, ⁶Department of Neuromuscular Diseases, Center for Neurology, University Hospital Bonn, ⁷Department of Neuropathology, Charité – Universitätsmedizin, ⁸Department of Neurology, Justus Liebig University, ⁹Clinic of Neurology, University Hospital Ulm, ¹⁰Institute of Biomedical Informatics and Systems Medicine Science Unit for Basic and Clinical Medicine, Institute for Lung Health (ILH) Platform for Genomics and Bioinformatics, Justus Liebig University, ¹¹Department of Pediatric Neurology, Centre for Neuromuscular Disorders, Centre for Translational Neuro- and Behavioral Sciences, University Duisburg-Essen, ¹²Brain and Mind Research Institute, Children's Hospital of Eastern Ontario Research Institute, ¹³Department of Neurology, University Hospital Düsseldorf, Heinrich Heine University

676P Impact of discontinuation and reintroduction of alglucosidase alpha in patients with late-onset Pompe disease

Andrejic N¹, Viric V², Andabaka M³, Bozovic I², Palibrk A², Ivanovic V², Basta I², Stevic Z², Peric S²

¹Medical Faculty University of Belgrade, ²University Clinical Centre of Serbia - Neurology Clinic, ³Clinic of Neurology and Psychiatry for Children and Youth, Belgrade

705LBP - 710LBP, 711VP, 712LBP - 717LBP, 719LBP - 733LBP,, 735LBVP, 736LP - 738LBP: Late Breaking

705LBP Epilepsy in childhood neuromuscular disorders: Is it truly rare?

Acar Arslan E¹, Öztürk G¹, İyışenyürek Ş¹, Akbeyaz H¹, Bıkmazer B¹, Karayakalı B¹, Ünver O¹, Türkdoğan D¹

¹Marmara University Pendik Research and Training Hospital

706LBP Evaluation of children diagnosed with muscular dystrophy panel

Ayca S¹, Orak S¹, Polat M¹, Çam S²

¹Celal Bayar University, School of Medicine, Department of Pediatric Neurology, ²Celal Bayar University, School of Medicine, Department of Medical Genetics

707LBP Transcriptomics reveals DMD-driven cell dynamics and mechanisms of fibroblast inflammatory tissue priming in human dystrophic muscle

Barthelemy F^{1,2}, Chesmore K^{1,3}, Scripture-Adams D^{1,2}, Nelson S^{1,3,4,5}, Miceli M^{1,2}

¹Center for Duchenne Muscular Dystrophy at UCLA, Los Angeles, USA, ²Department of Microbiology, Immunology, and Molecular Genetics, David Geffen School of Medicine and College of Letters and Sciences, University of California, ³Department of Human Genetics, David Geffen School of Medicine, University of California, ⁴Institute for Precision Health, David Geffen School of Medicine, University of California, ⁵Department of Pathology and Laboratory Medicine, David Geffen School of Medicine,

708LBP Clinical trial readiness in a rare and underserved disease: Learnings from community engagement and the lived experience in Becker muscular dystrophy (Becker)

Bronson A¹, Cameron M³, Tencer S¹, Engel P², Jackson S², Krieger K¹, Donovan J¹

¹Edgewise Therapeutics, ²Engage Health, ³AdvocacyWorks Consulting

709LBP Longer-term efficacy, safety, and patient-reported outcomes of apitegromab in patients with nonambulatory SMA: Results from the 48-month TOPAZ study

Crawford T¹, De Vivo D², Krueger J³, Mazzone E⁴, Song G⁵, Marantz J⁵, Gueye M⁵, Yu D⁵, Yao B⁵, Umans K⁵, Darras B^{6,7}, on behalf of the TOPAZ Study Team⁸

¹John Hopkins Hospital, Department of Neurology, ²Columbia University, Irving Medical Center, ³Helen Devos Children's Hospital Neurology - Grand Rapids, ⁴Catholic University, ⁵Scholar Rock, Inc., ⁶Boston Children's Hospital, Department of Neurology, ⁷Harvard Medical School, ⁸TOPAZ Study Team includes clinical trial investigators, physical therapists, study coordinators, and Scholar Rock (sponsor) staff

710LBP Exploring higher doses of nusinersen in spinal muscular atrophy: final results from part B of the 3-part DEVOTE study

Crawford T¹, Finkel R², Mercuri E³, Day J⁴, Montes J⁵, Garcia Romero M⁶, Sumner C¹, Sohn J⁷, Monine M⁷, Paradis A⁷, Sun P⁷, Foster R⁸, Gambino G⁸, Makepeace C⁷, Fradette S⁷, Farewell R⁷, on behalf of the DEVOTE Study Group

¹John Hopkins Hospital, ²St Jude Children's Research Hospital, ³Catholic University, ⁴Stanford University School of Medicine, ⁵Columbia University Irving Medical Center, ⁶Hospital La Paz, ⁷Biogen, ⁸Biogen

711LBVP Genetic susceptibility for thrombotic microangiopathies in a 10-month-old child affected by SMA type 1

D'Alessandro R^{1,2}, Somà A¹, Salvalaggio A¹, Guarnone E¹, Cavallina I¹, Rolle E¹, Rossi F¹, Vacchetti M¹, Mongini T², Ricci F¹

¹Department of Public Health and Pediatric Sciences, Section of Child and Adolescent Neuropsychiatry, University of Turin, ²Department of Neurosciences, Neuromuscular Unit, University of Turin

712LBP Epigenetic liquid biopsy for Duchenne and Becker muscular dystrophy

Hart S¹, Fattal-Valevsky A², Lavi R², Sagi L², Shemer R¹, Dor Y¹, **Dor-Wolman T¹**

¹Hadassah Hebrew University Medical Center, ²Tel Aviv Sourasky Medical Center

713LBVP Heterozygous truncating variants in DAG1 are associated with sporadic and familial isolated hyperCKemia

Fiorillo C^{1,7}, Traverso M¹, Baratto S¹, Panicucci C¹, Bruno C^{1,7}, Grandis M^{5,7}, Innes A³, Torella A^{2,6}, Picillo E^{2,6}, Onore M^{2,6}, Politano L^{2,6}, Nigro V^{2,6}, Scala M^{1,7}, Barresi R⁴

¹Gaslini Children Hospital, Genova, Italy, ²Telethon Institute of Genetics and Medicine (TIGEM), ³Alberta Children's Hospital Research Institute, Cumming School of Medicine, University of Calgary, ⁴IRCCS San Camillo Hospital, ⁵IRCCS Ospedale Policlinico San Martino, ⁶Department of Precision Medicine, University "Luigi Vanvitelli", ⁷Department of Neurosciences, University of Genoa

714LBP Can 5q SMA neonatal screening be a sustainable reality in middle-income countries? The experience of Minas Gerais state in Brazil

Giannetti J¹, Januário J¹, Milanez L¹, Sacramento A¹, Moura A¹, Braga T¹, Pinhati C¹, Carvalho N¹

¹Universidade Federal de Minas Gerais, Belo Horizonte

715LBP Juvenile ALS associated with the SPTLC1 gene: a diagnostic challenge

Gomez Montoya S¹, Veneruzzo G², Monges S¹

¹Department of Neurology, Hospital de Pediatría J.P. Garrahan, ²Genomics laboratory, Hospital de Pediatría J.P. Garrahan

716LBP Distinct muscle regeneration capability of mesenchymal stromal cells derived from human iPS cells in Ullrich congenital muscular dystrophy model mice

Goto M¹, Takenaka-Ninagwa N¹, Yoshioka-Bourgeois C¹, Miki M¹, Sakurai H¹

¹Center for iPS Cell Research and Application, Kyoto University

717LBP PhenoRareAI: Phenotype-Based Intelligent Diagnosis for Rare Neuromuscular Disorders

Zhai W^{1,2}, **Jiao K¹**, Wang N¹, Yu L³, Huang X⁴, Li W⁵, Hu C⁵, Chen X¹, Zhu B¹, Zhang J¹, Chang X⁶, Zhong H¹, Zhao C¹, Zhu S², Zhu W¹

¹Huashan Hospital, Fudan University, ²Institute of Science and Technology for Brain-Inspired Intelligence, Fudan University, ³Department of Neurology, The First Affiliated Hospital of Soochow University, ⁴School of Computing, Mathematics, and Engineering, Charles Sturt University, ⁵Department of Neurology, National Children's Medical Center, Children's Hospital of Fudan University, ⁶Department of Integrative Biology and Physiology, University of Minnesota Medical School

719LBP Duchenne muscular dystrophy gene editing therapy with CRISPR/high-fidelity Cas12Max

Luk A^{1,4}, Lin J², Jin M², Li Z³, Li T⁴, Shi L⁴, Yang H⁵, Li G⁴

¹HuidaGene Therapeutics, ²Department of Neurology, First Affiliated Hospital, Fujian Medical University,

³Lingang Laboratory, ⁴HuidaGene (Shanghai) Therapeutics Co., Ltd, ⁵Center for Excellence in Brain Science and Intelligence Technology, Chinese Academy of Sciences

720LBP Initial data following 24 weeks of treatment with WVE-N531 in patients with DMD: findings from Part B (FORWARD-53) of a phase 1b/2 open-label study

Malhi S¹, Servais L², Bader M³, AlQurashi M⁴, Tillinger M¹, Paulson D¹, Angelov A¹, Kaviya A¹, Hu X¹, Narayanan P¹, Hart A¹, Haeghele J¹, Singh K¹, Rheinhardt J¹, Ghosh A¹, Saint S¹, Bhatia S¹, McClure T¹, Casey C¹, Li-Kwai-Cheung A¹

¹Wave Life Sciences, ²Oxford Children's Hospital, Oxford University Hospitals NHS Foundation Trust,

³The Specialty Hospital (TSH), Advanced Clinical Center, ⁴Istiklal Hospital, Clinical Research Unit

721LBP Multi-modal benefits of deramiocecel (CAP-1002) in late-stage patients with DMD: A new treatment approach to target skeletal and cardiac muscle pathogenesis (HOPE-2-OLE Trial – 36-month data)

McDonald C¹, Villa C², Tian C², Zygmunt A², Soslow J³, Ollberding N², Hor K⁴, Harmelink M⁵, Varadhachary A⁶, Apkon S⁷, Romana V⁸, Desai U⁸, Hogan N⁸, Maharry K⁸, Awadalla M⁸, Marban L⁸

¹UC Davis Health, ²Cincinnati Children's Hospital, ³Vanderbilt University Medical Center, ⁴Nationwide Children's Hospital, ⁵Children's Hospital of Wisconsin, ⁶Washington University, ⁷Children's Hospital Colorado, ⁸Capricor Therapeutics

722LBP Evaluating the effectiveness of clinical tools in determining the causes of recurrent rhabdomyolysis

Nandakumar D¹, Breland C¹, Bhai S¹

¹University Of Texas Southwestern Medical School

723LBP The genetic diagnosis of neuromuscular diseases beyond whole genome sequencing: a next step in testing

Nigro V^{1,2}, Di Letto P¹, Rahman S¹, Zanolio M¹, Romano F¹, Scarpato M¹, Vicidomini G¹, Giacobbe C¹, Picillo E¹, Spanpanato C^{1,2}, Del Vecchio Blanco F¹, Piluso G¹, Politano L¹, Torella A^{1,2}

¹University of Campania Luigi Vanvitelli, ²Telethon Institute of Genetics and Medicine

724LBP The natural history of pediatric Becker muscular dystrophy: a single center retrospective cohort study and muscle ultrasound characterization

Piccoli C¹, Glanzman A², Gross B², Yum S²

¹Stanford University, ²Children's Hospital of Philadelphia

725LBP Meaningful Within-Patient Change (MWPC) thresholds for North Star Ambulatory Assessment (NSAA) and Modified Pediatric Outcomes Data Collection Instrument (PODCI) in patients with Duchenne Muscular Dystrophy (DMD)

Posner N¹, Bushmakina A¹, Mazar I¹, Shen Q¹, Duckacz S¹, Ines M¹, Aslam Z¹, Cappelleri J¹

¹Pfizer, Inc.

726LBP Long-term safety and tolerability of delandistrogene moxeparvovec in Duchenne muscular dystrophy: phase 1 to phase 3 clinical trials

Proud C¹, McDonald C², Mercuri E³, Muntoni F⁴, Zaidman C⁵, Dharia S⁶, Mason S⁶, Meng J⁶, Murphy A⁷, Palatinsky E⁶, Reid C⁷, Wandel C⁸, Mendell J⁶

¹Children's Hospital of The King's Daughters, ²UC Davis, ³Pediatric Neurology Institute, Catholic University and Nemo Pediatrico, Fondazione Policlinico Gemelli IRCCS, ⁴Dubowitz Neuromuscular Centre, NIHR Great Ormond Street Hospital Biomedical Research Centre, Great Ormond Street Institute of Child Health, University College London, and Great Ormond Street Hospital Trust, ⁵Washington University in Saint Louis, ⁶Sarepta Therapeutics, Inc., ⁷Roche Products Ltd, ⁸F. Hoffmann-La Roche Ltd

727LBP Evidence for a role of eotaxin family proteins as inflammatory mediators and biomarkers in inclusion body myositis: new insights in the disease pathogenesis

Riolo G¹, Gibertini S¹, Iannibelli E¹, Carnazzi A^{1,2}, Nicolini De Gaetano L¹, Salerno F¹, Ruggieri A¹, Bonanno S¹, Marcuzzo S¹, Cavalcante P¹, Maggi L¹

¹Neuroimmunology and Neuromuscular Diseases Unit - Fondazione IRCCS Istituto Neurologico Carlo Besta,

²Ph.D. program in Pharmacological Biomolecular Sciences, Experimental and Clinical, University of Milan

728LBP Post-Authorisation Safety Study (PASS). Mexiletine effectiveness in patients with non-dystrophic myotonia: interim analysis findings

Rosenbohm A¹, Vicart S², Tard C³, Jayaseelan D⁴, Sedehizadeh S⁵, Schneider-Gold C⁶, Adetoro N⁷, Zozulya-Weidenfeller A⁸

¹University of Ulm, ²Pitié-Salpêtrière University Hospital, ³CHRU Lille, ⁴National Hospital for Neurology and Neurosurgery, ⁵Nottingham University Hospitals NHS Trust, ⁶St. Josef-Hospital, ⁷Lupin Research, ⁸Lupin EMEA

729LBP Protein biomarkers of muscle injury exhibit differential reduction with subject age and time in adults with Becker muscular dystrophy

Russell A¹, Barthel B¹, Schrama E², Koeks Z², van de Velde N², Verschuuren J², Donovan J¹, Niks E², Spitali P²
¹Edgewise Therapeutics, ²University of Leiden

730LBP Double trouble: a comprehensive study into unrelated genetic comorbidities in adult patients with Facioscapulohumeral muscular dystrophy type I

Saconni S^{1,2}, Tammam G^{3,4}, Ezaru A¹, Slioui A¹, Monforte M⁵, Tasca G⁶, Villa L¹, Cavalli M¹, Salviati L⁷, van der Vliet P⁸, Lemmers R⁸, Pini J^{1,2}, van der Maarel S⁸, Puma A¹

¹Peripheral Nervous System & Muscle Department, Pasteur 2 Hospital, Nice University Hospital, ²Institute for Research on Cancer and Aging of Nice, CNRS, INSERM, Côte d'Azur University, ³Department of Brain and Behavioral Sciences, University of Pavia, ⁴IRCCS Mondino Foundation, ⁵Institute of Neurology, Catholic University School of Medicine, ⁶John Walton Muscular Dystrophy Research Centre, Newcastle University and Newcastle Hospitals NHS Foundation Trust, ⁷Clinical Genetics Unit, Department of Women's and Children's Health, University of Padua, ⁸Department of Human Genetics, Leiden University Medical Center

731LBP Efficient exon skipping and dystrophin restoration after a single in vivo dose of Antisense Oligonucleotide Conjugate (AOC) in the mdx mouse model for Duchenne muscular dystrophy

Stan T¹, Van De Vijver D¹, Tanganyika-de Winter C¹, Post E², van Geel R², Türkmen N², van Delft F², Aartsma-Rus A¹

¹Leiden University Medical Center (LUMC), ²Synaffix BV

732LBP Post-exercise biomarkers of muscle injury are reduced by Sevasemten, a fast myosin inhibitor, in adults with Becker muscular dystrophy

Stemmerik M¹, Russel A², Frølich S¹, Receveur N¹, Slipsager A¹, Barthel B², Donovan J², MacDougall J², Vissing J¹
¹Copenhagen Neuromuscular Center, Rigshospitalet, ²Edgewise Therapeutics

733LBP Development of KT323 as a potent and safe gene therapy candidate for facioscapulohumeral muscular dystrophy (FSHD) through high throughput AAV capsid and cargo engineering

Tabebordbar S¹, Seshadri S¹, Brown K¹, Dang C¹, Tabebordbar S¹, Marsh E¹, Salmun G¹, Hakim C¹, Jenquin J¹, Stricker J¹, Ferguson B¹, Fielden M¹

¹Kate Therapeutics

735LBP First in class ASO targeting IGHMBP2 cryptic splice variant: efficacy and safety

Tyner C¹, Smieszek S¹, Przychodzen B¹, Johnson C¹, Polymeropoulos C¹, Birznieks G¹, Polymeropoulos M¹

¹Vanda Pharmaceuticals Inc.

736LBP Solving challenging titinopathy cases via multi-omics

Zhang Y¹, Xu L¹, Lei Y², Bönnemann C³, Chan S², Javed A¹

¹School of Biomedical Sciences, LKS faculty of Medicine, The University of Hong Kong, ²Department of Paediatrics and Adolescent Medicine, School of Clinical Medicine, LKS Faculty of Medicine, The University of Hong Kong, ³Neuromuscular and Neurogenetic Disorders of Childhood Section, Neurogenetics Branch, National Institute of Neurological Disorders and Stroke, National Institutes of Health

737LBP Full-length RNA sequencing in FSHD identifies novel isoforms and intergenic transcripts activated by DUX4

Zheng D¹, van den Heuvel A¹, Balog J¹, M. Willemsen I¹, Kloet S¹, J. Tapscott S^{2,3}, Mahfouz A^{1,4}, M. van der Maarel S¹

¹Leiden University Medical Center, ²Fred Hutchinson Cancer Center, ³University of Washington, ⁴Delft University of Technology

738LBP Non-invasive optoacoustic muscle imaging in Late-onset Pompe disease – a translational and multicenter approach

Wagner A^{1,2}, Tan L^{2,3}, Zschüntzsch J⁴, Meyer S⁴, Stobbe A⁴, Bruex H⁴, Regensburger A^{2,3}, Alves F^{4,5}, Jüngert J³, Rother U⁶, Danko V^{2,3}, Türk M⁷, Schmidt S⁸, Vorgerd M^{9,10}, Schlaffke L⁹, Wölflé J³, Hahn A¹¹, Mensch A¹², Winterholler M¹³, Trollmann R³, Heiß R⁸, Raming R^{2,3}, Knieling F^{2,3}

¹Department of Pediatric Neurology, Charité University Hospital Berlin, ²Translational Pediatrics, Department of Pediatrics and Adolescent Medicine, University Hospital Erlangen, ³Department of Pediatrics and Adolescent Medicine, University Hospital Erlangen, ⁴Translational Molecular Imaging, Max-Planck Institute for Multidisciplinary Sciences (MPI-NAT), ⁵Clinic for Haematology and Medical Oncology, Institute of Diagnostic and Interventional Radiology, University Medical Center Göttingen, ⁶Department of Vascular Surgery, University Hospital Erlangen, ⁷Department of Neurology, University Hospital Erlangen, ⁸Institute of Radiology, University Hospital Erlangen, ⁹Department of Neurology, BG-University Hospital Bergmannsheil; Ruhr-University Bochum, ¹⁰Heimer Institute for Muscle Research; BG-University Hospital Bergmannsheil, ¹¹Department of Child Neurology; Justus-Liebig-Universität Giessen, ¹²Department of Neurology; Martin-Luther-Universität Halle-Wittenberg, ¹³Sana Krankenhaus Rummelsberg

16:45-17:15	Short Oral Presentations 10 ♀ North Hall 181P, 177P, 178P, 180P, 179P <i>Moderator: Laurent Servais, University of Oxford</i>	Short Oral Presentations 11 ♀ Terrace 2A 656P, 675P, 673P, 674P, 358P <i>Moderator: Pascal Laforêt, Hôpital Raymond Poincaré</i>	Short Oral Presentations 12 ♀ Terrace 2B 536P, 109P, 513P, 512P, 241P <i>Moderator: Heike Kölbel, Universitätsmedizin Essen</i>
19:15-01:00	Networking Dinner ♀ Municipal House (separate registration required)		

Saturday 12th October 2024

07:15-14:00	Congress desk open
07:15-14:00	Myology Café open ♀ Congress Hall Foyer
07:45-08:45	Clinical Trial Updates ♀ Congress Hall <i>Moderators: Francesco Muntoni, University College London, Great Ormond Street Hospital, UK & Tina Duong, Stanford University, USA</i>
07:45-08:00	190 Muscle MRI outcomes in patients with Duchenne Muscular Dystrophy treated with delandistrogene moxeparvovec: Findings from EMBARK Part 1 <u>Vandenborne K¹</u> , Walter G ² , Straub V ³ , Willcocks R ¹ , Forbes S ¹ , Ennamuri S ⁴ , Ding K ⁴ , Reid C ⁵ , Murphy A ⁵ , Manfrini M ⁶ , Elkins J ⁴ , Rodino-Klapac L ⁴ ¹ Department of Physical Therapy, University of Florida, ² Department of Physiology and Aging, University of Florida, ³ Newcastle University, John Walton Muscular Dystrophy Research Centre, ⁴ Sarepta Therapeutics, Inc., ⁵ Roche Products Ltd, ⁶ F. Hoffmann-La Roche Ltd
08:00-08:15	200 Preliminary results from a Phase 1-2 gene therapy study of ATA-100, AAV9 vector encoding FKRP, in patients with Limb Girdle Muscular Dystrophy R9 <u>Olivier S¹</u> , Richard I ^{1,2} , Stojkovic T ³ , Straub V ⁴ , Preisler N ⁵ , Zanfongnon R ² , Buscara L ² , Genries-Ferrand S ² , Vissing J ⁵ ¹ Atamyo Therapeutics, ² Genethon, ³ APHP, Reference center for neuromuscular diseases, Institute of Myology, ⁴ John Walton Muscular Dystrophy Research Centre, ⁵ Rigshospitalet
08:15-08:30	220 MExiletine versus lamotrigine in Non-Dystrophic myotonias – a randomised, double-blinded, cross-over trial <u>Vivekanandam V^{1,2}</u> , Jayaseelan D ¹ , Skorupinska I ¹ , Germain L ¹ , Matthews E ³ , Barohn R ⁴ , McDermott M ⁵ , Hanna M ^{1,2} ¹ The National Hospital for Neurology and Neurosurgery, Queen Square National Hospital for Neurology and Neurosurgery, Queen Square, ² Queen Square UCL Institute of Neurology, ³ Neurosciences and Cell Biology Research Institute, St George's University of London, ⁴ University of Missouri, ⁵ University of Rochester Medical Center
08:30-08:45	210 Rainbowfish: 2-year efficacy and safety data of risdiplam in infants with presymptomatic SMA <u>Servais L^{1,2}</u> , Finkel R ³ , Farrar M ⁴ , Vlodavets D ⁵ , Zanoteli E ⁶ , Al-Muhaizea M ⁷ , Araújo A ⁸ , Nelson L ⁹ , Jaber B ¹⁰ , Gorni K ¹¹ , Kletzl H ¹² , Palfreeman L ¹³ , Gaki E ¹³ , Rabbia M ¹⁴ , Summers D ¹³ , Fontoura P ¹¹ , Bertini E ¹⁵ , on behalf of the RAINBOWFISH Study Group ¹ MDUK Oxford Neuromuscular Centre, Department of Paediatrics, University of Oxford, ² Division of Child Neurology, Centre de Références des Maladies Neuromusculaires, Department of Pediatrics, University Hospital Liège & University of Liège, ³ Center for Experimental Neurotherapeutics, St Jude Children's Research Hospital, ⁴ Sydney Children's Hospital Network and UNSW Medicine, UNSW Sydney, ⁵ Russian Children Neuromuscular Center, Veltischev Clinical Pediatrics and Pediatric Surgery Research Institute of Pirogov Russian National Research Medical University, ⁶ Department of Neurology, Faculdade de Medicina, Universidade de São Paulo, ⁷ Department of Neurosciences, King Faisal Specialist Hospital & Research Center-Riyadh, ⁸ Pediatrics Department, Faculty of Medicine, Federal University of Rio de Janeiro, ⁹ Department of Physical Therapy, University of Texas Southwestern Medical Center, ¹⁰ Pharma Development, Safety, F. Hoffmann-La Roche Ltd, ¹¹ PDMA Neuroscience and Rare Disease, F. Hoffmann-La Roche Ltd, ¹² Roche Pharmaceutical Research and Early Development, Roche Innovation Center Basel, ¹³ Roche Products Ltd, ¹⁴ Genentech, Inc., ¹⁵ Research Unit of Neuromuscular and Neurodegenerative Disorders, Bambino Gesù Children's Research Hospital IRCCS
08:45-09:00	Comfort Break

09:00-09:30	Victor Dubowitz Lecture 📍 Congress Hall Moderators: Volker Straub, Newcastle University, UK & Jana Haberlová, University Hospital Motol, Czechia INV13 AAV delivery of mini-and full-length dystrophins <u>Chamberlain J¹</u>, Hauschka S¹, Regnier M¹, Tasmaout H¹ ¹University of Washington School of Medicine
09:30-11:00	Poster Highlights Moderators: Edoardo Malfatti, Université Paris Est, France & Tamara Dangouloff, University Of Liege, Belgium 09:30- 09:45 230 Spinal Muscular Atrophy is also a disorder of spermatogenesis <u>Magot A¹</u>, Reignier A², Binois O³, Vuillerot C^{4,5}, Yann P¹ and the Fermasi Study Group ¹Centre de Référence des Mala Neuromusculaires AOC, CHU de Nantes, Filnemus, Euro-NMD, Nantes, ²Service de Médecine et Biologie de la Reproduction, gynécologie médicale, CHU de Nantes, ³Service de Biologie de la Reproduction - CECOS, Hôpital Antoine Bécélère, AP-HP, Université Paris Saclay, ⁴Centre de Référence PACA Réunion Rhône Alpes, Hospices Civils de Lyon, Hôpital Femme-Mère-Enfant, L'Escale, Service de Médecine Physique et de Réadaptation Pédiatrique, Bron, ⁵NeuroMyogen Institute, CNRS UMR 5310 - INSERM U1217, University of Lyon 09:45-10:00 240 Temporal requirement of dystroglycan glycosylation during brain development and rescue of cortical dysplasia via gene delivery in the fetal stage <u>Sudo A¹</u>, Kanagawa M², Kobayashi K², Endo M³, Minami Y³, Aiba A⁴, Toda T¹ ¹Department of Neurology, The University of Tokyo, ²Division of Molecular Brain Science, Kobe University, ³Division of Cell Physiology, Kobe University, ⁴Laboratory of Animal Resources, The University of Tokyo 10:00-10:15 250 Development of a CRISPR/CasX 4q telomeric region ablation strategy for FSHD1 using an isogenic hiPSC line and a FSHD1 fibroblast cell line <u>Lama C¹</u>, de Graaf N^{1,2}, Bou Akar R¹, Danaus P³, Suel-Petat L⁴, Nectoux J³, Authier F^{1,5}, Relaix F¹, Richard I⁴, Malfatti E^{1,5} ¹Université Paris Est Créteil, INSERM, IMRB - Hôpital Henri-Mondor, ²The Department of Neurology, Donders Institute for Brain, Cognition and Behaviour, Radboud university medical center, ³Assistance Publique - Hôpitaux de Paris, APHP, Centre Universitaire Paris, Hôpital Cochin, Laboratoire de Génétique et Biologie Moléculaires, ⁴Généthon, INSERM, Unité de recherche Integrare, UMR_S951 - Université Paris-Saclay, Université d'Évry, ⁵Reference Center for Neuromuscular Disorders, APHP Henri Mondor University Hospital 10:15-10:30 260 Understanding the clinical heterogeneity in myotonic dystrophy type 1: identifying clinical phenotypes using unsupervised clustering <u>la Fontaine L¹</u>, Imkamp M¹, 't Hoen P², van As D², Smulders F², Bruijnes J¹, de Kok J¹, Faber C¹, Merkies I¹, van Kuijk S¹ ¹Maastricht University Medical Centre, ²Radboud University Medical Centres 10:30-10:45 270 Mass spectrometry as a technique for robust quantification of titin and other large muscle disease-associated proteins <u>Smolnikov A¹</u>, Padoani D¹, Jurczyk J¹, Su Z¹, Hamey J¹, Wilkins M¹, Yuen M^{1,2,3,4}, Oates E^{1,5} ¹School of Biotechnology and Biomolecular Sciences, Faculty of Science, University Of New South Wales, ²Kids Neuroscience Centre, Kids Research Institute, The Children's Hospital at Westmead, ³Functional Neuromics, Children's Medical Research Institute, The University of Sydney, ⁴Faculty of Medicine and Health, The University of Sydney, ⁵Sydney Children's Hospital Network 10:45-11:00 280 Minimal detectable change of the Revised Hammersmith Scale in patients with Spinal Muscular Atrophy <u>O'reilly E^{1,2}</u>, Stimpson G², Rohwer A^{1,2}, Baranello G^{1,2,3}, Muntoni F^{1,2,3}, Scoto M^{1,2,3}, On behalf of SMA REACH UK² ¹Great Ormond Street Hospital for Children NHS Foundation Trust, ²Dubowitz Neuromuscular Centre, Institute of Child Health, UCL, ³UCL NIHR GOSH Biomedical Research Centre
11:00-11:30	Morning refreshments, exhibition and posters
11:30-13:30	Late Breaking News 📍 Congress Hall Moderators: Ana Topf, John Walton Muscular Dystrophy Research Centre, UK & Alan H. Beggs, Boston Children's Hospital, Harvard Medical School, USA

11:30 - 11:45	01LBO Biallelic variants affecting the DST-b isoform cause a severe congenital myopathy presenting with arthrogryposis, muscular hypotonia and dilated cardiomyopathy Jacob M¹, Kölbel H², Munot P³, Kopajtich R^{1,4}, Achleitner M⁵, Hahn A⁶, Schänzer A⁷, Weis J⁸, Sewry C^{3,9,10}, Phadke R³, Sukenik-Halevy R^{11,12}, Maroofian R¹³, Gómez-Andrés D¹⁴, Wilson L¹⁵, Schara-Schmidt U², Winkelmann J^{1,4,16}, Roos A^{2,17,18}, Mayr J⁵, Distelmaier F¹⁹, Wagner M^{1,4,20} ¹Institute of Human Genetics, Klinikum rechts der Isar, Technical University of Munich, School of Medicine and Health, Munich, ²Department of Neuropediatrics and Neuromuscular Centre for Children and Adolescents, Center for Translational Neuro- and Behavioral Sciences, University Hospital Essen, Duisburg-Essen University, ³Dubowitz Neuromuscular Centre, Great Ormond Street Hospital, ⁴Institute of Neurogenomics, Helmholtz Munich, ⁵University Children's Hospital, Salzburger Landeskliniken (SALK), Paracelsus Medical University, ⁶Department of Child Neurology, Justus-Liebig-University Giessen, ⁷Institute of Neuropathology, Justus Liebig University Giessen, ⁸Institute of Neuropathology, RWTH Aachen University Hospital, ⁹Wolfson Centre for Neuromuscular Disorders, Robert Jones and Agnes Hunt Orthopaedic Hospital, ¹⁰Cellular Pathology, Salford Royal Hospital NHS Foundation Trust, Northern Care Alliance, ¹¹Genetic Institute, Meir Medical Center, ¹²School of Medicine, Faculty of Medical and Health Sciences, Tel Aviv University, ¹³Centre for Neuromuscular Diseases, UCL Queen Square Institute of Neurology, ¹⁴Department of Pediatric Neurology, Vall d'Hebron University Hospital, Vall d'Hebron Hospital Campus, ¹⁵Department of Clinical Genetics, Great Ormond Street Hospital, ¹⁶Munich Cluster for Systems Neurology (SyNergy), ¹⁷Department of Neurology, Heinrich Heine University Düsseldorf, ¹⁸Division of Neurology, Department of Medicine, Children's Hospital of Eastern Ontario Research Institute, The Ottawa Hospital, and Brain and Mind Research Institute, University of Ottawa, ¹⁹Department of General Pediatrics, Neonatology, and Pediatric Cardiology, Medical Faculty and University Hospital Düsseldorf, Heinrich-Heine-University, ²⁰Division of Pediatric Neurology, Developmental Medicine and Social Pediatrics, Department of Pediatrics, Dr. von Hauner Children's Hospital, Ludwig-Maximilian University (LMU) Munich
11:45 - 12:00	02LBO Expanding the genetic and phenotypic landscape of replication factor C complex-related disorders: RFC4 deficiency is linked to a multisystemic disorder Saito Y¹, Morimoto M², Ryu E^{3,4,5}, RFC4 study group, Toro C², Myung K^{3,6}, Nishino I¹, Malicdan M^{2,7} ¹Department of Neuromuscular Research, National Institute of Neuroscience, National Center of Neurology and Psychiatry, ²National Institutes of Health Undiagnosed Diseases Program, National Human Genome Research Institute, National Institutes of Health, ³Center for Genomic Integrity, Institute for Basic Science, ⁴Department of Biological Sciences, Ulsan National Institute of Science and Technology, ⁵Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, ⁶Department of Biomedical Engineering, Ulsan National Institute of Science and Technology, ⁷Human Biochemical Genetics Section, Medical Genetics Branch, National Human Genome Research Institute, National Institutes of Health
12:00 - 12:15	03LBO Decoy gene therapy for myotonic dystrophy Furling D¹, Arandel L¹, Sureau A¹, Cordier A¹, Moulay G¹, Rouxel C¹, Klein A¹ ¹Sorbonne Université, Inserm, Institut de Myologie, Centre de Recherche en Myologie
12:15 - 12:30	04LBO Interim clinical data summary: A phase 1b/2a open-label, dose escalation study to evaluate the safety and clinical activity of intramuscular doses of an AAV9-based gene therapy (BB-301) administered to subjects with oculopharyngeal muscular dystrophy (OPMD) with dysphagia Amin M¹, Achlatis E¹, Balou S¹, Steele C², Peladeau-Pigeon M², Barrett E², Meng D² ¹NYU Grossman School of Medicine, ²Swallowing Rehabilitation Laboratory, University Health Network
12:30 - 12:45	05LBO A phase 1 study of antisense oligonucleotide NS-035 in patients with Fukuyama congenital muscular dystrophy Fujino G¹, Kitamura A¹, Takahashi A¹, Maeda M¹, Kubota A¹, Tokuyama Y², Wada I², Kobayashi K³, Komaki H⁴, Taniguchi-Ikeda M⁵, Ishigaki K⁶, Toda T¹ ¹The University of Tokyo, ²The University of Tokyo Hospital, ³Kobe University, ⁴National Center of Neurology and Psychiatry, ⁵Fujita Health University Hospital, ⁶Tokyo Women's Medical University
12:45-13:00	06LBO CFFREO, a phase 3, randomized, double-blind, placebo-controlled study of fordadistrogene movaparvovec (FM) in ambulatory participants with Duchenne muscular dystrophy (DMD) Muntoni F¹, Nascimento A², Shin J³, Guglieri M⁴, Stettner G⁵, Veerapandiyan A⁶, Gallo S⁷, Shi H⁷, Gundapaneni B⁷, Neelakantan S⁷, Lobello K⁷, Shen Q⁷, Levy D⁷, Mercuri E⁸ ¹UCL GOS Institute of Child Health, ²Passeig de Sant Joan de Déu, ³Pusan National University School of Medicine, ⁴Newcastle University, ⁵University of Zürich, ⁶University of Arkansas for Medical Sciences, ⁷Pfizer Inc, ⁸Universita' la Cattolica Prize Giving Ceremony Moderator: Marco Savarese, University of Helsinki, Finland Introduction to the WMS 2025 Congress, Vienna, Austria Handover of the WMS flag and close of Congress Moderator: Volker Straub
13:30-14:30	Homeward lunch