

mnda

motor neurone disease
association

24th international
symposium
on ALS/MND

6 – 8 December 2013

Milan
ITALY

Programme

Host: AISLA

(Associazione Italiana Sclerosi Laterale Amiotrofica)



Organised by the MND Association in co-operation with the
International Alliance of ALS/MND Associations

Organiser of the symposium:



Motor Neurone Disease Association

PO Box 246, Northampton NN1 2PR, UK
tel: (-) 44 1604 611845 or 611822
fax: (-) 44 1604 611858
email: symposium@mndassociation.org
website: www.mndassociation.org

Host for the symposium:



AISLA (Associazione Italiana Sclerosi Laterale Amiotrofica)

20139 Milano (Lombardia), Viale Ortles 22/4
Tel (-) 39 02 43986673
Fax (-) 39 02 5393893
Email segreteria@aisla.it
Website: www.aisla.it

Held in co-operation with:



The International Alliance of ALS/MND Associations

Tel: (-) 1 215 568 2462
Fax: (-) 1 215 543 3366
Email: alliance@als-mnd.org
Website: www.alsmndalliance.org

CME Accreditation

Royal College of Physicians (London)

The symposium has been awarded 16 CME credits from RCP (London).

EACCME credits (accepted by AMA) are to be confirmed.

Thank you to the following organisations for supporting the 24th International Symposium



Friday 6 December 2013

	Location: Aquarium	
SESSION 1	JOINT OPENING SESSION	
Chairs:	<i>W Robberecht (Belgium) V Silani (Italy)</i>	09.50 – 10.05 International Alliance Humanitarian Award International Alliance Forbes Norris Award
09.00 – 09.10	Welcome – <i>W Robberecht (Belgium)</i> Opening dignitary – To be confirmed	10.05 – 10.30 IPG Award and winner's research presentation
09.10 – 09.50	ALS in a world of multiple phenotypes – <i>S Appel (USA)</i>	

10.30 – 11.00 COFFEE

Location: Aquarium / Mizar lobby

	Location: Mizar			Location: Aquarium
SESSION 2A	NEURONAL VULNERABILITY IN ALS		SESSION 2B	AUTONOMY AND QUALITY OF LIFE
Chairs:	<i>C Bendotti (Italy) G Haase (France)</i>		Chairs:	<i>O Hardiman (Ireland) Z Simmons (USA)</i>
11.00 – 11.30	Mechanisms underlying selective neuronal vulnerability in ALS – <i>P Caroni (Switzerland)</i>		11.00 – 11.30	To test or not to test, that is the question – <i>O Hardiman (Ireland)</i>
11.30 – 11.45	Size-dependent axon loss in the corticospinal tract in ALS patients with upper motor neuron signs – <i>F Song (USA)</i>		11.30 – 11.45	ALS clinics and the emerging challenge of genetics: a worldwide survey – <i>S Rudnicki (USA)</i>
11.45 – 12.00	Axon degeneration and axon protection in ALS – <i>A King (Australia)</i>		11.45 – 12.00	Developing a model of patient-centered decision-making for amyotrophic lateral sclerosis multidisciplinary care – <i>A Hogden (Australia)</i>
12.00 – 12.15	Inhibitory loss or dysfunction: a primary mechanism in ALS? – <i>T Dickson (Australia)</i>		12.00 – 12.15	Quality of life, depression and perceived social support in the course of ALS – <i>D Lulé (Germany)</i>
12.15 – 12.30	Peripheral nervous system dysfunction in a rat model and in human motor nerve biopsies of amyotrophic lateral sclerosis – <i>N Riva (Italy)</i>		12.15 – 12.30	Understanding quality of life in motor neurone disease: qualitative explanations from the Trajectories of Outcome in Neurological Conditions study (TONIC) – <i>H Ando (UK)</i>

12.30 – 14.00 LUNCH

Location: Restaurant

	Location: Mizar			Location: Aquarium
SESSION 3A	RNA PROCESSING AND DYSREGULATION		SESSION 3B	COGNITIVE AND PSYCHOLOGICAL CHANGE
Chairs:	<i>S Kwak (Japan) C Lagier-Tourenne (USA)</i>		Chairs:	<i>S Woolley (USA) S Abrahams (UK)</i>
14.00 – 14.15	hnRNP A3 binds to GGGGCC repeats of patients with C9orf72 mutations: consequences for RAN translation – <i>C Haass (Germany)</i>		14.00 – 14.15	Screening for cognitive and behaviour change in ALS – <i>E Niven (UK)</i>
14.15 – 14.30	The role of RNA binding protein hnRNP K in ALS and FTD – <i>D Moujalled (Australia)</i>		14.15 – 14.30	High rates of cognitive and behavioural impairment in a large prospective ALS study – <i>J Murphy (USA)</i>
14.30 – 14.45	TDP-43's neurotoxicity is mediated by Fragile X protein and specific mRNA targets – <i>D Zarnescu (USA)</i>		14.30 – 14.45	Neuropsychiatric symptoms appear very early in ALS and do not effect survival – <i>E Mioshi (Australia)</i>
14.45 – 15.00	Missense mutations in different domains of the mouse TDP-43 gene cause diverse effects on RNA metabolism – <i>P Fratta (UK)</i>		14.45 – 15.00	Behind the curtain of dysarthria: The nature of language impairment in MND – <i>P Rewaj (UK)</i>
15.00 – 15.15	Systemic dysregulation of TDP-43 binding microRNAs in Amyotrophic Lateral Sclerosis – <i>J Weishaupt (Germany)</i>		15.00 – 15.15	Efficacy of hypnosis-based treatment in ALS and its effect on the caregiver: results of a six-month longitudinal study – <i>A Palmieri (Italy)</i>
15.15 – 15.30	Stress granule (SG) dynamics is regulated by autophagic machinery in FUS-related ALS – <i>U Pandey (USA)</i>		15.15 – 15.30	Dignity Therapy: A psychotherapeutic intervention to enhance the end of life experience for people with motor neurone disease and their family carers – <i>B Bentley (Australia)</i>

15.30 – 16.00 COFFEE

Location: Aquarium / Mizar lobby

Location: Mizar

SESSION 4A IN VITRO MODELLING

Chairs: *C Shaw (UK) S Finkbeiner (USA)*

16.00 – 16.30 Small molecule screening for neuroprotective agents - *S Finkbeiner (USA)*

16.30 – 16.45 RNA-induced toxicity from the C9orf72 ALS/FTD repeat expansion is mitigated by antisense intervention - *C Donnelly (USA)*

16.45 – 17.00 Comparison of disease mechanisms and therapeutic interventions in primary culture models of multiple familial forms of ALS/MND - *H Durham (Canada)*

17.00 – 17.15 Targeting RNA foci shows a therapeutic effect in iPSC-derived motor neurons from C9orf72 repeat patients - *R Baloh (USA)*

17.15 – 17.30 Therapy development for ALS/MND and frontotemporal dementia with C9orf72 expansion: antisense oligonucleotide mediated reduction in nuclear RNA foci - *C Lagier-Tourenne (USA)*

Location: Aquarium

SESSION 4B QUALITY OF CARE

Chairs: *J Rosenfeld (USA) T Heiman-Patterson (USA)*

16.00 – 16.35 Advance care planning in ALS – the role of the physician - *G Borasio (Switzerland)*

16.35 – 17.10 The issues of end of life care planning – the final stages - *D Oliver (UK)*

17.10 – 17.30 The AAN ALS Quality Measures: a tool to enhance quality of care - *R Miller (USA)*

POSTER SESSION A *Kindly supported by Cytokinetics*

17.45 – 19.30

Location: Quasar

17.45 – 18.20 Theme 8: Human cell biology and pathology

18.20 – 18.55 Theme 9: In vivo experimental models

18.55 – 19.30 Theme 10: In vitro experimental models

18.55 – 19.30 Theme 12A: Scientific work in progress

Location: Aquarium

17.45 – 18.20 Theme 1: Multidisciplinary care and quality of life

18.20 – 18.55 Theme 2: Respiratory and nutritional management

18.55 – 19.30 Theme 3: Cognitive and psychological assessment and support

Saturday 7 December 2013

Location: Mizar

SESSION 5A THERAPEUTIC STRATEGIES

Chairs: *P Shaw (UK) B Kaspar (USA)*

08.30 – 09.00 Targeting immune responses in neurodegenerative disease - *S Rivest (Canada)*

09.00 – 09.15 Activation of the brain's choroid plexus for leukocyte trafficking as a therapeutic approach for ALS - *K Baruch (Israel)*

09.15 – 09.30 Recombinant human-derived monoclonal antibodies targeting misfolded SOD1 as novel therapeutics for the treatment of ALS - *J Grimm (Switzerland)*

09.30 – 09.45 Nanobody against SOD1 reduces in vitro aggregation, rescues SOD1-induced axonopathy and extends survival in ALS models - *S Hernandez (Belgium)*

09.45 – 10.00 AAV9-mediated SOD1 downregulation as a future therapy for amyotrophic lateral sclerosis - *B Kaspar (USA)*

Location: Aquarium

SESSION 5B EPIDEMIOLOGY

Chairs: *A Chiò (Italy) E Beghi (Italy)*

08.30 – 09.00 Endemic ALS: is there anything we can learn from clusters? - *E Beghi (Italy)*

09.00 – 09.15 Feasibility assessment of an epidemiologic study of electroconvulsive therapy and motor neuron disease - *G Mezei (USA)*

09.15 – 09.30 n-3 and n-6 polyunsaturated fatty acid intake and risk of amyotrophic lateral sclerosis: Pooled results from 5 cohort studies - *K Fitzgerald (USA)*

09.30 – 09.45 Interaction between HFE polymorphisms and cumulative lead exposure on the risk of amyotrophic lateral sclerosis - *M Weisskopf (USA)*

09.45 – 10.00 ALS multicenter cohort study of oxidative stress (ALS COSMOS): study methodology, recruitment and baseline demographics and disease characteristics - *H Mitsumoto (USA)*

10.00 – 10.30 COFFEE

Location: Aquarium / Mizar lobby

Location: Mizar

SESSION 6A CELL METABOLISM AND STRESS

Chairs: *J Atkin (Australia) H Durham (Canada)*

- 10.30 – 11.00** Mitochondrial etiology of metabolic and degenerative diseases - *D Wallace (USA)*
- 11.00 – 11.15** Mutated SOD1 causes region specific differences in Ca^{2+}_{cyt} dependent properties of mitochondria from CNS of SOD1 G93A mice and Ca^{2+} dyshomeostasis in fibroblasts of fALS patients - *F N Gellerich (Germany)*
- 11.15 – 11.30** Mitochondrial metabolic markers in ALS fibroblasts - *H Mitsumoto (USA)*
- 11.30 – 11.45** Altered growth hormone/insulin balance in hSOD1G93A mice: implications for insulin resistance in amyotrophic lateral sclerosis (ALS) - *S Ngo (Australia)*
- 11.45 – 12.00** Mechanisms of ER-Golgi transport inhibition in amyotrophic lateral sclerosis - *K Soo (Australia)*
- 12.00 – 12.15** Mutant TDP-43 leads to pathological accumulation of SMN and its nuclear complexes in motor neurons - *N Perera (Australia)*
- 12.15 – 12.30** Cyclophilin A interaction network perturbation is a converging patho-mechanism in different forms of amyotrophic lateral sclerosis - *V Bonetto (Italy)*

Location: Aquarium

SESSION 6B NEUROIMAGING

Chairs: *J Grosskreutz (Germany) M Benatar (USA)*

- 10.30 – 11.00** Neuroimaging in ALS: Can we see more clearly? - *M Filippi (Italy)*
- 11.00 – 11.15** The neuroimaging signature of the C9orf72 hexanucleotide repeat in amyotrophic lateral sclerosis: a multimodal MRI study - *P Bede (Ireland)*
- 11.15 – 11.30** A visual MRI atrophy scale for the ALS-FTD continuum - *E Devenney (Australia)*
- 11.30 – 11.45** Cerebellar substructure integrity in amyotrophic lateral sclerosis and behavioural variant frontotemporal dementia - *R Tan (Australia)*
- 11.45 – 12.00** Proton MRSI of cerebellum in ALS - *K Sharma (USA)*
- 12.00 – 12.15** Discriminant value of ^{18}F FDG-PET in amyotrophic lateral sclerosis - *A Chiò (Italy)*
- 12.15 – 12.30** Development of a PET radioligand for the non-invasive imaging of cannabinoid type 2 receptor - *L Mu (Switzerland)*

12.30 – 14.00 LUNCH

Location: Restaurant

Location: Mizar

SESSION 7A GENETICS AND GENOMICS

Chairs: *L van den Berg (Netherlands) J Kirby (UK)*

- 14.00 – 14.15** Reduced C9orf72 gene expression in C9FTD/ALS is caused by trimethylation of histone H3K9 - *V Belzil (USA)*
- 14.15 – 14.30** Extensive Southern blot study of C9orf72 expansion carriers - *M van Blitterswijk (USA)*
- 14.30 – 14.45** C9orf72 GGGGCC expanded repeats produce splicing dysregulation which correlates with disease severity in amyotrophic lateral sclerosis (ALS) - *J Cooper-Knock (UK)*
- 14.45 – 15.00** Motor neuron specific translational profiling in SOD1G93A transgenic mice - *B Zhao (Canada)*
- 15.00 – 15.15** More evidence supporting perturbation in extracellular and transmembrane domains and of protein signalling by transcriptome analysis of motor neurons from sporadic ALS spinal cords - *J Ravits (USA)*
- 15.15 – 15.30** Translational study of potential prognostic and diagnostic biomarkers to human samples - *A Calvo (Spain)*

Location: Aquarium

SESSION 7B BIOMARKERS

Chairs: *B Brooks (USA) N Leigh (UK)*

- 14.00 – 14.15** Serum creatinine, a biomarker for muscle mass in amyotrophic lateral sclerosis (ALS), predicts loss of ambulation measured by ALS functional rating scale-revised walking item score (ALSFRSw) - *M Fischer (USA)*
- 14.15 – 14.30** Misfolded SOD1 in blood plasma is an antibody-accessible biomarker for sporadic ALS - *N Cashman (Canada)*
- 14.30 – 14.45** Proton NMR spectroscopy metabolomics in serum and CSF - *E Gray (UK)*
- 14.45 – 15.00** Beta-band intermuscular coherence as a biomarker of upper motor neuron dysfunction in motor neuron disease - *S Jaiser (UK)*
- 15.00 – 15.15** Transglutaminase 6 antibodies in the serum of patients with ALS – is gluten sensitivity involved in motor neuron degeneration? - *V Drory (Israel)*
- 15.15 – 15.30** Effect of lipid profile on prognosis in patients with amyotrophic lateral sclerosis - *M Rafiq (UK)*

15.30 – 16.00 COFFEE

Location: Aquarium / Mizar lobby

Location: Mizar

SESSION 8A GENETICS

- Chairs: **A Al-Chalabi (UK) P Andersen (Sweden)**
- 16.00 – 16.15** Genetic background effects on lifespan of SOD1 mouse models of ALS - *R Sher (USA)*
- 16.15 – 16.30** AATXN2 CAG repeat expansions increase the risk for Chinese ALS patients - *X Liu (China)*
- 16.30 – 16.45** Genome-wide association analyses in Han Chinese identify two new susceptibility loci for amyotrophic lateral sclerosis - *M Deng (China)*
- 16.45 – 17.00** A genome-wide association meta-analysis identifies a novel locus at 17q11.2 associated with sporadic amyotrophic lateral sclerosis - *I Fogh (UK)*
- 17.00 – 17.15** Exome sequencing to identify de novo mutations in sporadic ALS trios - *A Gitler (USA)*
- 17.15 – 17.30** Using public databases of genetic variation to test the pathogenicity of reported ALS mutations - *K Kenna (Ireland)*

Location: Aquarium

SESSION 8B TRIALS AND TRIAL DESIGN

- Chairs: **M Cudkowicz (USA) V Meininger (France)**
- 16.00 – 16.15** The effect of tirasemtiv on functional status in patients with ALS - *J Shefner (USA)*
- 16.15 – 16.30** Efficacy of Erythropoietin in amyotrophic lateral sclerosis: a multicentre, randomized, double blind, placebo controlled phase III study (EPOS trial) - *G Lauria (Italy)*
- 16.30 – 16.45** Additional follow-up and biomarker data from a Phase II safety and preliminary efficacy trial of NP001: a novel immune regulator for slowing progression of ALS - *R Miller (USA)*
- 16.45 – 17.00** Identification of improved clinical outcomes and creatinine-sparing effect of dexamipexole based on significant inter-study differences in the Phase 2 and Phase 3 (EMPOWER) clinical trials in ALS - *M Bozik (USA)*
- 17.00 – 17.15** Fetal neural stem cells transplantation in ALS: preliminary results of a phase I clinical trial - *L Mazzini (Italy)*
- 17.15 – 17.30** Analysis of patients with amyotrophic lateral sclerosis (ALS) treated with autologous differentiated mesenchymal stem cells: a Phase I/II and IIa clinical trial - *D Karussis (Israel)*

POSTER SESSION B *Kindly supported by Cytokinetics*

17.45 – 19.30

Location: Quasar

- 17.45 – 18.20** Theme 7: Genetics
- 18.55 – 19.30** Theme 11: Therapeutic strategies
- 18.55 – 19.30** Theme 12C: Clinical work in progress and care practice
- 18.55 – 19.30** Theme 12B: Resources and repositories

Location: Aquarium

- 17.45 – 18.20** Theme 5: Improving diagnosis, prognosis and disease progression
- 18.20 – 18.55** Theme 4: Imaging, electrophysiology and markers of disease progression
- 18.20 – 18.55** Theme 3: Epidemiology

Sunday 8 December 2013

Location: Mizar

SESSION 9A GLIAL BIOLOGY AND PATHOLOGY

- Chairs: **L Van Den Bosch (Belgium) J Rothstein (USA)**
- 08.30 – 09.00** Oligodendrocytes: from biology to disease - *P Casaccia (USA)*
- 09.00 – 09.15** Oligodendrocytes from the ALS mouse model and ALS patients are toxic to motor neurons in vitro - *L Ferraiuolo (USA)*
- 09.15 – 09.30** Altered astrocytic expression of TDP-43 does not influence motor neuron survival - *A Haidet-Phillips (USA)*
- 09.30 – 09.45** Mutant TDP-43 triggers astrocytic activation and impaired glutamate transport in primary cultures derived from TDP-43 (A315T) mice - *C Lau (Australia)*
- 09.45 – 10.00** Human sporadic ALS and rodent familial ALS primary astrocytes are selectively toxic to spinal motor neurons through the same death pathway - *V Le Verche (USA)*

Location: Aquarium

SESSION 9B DISEASE PROGRESSION

- Chairs: **A Ludolph (Germany) M de Carvalho (Portugal)**
- 08.30 – 09.00** ALS/MND as a disease spectrum: time to leave the lumpers behind? - *M Strong (Canada)*
- 09.00 – 09.15** Being PRO-ACTive – what a clinical trials database can reveal about ALS - *M Leitner (USA)*
- 09.15 – 09.30** Isometric muscle testing using hand held dynamometry (HHD) in a multicenter ALS trial - *J Shefner (USA)*
- 09.30 – 09.45** Bulbar ALS: predicting survival from physiological measures of speech - *Y Yunusova (Canada)*
- 09.45 – 10.00** The soleus H-Reflex delineates upper motor neurone pathophysiology in amyotrophic lateral sclerosis - *N Simon (Australia)*

10.00 – 10.30 COFFEE

Location: Aquarium / Mizar lobby

Location: Mizar

SESSION 10A PROTEIN PROCESSING AND DEGRADATION

- Chairs: *V Bonetto (Italy) A Gitler (USA)*
- 10.30 – 11.00** Mechanisms of prion-induced toxicity - *A Aguzzi (Switzerland)*
- 11.00 – 11.15** In vivo propagation of human wild-type SOD1 misfolding in a transgenic mouse model - *N Cashman (Canada)*
- 11.15 – 11.30** Overexpression of human wild-type SOD1 hastens disease onset and induces earlier presence of mutant SOD1 aggregates in a mouse model of ALS - *E Tokuda (Sweden)*
- 11.30 – 11.45** Protein stability and neurodegenerative disease - *G Wright (UK)*
- 11.45 – 12.00** Studying aggregation and distribution of TDP-43 in mammalian cells using biarsenical labelling - *J Ng (UK)*
- 12.00 – 12.15** Stages of pTDP-43 pathology in ALS - *J Brettschneider (Germany)*
- 12.15 – 12.30** C9orf72 regulates protein degradation pathways - *M Farg (Australia)*

Location: Aquarium

SESSION 10B RESPIRATORY AND NUTRITIONAL MANAGEMENT

- Chairs: *G Mora (Italy) R Tandan (USA)*
- 10.30 – 11.00** Assessment and maintenance of caloric needs in ALS - *R Tandan (USA)*
- 11.00 – 11.15** A multi-centre evaluation of secretion management in patients with motor neurone disease (MND) - *A McGeachen (UK)*
- 11.15 – 11.30** Oral Secretion Score (OSS) predicts best care interventions and outcomes of patients with ALS/MND using non-invasive ventilation (NIV) - *P Cazzolli (USA)*
- 11.30 – 11.45** Nocturnal transcutaneous capnography in ALS is a reliable and non-invasive parameter for deciding non-invasive ventilation in ALS patients - *N Pageot (France)*
- 11.45 – 12.00** Can NIV parameters settings and changes over time predict functional and survival outcome in ALS patients? - *A Pinto (Portugal)*
- 12.00 – 12.15** Diaphragm functional analysis at the upper and lower spectrum of forced vital capacity (FVC) in ALS/MND: FVC inadequately assesses diaphragm function or upper motor neuron involvement for stimulatability - *R Onders (USA)*
- 12.15 – 12.30** An ambulatory model of non-invasive ventilation implementation improves survival in motor neurone disease - *N Sheers (Australia)*

12.30 – 14.00 LUNCH

Location: Restaurant

Location: Mizar

SESSION 11 JOINT CLOSING SESSION

- Chairs: *W Robberecht (Belgium) K Talbot (UK)*
- 14.00 – 14.05** Invitation to Brussels 2014
- 14.05 – 14.10** Poster Prize presentation
- 14.10 – 14.20** Late breaking news
- 14.20 – 15.00** The future of ALS therapeutics - *T Miller (USA)*

Theme 1 Multidisciplinary Care and Quality of Life

P01 MULTIDISCIPLINARY ALLIED HEALTH PRACTICE GUIDELINES FOR PHYSICAL, SPEECH AND OCCUPATIONAL THERAPY IN ALS
OFFERINGA A, BROEK TEN J, OUDENAARDEN J, SCHAAF VAN DER M

P02 DEVELOPING A REMOTE MULTIDISCIPLINARY CLINIC: INITIAL OBSERVATIONS AND LESSONS LEARNED
KASARSKIS E, VANDERPOOL K, GOULSON D

P03 MULTIDISCIPLINARY TEAMS: EXCELLENT CARE FOR PATIENTS, BUT HOW DO WE CARE FOR OURSELVES?
AXLINE R

P04 PATIENTS' AND PROFESSIONALS' PERSPECTIVES ON CASE MANAGEMENT IN ALS CARE
BAKKER M, CREEMERS H, SCHIPPER K, BEELEN A, NOLLET F, ABMA T

P05 COMPREHENSIVE CARE AND HOME TELEHEALTH FOR VETERANS WITH ALS
KELSEN L, MCCOY S, HOFFMAN P, PATWA H

P06 THE COST OF MANAGING ALS IN A TERTIARY REFERRAL CLINIC: A RETROSPECTIVE CHART REVIEW
CONNOLLY S, TOBIN K, HESLIN C, GALVIN M, HARDIMAN O

P07 THE ROLE ANALYSIS OF THE COORDINATORS FOR PATIENTS WITH INTRACTABLE DISEASES IN JAPAN FROM THE POINT OF VIEW OF CONTINUITY OF CARE
IWAKI M, NAKAI M, TATEISHI T, MURAI H, HAYASHI S, KIRA J

P08 THE TRACE TO THE FIGHT FOR THE IMPROVEMENT IN PALLIATIVE CARE OF THE PATIENTS WITH ALS IN JAPAN
OGINO M, MINAMI S, KANAZAWA N, TAKAHASHI-NARITA K, OGINO Y

P09 PALLIATIVE APPROACH IN AMYOTROPHIC LATERAL SCLEROSIS: A POPULATION-BASED STUDY IN ITALY
ILARDI A, CAMMAROSANO S, MANERA U, BERTUZZO D, PESSIA A, MOGLIA C, CALVO A, VERONESE S, MANAZZA A D, BERSANO G, CHIÒ A

P10 EXAMINING THE RELATIONSHIP OF BULBAR AND LIMB FUNCTION TO PATIENT REPORTED QUALITY OF LIFE: A MULTINATIONAL STUDY
SIMMONS Z, STEPHENS H, FELGOISE S, ABRAHAMS S, CZELL D, GENGE A, GOTKINE M, JACKSON C, KORNGUT L, O'CONNELL C, WEBER M, ZINMAN L

P11 THE EFFECT OF A MULTIDISCIPLINARY CARE PROGRAM ON ALS PATIENTS SURVIVAL
PAIPA A, POVEDANO M, TURON J

P12 EFFECTS OF COGNITIVE BEHAVIOURAL THERAPY (CBT) IN PATIENTS WITH ALS AND THEIR PARTNERS; PRELIMINARY RESULTS
VAN GROENESTIJN AC, SCHRÖDER CD, VISSER-MEILY JM, VAN DEN BERG LH

P13 BREAKING THE NEWS IN AMYOTROPHIC LATERAL SCLEROSIS. ALS PATIENTS' REFLECTIONS ON THE TWO-TIERED APPROACH OF THE ALS CENTRE AMSTERDAM
SEEBER A, POLS A, HIJDR A, WILLEMS D, DE VISSER M

P14 DIFFICULTIES OF HOME CARE NURSES SUPPORTING INDIVIDUALS WITH AMYOTROPHIC LATERAL SCLEROSIS UNTIL END-OF-LIFE
USHIKUBO M, IIDA M, OKAMOTO K

P15 FRAIL TERMINALITY: HEALTH PROFESSIONALS' AND CARERS' DYNAMIC AND DIVERGING PERCEPTIONS OF CHRONICITY AND TERMINALITY IN ALS/MND
LERUM S, HOLMØY T, SOLBRÆKKE K, FRICH J

P16 PLANNING AHEAD FOR PATIENTS WITH MOTOR NEURONE DISEASE
BATES C, GREENE M, ROSE G, LARRSON E, RADUNOVIC A

P17 THE MEANING OF LOSS FOR PEOPLE WITH AMYOTROPHIC LATERAL SCLEROSIS: IMPACT ON DECISION-MAKING IN CARE
FOLEY G, TIMONEN V, HARDIMAN O

P18 WHERE AND HOW DO PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS (ALS) DIE?
VARELA CERDEIRA M, SANZ PECES E, GAINZA MIRANDA D, RODRIGUEZ BARRIENTOS R, ALONSO BABARRO A, RODRIGUEZ DE RIVERA F

P19 INTERACTION OF PHYSICAL FUNCTION, QUALITY OF LIFE AND DEPRESSION IN AMYOTROPHIC LATERAL SCLEROSIS: CHARACTERIZATION OF A LARGE PATIENT COHORT
KOERNER S, KOLLEWE K, ABDULLA S, ZAPF A, DENGLER R, PETRI S

P20 BULBAR SYMPTOMS AS PHYSICAL DETERMINANTS OF QUALITY OF LIFE IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS: A SYSTEMATIC REVIEW
MOHAMMAD M, YOUNG C

P21 THE RELATIONSHIP BETWEEN BULBAR FUNCTION AND QUALITY OF LIFE IN PATIENTS WITH ALS
DAVIES J, STEPHENS H, SIMMONS Z

P22 PSYCHOSOCIAL FACTORS AFFECTING QUALITY OF LIFE IN MOTOR NEURONE DISEASE: A SYSTEMATIC REVIEW OF THE LITERATURE
NEE L, GOLDSTEIN L, YOUNG C

P23 FUNCTIONING, FATIGUE AND PSYCHOSOCIAL FEATURES OF MND/ALS: ASSOCIATIONS CHANGE OVER TIME AND IMPACT ON PATIENT QUALITY OF LIFE
GIBBONS C, THORNTON E, EALING J, SHAW P, TALBOT K, TENNANT A, YOUNG C

P24 PHYSICAL THERAPY AND EXERCISES TO PATIENTS WITH ALS
VERSTERRE S, BUUS L

P25 EFFECTS OF ENDURANCE TRAINING ON QUALITY OF LIFE IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS
PRATI C, BASILICO M, SARTORELLI L, PICARDI M, PAIN D, MARINOU K, MORA G

P26 AN EVALUATION OF THE EFFECT OF CORTICOSTEROID INJECTION ON SHOULDER PAIN AND SLEEP QUALITY IN PATIENTS WITH MOTOR NEURON DISEASE
CAMPION A, CALDWELL F, GILSENAN C, MURRAY D, VANCE R, MCGROARTY D, HARDIMAN O

P27 RELATIONSHIP BETWEEN QUALITY OF LIFE AND RESPIRATORY ASPECTS, DIAGNOSIS TIME AND FUNCTIONALITY IN AMYOTROPHIC LATERAL SCLEROSIS
VITAL DE CARVALHO E, SOARES SANTOS N, GONÇALVES HOLSAPFEL S, LEICO ODA A, STANICH P, SOUZA BULLE OLIVEIRA A

P28 DISABILITY, ASSISTANCE AND MOBILITY AIDS IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS
ORTIZ-CORREDOR F, MENDOZA-PULIDO C, PEÑA-PRECIADO M, MORA M

P29 UROLOGICAL MANAGEMENT IN AMYOTROPHIC LATERAL SCLEROSIS/MOTOR NEURON DISEASE (ALS/MND): SUBRAPUBIC CATHETERS CAN IMPROVE QUALITY OF LIFE BUT ARE UNDERUTILIZED
ONDERS R, ELMO M, PONSKY L, KAPLAN C, KATIRJI B

P30 HOW MUCH IS THE OPTIMAL INITIAL DOSE OF MORPHINE FOR ALS PATIENTS?
OGINO Y, MIYAKAWA S, URANO Y, KITAMURA E, UCHINO A, KANEKO J, TOMINAGA N, TAKAHASHI-NARITA K, NAGASHIMA K, NAGAI M, OGINO M

P31 VOICE BANKING AND VOICE RECONSTRUCTION FOR MND PATIENTS
VEAUX C, YAMAGISHI J, KING S, COLVILLE S

P32 FINDING IN THE INTELLIGIBILITY SCALE OF SPEECH RELATED TO MYOELASTIC-AERODYNAMIC MECHANISMS OF PATIENTS WITH MOTOR NEURONE DISEASES
ODA AL, SIERRA HNM, ALVES PCL, VECINA ALC, BRUNORO ACV, SILVA R, STANICH P, OLIVEIRA ASB

P33 A SURVEY OF POWER WHEELCHAIR USERS WITH ALS/MND; CHANGING NEEDS OVER TIME
WARD A

P34 EYE-TRACKING COMPUTER SYSTEM UTILIZATION BY PATIENTS WITH ADVANCED AMYOTROPHIC LATERAL SCLEROSIS
SPATARO R, MANNO C, CIRIACONO M, LA BELLA V

P35 SATISFACTION OF ALS CLIENTS AND CAREGIVERS WITH TRAINING ON USE OF AN EYE-GAZE SYSTEM IN A FACILITY SETTING
CHAM E, POIRIER B

P36 VIDEOENDOSCOPIC EVALUATION OF SWALLOWING (VEES) IN PATIENTS WITH MOTOR NEURON DISEASE/AMYOTROPHIC LATERAL SCLEROSIS
SCHWEIKERT K, WILMES S, DUNKEL N, WEBER M, SCHLAEGEL W

P37 PALATAL PLATE IMPLANTATION FOR THE TREATMENT OF DYSARTHRIA AND SEVERE HYPERNASALITY IN ALS PATIENTS
PASIAN V, PIUMETTO E, CERUTI P, MOGLIA C, CALVO A, GASSINO G, CHIÒ A

P38 ONE-HANDED FEEDING TUBE ASSIST DEVICE FOR ALS CLIENTS WITH DECREASED HAND FUNCTION
BEGGS K, CHAM E

Theme 2 Respiratory and Nutritional Management

P39 INITIAL RESULTS FROM THE HIGH FAT/HIGH CALORIE VERSUS OPTIMAL NUTRITION IN ALS CLINICAL TRIAL

WILLS A, HUBBARD J, MACKLIN E, MAHONEY K, GRASSO D, SOODOO N, LISI J, SIMPSON E, LAWSON R, YU H, CUDKOWICZ M

P40 EFFECT OF BCAA SUPPLEMENTATION ENRICHED OF LEUCINE IN AMYOTROPHIC LATERAL SCLEROSIS PATIENTS
BONGIOANNI P, CORBIANCO S, DINI M

P41 PROSPECTIVE STUDY OF HYDRATION STATUS IN ALS PATIENTS
TANDAN R, BROMBERG M, KASARSKIS E, MITSUMOTO H, SIMMONS Z, MATTHEWS D

P42 PERFORMANCE OF NUTRITION TEAM SPECIALIZED IN TREATMENT OF PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS-ALS
STANICH P, SALVIONI CCS, ALMEIDA CS, GOMES M, TEIXEIRA EZ, BASSOLLI L, OLIVEIRA ASB

P43 GASTROSTOMY USE IN MND: FACTORS INFLUENCING DECISIONS, CHALLENGES AND BENEFITS FROM THE PERSPECTIVE OF PATIENTS AND THEIR INFORMAL CARERS
STAVROULAKIS T, BAIRD W, BAXTER S, WALSH T, SHAW PJ, MCDERMOTT C

P44 ANALYSIS OF PREDICTIVE FACTORS FOR SURVIVAL PROGNOSIS AT THE TIME OF PERCUTANEOUS ENDOSCOPIC GASTROSTOMY IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS
BOKUDA K, SHIMIZU T, IMAMURA K, KAWATA A, NAKANO I

P45 DAILY ENERGY EXPENDITURE ASSESSED BY DOUBLY-LABELLED WATER METHOD IN JAPANESE PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS
SHIMIZU T, ISHIKAWA-TAKATA K, NAGAOKA U, ICHIHARA N, ISHIDA C, NOBUKUNI K, NAKANO I, NISHIZAWA M

P46 EFFECTS OF COUGH AUGMENTATION ON PULMONARY MORBIDITY, SURVIVAL AND QUALITY OF LIFE IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS IN RESPIRATORY FAILURE: A RANDOMISED CONTROLLED TRIAL
RAFIQ M, BRADBURN M, PROCTOR A, BILLINGS C, BIANCHI S, MCDERMOTT C, SHAW PJ

P47 THE RELATION BETWEEN THE PEAK COUGH FLOW AND THE FUNCTIONAL ORAL INTAKE SCALE ASSOCIATED WITH THE FUNCTIONALITY IN PATIENTS DIAGNOSED WITH MOTOR NEURONE DISEASES

ODA AL, ALVES PCL, SIERRA HNM, SILVA R, VECINA ALC, BRUNORO ACV, STANICH P, OLIVEIRA ASB

P48 THE BALLOON – BASED MANOMETRY: EVALUATION OF SWALLOWING IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS
TOMIK J, TOMIK B, GAJEK S, SKLADZIEN J, WIATR M, STREK P, OLES K

P49 COORDINATION OF SWALLOWING AND BREATHING IN PATIENT WITH AMYOTROPHIC LATERAL SCLEROSIS
BIANCHI F, LUNETTA C, CORBO M, MORA G, GINOCCHIO D

P50 CORRELATION AMONG FORCED VITAL CAPACITY, RESTING ENERGY EXPENDITURE AND SEGMENTAL TRUNK BIOELECTRICAL IMPEDANCE ANALYSIS IN ALS PATIENTS FOR PREDICTING CLINICAL DISEASE PROGRESSION: A PRELIMINARY STUDY

BONGIOANNI P, DINI M, CORBIANCO S, CICCARESE R

P51 RESPIRATORY IMPAIRMENT IN PATIENTS WITH MOTOR NEURON DISEASE: REFERRAL PROCESS AND FIRST ASSESSMENT AT A HOME VENTILATION SERVICE IN THE NETHERLANDS
RAAPHORST J, TUIJP J, VERWEIJ L, WESTERMANN E, VAN DER KOOI A, GAYTANT M, VAN DEN BERG L, DE VISSER M, KAMPELMACHER M

P52 RESPIRATORY ASSISTIVE CARE APPLIED TO HYPOVENTILATION WITHOUT SIGNIFICANT DIAPHRAGMATIC DYSFUNCTION IN AMYOTROPHIC LATERAL SCLEROSIS
YAMAUCHI R, IMAI T, TSUDA E, YAMAMOTO D, HOZUKI T, SHIMOHAMA S

P53 NON-TERMINAL WEANING FROM INVASIVE VENTILATION IN ALS / NMD
RATNER E, AARON T, BATEMAN A

P54 NON-INVASIVE VENTILATION IN MOTOR NEURON DISEASE: ONE CENTRE'S EXPERIENCE
PROCTOR A, WALSH T, BILLINGS C, MCDERMOTT C, SHAW PJ

P55 BRAZILIAN NON-INVASIVE VENTILATION ASSISTANCE PROGRAM FOR PATIENTS WITH MOTOR NEURON DISEASES, IN THE CITY OF SÃO PAULO

ODA AL, STANICH P, ALVES PCL, CARVALHO EV, HOLSAPFEL SGA, AKAMINE RT, MOREIRA GA, CHIEIA MA, OLIVEIRA ASB

P56 PREOPERATIVE TESTING IN ALS PATIENTS PREDICTS DIAPHRAGMATIC RESPONSE TO DIRECT STIMULATION
SHAH A, TSIMERINOV E, MUTHUKUMARAN A, ELSAYEGH A, BALOH R, LEWIS R

P57 NOCTURNAL PULSE OXIMETRY AS AN INDICATOR OF SURVIVAL IN AN ALS CLINICAL POPULATION
LO COCO D, TAIELLO A C, SPATARO R, LA BELLA V

P58 REM SLEEP BEHAVIOR DISORDER AND PERIODIC LEG MOVEMENTS IN SLEEP IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS
LO COCO D, MATTALIANO P, PULIGHEDDU M, FANTINI ML, MATTALIANO A, LA BELLA V, BORGHIERO G, CONGIU P, GIOI G

Theme 3 Cognitive and Psychological Assessment and Support

P59 FREQUENCY OF COGNITIVE IMPAIRMENT IN ALS PATIENTS
TURON J, GASCON J, REÑE R, RICO I, GAMEZ C, ANDRES B, MONTERO J, POVEDANO M

P60 THE COGNITIVE PROFILE OF ALS. UPDATE OF A META-ANALYSIS AS A BASIS FOR A COGNITIVE SCREEN
BEELDMAN E, RAAPHORST J, DE HAAN R, DE VISSER M, SCHMAND B

P61 THE VERBAL FLUENCY INDEX: NORMATIVE DATA BASED ON A SAMPLE OF HEALTHY DUTCH CONTROLS
JAEGER B, RAAPHORST J, BEELDMAN E, SEELEN M, VELDINK JH, VAN DEN BERG LH, DE VISSER M

P62 BRAIN COMPUTER INTERFACE AND EYE-TRACKING FOR COGNITIVE ASSESSMENT IN AMYOTROPHIC LATERAL SCLEROSIS: THE EBRAIN PROJECT

POLETTI B, CARELLI L, SOLCA F, LAFRONZA A, ZAGO S, TICOZZI N, MESSINA S, MORELLI C, MERIGGI P, CIPRESSO P, PEDROLI E, LULÉ D, LUDOLPH AC, RIVA G, SILANI V

P63 USE OF FNIR TO EXAMINE HEMODYNAMIC CHANGES DURING COGNITIVE TASKS IN INDIVIDUALS WITH ALS

SCULL L, AYAZ H, SHEVOKIS P, LIBON D, WICAS G, EPPIG J, FELDMAN S, DEBOO A, HEIMAN-PATTERSON T

P64 THE ITALIAN VERSION OF THE ALS-COGNITIVE BEHAVIORAL SCREEN (ALS-CBS): A MOTOR NEURON DISEASE DEDICATED TOOL
LUNETTA C, TREMOLIZZO L, SUSANI E, PERINI M, SPINAZZOLA L, CORBO M, WOOLLEY SC, ISELLA V, FERRARESE C, APPOLLONIO I

P65 PRIMITIVE REFLEXES FOR THE SCREENING OF COGNITIVE DYSFUNCTION IN AMYOTROPHIC LATERAL SCLEROSIS

LUNETTA C, TREMOLIZZO L, SUSANI E, CORBO M, FERRARESE C, APPOLLONIO I

P66 CALLOSAL DYSFUNCTION AND COGNITIVE IMPAIRMENT IN ALS: IS THERE A LINK?

CONSONNI M, FEA N, CATRICALÀ E, DALLABELLA E, PATRIZIA D, GIUSEPPE P, SALSANO E, CERAMI C, CANESSA N, BOFFANO C, PAREYSON D, CAPPÀ S, LAURIA G

P67 PATTERN OF PERSONALITY CHANGES IN ALS: A PRELIMINARY LONGITUDINAL STUDY

PARDINI M, SCIALÒ C, MASCOLO M, DE ROSA E, AMERIO F, FERULLO C, MANCARDI G, CAPONNETTO C

P68 CHARACTERISTICS AND CLINICAL SIGNIFICANCE OF EXECUTIVE FUNCTIONING IN AMYOTROPHIC LATERAL SCLEROSIS (ALS) WITH AND WITHOUT FTD

KASPER E, SCHUSTER C, MACHTS J, VEIT M, BITTNER D, KAUFMANN J, BENECKE R, TEIPEL S, VIELHABER S, PRUDLO J

P69 SEMANTIC IMPAIRMENT PROFILES OF THE FTD-MND CONTINUUM

LESLIE FVC, HSIEH S, CAGA J, MIOSHI E, KIERNAN MC, HODGES JR, BURRELL JR

P70 CEREBROSPINAL FLUID PROGRANULIN LEVELS IN AMYOTROPHIC LATERAL SCLEROSIS ARE ASSOCIATED WITH FRONTO-EXECUTIVE DYSFUNCTION

BITTNER DM, MACHTS J, KASPER E, SCHUSTER CH, PRUDLO J, HEINZE H-J, VIELHABER ST

P71 BEHAVIOURAL ASSESSMENT OF AMYOTROPHIC LATERAL SCLEROSIS

MONTUSCHI A, LO PRESTI A, IAZZOLINO B, CASALE F, CALVO A, MOGLIA C, CAMMAROSANO S, ILARDI A, CHIÒ A

P72 A NOVEL TOOL FOR DETECTION OF NEUROPSYCHIATRIC SYMPTOMS IN ALS – THE MIND-BEHAVIOURAL (MIND-B)

MIOSHI E, HSIEH S, CAGA J, RAMSEY E, CHEN K, SIMON N, LILLO P, HORNBERGER M, VUCIC S, HODGES J, KIERNAN M

P73 DELAY IN DIAGNOSIS IS A MAIN RISK FACTOR FOR DEPRESSION IN MND

CAGA J, RAMSEY E, MIOSHI E, KIERNAN MC

P74 CONFOUNDERS OF DEPRESSION MEASUREMENT IN ALS/MND: META-REGRESSION ANALYSIS OF PUBLISHED LITERATURE

GIBBONS C, MANZONI GM, PAGNINI F

P75 GROUP INTERVENTION BASED ON MINDFULNESS FOR HOSPITAL HEALTH CARE PROVIDERS: TAKING CARE OF THOSE WHO CARE

MARCONI A, FOSSATI F, ROSSI G, GATTO R, SANSONE V

P76 ALS PATIENT'S DEATH: PSYCHOLOGICAL IMPACT ON THE CAREGIVER

CALVO V, PALMIERI A, KLEINBUB JR, QUERIN G, SAMBIN M, BARILARO P, SORARÙ G

Theme 4 Imaging, Electrophysiology and Markers of Disease Progression

P77 NEUROIMAGING IN ALS AS A FEASIBLE STRATEGY FOR CLINICAL THERAPY: TARGETS AND LIMITS

COVA L, BOSSOLASCO P, DIANA V, MICOTTI E, SITIA L, GIARDINO D, MOSCATELLI D, BIGINI P, SILANI V

P78 NEUROIMAGING CORRELATES OF IMPAIRED MOTOR FUNCTION IN AMYOTROPHIC LATERAL SCLEROSIS

KORITNIK B, PECARIC MEGLIC N, SIRNIK A, ZIDAR J

P79 TRACKING DISEASE PROGRESSION BY MRI: CLINICAL FEATURES OF AMYOTROPHIC LATERAL SCLEROSIS CORRELATE WITH FOCAL CORTICAL THINNING OF THE MOTOR CORTEX

SCHUSTER C, KASPER E, MACHTS J, BITTNER D, KAUFMANN J, BENECKE R, TEIPEL S, VIELHABER S, PRUDLO J

P80 POLING OF DTI METRICS DERIVED FROM DIFFERENT MR-PROTOCOLS: AN EX POST FACTO METHODOLOGICAL PILOT STUDY IN ALS

MÜLLER H-P, GORGES M, ROßKOPF J, LUDOLPH A C, KASSUBEK J

P81 DIFFUSION TENSOR TRACTOGRAPHY ANALYSIS OF THE CORPUS CALLOSAL FIBERS IN AMYOTROPHIC LATERAL SCLEROSIS

KIM J-E, OH JS, SUNG J-J, LEE K-W, SONG IC, HONG Y-H

P82 PATH OF INTEREST-BASED DTI METRICS ANALYSIS ON AFFECTED TRACT STRUCTURES IN THE BRAINS OF ALS PATIENTS

KASSUBEK J, MÜLLER H-P, DEL TREDICI K, BRETTSCHEIDER J, BRAAK H, LUDOLPH A C

P83 DISSOCIATION OF STRUCTURAL AND FUNCTIONAL MOTOR SYSTEM INTEGRITY ACROSS THE AMYOTROPHIC LATERAL SCLEROSIS – FRONTOTEMPORAL DEMENTIA CONTINUUM

BAE J, FERGUSON M, TAN R, LAM B, MENON P, MIOSHI E, SIMON N, BURRELL JR, VUCIC S, HODGES J, KIERNAN M, HORNBERGER M

P84 CORPUS CALLOSUM INVOLVEMENT IN AMYOTROPHIC LATERAL SCLEROSIS: A PROBABILISTIC TRACTOGRAPHY STUDY USING Q-BALL IMAGING

TROJSI F, CORBO D, CAIAZZO G, PICCIRILLO G, ESPOSITO F, MONSURRO MR, TEDESCHI G

P85 RESTING STATE FUNCTIONAL CONNECTIVITY ALTERATIONS IN PRIMARY LATERAL SCLEROSIS

AGOSTA F, CANU E, INUGGI A, CHIÒ A, RIVA N, SILANI V, FALINI A, COMI G, FILIPPI M

P86 EXTRAMOTOR PATHOLOGY IS ASSOCIATED WITH COGNITIVE DEFICITS IN PRIMARY LATERAL SCLEROSIS PATIENTS

CANU E, AGOSTA F, GALANTUCCI S, RIVA N, CHIÒ A, MESSINA S, IANNACCONE S, CALVO A, SILANI V, COPETTI M, FALINI A, COMI G, FILIPPI M

P87 CORTICAL MOTOR REPRESENTATION MAPPING BY NAVIGATED TRANSCRANIAL MAGNETIC STIMULATION & Voxel-BASED MORPHOMETRY. WHAT IS CLOSER TO THE TRUTH?

CHERVYAKOV A, BAKULIN I, BRYUKHOV V, KONOVALOV R, SAVITSKAYA N, POYDASHEVA A, ARKHIPOV I, GAVRILOV A, ZAKHAROVA M, PIRADOV M

P88 NEAR-INFRARED SPECTROSCOPY-BASED RESTING STATE ANALYSIS REVEALS ALTERED FUNCTIONAL CONNECTIVITY IN ALS-PATIENTS WITH AND WITHOUT COGNITIVE IMPAIRMENT

VEIT M1, MACHTS J, ABDULLA S, KOLLEWE K, PETRI S, DENGLER R, HEINZE H-J, VIELHABER S, KOPITZKI K

P89 FRACTIONAL ANISOTROPY LOSS IN ALS EVOLVES AS A FUNCTION OF DISEASE SEVERITY BUT LIMB- AND BULBAR-ONSET DIFFER QUANTITATIVELY WHEN MATCHED FOR SEVERITY STAGE

CARDENAS-BLANCO A, MACHTS J, ACOSTA-CABRONERO J, ABDULLA S, KOLLEWE K, PETRI S, DENGLER R, HEINZE H-J, VIELHABER S, NESTOR P

P90 ORIGIN OF FASCICULATIONS IN ALS AND BENIGN FASCICULATION SYNDROME
DE CARVALHO M, SWASH M

P91 SYMPTOM SPREAD IN PRIMARY LATERAL SCLEROSIS IS CONSISTENT WITH PATHOLOGY THAT SPREADS THROUGH AXONAL PATHWAYS AND TO CONTIGUOUS BRAIN REGIONS
FLYNN L, STEPHEN M, FLOETER MK

P92 ALTERED GLOBAL AND LOCAL RESTING STATE BEHAVIOUR IN AMYOTROPHIC LATERAL SCLEROSIS AT BASELINE AND DISEASE PROGRESSION
MACHTS J, ZHANG B, KAUFMANN J, KASPER E, SCHUSTER C, PRUDLO J, VEIT M, ABDULLA S, KOLLEWE K, PETRI S, DENGLER R, HEINZE H-J, VIELHABER S, WALTER M

P93 DISTAL ULNAR AND MEDIAN NERVE APPEARANCE IN ALS PATIENTS WITH DIFFERENT PHENOTYPES – A PROSPECTIVE ULTRASOUND STUDY
SCHREIBER S, ABDULLA S, DEBSKA-VIELHABER G, MACHTS J, FEISTNER H, GALAZKY I, OLDAG A, GOERTLER M, PETRI S, KOLLEWE K, KROPP S, HEINZE HJ, DENGLER R, VIELHABER S

P94 A RETROSPECTIVE STUDY OF ELECTROMYOGRAPHY OF THE TRAPEZIUS MUSCLE AT TIME OF DIAGNOSIS AS A PREDICTOR OF EARLY RESPIRATORY IMPAIRMENT IN ALS PATIENTS
HEGEDUS J, WHITE C, KORNGUT L

P95 DECREASED PLASMA LEVELS OF FIBRONECTIN IN AMYOTROPHIC LATERAL SCLEROSIS
OKETA Y, MIKAMI H, WATANABE T, SUZUKI M, ONO S

P96 PLASMA NEUROFILAMENTS AS A BIOMARKER OF DISEASE PROGRESSION IN ALS: INSIGHTS FROM LONGITUDINAL STUDIES IN MICE AND MAN
LU C, PETZOLD A, TOPPING J, ALLEN K, FISH M, ORRELL R, HOWARD R, GREENSMITH L, MALASPINA A

P97 EOSINOPHIL-DERIVED NEUROTOXIN AS A BIOMARKER FOR AMYOTROPHIC LATERAL SCLEROSIS
HWANG CS, LIU GT, CHANG HT

P98 SERUM FERRITIN IS ELEVATED IN AMYOTROPHIC LATERAL SCLEROSIS PATIENTS
SU X, CLARDY S, LAWSON R, STEPHENS H, SIMMONS Z, CONNOR J

P99 URINARY EXTRACELLULAR DOMAIN OF NEUROTROPHIN RECEPTOR P75 MEASUREMENTS AS A NOVEL BIOMARKER FOR MOTOR NEURON DISEASE
SHEPHEARD SR, CHATAWAY T, SCHULTZ D, RUSH RA, ROGERS M-L

P100 IRISIN, A NEWLY IDENTIFIED MYOKINE AS A CANDIDATE MARKER OF METABOLIC INVOLVEMENT IN ALS
WEYDT P, BÖHM B, LUDOPH A, SÜSSMUTH S

P101 AN IMPROVED MOTOR UNIT NUMBER INDEX (MUNIX) AS BIOMARKER FOR ALS
KOBOR I, STEIN F, KHOMENKO A, BALDARANOV D, JOHANNESSEN S, BRUUN T-H, BOGDAHN U, SCHULTE-MATTLER W

P102 “REPORTING BIOMARKER” DEVELOPMENT: UPDATE IN ALS PATIENTS TREATED WITH G-CSF-MOBILIZED HEMATOPOIETIC STEM CELLS
KHOMENKO A, BALDARANOV D, JOHANNESSEN S, KOBOR I, GRASSINGER J, STEIN F, RÖSL J, KOLLEWE K, DENGLER R, LUDOLPH A, KASSUBEK J, DEPPE M, SCHUIERER G, BRUUN T, SCHULTE-MATTLER W, BOGDAHN U

P103 THE FEATURES OF SERUM LIPID AND SURVIVAL IN ALS PATIENTS: A STUDY FROM SOUTHWEST CHINA
HUANG R, ZHENG Z, GUO X, SHANG H

P104 VIDEOFLUOROGRAPHIC MARKERS IN SPINAL AND BULBAR MUSCULAR ATROPHY (SBMA): A STUDY OF 111 JAPANESE PATIENTS
BANNO H, KATSUNO M, SUZUKI K, TANAKA S, SUGA N, HASHIZUME A, MANO T, ARAKI A, FUJIMOTO Y, NAKASHIMA T, YAMAMOTO M, SOBUE G

Theme 5 Improving Diagnosis, Prognosis and Disease Progression

P105 PROGNOSTIC FACTORS FOR SURVIVAL IN AMYOTROPHIC LATERAL SCLEROSIS PATIENTS IN A SERBIAN POPULATION
STEVIC Z, KOSTIC-DEDIC S, RAKOCEVIC-STOJANOVIC V, BASTA I, DEDIC V, LAVRNIC D

P106 ELEVATED CREATINE KINASE IS ASSOCIATED WITH A BETTER PROGNOSIS IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS
RAFIQ M, LEE E, BRADBURN M, MCDERMOTT C, SHAW PJ

P107 MYOCARDIAL INFARCTION AND TAKO-TSUBO CARDIOMYOPATHY IN FEMALE PATIENTS WITH BULBAR AMYOTROPHIC LATERAL SCLEROSIS: A POSSIBLE RELATIONSHIP?
MORELLI C, VERDE F, DORETTI A, TICOZZI N, ALTIERI A, TILOCA C, MADERNA L, MESSINA S, SILANI V

P108 MAXIMAL INSPIRATORY PRESSURE (MIP) AND FORCED VITAL CAPACITY (FVC) CORRELATE WITH DISABILITY LEVELS AT TIMES OF ALS DIAGNOSIS
ILIEVA H, VORA N, SIMPSON E

P109 ASYMMETRY OF MOTOR DYSFUNCTION IN AMYOTROPHIC LATERAL SCLEROSIS: THE EFFECT OF LIMB DOMINANCE
DEVINE M, HEGGIE S, MCCOMBE P, KIERNAN M, HENDERSON R

P110 IS THYROID HORMONE ABNORMALITY A PROGNOSTIC FACTOR OF AMYOTROPHIC LATERAL SCLEROSIS?
ZHENG Z, HUANG R, CHEN X, SHANG H

P111 OCULAR MOTOR APRAXIA: AN UNCOMMON EARLY SIGN IN AMYOTROPHIC LATERAL SCLEROSIS
MORELLI C, TICOZZI N, DORETTI A, VERDE F, ALTIERI A, LAFRONZA A, POLETTI B, GIROTTI F, CIAMMOLA A, MESSINA S, SILANI V

P112 CIRCULATING MIR-1285 AND MIR-29B AS POTENTIAL BIOMARKERS FOR AMYOTROPHIC LATERAL SCLEROSIS
CAI B, FAN D

P113 UNTARGETED METABOLOMICS IN CEREBROSPINAL FLUID OF PATIENTS WITH MOTONEURON DISORDERS: DIAGNOSIS PREDICTION TO AN EXTERNAL POPULATION
BLASCO H, CORCIA P, PRADAT PF, EMOND P, ANTAR C, VEYRAT-DUREBEX C, MOREAU C, DEVOS D, MAVEL S, GORDON PH, ANDRES CR, NADAL-DESBARATS L

P114 SPORADIC ALS: A SPINAL FLUID PATHWAY DISORDER?
SMITH R, RAVITS J, BOWSER R

P115 PHASE 2 SELECTION TRIAL OF HIGH DOSAGE CREATINE (CRE) AND TWO DOSAGES OF TAMOXIFEN (TAM) IN AMYOTROPHIC LATERAL SCLEROSIS (ALS)

ATASSI N, MACKLIN E, JACKSON K, BERKLEY J, SIMPSON E, YU H, WALKER J, SIMMONS Z, DAVID W, BARKHAUS P, SIMIONESCU L, DIMACHKIE M, PESTRONK A, SALAMEH J, WEISS M, BRAVVER E, BROOKS B, SCHOENFELD D, SHEFNER J, CUDKOWICZ M

P116 SAFETY OF DEXPRAMIPEXOLE FOR THE TREATMENT OF ALS: RESULTS FROM THE RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY, EMPOWER
HEBRANK G, KHEMANI S, BOZIK M

P117 EMPOWER SUBJECTS WITH EL ESCORIAL DEFINITE ALS EXHIBITED SIGNIFICANT BASELINE DIFFERENCES INDEPENDENT OF DISEASE DURATION AND EXPERIENCED SIGNIFICANTLY WORSE OUTCOMES
PETZINGER T, MATHER J, ARCHIBALD D, ZHANG B, BROOKS B, BOZIK M

P118 CREATININE IS A BIOMARKER OF DISEASE SUBTYPE, DISEASE PROGRESSION AND DRUG RESPONSE IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS IN THE PHASE 3 EMPOWER STUDY
PETZINGER T, MATHER J, ARCHIBALD D, BOYD S, DWORETZKY S, ZHANG B, BROOKS B, BOZIK M

P119 EQUIVALENCE OF HISTORICAL CONTROL DATA BETWEEN LARGE ALS TRIALS: SHOULD WE BE PAYING MORE ATTENTION TO THIS DATA?
KATZ J, MOORE D

P120 AEROBIC CYCLE ERGOMETER ACCORDING TO HEART RATE RESERVE (HRR) IN AMYOTROPHIC LATERAL SCLEROSIS REHABILITATION
ZUCCARINO R, CELLOTTO N, VIGNOLO M, BANDETTINI DI POGGIO M, TRUFFELLI R, GIOVE E, CIPOLLINA I, DOTTA M, BAGNOLI E, CAPONNETTO C

P121 THE USE OF EYE-TRACKER BASED NEUROPSYCHOLOGICAL TESTS FOR THE IDENTIFICATION OF C9ORF72 EXPANSIONS CARRIERS AMONG ALS PATIENTS
POLETTI B, CARELLI L, SOLCA F, LAFRONZA A, TICOZZI N, RATTI A, TILOCA C, CALINI D, MERIGGI P, CIPRESSO P, PEDROLI E, LULÉ D, LUDOLPH AC, RIVA G, SILANI V

P122 AN ASSESSMENT OF PAIN REPORTS IN ALS USING THREE LARGE DATA SETS
STEPHENS H, FELGOISE S, WALSH S, SIMMONS Z

P123 USE OF VETERANS SPECIFIC ACTIVITY QUESTIONNAIRE [VSAQ] TO ESTIMATE EXERCISE TOLERANCE IN AMBULATORY AMYOTROPHIC LATERAL SCLEROSIS (AMBALS) PATIENTS
SANJAK M, HOLSTEN S, SUPER M, LANGFORD V, BOCKENEK WL, BRAVVER E, DESAI U, LINDBLOM SC, PACCICO TJ, LUCAS NW, SMITH NP

P124 VALUES: A NATIONAL MULTICENTER STUDY EVIDENCING GENDER DIFFERENCES IN THE BEHAVIORAL VARIANT OF FRONTOTEMPORAL LOBAR DEGENERATION IN AMYOTROPHIC LATERAL SCLEROSIS
FLAHERTY C, BROTHERS A, HOFFER D, HARRISON M, YANG C, LEGRO R, SIMMONS Z

P125 CLINICALLY MEANINGFUL CHANGE ON THE ALSFRS-R
RATTI E, BERRY J, HUDGENS S, CUDKOWICZ M, KERR D

P126 STATISTICAL CONSIDERATIONS IN THE PRIZE4LIFE DATA MINING CONTEST INVOLVING PREDICTING ALSFRS
SCHOENFELD D, HAYDEN D, ZACH N, KUEFFNER R, LEITNER M

P127 EVALUATING THE PENN STATE HERSHEY COMMUNICATION AND TREATMENT PREFERENCE TOOL
WALSH S, STEPHENS H, SIMMONS Z

P128 FIBEROPTIC ENDOSCOPY EVALUATION OF SWALLOWING IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS
LINHARES FILHO TA, D'OTTAVIANO FG, ROCHA MSG, ANDRADE HMT, ALVES PCL, TABACOW MEC, PEREIRA LO, SIERRA HNM, STANICH P, ODA AL, OLIVEIRA ASB

P129 PRIMARY LATERAL SCLEROSIS: ARE THE PRINGLE CRITERIA STILL VALID?
WAIS V, ROSENBOHM A, LUDOLPH AC, DORST J

P130 AN EVALUATION OF NEWLY DIAGNOSED PATIENT NEEDS: LESSONS LEARNED FROM PATIENTS AND FAMILIES
KLAPPER J, WALSH S, SCHWARTZ S, HILL S, SIMMONS Z

P131 FALSE POSITIVE DIAGNOSIS OF AMYOTROPHIC LATERAL SCLEROSIS: A TWO-YEAR RETROSPECTIVE COHORT STUDY IN TURIN
CAMMAROSANO S, ILARDI A, CANOSA A, MOGLIA C, MANERA U, BERTUZZO D, MONGINI T, CALVO A, CHIO A

P132 PHENOTYPE AND GENOTYPE STUDIES OF ALS CASES IN ALS-ASI FAMILIES
CORCIA P, BLASCO H, BIBERON J, COURATIER P, DESCHAMPS R, DESNUELLE C, VIADER F, PAUTOT V, MAUGIN D, SALACHAS F, MEININGER V, CAMU W, VOURC'H P

P133 CLINICAL AND MOLECULAR CHARACTERIZATION OF A COHORT OF PATIENTS WITH DISTAL MOTOR NEURONOPATHY
RIVA N, SCARLATO M, SCARLINO S, DEL BO R, COMI GP, CORBO M, PENCO S, FERRARI M, FOGLIO A, GRIMALDI LM, COMI G, NOBILE-ORAZIO E, MARROSU MG, GEREVINI S, BOLINO A, PREVITALI S

P134 THE CLINICAL CHARACTERISTICS OF ALS PATIENTS IN DIFFERENT ETHNIC GROUPS
KWAN J, VINTAYEN E, ZILLOX L, EMPENO R, RUSSELL J, DIAZ-ABAD M

P135 URIC ACID IN AMYOTROPHIC LATERAL SCLEROSIS: NO EFFECT ON OUTCOME IN A POPULATION-BASED SERIES
MOGLIA C, BERTUZZO D, MANERA U, CAMMAROSANO S, GALMOZZI F, CUGNASCO P, CALVO A, CHIÒ A

Theme 6 Epidemiology

P136 AMYOTROPHIC LATERAL SCLEROSIS (ALS) ESTIMATES FROM NATIONAL DATABASES IN THE UNITED STATES FROM 2001 TO 2010
SANCHEZ MS, ANTAO VC, KAYE WE, MURAVOV O, HORTON DK

P137 CLINICAL CHARACTERISTICS OF AFRICAN AMERICAN PATIENTS WITH ALS, THE NORTHWESTERN ALS/MDA CLINIC EXPERIENCE
AJROUD-DRISS S, ALLEN J, SUFIT R, HELLER S, WOLFE L, SIDDIQUE T

P138 THE EPIDEMIOLOGY OF AMYOTROPHIC LATERAL SCLEROSIS IN NEW HAMPSHIRE, USA, 2004-2007
CALLER T, ANDREW A, FIELD N, STOMMEL E

P139 INCIDENCE OF AMYOTROPHIC LATERAL SCLEROSIS IN RHINELAND-PALATINATE, GERMANY – THE ALS REGISTRY RHINELAND-PALATINATE
WOLF J, WÖHRLE J, PALM F, NIX W, MASCHKE M, BECHER H, GRAU A

P140 CLUSTERING OF ALS IN FRANCE: RESULTS OF THE BMAALS STUDY
BOUMEDIENE F, BONNETERRE V, CAMU W, LAGRANGE E, BESSON G, PREUX PM, COURATIER P, MARIN AND BMAALS GROUP B

P141 RESULTS FROM THE FIRST FRENCH ALS REGISTER: THE LIMOUSIN ALS REGISTER
MARIN B, PREUX PM, BOUMEDIENE F, NICOL M, LELEU JP, RAYMONDEAU M, HAMIDOU B, LAUTRETTE G, COURATIER P

P142 CLINICAL SPECTRUM AND NATURAL HISTORY OF MOTOR NEURON DISEASE IN KOREA
OH K-W, OH S, CHOI W-J, LIM H, SHIN KJ, KOH S-H, KIM S

P143 TRANSITIONAL METAL CONTENTS IN SCALP HAIR AND LIFESTYLE OF ALS PATIENTS AND RESIDENTS IN THE KII PENINSULA, JAPAN, THE SECOND REPORT
KIHIRA T, SAKURAI I, YOSHIDA S, WAKAYAMA I, TAKAMIYA K, NAKANO Y, OKUMURA R, IINUMA Y, IWAI K, KAJIMOTO Y, HIWATANI Y, KOHMOTO J, OKAMOTO K, KOKUBO Y, KUZUHARA S

P144 PRELIMINARY REPORT OF AFRICAN CASES IN THE TROPALS STUDY - A SURVEY OF AMYOTROPHIC LATERAL SCLEROSIS IN TROPICAL AREAS
MARIN B, DIAGANA M, HAMIDOU B, GOUIDER R, BASSE FAYE A, BALOGOU A, HOUINATO D, BOUMEDIENE F, COURATIER P, PREUX PM

P145 REAPPRAISAL OF THE NOSOLOGICAL SIGNIFICANCE OF ALS-PDC MIXED CASES ON GUAM
YOSHIDA S, UEDA T, UEBAYASHI Y, KIHIRA T, YASE Y, CHEN K-M, GARRUTO RM

P146 ALSFRS-R DECLINE IN PATIENTS FROM THE EMILIA-ROMAGNA REGISTER FOR ALS (ERRALS)
MANDRIOLI J, SALVI F, SETTE E, TERLIZZI E, RIZZI R, CASMIRO M, LIGUORI R, PASQUINELLI M, PIETRINI V, VENTURINI E, BIGUZZI S, CHIERICI E, GUIDI C, BORGHI A, SANTANGELO M, GRANIERI E, MUSSUTO V, FINI N, DE PASQUA S, D'ALESSANDRO R

P147 CLINICAL CHARACTERISTICS OF PATIENTS WITH YOUNG-ONSET ALS
LAZO C, POVEDANO M, TURON G, MONTERO J

P148 RARE ALS VARIANTS IN THE TURKISH POPULATION
IDRISOGLU HA, IDRISOGLU FM, IDRISOGLU M, POLAT N

P149 UBQLN2 IN A JUVENILE ALS WITHOUT DEMENTIA
IDRISOGLU HA, IDRISOGLU FM, IDRISOGLU M

P150 PHYSICAL ACTIVITY: A RISK FACTOR FOR MOTOR NEURONE DISEASE?
HARWOOD C, BESSON H, EKELUND U, FINUCANE F, MCDERMOTT C, WAREHAM N, SHAW P

P151 AMYOTROPHIC LATERAL SCLEROSIS, PHYSICAL ACTIVITY AND SPORT: A LITERATURE REVIEW
HAMIDOU B, MARIN B, PREUX PM, COURATIER P

P152 THE IMPACT OF PHYSICAL IMPAIRMENT ON EMOTIONAL FUNCTIONING IN ALS SEEN THROUGH THE PATIENT'S EYE
ABDULLA S, VIELHABER S, KÖRNER S, MACHTS J, HEINZE HJ, DENGLER R, PETRI S

P153 NECK WEAKNESS IS A POTENT PROGNOSTIC FACTOR IN SPORADIC AMYOTROPHIC LATERAL SCLEROSIS PATIENTS
NAKAMURA R, ATSUTA N, WATANABE H, HIRAKAWA A, WATANABE H, IZUMI Y, MORITA M, OGAKI K, TANIGUCHI A, MIZOGUCHI K, OKAMOTO K, HASEGAWA K, AOKI M, KAWATA A, ABE K, IMAI T, TSUJI S, KAJI R, NAKANO I, SOBUE G

P154 OCCUPATIONAL EXPOSURE TO ELECTRIC SHOCKS AND MAGNETIC FIELDS AND MORTALITY DUE TO MOTOR NEURON DISEASE
VERGARA X, KHEIFETS L, MEZEI G

Theme 7 Genetics

P155 GENETIC COUNSELLING IN ALS: FACTS AND UNCERTAINTIES
CHIÒ A, MORA G, SABATELLI M, BATTISTINI S, CORBO M, CAPONNETTO C, MANDICH P, PENCO S, CONFORTI F, ZOLLINO M, MANDRIOLI J, RESTAGNO G, SURBONE A

P156 WHOLE BLOOD GENE EXPRESSION PROFILES DISCRIMINATE ALS PATIENTS FROM HEALTHY CONTROLS
VAN RHEENEN W, SARIS C, DIEKSTRA F, GROEN E, MEDIC J, SCHELLEVIS R, SODAAR P, VAN ES M, BLAUW H, VAN VUGHT P, VELDINK J, VAN DEN BERG L

P157 CHANGES IN MICRORNAs EXPRESSION DISCLOSE NOVEL LINKS BETWEEN ALS AND INFLAMMATION
PARISI C, ARISI I, D'AMBROSI N, STORTI AE, BRANDI R, RICCI C, BATTISTINI S, D'ONOFRIO M, VOLONTÉ C

P158 HOMOZYGOSITY ANALYSIS IN AMYOTROPHIC LATERAL SCLEROSIS
MOK K, LAAKSOVIRTA H, TIENARI P, PEURALINNA T, MYLLYKANGAS L, CHIÒ A, TRAYNOR B, NALLS M, SHOAI M, GURUNLIAN N, SHATUNOV A, RESTAGNO G, MORA G, LEIGH P, SHAW C, MORRISON K, SHAW P, AL-CHALABI A, HARDY J, ORRELL R

P159 USING WHOLE GENOME SEQUENCING (WGS) TO SOLVE THE SPG27 QUESTION
NOREAU A, MEIJER I, GIRARD S, DIONNE-LAPORTE A, COSSETTE P, DION P, ROULEAU G

P160 ALS MOLECULAR GENETIC ANALYSIS: EXPERIENCE AT GENOA'S MEDICAL GENETICS UNIT
ORIGONE P, VERDIANI S, MANTERO V, BANDETTINI DI POGGIO M, CAPONNETTO C, MANCARDI GL, MANDICH P

P161 IMPROVING THE KNOWLEDGE OF ALS GENETICS: NOVEL SOD1 VARIANTS AND RECESSIVE FUS MUTATION
BERTOLIN C, QUERIN G, D'ASCENZO C, BOARETTO F, SALVORO C, VAZZA G, CAGNIN A, PEGORARO E, SORARÙ G, MOSTACCIUOLO M

P162 CHARACTERIZING THE GENETIC HETEROGENEITY OF ALS THROUGH MASSIVELY PARALLEL TARGETED RESEQUENCING
KENNA K, MCLAUGHLIN R, BYRNE S, HEVERIN M, KENNY E, CORMICAN P, MORRIS D, DONAGHY C, BRADLEY D, HARDIMAN O

P163 A FAMILIAL ALS CASE CARRYING A NOVEL PG147C SOD1 HETEROZYGOUS MISSENSE MUTATION
CANOSA A, RESTAGNO G, BRUNETTI M, OSSOLA I, BARBERIS M, GALMOZZI F, BERTUZZO D, CHIÒ A, TANEL R, CALVO A

P164 FAMILIAL AMYOTROPHIC LATERAL SCLEROSIS WITH CYS111TYR MUTATION IN CU/ZN SUPEROXIDE DISMUTASE SHOWING WIDESPREAD LEWY BODY-LIKE HYALINE INCLUSIONS
SUZUKI M, OKETA Y, MIKAMI H, WATANABE T, ONO S

P165 CO-OCCURRENCE OF MULTIPLE SCLEROSIS (MS) AND AMYOTROPHIC LATERAL SCLEROSIS (ALS) IN A PATIENT CARRYING A P.D109Y MISSENSE MUTATION OF SOD1 GENE
BERTUZZO D, ILARDI A, MANERA U, MOGLIA C, CALVO A, CAMMAROSANO S, VALENTINI C, BRUNETTI M, RESTAGNO G, CHIÒ A

P166 A NEW MISSENSE MUTATION IN EXON 4 OF SOD1 GENE IN A PATIENT WITH SPORADIC ALS
RICCI C, BATTISTINI S, BENIGNI M, CASALI S, GIANNINI F

P167 GENETIC BACKGROUNDS OF ADULT ONSET LOWER MOTOR NEURON SYNDROME
MASHIKO T, MORITA M, TETSUKA S, AKIMOTO C, HIGUCHI Y, HASHIGUCHI A, TAKASHIMA H, NAKANO I

P168 LOWER MOTOR NEURON DISEASE WITH PREDOMINANT RESPIRATORY FAILURE AND WITHOUT DEMENTIA CAUSED BY A NOVEL MAPT MUTATION IN AN ITALIAN KINDRED: CLINICAL, GENETIC AND PATHOLOGICAL CHARACTERIZATION
DI FONZO A, TREZZI I, MILENA C, RONCHI D, GALLIA F, SALANI S, BORDONI A, CORTI S, BOSARI S, ZUFFARDI O, BRESOLIN G, NOBILE ORAZIO E, COMI GP

P169 PHENOTYPIC VARIABILITY ASSOCIATED WITH THE R155C VCP GENE MUTATION
BATTISTINI S, RICCI C, BENIGNI M, CASALI S, GIANNINI F

P170 SOMATIC VARIATION OF THE ATAXIN-2 CAG REPEAT IN MOTOR NEURON DISEASE
EAST S, BÄUMER D, TSEU B, CLIFT A, PEPIATT J, TALBOT K, ANSORGE O

P171 A RARE MOTOR NEURON DELETERIOUS MISSENSE MUTATION IN THE DPVSL3 (CRMP4) GENE IS ASSOCIATED WITH ALS
BLASCO H, BERNARD-MARISSAL N, VOURC'H P, GUETTARD Y-O, SUNYACH C, AUGEREAU O, KHEDERCHAH J, MOUZAT K, ANTAR C, GORDON PH, VEYRAT-DUREBEX C, BESSON G, ANDERSEN PM, SALACHAS F, MEININGER V, WILLIAM C, PETTMANN B, ANDRES CR, CORCIA P

P172 MECHANISMS OF A NOVEL PHOSPHORYLATION SITE MUTATION IN PROFILIN 1
INGRE C, LANDERS J, RIZIK N, VOLK A, AKIMOTO C, BIRVE A, KEAGLE P, PIOTROWSKA K, PRESS R, ANDERSEN PM, LUDOLPH AC, WEISHAUP T JH

P173 SCREENING OF THE PFN1 GENE IN SPORADIC AMYOTROPHIC LATERAL SCLEROSIS AND IN FRONTOTEMPORAL DEMENTIA
TILOCA C, TICOZZI N, PENSATO V, BAGAROTTI A, DEL BO R, GAGLIARDI S, LAURIA G, CORTI S, GALIMBERTI D, CERONI M, SICILIANO G, CEREDA C, SCARPINI E, SORARÙ G, COMI GP, CORRADO L, GELLERA C, RATTI A, LANDERS JE, SILANI V

P174 PFN1 MUTATIONS ARE AN UNCOMMON CAUSE OF FAMILIAL AMYOTROPHIC LATERAL SCLEROSIS
CALVO A, RESTAGNO G, BRUNETTI M, BARBERIS M, OSSOLA I, MOGLIA C, CANOSA C, FUDA G, TRAYNOR BJ, JOHNSON JO, DRORY V, ROGAËVA E, ZINMAN L, SENDTNER M, DREPPER C, CHIO A

P175 ANALYSIS OF HNRNP A1, A2/B1 AND A3 GENES IN ALS PATIENTS
CALINI D, DELBO R, CORRADO L, GAGLIARDI S, PENSATO V, VERDE F, CORTI S, MAZZINI L, MILANI P, CASTELLOTTI B, BERTOLIN C, SORARÙ G, CEREDA C, COMI GP, D'ALFONSO S, GELLERA C, TICOZZI N, LANDERS JE, RATTI A, SILANI V

P176 HNRNPA1 AND HNRNPA2B1 MUTATIONS IN ALS AND OTHER PROTEINOPATHIES IN THE NETHERLANDS
SEELLEN M, VISSER A, VAN SWIETEN J, SCHELLEN P, VELDINK J, VAN ES M, VAN DEN BERG L

P177 THE MOLECULAR BASIS OF ALS IN TURKEY
 OZOGUZ A, UYAN O, BIRDAL G, AGIM ZS, OMUR O, LAHUT S, ISKENDER C, SAYGI C, KARTAL E, PARMAN Y, TAN E, KOC F, KOTAN D, ERTAS M, BILGUVAR K, GUNEL M, KESKIN O, OZCELIK H, BASAK AN

P178 EXTENSIVE GENETIC ANALYSIS IN A TAIWANESE COHORT WITH AMYOTROPHIC LATERAL SCLEROSIS
 LEE YC, TSAI CP, SOONG BS

P179 IDENTITY-BY-DESCENT IN AN IRISH ALS COHORT
 MCLAUGHLIN R, KENNA K, BRADLEY D, HARDIMAN O

P180 MOLECULAR GENETIC ANALYSIS IN RUSSIAN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS
 LYSOGORSKAIA E, ABRAMYCHEVA N, ROSSOKHIN A, ZAKHAROVA M, ILLARIOSHKIN S

P181 CONTRIBUTION OF MAJOR AMYOTROPHIC LATERAL SCLEROSIS RELATED GENES TO THE ETIOLOGY OF THE DISEASE IN CHINA
 ZOU Z, LIU M, LI X, CUI L

P182 FLJ10986 IS NOT ASSOCIATED WITH AMYOTROPHIC LATERAL SCLEROSIS IN A LARGE CHINESE COHORT
 CAI B, FAN D

P183 ASYMMETRICAL LATE-ONSET DISTAL HEREDITARY MOTOR NEUROPATHY IN A CHINESE FAMILY ASSOCIATED WITH AN HSPB1 MUTATION
 ZHANG Y, LIU X, SUN A, SONG S, FAN D

P184 POLYMORPHISM RISK FACTOR STUDY IN FGGY GENE IN CHINESE SPORADIC AMYOTROPHIC LATERAL SCLEROSIS PATIENTS
 LI X, LIN Y, LIU M, XIE M, ZHANG J, CUI L

P185 C9ORF72 REPEAT EXPANSION IN CHINESE FAMILIAL AND SPORADIC ALS PATIENTS
 TANG L, LIU R, CAI B, LIU X, YE S, MA Y, CHUI D, ZHANG H, FAN D

P186 IDENTIFICATION OF GGGGCC HEXAMER REPEAT IN ALS LYMPHOBLASTOID CELL LINES
 SARDONE V, LEE Y, SMITH BN, VANCE C, WRIGHT J, CEREDA C, NISHIMURA A, SHAW CE

P187 C9ORF72 REPEAT EXPANSIONS ARE SPECIFIC TO TDP-43 PROTEINOPATHIES
 TICOZZI N, TILOCA C, CALINI D, GAGLIARDI S, COLOMBRITA C, ALTIERI A, CEREDA C, RATTI A, PEZZOLI G, BORRONI B, GOLDWURM S, PADOVANI A, SILANI V

P188 SOMATIC HETEROGENEITY IN C9ORF72 EXPANSIONS AND THE EFFECT OF REPEAT LENGTH ON C9ORF72 TRANSCRIPTION
 COOPER-KNOCK J, HIGGINBOTTOM A, CONNOR-ROBSON N, BAYATI N, BURY J, KIRBY J, NINKINA N, BUCHMAN V, SHAW PJ

P189 C9ORF72 REPEAT EXPANSION SIZE CORRELATES WITH AGE OF ONSET AND CAUSES AGGRESSIVE DISEASE PROGRESSION IN FALS, BUT IS RARE IN OTHER MOTOR NEURON DISEASES
 HÜBERS A, VOLK A, MARROQUIN N, KUBISCH C, LUDOLPH AC, WEISHAUPT JH

P190 CAN A SIMPLE VISUAL MRI RATING ATROPHY SCALE DISTINGUISH CARRIERS OF THE C9ORF72 GENETIC MUTATION FROM NON-CARRIERS?
 DEVENNEY E, TAN R, MIOSHI E, KIERNAN M, HODGES J, HORNBERGER M

Theme 8 Human Cell Biology and Pathology

P191 THE EFFECT OF HEXANUCLEOTIDE REPEAT EXPANSIONS ON C9ORF72 TRANSCRIPT LEVELS IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS
 DE MUYNCK L, DIEKSTRA F, VAN DEN BOSCH L, VAN DEN BERG LH, MEDIC J, ROBBERECHT W, VELDINK J, VAN DAMME P

P192 REDUCTION OF U11/U12 SMALL NUCLEAR RIBONUCLEOPROTEIN IN AMYOTROPHIC LATERAL SCLEROSIS

ISHIHARA T, KATO T, SHIGA A, ARIIZUMI Y, KOYAMA A, YOKOSEKI A, KAKITA A, NISHIZAWA M, TAKAHASHI H, ONODERA O

P193 RNA PROCESSING FACTORS INTERACT WITH GGGGCC REPEAT EXPANSION RNA IN VITRO AND DISPLAY ALTERED LOCALISATION AND EXPRESSION C9ORF72 ALS CASES
 WALSH M, COOPER-KNOCK J, DICKMAN M, HIGGINBOTTOM A, HIGHLEY J, RATTRAY M, KIRBY J, HAUTBERGUE G, SHAW P

P194 C9ORF72 HEXANUCLEOTIDE REPEAT EXPANSION PATHOLOGY IN THE OXFORD BRAIN BANK COHORT
 BÄUMER D, EAST S, HOFER M, KENT L, TURNER M, WAITE A, BLAKE D, MORRIS H, TALBOT K, ANSORGE O

P195 P62 PATHOLOGY AND THE FRONTOTEMPORAL SYNDROME OF ALS
 RAAPHORST J, STEENTJES K, ARONICA E, BAAS F, DE VISSER M, DE JONG V, TROOST D

P196 STRUCTURE, BIOGENESIS, AND CLEARANCE OF ER-DERIVED INCLUSIONS GENERATED BY THE ALS-LINKED MUTANT OF VAPB
 GENEVINI P, PAPIANI G, NAVONE F, BORGESE N

P197 OPTINEURIN AND MYOSIN VI ASSOCIATED CELLULAR TRAFFICKING DEFECTS IN ALS
 SUNDARAMOORTHY V, WALKER A, FARG M, SOO KY, ATKIN J

P198 SOD1, TARDBP AND FUS: A LINK BETWEEN GENE EXPRESSION LEVELS AND PROTEIN AGGREGATION IN NON-MUTATED AND MUTATED ALS PATIENTS
 GAGLIARDI S, MILANI P, PANSARASA O, DIAMANTI L, POLVERACCIO F, LA SALVIA S, DRUFUCA L, CERONI M, CEREDA C

P199 FUNCTIONAL ANALYSES OF MOTOR NEURONS DIFFERENTIATED FROM ALS PATIENT-DERIVED INDUCED PLURIPOTENT STEM CELLS (IPSC) WITH FUS AND SOD1 MUTATIONS
 NAUJOCK M, STANSLOWSKY N, HERMANN A, WEGNER F, KIM KS, PETRI S

P200 INDUCED PLURIPOTENT STEM CELLS FROM ALS PATIENTS
 DENG M, LIU X, ZHANG S

P201 MITOCHONDRIAL RESPIRATORY CHAIN ENZYMATIC ACTIVITIES AND UCP3 EXPRESSION IN MUSCLES OF PATIENTS WITH HEREDITARY AND SPORADIC AMYOTROPHIC LATERAL SCLEROSIS
 SPINAZZI M, CASARIN A, TASCA E, SALVIATI L, CIMA V, GAVASSINI B, PEGORARO E, SORARU G, ANGELINI C

P202 DJ-1 AND PINK1 IN SPORADIC ALS AND IN THE SOD1G93A ALS MOUSE MODEL: ROLE IN MITOCHONDRIAL DYSFUNCTION IN SKELETAL MUSCLES?
 KNIPPENBERG S, SIPOS J, THAU-HABERMANN N, KÖRNER S, RATH K J, DENGLER R, PETRI S

P203 SOD1 MUTATION LEADS TO ALTERED METABOLIC PATHWAYS FOR ENERGY GENERATION IN ALS PATIENT FIBROBLASTS
 ALLEN S, RAJAN S, DUFFY L, MORTIBOYS H, HIGGINBOTTOM A, GRIERSON A, SHAW P

P204 METABOLIC SIGNATURES OF AMYOTROPHIC LATERAL SCLEROSIS: INSIGHTS INTO DISEASE PATHOGENESIS
 DODGE J, TRELAVERN C, FIDLER J, TAMSETT T, BAO C, SEARLES M, TAKSIR T, SIDMAN R, CHENG S, SHIHABUDDIN L

P205 INCREASED EXPRESSION OF VALOCIN-CONTAINING PROTEIN IN THE SKIN OF PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS. AN IMMUNOHISTOCHEMICAL STUDY
 MIKAMI H, WATANABE T, OKETA Y, SUZUKI M, ONO S

P206 CATALASE ACTIVITY IN DISTINCT PARTS OF BLOOD TISSUE OF PATIENTS WITH SPORADIC ALS
 GOLENIA A, LESKIEWICZ M, REGULSKA M, BUDZISZEWSKA B, SZCZESNY E, JAGIELLA J, WNUK M, OSTROWSKA M, LASON W, BASTA - KAIM A, SLOWIK A

P207 HUMAN MESENCHYMAL STROMAL CELL INCREASES REGULATORY T LYMPHOCYTES /CD4 LYMPHOCYTES RATIO IN PBMC OF PATIENTS WITH ALS

KWON M, NOH M, CHO K, OH K, KANG B, AN J, KIM S

P208 IMMUNE ACTIVATION MARKER PRODUCTION BY CULTURED SPORADIC ALS (SALS) PATIENT BLOOD-DERIVED MACROPHAGES IMPLICATES PRO- AND ANTI-INFLAMMATORY MACROPHAGE ACTIVATION IN ALS PATHOGENESIS
 ZHANG R, MILLER RG, KATZ J, FORSHEW DA, HARRIS W, MCGRATH MS

P209 ANDROGEN DEPENDENT IMPAIRMENT OF MYOGENESIS IN SPINAL AND BULBAR MUSCULAR ATROPHY
 SORARU G, MALENA A, PENNUTO M, SILANI V, CENACCHI G, ROMITO S, MORANDI L, RUSSEL A, PEGORARO E, VERGANI L

Theme 9 In Vivo Experimental Models

P210 ROLE OF ZPR1 IN MOTOR NEURON DEGENERATION AND SEVERITY OF SPINAL MUSCULAR ATROPHY
 GANGWANI L

P211 POSTNATAL REQUIREMENTS FOR SURVIVAL MOTOR NEURON (SMN), A PROTEIN DEFICIENT IN SPINAL MUSCULAR ATROPHY, DURING MATURATION AND REMODELING OF THE NEUROMUSCULAR SYSTEM
 KARIYA S, OBIS T, GARONE C, AKAY T, HIRANO M, MONANI U

P212 GENETIC BACKGROUND EFFECTS ON LIFESPAN OF DYNACTIN P150 GLUED MOUSE MODEL OF MOTOR NEURON DISEASE
 HEIMAN-PATTERSON T, BLANKENHORN E, SHER R, WONG P, JIANG J, ALEXANDER G, COX G

P213 ROLE OF ELP3 IN ALS
 BENTO-ABREU A, TIMMERS M, ROBBERECHT W

P214 LOSS OF FUNCTION C9ORF72 CAUSES MOTOR DEFICITS IN A ZEBRAFISH MODEL OF ALS
 KABASHI E, CIURA S, LATTANTE S

P215 CHARACTERISATION OF A UNIQUE SOD1 MOUSE MODEL FOR AMYOTROPHIC LATERAL SCLEROSIS
 SACCON R, JOYCE P, MCGOLDRICK P, FRATTA P, GREENSMITH L, ACEVEDO A, FISHER EM

P216 A NEW TRANSGENIC MOUSE MODEL BASED ON OVEREXPRESSION OF A CHMP2B MUTANT RECAPITULATES PARTS OF ALS AND FTD HALLMARKS
 VERNAY A, THERREAU L, BLOT B, RISSON V, GROSCH S, SCHAEFFER L, SADOUL R, LOEFFLER JP, RENE F

P217 LOSS OF P62/SQSTM1 EXACERBATES MOTOR DYSFUNCTION IN A MUTANT SOD1-EXPRESSING MOUSE ALS MODEL
 PAN L, OTOMO A, ABE K, OGAWA H, CHIBA T, KOIKE M, UCHIYAMA Y, AOKI M, YOSHII F, ISHII T, YANAGAWA T, HADANO S

P218 FATTY ACID PROFILE REVEALS PROFOUND ALTERATIONS OF LIPID METABOLISM IN SOD1 MICE
 HENRIQUES A, SCHMITT F, LEQUEU T, HUSSAIN G, METZ-BOUTIGUES M-H, BINDLER F, MARCHIONI E, GONZALEZ DE AGUILAR J-L, LOEFFLER J-P

P219 DISEASE STAGE SPECIFIC ALTERATIONS IN FAT METABOLISM IN THE HSOD1G93A MOUSE MODEL OF AMYOTROPHIC LATERAL SCLEROSIS (ALS)
 STEYN F, LEE K, CHEN C, MCCOMBE P, BORGES K, NGO S

P220 ANALYSIS OF HISTONE POST-TRANSLATIONAL MODIFICATIONS ASSOCIATED WITH AMYOTROPHIC LATERAL SCLEROSIS (ALS) ONSET AND PROGRESSION
 MASALA A, ESPOSITO S, DEDOLA S, GALIOTO M, IACCARINO C, CROSIO C

P221 NEW INSIGHTS INTO THE MECHANISMS UNDERLYING THE PATHOGENESIS OF ALS USING FDG-PET AND 1H-MRS STUDIES IN VIVO AND ADENOVIRAL-MEDIATED GENE TRANSFER OF DNA/RNA-BINDING PROTEINS IN VITRO
OKSMAN J, AHTONIEMI T, HUHTALA T, CERRADA-GIMENEZ M, LEHTIMAKI K, WOLOSZYNEK J, ETZEL K, MCINTOSH D, MOORE C, HAQ M, LOPEZ H, HAQ S

P222 CHARACTERIZATION OF INNATE AND ADAPTIVE IMMUNE RESPONSES IN THE HSOD1G93A-MCP1-CCR2 TRIPLE TRANSGENIC ALS MOUSE
JARA J, FARRIS C, TRIMARCHI J, MILLER R, OZDINLER PH

P223 DEVELOPMENT OF A NEW CONFORMATION-SPECIFIC ANTI -SOD1 ANTIBODY (AJ10) USING A P2X4-LIKE HUMAN SOD1 PEPTIDE AS IMMUNIZING AGENT. IMPLICATIONS FOR IMMUNOTHERAPY IN ALS MICE

SÁBADO J, CASANOVAS A, HERNÁNDEZ S, PIEDRAFITA L, HEREU M, ARQUÉ G, RODRIGO H, ESQUERDA JE

P224 EFFECT OF THYMIC STIMULATION OF CD4+ T-CELLS ON DISEASE ONSET AND PROGRESSION IN MUTANT SOD1 MICE
SHEEAN R, WESTON R, PERERA N, D'AMICO A, NUTT S, TURNER B

P225 GENDER SPECIFIC CONTRIBUTIONS TO ALTERED MOTONEURON SIZE IN SOD1G93A MOUSE MODEL OF ALS
QUINLAN KA, JIANG M, ELBASIOUNY SM, LAMANO JB, EISSA T, SAMUELS J, HECKMAN CJ

P226 VISUAL ANALYSIS AND INVESTIGATION OF TIMING AND EXTENT OF SENSORY NERVOUS SYSTEM DEGENERATION IN ALS USING A NOVEL REPORTER LINE
GENC B, MENICHELLA D, YASVOINA M, TU M, MILLER R, OZDINLER H

P227 ALSIN KO-UEGFP MICE REVEAL LACK OF CSMN LOSS, BUT AXONAL DEFECT IN THE ABSENCE OF ALSIN FUNCTION AT P500
YASVOINA M, JARA J, YANG N, OZDINLER H

P228 NEUREGULIN-1 IS ASSOCIATED TO POSTSYNAPTIC SITES CONTACTING AFFERENT C-TYPE CHOLINERGIC TERMINALS ON LOWER MOTONEURONS: CHANGES IN MURINE MODELS OF MOTONEURON DISEASES

GALLART-PALAU X, TARABAL O, CASANOVAS A, SÁBADO J, CORREA F, CERVERÓ C, HEREU M, PIEDRAFITA L, CALDERO J, ESQUERDA JE

P229 NEUROINFLAMMATION IN ALS: THE COMPLEX ROLE OF P2X7 RECEPTOR
APOLLONI S, AMADIO S, PARISI C, MONTILLI C, CARRI MT, COZZOLINO M, VOLONTÉ C, D'AMBROSI N

P230 KNOCKING-DOWN MGLUR1 AND MGLUR5IN SOD1G93A MICE AMELIORATES SURVIVAL AND DISEASE PROGRESSION
BONIFACINO T, MILANESE M, MELONE M, GIRIBALDI F, MUSANTE I, VERGANI L, VOCI A, PULITI A, CONTI F, BONANNO G

P231 CALCITONIN GENE-RELATED PEPTIDE SIGNALING INFLUENCES MOTOR SYMPTOM ONSET AND DISEASE PROGRESSION IN THE SOD1-G93A MOUSE MODEL OF ALS
RINGER C, TSUJIKAWA K, WEIHE E, SCHÜTZ B

P232 ERYTHROPOIETIN MODULATES IMMUNE-INFLAMMATORY RESPONSE IN A SOD1 (G93A) MOUSE MODEL OF AMYOTROPHIC LATERAL SCLEROSIS

NOH M-Y, CHO KA, KIM H, CHOI H, KIM SH

P233 NEUROINFLAMMATION AND MUSCLE DENERVATION IN WOBBLER MICE
KANO O, KAWABE K, YOSHII Y, ISHIKAWA Y, ISHII T, IKEDA K, IWASAKI Y

P234 TESTOSTERONE AND SYNTHETIC ANABOLIC STEROIDS ARE MODIFIERS FOR MUTANT SOD1-RELATED ALS PATHOGENESIS
AGGARWAL T, GALBIATI M, RIZZUTO E, MUSARO A, POLETTI A, PENNUTO M

P235 H63D HFE SHORTENS SURVIVAL AND ACCELERATES DISEASE PROGRESSION IN AN ALS MOUSE MODEL

NANDAR W, NEELYE, SIMMONS Z, CONNOR J

P236 CHARACTERISING DISTAL DYSFUNCTION AND DEGENERATION IN ALS: THE POTENTIAL FOR AXON PROTECTION?

CLARK JA, BLIZZARD CA, SOUTHAM K, CHUCKOWREE J, KING A, DICKSON TC

P237 TARGETED ABLATION OF MYELINATING SCHWANN CELLS ENHANCES DISEASE SEVERITY IN SOD1G93A MICE

SHEEAN R, STRATTON J, MERSON T, TURNER B

P238 BLOCKING DEATH RECEPTOR 6 (DR6) PROMOTES NEUROMUSCULAR JUNCTION INTEGRITY AND FUNCTIONAL RECOVERY IN MOUSE MODEL FOR ALS

MI S, HUANG G, LEE X, SHAO Z, BIAN Y, PEPINSKY B

P239 EXCITOTOXICITY AND NEUROMUSCULAR JUNCTION DEGENERATION FOLLOWING SITE-SPECIFIC EXCITOTOXIN EXPOSURE IN VIVO

BLIZZARD CA, CLARK JA, DICKSON TC

P240 IDENTIFICATION OF NOVEL THERAPEUTICS TO TREAT NEURODEGENERATION USING THE SOD1 ZEBRAFISH MODEL OF AMYOTROPHIC LATERAL SCLEROSIS (ALS)

MCGOWN A, SHAW PJ, RAMESH T

P241 CHEMICAL GENETIC SCREENS OF TARDBP AND FUS MODIFIERS IN C. ELEGANS AND ZEBRAFISH

DRAPEAU P, KABASHI E, PARKER JA

P242 IDENTIFICATION OF RNA BOUND TO TDP-43 SUPPORTS ITS ROLE IN SYNAPTIC FUNCTION
MANGELSDORF M, NARAYANAN R, CHAPLIN J, NOAKES PG, HILLIARD MA, WALLACE RH

P243 TRANSLATIONAL PROFILING IN TDP-43 TRANSGENIC MOUSE MODEL OF ALS

MACNAIR L, ZHAO B, MILETIC D, GHANI M, ROGAEVA E, KEITH J, ZINMAN L, JULEIN JP, ROBERTSON J

P244 SENATAXIN MOUSE MODELS OF ALS4 RECAPITULATE HUMAN ALS TDP-43 PATHOLOGY, DEVELOP NEUROMUSCULAR PHENOTYPES, AND EXHIBIT TRANSCRIPTIONAL ALTERATIONS RESULTING IN DEMYELINATION
VAN ES M, BENNETT C, LING S, LAGIER-TOURENNE C, LIU P, CRAIN B, SHELTON D, CLEVELAND DW, YEO G, LA SPADA A

P245 A BAC-BASED MOUSE MODEL OF TDP-43-ASSOCIATED ALS AS A TOOL TO EXPLORE EARLY PHASE PATHOGENESIS

GORDON D, MUTIHAC R, ALEGRE-ABARRATEGUI J, DAVIES B, ANSORGE O, WADE-MARTINS R, TALBOT K

P246 ABERRANT PERIPHERIN EXPRESSION AND STABILITY AND SPLICING OF GLT-1 IN TDP-43 (A315T) TRANSGENIC MOUSE MODEL OF ALS
BARRI M, HAFEZPARAST M

P247 MUTANT TDP-43 Deregulates the AMPK signalling cascade through novel activation of protein phosphatase 2A (PP2A)

PERERA N, SHEEAN R, HORNE M, TURNER B

P248 ADAR2 PLAYS A KEY ROLE FOR DEATH AND TDP-43 MISLOCALIZATION IN ALS MOTOR NEURONS

YAMASHITA T, TERAMOTO S, CHAI H-L, MURAMATSU S-I, KWAK S

P249 ULTRASTRUCTURAL CHANGES IN THE BLOOD-SPINAL CORD BARRIER IN TDP-43 CONDITIONAL KNOCKOUT MICE

SASAKI S, IGUCHI Y, KATSUNO M, SOBUE G

P250 THE EFFECT OF CLUSTERIN ON THE TOXICITY OF GLIAL TDP-43 IN A DROSOPHILA MODEL OF ALS

BROWN R, LUHESHI L, WILSON M, DOBSON C

P251 INVESTIGATING PROPAGATION OF TDP-43 AGGREGATION IN AMYOTROPHIC LATERAL SCLEROSIS USING A DROSOPHILA MELANOGASTER MODEL

HANSPAL M, LUHESHI L, YERBURY J, DOBSON C

P252 IDENTIFYING THE ROLE OF TDP-43 IN AMYOTROPHIC LATERAL SCLEROSIS (ALS) THROUGH INTERACTOME ANALYSIS OF PATHOGENIC TDP-43 IN A TRANSGENIC MOUSE MODEL

CHIANG H, XIAO S, ZHAO B, MILETIC D, HO K, MOUNT H, SCHMITT-ULMS G, ROBERTSON J

Theme 10 In Vitro Models

P253 BIOPHYSICAL AND BIOLOGICAL CHARACTERISATION OF INCLUSION BODIES CONTAINING TDP-43

CAPITINI C, CONTI S, CASCELLA R, CECCHI C, CHITI F

P254 MOTONEURON AND MUSCLE SELECTIVE REMOVAL OF ALS-RELATED MISFOLDED PROTEINS

CRIPPA V, GALBIATI M, BONCORAGLIO A, RUSMINI P, ONESTO E, ZITO A, GIORGETTI E, CRISTOFANI R, PENNUTO M, CARRA S, POLETTI A

P255 ACTIVATION OF TRANSFORMING GROWTH FACTOR- BETA/SMAD SIGNALING REDUCES AGGREGATE FORMATION OF MISLOCALIZED TAR DNA BINDING PROTEIN-43

NAKAMURA M, KANEKO S, ITO H, FUJISAWA J, KUSAKA H

P256 FUNCTIONAL EFFECTS OF TDP-43 MUTATIONS IN HUMAN IPSC DERIVED MOTOR NEURONS AND GENOMIC DNA MODELS

MUTIHAC R, ALEGRE-ABARRATEGUI J, YAMASAKI-MANN M, VOWLES J, COWLEY S, TALBOT K, WADE-MARTINS R

P257 TDP-43 PROTEINOPATHY: LOSS- AND GAIN-OF-FUNCTION DISEASE CELL MODELS
ONESTO E, COLOMBRITA C, BURATTI E, BARALLE FE, SILANI V, RATTI A

P258 ALTERNATIVE SPLICING OR POLYADENYLATION, WHICH IS THE MAJOR MECHANISM FOR AUTO-REGULATION OF TDP-43?

KOYAMA A, SUGAI A, KATO T, KONNO T, ISHIHARA T, NISHIZAWA M, ONODERA O

P259 DISTINCT SPLICING PATTERNS FOR TDP-43 AND FUS RNA-BINDING PROTEINS IN NEURAL-LIKE CELLS

COLOMBRITA C, ONESTO E, BURATTI E, SILANI V1, BARALLE FE, RATTI A

P260 ALS-ASSOCIATED FUS MUTANTS RETAIN SPLICEOSOMAL SNRNPS IN THE CYTOPLASM
GERBINO V, ROSSI S, MIRRA A, CARRI MT, COZZOLINO M, ACHSEL T

P261 THE ALS-ASSOCIATED PROTEIN FUS/TLS IS A COMPONENT OF THE CELLULAR RESPONSE TO DNA DAMAGE

RULTEN S, ROTHERAY A, MOORE D, GREEN R, CALDECOTT K, HAFEZPARAST M

P262 AUTOSOMAL DOMINANT INHERITANCE OF RAPIDLY PROGRESSIVE JUVENILE-TYPE ALS DUE TO A FUS MUTATION

KENT L, VIZARD T, SMITH B, TOPP S, SHAW C, TALBOT K

P263 EVALUATION OF THE ROLE OF SMN (SURVIVAL OF MOTOR NEURON) PROTEIN IN PATHOLOGICAL FUS STRESS GRANULES IN PRIMARY NEURONS

VIZARD T, KENT L, OLIVER P, BÄUMER D, ANSORGE O, TALBOT K

P264 UBIQUILIN 2 MUTATIONS INDUCE ENDOPLASMIC RETICULUM STRESS

HALLORAN M, SOO KY, YANG S, BLAIR I, ATKIN J

P265 YEAST MODEL EXPRESSING ALS-LINKED P56S-VAPB EXHIBITS INCREASED SENSITIVITY TO OXIDATIVE AND ENDOPLASMIC RETICULUM INDUCED STRESSES

PALMA F, MITNE-NETO M, GOMES F, DEMASI M, ZATZ M, NETTO L

P266 THE ROLE OF RBM45 IN ANTIOXIDANT RESPONSES IN ALS

BAKKAR N, BOWSER R

P267 EVALUATION OF EXPRESSION AND LOCALIZATION OF ELAV PROTEINS IN ALS
MILANI P, DELL'ORCO M, AMADIO M, GAGLIARDI S, LAFORENZA U, DIAMANTI L, CERONI M, CEREDA C

P268 CAUSES AND CONSEQUENCES FOR MICRORNA MALFUNCTION IN ALS
HORNSTEIN E, EMDE A, YARDENI T, REICHENSTEIN I, SKOROVSKY M, MOELLER T, RAVITS J

P269 IN VITRO CHARACTERIZATION OF RBM45, A NEW RNA-BINDING PROTEIN IMPLICATED IN ALS AND FTLD
LI Y, BOWSER R

P270 THE RNA BINDING PROTEIN RBM45 ASSOCIATES WITH NUCLEAR STRESS BODIES DURING CELLULAR STRESS EVENTS
COLLINS M, RICE R, BOWSER R

P271 CHARACTERIZATION OF THE ROLE OF SIGMA RECEPTOR 1 (SIGMAR1) IN MOTONEURON FUNCTION AND DISEASE
BERNARD MARISSAL N, AZZEDINE H, CHRAST R

P272 METABOLOMIC APPROACH ON AN IN VITRO MODEL OF AMYOTROPHIC LATERAL SCLEROSIS, A CO-CULTURE OF ASTROCYTES AND MOTOR NEURONS EXPOSED TO OXIDATIVE STRESS

VEYRAT-DUREBEX C, BLASCO H, DANGOU MAU A, VOURC'H P, PIVER E, LAUMONNIER F, JONNEAUX A, DEVOS D, MARCHETTI P, GARÇON G, ANDRES CR, CORCIA P

P273 ALS ASTROCYTES KILL MOTOR NEURONS VIA LIGATION OF DEATH RECEPTOR 6 BY A FRAGMENT OF N-APP/APLP1

RE D, LE VERCHE V, IKIZ B, ALVAREZ M, POLITI K, DOULIAS P, PAPADIMITRIOU D, GRECCO T, THAN M, NIKOLAIEV A, CALIFANO A, ISHIROPOULOS H, TESSIER-LAVIGNE M, PRZEDBORSKI S

P274 UNRAVELING THE MOLECULAR DEATH CASCADE TAKING PLACE IN MOTOR NEURONS IN RESPONSE TO ALS-LINKED ASTROCYTE TOXICITY

POLITI K, IKIZ B, LE VERCHE V, RE D, ALVAREZ M, CALIFANO A, PRZEDBORSKI S

P275 ABNORMAL GLUTAMATE RELEASE INDUCED BY GROUP I METABOTROPIC GLUTAMATE RECEPTORS IN EXPERIMENTAL ALS
BONIFACINO T, GIRIBALDI F, MILANESE M, ROSSI PIA, PITTALUGA A, PULITI A, USAI C, BONANNO G

P276 MOLECULAR MECHANISM UNDERLYING EXCESSIVE AND PRECOCIOUS GLUTAMATE RELEASE IN THE SPINAL CORD OF THE SOD1G93A MOUSE MODEL OF AMYOTROPHIC LATERAL SCLEROSIS

MILANESE M, BONIFACINO T, GIRIBALDI F, MUSAZZI L, TRECCANI G, ONOFRI F, USAI C, POPOLI M, BONANNO G

P277 REDUCED GLUTAMATE UPTAKE IN ACTIVATED ASTROCYTES IN SOD1 (G93A) MICE AND ITS IMPLICATIONS ON ALS PATHOGENESIS
BENKLER C, BARHUM B, BEN-ZUR T, OFFEN D

P278 E6-AP PROMOTES SOD1 PROTEIN DEGRADATION AND SUPPRESSES MUTANT SOD1 TOXICITY

MISHRA A, MAHESHWARI M, CHHANGANI D, FUJIMORI-TONOU N, ENDO F, PRAKASH JA, JANA N, YAMANAKA K

P279 CYSTATIN C PROTECTED NEURONAL CELLS AGAINST MUTANT COPPER-ZINC SUPEROXIDE DISMUTASE-MEDIATED TOXICITY IN VITRO
WATANABE S, WAKASUGI K, YAMANAKA K

P280 INCREASED AMPK ACTIVITY AND DOWNREGULATION OF HSP70 EXPRESSION DECREASE THE LIFESPAN OF SOD1G93A MOUSE MODEL OF AMYOTROPHIC LATERAL SCLEROSIS
ZHAO Z, SUI Y, GAO W, CAI B, FAN D

P281 PHENOTYPIC DISCOVERY AND CHARACTERIZATION OF NEUROPROTECTIVE COMPOUNDS RELEVANT TO ALS
RUDHARD Y, HÖING S, REINHARDT P, GLATZ A M, SLACK M, SCHÖLER H R, STERNECKERT J

P282 VITAMIN D CONFERS PROTECTION TO MOTONEURONS AND IS A PROGNOSTIC FACTOR OF AMYOTROPHIC LATERAL SCLEROSIS
CAMU W, TREMBLIER B, SALASC C, SCAMPS F, ALPHANDERY S, PAGEOT N, JUNTAS-MORALES R, RAOUL C

P283 SODIUM AND CALCIUM OVERLOAD INDUCED BY VERATRIDINE IN NSC-34 CELLS: A NOVEL IN VITRO MODEL OF ALS TO EXPLORE NEW NEUROPROTECTIVE COMPOUNDS
CANO-ABAD MF, MORENO-ORTEGA AJ, MOUHID L, RUIZ-NUÑO A

P284 IN VITRO EVIDENCE FOR THE THERAPEUTIC POTENTIAL OF MENSENCHYMAL STROMAL CELLS IN ALS

SUN H, BERNARDAIS K, STANSLOWSKY N, THAU-HABERMANN N, HENSEL N, HUANG D, CLAUS P, STANGEL M, DENGLER R, PETRI S

P285 EMBRYONIC STEM CELL-DERIVED MOTONEURON/MUSCLE FIBER CO-CULTURES: A MODEL SYSTEM FOR STUDYING AMYOTROPHIC LATERAL SCLEROSIS PATHOPHYSIOLOGY
SHEHETAR B, RAFUSE V

P286 ALTERED NEURAL FATE OF EPENDYMAL STEM PROGENITOR CELLS IN ALS G93A-SOD1 MOUSE MODEL: THE MICRORNA REGULATION
MARCUSO S, KAPETIS D, BONANNO S, CAVALCANTE P, BARZAGO C, BERNASCONI P, MANTEGAZZA R

Theme 11 Therapeutic Strategies

P287 CLINICAL EFFICACY OF STEM CELLS IN ALS: CORRELATION WITH TROPIC SUPPORT AND EXPERIMENTAL IN VIVO STUDY

KIM HY, KIM HK, OH KW, KOH SH, KIM KS, KIM SH

P288 AMYOTROPHIC LATERAL SCLEROSIS: NEW THERAPEUTIC PERSPECTIVES OFFERED BY IPSCS-DERIVED NEURAL STEM CELLS

CORTI S, NIZZARDO M, SIMONE C, RIZZO F, RUGGIERI M, SALANI S, FARAVELLI I, ZANETTA C, RIBOLDI G, BRAJKOVIC S, BRESOLIN N, COMI G

P289 ISOLATION OF PURE IPS-DERIVED HUMAN MOTOR NEURONS BY A NOVEL P75/HB9 DOUBLE SELECTION FACS PROCEDURE
TOLI D, BUTTIGIEG D, BLANCHARD S, LEMONNIER T, BOHL D, HAASE G

P290 ENDOGENOUS STEM CELL MOBILIZATION IN A MOUSE MODEL OF ALS
RANDO A, GASCO S, CALVO A, MANZANO R, OLIVÁN S, MUÑOZ M J, ZARAGOZA P, GARCÍA-REDONDO A, OSTA R

P291 SCF-ACTIVATED BONE MARROW TRANSPLANTATION IN ALS MODEL MICE
TERASHIMA T, KOJIMA H, OGAWA N, YAMAKAWA I, URABE H, KAWAI H, MAEGAWA H

P292 INTRAMUSCULAR TRANSPLANTATION OF MUSCLE PROGENITOR CELLS THAT SECRETE NEUROTROPIC FACTORS SIGNIFICANTLY DELAY THE SYMPTOMS AND INCREASE THE LIFESPAN OF MSOD1 MICE
OFFEN D, BEN-ZUR T, BARHUM Y, KUN D, GLUSKA S, PERLSON E, YAFFE D

P293 PERSONALIZING ALS TREATMENT: DIRECT AND SIMULTANEOUS DRUG HIGH CONTENT ANALYSIS SCREENING ON CELL-BASED MODEL FROM SEVERAL SALS PATIENTS
WEIL M

P294 CHROMOSOMALLY-MODIFIED MESENCHYMAL STEM CELLS SECRETING GDNF, IGF-1, AND HGF ATTENUATE DISEASE PROGRESSION IN AN ALS ANIMAL MODEL
WATANABE Y, YAMAKAWA M, EBIKI M, HOSOKAWA H, KAWASE S, YASUI K, NAKANO T, NAKASHIMA K

P295 NOVEL FEATURES OF ADULT RAT FACIAL MOTONEURONE RESCUE BY A MUSCLE-DERIVED ISOFORM OF IGF-1
KATHARESAN V, JOHNSON I, LI R, EVANS A

P296 THE BIOLOGICAL RELEVANCE OF CORTICOSPINAL MOTOR NEURONS TO MOTOR NEURON DISEASES
OZDINLER PH

P297 CHRONIC TREATMENT WITH LITHIUM DOES NOT IMPROVE NEUROMUSCULAR PHENOTYPE IN A MOUSE MODEL OF SEVERE SPINAL MUSCULAR ATROPHY
DACHS E, PIEDRAFITA L, HEREU M, MONTULL N, ESQUERDA JE, CALDERO J

P298 GHRELIN ATTENUATES DISEASE PROGRESSION IN A MOUSE MODEL OF AMYOTROPHIC LATERAL SCLEROSIS
MATSUO T, MURAYAMA N, OGINO R, INOMATA N, INOUE T, FURUYA M

P299 INHIBITION OF EXTRACELLULAR CYCLOPHILIN A AS A POSSIBLE THERAPEUTIC TARGET FOR ALS
PASETTO L, POZZI S, CASTELNOVO M, MARZO M, LAURANZANO E, BATTAGLIA E, TORTAROLO M, FISCHER G, MALESEVIC M, BENDOTTI C, BONETTO V

P300 APO-H-FERRITIN INFUSION AS A THERAPY FOR AMYOTROPHIC LATERAL SCLEROSIS
SNYDER A, NEELY E, HESS O, MACCARINELLI F, PATEL A, RIZK E, AROSIO P, SIMMONS Z, CONNOR J

P301 ADMINISTRATION OF ANTIBODIES FOR MISFOLDED SOD1 PROLONG SURVIVAL IN THE SOD1-G93A MOUSE
MCCAMPBELL A, QIAN F, EHRENFELS C, LUO Y, SUN L, DUPAGE A, ZHANG M, RHODES K, WEINREB P, AMBROSE C

P302 NEUROPROTECTIVE AND IMMUNOMODULATORY EFFECTS OF THE SIGMA-1 RECEPTOR (S1R) AGONIST PRE-084, IN A MOUSE MODEL OF MOTOR NEURON DISEASE NOT LINKED TO SOD1 MUTATION
PEVIANI M, SALVANESCHI E, BONTEMPI L, PETESE A, ROSSI D, COLLINA S, BIGINI P, CURTI D

P303 CHANGES IN ENDOCANNABINOID RECEPTORS AND ENZYMES AND BENEFICIAL EFFECTS OF A SATIVEX®-LIKE COMBINATION OF PHYTOCANNABINOIDS IN AN EXPERIMENTAL MODEL OF AMYOTROPHIC LATERAL SCLEROSIS
MORENO-MARTET M, ESPEJO-PORRAS F, OSTA R, FERNÁNDEZ-RUIZ J, DE LAGO E

P304 EFFECTS OF DEXPRAMIPEXOLE ON WHITE BLOOD CELLS IN A MINI-PIG TOXICOLOGY STUDY AND FROM TWO CLINICAL TRIALS IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS
HEBRANK G, DWORETZKY S, ARCHIBALD D, SULLIVAN M, FARWELL W, REYNOLDS I, BOZIK M

P305 DETERMINING THE SAFETY OF L-SERINE IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS (ALS) AT VARIED DOSES
LEVINE T, HANK N, COX P, BRADLEY W, SAPERSTEIN D

P306 INHIBITION OF NOX 2 NADPH OXIDASES AS A POTENTIAL TREATMENT FOR AMYOTROPHIC LATERAL SCLEROSIS
SEREDENINA T, SCHIAVONE S, MAGHZAL G, BASSET O, FIORASO-CARTIER L, MAHIOUT Z, PLASTRE O, NAYERNIA Z-M, STOCKER R, KRAUSE K-H, JAQUET V

P307 CLINICAL TRIAL OF EDARAVONE IN AMYOTROPHIC LATERAL SCLEROSIS/PARKINSONISM-DEMENCIA COMPLEX OF THE KII PENINSULA OF JAPAN
KOKUBO Y, MORIMOTO S, NAKAGAWA T, MIYAZAKI K, KUZUHARA S

P308 SAFETY OF CENTRAL VENOUS CATHETER IN SELF-ADMINISTRATION OF CEFTRIAXONE IN ALS
SAWICKI D, BERRY J, YU H, CUDKOWICZ M

P309 HEAT SHOCK FACTOR-1 (HSF-1) CONTROLS PATHOLOGICAL LESION DISTRIBUTION OF POLYGLUTAMINE-INDUCED MOTOR NEURON DISEASE

KONDO N, KATSUNO M, ADACHI H, MINAMIYAMA M, DOI H, MATSUMOTO S, MIYAZAKI Y, IIDA M, NAKATSUJI H, TOHNAI G, ISHIGAKI S, FUJIOKA Y, WATANABE H, TANAKA F, NAKAI A, SOBUE G

P310 PROTEIN DISULPHIDE ISOMERASE IS PROTECTIVE AGAINST MUTANT SOD1, TDP-43 AND FUS PATHOLOGY IN AMYOTROPHIC LATERAL SCLEROSIS
PARAKH S, SPENCER D, SULTANA J, SOO K Y, BILLA N, AL HELWANI N, FARG M, SUNDARAMOORTHY V, WALKER A, TURNER B, AUMAN T, YANG S, BLAIR I, ATKIN J

P311 POSSIBLE MITOCHONDRIAL TARGET ENGAGEMENT IN AN OPEN LABEL TRIAL OF RASAGILINE FOR ALS

MACCHI Z, WANG Y, MOORE D, DICK A, DIMACHKIE M, KATZ J, SAPERSTEIN D, LEVINE T, WALK D, SIMPSON E, GENGE A, BERTORINI T, FERNANDES J, SWENSON A, ELMAN L, JACKSON C, LU J, HERBELIN L, BAROHN RJ

P312 REGULATION OF IP3-RECEPTOR-MEDIATED CALCIUM SIGNALING AND CELL DEATH BY THE BH4 DOMAIN OF BCL-XL IN ALS ASTROCYTES

MARTORANA F, BRAMBILLA L, VALORI CF, BERGAMASCHI C, RONCORONI C, ARONICA E, VOLTERRA A, BEZZI P, ROSSI D

P313 DELETING EPHRIN-B2 FROM REACTIVE ASTROCYTES IS BENEFICIAL IN ALS

SCHOONAERT L, POPPE L, RUÉ CABRE L

P314 INTERLEUKIN-1 RECEPTOR ANTAGONIST TREATMENT OF ALS PATIENTS WITH PREDOMINANT LOWER MOTOR NEURON INVOLVEMENT

MAIER A, DEIGENDESCH N, MEISSNER F, MOLAWI K, MÜNCH C, HOLM T, MEYER R, MEYER T, ZYCHLINSKY A

P315 IS IVIG TREATMENT WARRANTED IN PATIENTS WITH PROGRESSIVE ASYMMETRIC LOWER MOTOR NEURON LIMB WEAKNESS WITHOUT CONDUCTION BLOCK? A PROSPECTIVE, COHORT STUDY

SIMON N, LOMÉN-HOERTH C

P316 2B3-201, GLUTATHIONE PEGYLATED LIPOSOMAL METHYLPREDNISOLONE, ENHANCES BRAIN DELIVERY OF METHYLPREDNISOLONE AND REDUCES PATHOLOGY IN A MOUSE MODEL OF ALS

APPELDOORN C, EVANS M, STOLP H, DE BOER M, DORLAND R, MORENO A, KIDD J, THOMPSON K, SIBSON N, TURNER M, VIEIRA F, ANTONY D, GAILLARD P

P317 INHIBITION OF PROTEIN AGGREGATION IN ALS

MASOUMI A, YE J, FONTANILLA C, BITAN G, WIEDAU-PAZOS M

P318 TARGETED GENOME EDITING FOR DEVELOPING NOVEL THERAPEUTIC APPROACHES FOR SMA

RUGGIERI M, SIMONE C, NIZZARDO M, RIZZO F, RIBOLDI G, SALANI SA, FARAVELLI I, ZANETTA C, BRESOLIN N, COMI G, CORTI S

P319 NEW SYNERGISTIC GENETIC TREATMENT EXTENDS SIGNIFICANTLY DELAYS SYMPTOM ONSET AND PROLONGED SURVIVAL IN ALS MICE

BENKLER C, BEN ZUR T, BARHUM Y, OFFEN D

P320 THE ROLE OF STABILIZED NEUROPEPTIDES DERIVED FROM HYPERIMMUNE CAPRINE SERA (HICS) IN MOTOR NEURON DISEASE – IMPLICATIONS FOR A NOVEL THERAPEUTIC STRATEGY IN ALS PATIENTS

AHTONIEMI T, OKSMAN J, LEHTIMAKI K, CERRADA-GIMENEZ M, WESTLAKE A, HAQ M, VARTIAINEN N, MCINTOSH D, MOORE C, FORCE T, HEIMAN-PATTERSON T, HAQ S

Theme 12A Scientific Work In Progress

SW01 WHOLE GENOME AND EXOME ANALYSIS FOR EARLY-ONSET AMYOTROPHIC LATERAL SCLEROSIS WITH AN AUTOSOMAL RECESSIVE MODE OF INHERITANCE

TAKAHASHI Y, HIGASA K, TAKAGI S, KURITA T, ISHIURA H, MITSUI J, FUKUDA Y, YOSHIMURA J, SAITO TL, MORISHITA S, GOTO J, TSUJI S

SW02 WHOLE BLOOD MRNA DIFFERENTIAL CO-EXPRESSION ANALYSIS TO REVEAL MOTOR NEURON DISEASE BIOLOGY

VAN RHEENEN, W, SARIS C, DIEKSTRA F, SCHELLEVIS R, MEDIC J, SODAAR P, VAN DEN BERG LH, VELDINK J

SW03 A CASE OF IBMPFD WITH SPASTIC PARAPLEGIA LINKED TO VCP MUTATION

KAMADA M, IKEDA K, TAKATA T, KUME K, DEGUCHI K, TOUGE T, MIYAMOTO R, SUGIHARA K, MORINO H, MARUYAMA H, KAWAKAMI, ITO H, AYAKI T, NAKANO S

SW04 AMYOTROPHIC LATERAL SCLEROSIS ASSOCIATED WITH NOVEL TRK-FUSED GENE (TFG) MUTATIONS: DISCOVERY OF NEW MUTATIONS DISTINCT FROM THOSE CAUSING HMSNP OR HSP AMONG TYPICAL ALS PATIENTS

KAJI R, MORITA M, KAWARAI T, FUJITA K, MORIGAKI R, GOTO S, KAWATA A, OGAKI K, HATTORI N, NAKANO I

SW05 NEW MUTATION IN THE SOD1 (COPPER-ZINC SUPEROXIDE DISMUTASE 1) GENE IN A CHINESE AMYOTROPHIC LATERAL SCLEROSIS (ALS) PATIENT

FANG C1, WANSHI C1, 2, ZHANJUN W1, 2, ZHONGSHENG S1, 2, XUSHENG H1

SW06 SQSTM1 MUTATIONS IN SPORADIC CHINESE PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS

CHEN Y, CHEN X, HUANG R, ZHENG Z, WEI Q, GUO X, PAN L, HADANO S, SHANG H

SW07 SPORADIC ALS WITH COMPOUND HETEROZYGOUS MUTATIONS IN THE SQSTM1 GENE

SHIMIZU H, TOYOSHIMA Y, SHIGA A, YOKOSEKI A, ARAKAWA K, SEKINE Y, SHIMOHATA T, IKEUCHI T, NISHIZAWA M, KAKITA A, ONODERA O, TAKAHASHI H

SW08 IMMUNOHISTOCHEMICAL STUDIES ON FALS-RELATED PATHOGENIC MOLECULES IN THE SPINAL CORD OF SPORADIC ALS PATIENTS

IKEMOTO A, AYAKI T, SAWAMOTO N, TAKAHASHI R, ITO H

SW09 ROLE OF OXIDATIVE STRESS IN ALS AND OTHER NEUROLOGICAL DISORDERS

MARRALI G, SALAMONE P, CASALE F, FUDA G, CAORSI C, AMOROSO A, COCITO D, ZIBETTI M, CALVO A, LOPIANO L, CHIÒ A

SW10 RNA-BINDING PROTEINS OF C9ORF72 RNA AND THEIR ROLE IN THE PATHOGENESIS OF ALS AND FTD

MIZIELINSKA S, LASHLEY T, NORONA F, RIDLER C, FRATTA P, DENGJEL J, BURATTI E, ISAACS A

SW11 STRESS-INDUCED SUBCELLULAR DISTRIBUTION PATTERNS OF FUS MUTANTS IN IN VITRO MODELS

LIM SM, CHOI WJ, OH SI, OH K-W, KIM SH

SW12 CHARACTERIZATION OF HUMAN SPORADIC ALS BIOMARKERS IN THE FAMILIAL ALS TRANSGENIC SOD1G93A MOUSE MODEL

WALD S, LILO E, PERLSON E, WEIL M

SW12.5 EARLY AND RAPID DECLINE IN MOTOR FUNCTION IN SOD1G93A TRANSGENIC MICE MEASURED USING IN-CAGE RUNNING WHEELS

MEAD R, BENNETT E, GRIERSON A, SHAW PJ

SW13 ALS: NEW OPPORTUNITIES FROM AN INNOVATIVE TRANSGENIC SWINE MODEL OF ALS

CORONA C, CHIEPPA MN, GRINDATTO A, PEROTA A, RAINOLDI A, MERLETTI R, FORMICOLA D, BOTTER A, D'ANGELO A, PERONA G, BONETTO V, DUCHI R, BENDOTTI C, VALENTINI MC, GALLI C, CASALONE C

SW14 INVESTIGATING OLIGODENDROCYTE DYSFUNCTION IN ALS

MAGNANI D, BURR K, SERIO A, BILICAN B, STORY D, ZHAO C, BOROOAH S, SHAW CE, VALLIER L, CHANDRAN S

SW15 ROLE OF THE MAJOR HISTOCOMPATIBILITY COMPLEX I (MHC I) IN AMYOTROPHIC LATERAL SCLEROSIS

NARDO G, TROLESE MC, IENNACO R, BENDOTTI C

SW16 UNDERSTANDING THE RELATIONSHIP BETWEEN THE MISFOLDING AND DYSFUNCTION OF UBQLN2 AND NEURONAL DEGENERATION IN ALS

PEREIRA DE BARROS T, DOBSON C, LUHESHI L

SW17 PRESYMPTOMATIC DEFECTS OF NEUROMUSCULAR JUNCTIONS IN ALS MODEL MICE

NISHIMUNE H, TANAKA T, TUNGTUR S, NADEAU L, STANFORD J

SW18 CONTRIBUTION OF LOWER MOTONEURONS, MUSCLE FIBERS, SCHWANN CELLS TO ALS ONSET AND PROGRESSION IN THE G93RSOD ZEBRAFISH MODEL

BENEDETTI L, GHILARDI A, MARSIANO S, DEMAGLIE M, RODIGHIERO S, PEREGO C, FRANCOLINI M, DEL GIACCO L

SW19 STUDIES ON THE CCL2/CCR2 AXIS IN THE REGULATION OF IMMUNE RESPONSES IN ALS

BENDOTTI C, NARDO G, BOSANI B, SAVINO B, CARONNI N, BONECCHI R, GARETTO S, MARTINI E, TROVATO AE, KALLIKOURDIS M, LOCATI M, SIDERI R, MARINO K, MORA G

SW20 HMSC DERIVED FROM ALS PATIENTS AS A MODEL TO ELUCIDATE MECHANISM OF THE DISEASE

WALD S, NACHMANY-AZOGY H, WEIL M

SW21 INVESTIGATING THE PATHOPHYSIOLOGY OF AMYOTROPHIC LATERAL SCLEROSIS USING HUMAN INDUCED PLURIPOTENT STEM CELL TECHNOLOGY

DEVLIN AC, BURR K, BOROOAH S, VALLIER L, SHAW CE, CHANDRAN S, MILES GB

SW22 GENE THERAPY STRATEGY FOR ALS BY AAV9-MEDIATED SILENCING OF MUTANT SOD1

BIFERI MG, COHEN-TANNOUJJI M, RODA M, BARKATS M

SW24 PRECLINICAL EVALUATION IN SOD1.G93A ALS MICE OF A NOVEL, SELECTIVE AND POTENT SIGMA-1 RECEPTOR (51R) AGONIST

PEVIANI M, ROSSI D, COLLINA S, CURTI D

SW25 THE DEVELOPMENT OF RILUZOLE DERIVATIVES WITH IMPROVED POTENCY

PUGH V, MATTHEWS T, POWELL L, SWEENEY J, RATTRAY M

SW26 SINGLE CHAIN ANTIBODIES AGAINST TDP-43 FOR TREATMENT OF ALS

POZZI S, DUTTA K, GRAVEL C, KRIZ J, JULIEN JP

SW27 THE REGULATION OF PROTEIN AGGREGATION BY ARFAP2 IN AMYOTROPHIC LATERAL SCLEROSIS

MOHAMMEDEID A, KONG S, GRIERSON A, AZZOZ M, NING K

Theme 12B Resources and Repositories

RR01 UPDATES ON THE U.S. NATIONAL AMYOTROPHIC LATERAL SCLEROSIS (ALS) REGISTRY

ANTAO V, SANCHEZ M, KAYE W, MURAVOV O, HORTON K

RR02 BENEFITS OF DATA STANDARDIZATION AND HARMONIZATION: A CASE STUDY OF ALSFRS-R FOR POOLED RESOURCE OPEN-ACCESS CLINICAL TRIALS (PRO-ACT) PLATFORM

WALKER J, SINANI E, KATSOVSKIY I, ZACH N, LEITNER M, SHERMAN A

RR03 NEUROBANK™: AN INTERNATIONAL INTEGRATED REPOSITORY OF CLINICAL AND RESEARCH INFORMATION IN ALS/MND

SHERMAN A

RR04 GLOBAL UNIQUE PATIENT IDENTIFIER (GUID) SYSTEM IN CONJUNCTION WITH NEUROBANK™ FACILITATES SCIENTIFIC COLLABORATION WHILE PROTECTING PATIENTS' PRIVACY

KATSOVSKIY I, SINANI E, WALKER J, SELSOV R, CUDKOWICZ M, SHERMAN A

RR05 THE ALS BRAIN TISSUE BANK OF THE ACADEMIC MEDICAL CENTER

CASULA M, TROOST D

RR06 EUROPE PUBMED CENTRAL (EUROPE PMC) – AN ONLINE INFORMATION RESOURCE FOR LIFE SCIENCES AND BIOMEDICAL RESEARCHERS

KINSEY AM, EUROPE PMC CONSORTIUM

RR07 UK MND DNA BANK: A REPOSITORY OF DNA AND CLINICAL INFORMATION FOR THE INTERNATIONAL MND RESEARCH COMMUNITY

CUPID BC, DICKIE B, AL-CHALABI A, MORRISON KE, SHAW CE, SHAW PJ

RR08 NEW DISEASE MANAGEMENT TOOLS

– AMYOTROPHIC LATERAL SCLEROSIS FUNCTIONAL RATING SCALE-REVISED (ALS FRS-R) MOBILE SMARTPHONE (IPHONE/ ANDROID) APPLICATION (ALSFRSR-LITE) FOR PATIENT REPORTING OF REAL-TIME CLINICAL STATUS – DEVELOPMENT AND DEPLOYMENT
BOCKENEK J, BROOKS BR, LUCAS NM, SMITH NP, NICHOLAS MS, BELCHER SL, STORY JS, DESAI UG, BOCKENEK WL, LINDBLOM SS, PACCICO TJ, SANJAK MS, BRAVVER EK, LANGFORD VL, WARD AL, WRIGHT KA, HOLSTEN SE, OPLINGER H, LARY C, RUSSO PC

Theme 12C Clinical Work In Progress and Care Practice

CW01 HOPE AND ALS

DE MOREE S, NOLLET F, DE HAES J, DE VISSER M, GRUPSTRA H, BEELEN A, SMETS E

CW02 TRACKING PATIENT CARE THROUGH A RETROSPECTIVE CHART REVIEW: STRENGTHS AND LIMITATIONS

HESLIN C, CONNOLLY S, TOBIN K, GALVIN M, HARDIMAN O

CW03 THE PATIENT AND CAREGIVER JOURNEY THROUGH ALS: A PROSPECTIVE ANALYSIS

CONOLLY S, GALVIN M, TOBIN K, HARDIMAN O, CORR B, STAINES A, NORMAND C, TIMONEN V, MCQUILLAN R

CW04 PROSPECTIVE STUDY OF COST OF CARE AT MULTIDISCIPLINARY CLINICS ADHERING TO AAN ALS PRACTICE PARAMETERS

TANDAN R, BOYLAN K, LEVINE T, LOMEN-HOERTH C, MAGINNIS K, LYON M

CW05 ATTITUDES TOWARDS LIFE-PROLONGING MEASURES IN PATIENTS WITH ALS

SALMON K, BERTONE D, VITALE A, GENGE A

CW06 THE EFFECTIVENESS OF PURPOSEFUL OCCUPATION IN TREATING MOTOR NEURONE DISEASE

CAREY H, KENNEDY L

CW07 ASSESSMENT OF NON-MOTOR SYMPTOMS IN PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS

PARKS A, KNOX B, WILL J, SHOESMITH C

CW08 HERMENEUTIC PHENOMENOLOGY: UNDERSTANDING THERE IS MORE TO A PERSON THAN MOTOR NEURONE DISEASE

HARRIS DA

CW09 MINDFULNESS MEDITATION FOR INDIVIDUALS WITH AMYOTROPHIC LATERAL SCLEROSIS AND THEIR CAREGIVERS

PAGNINI F, LUNETTA C, ROSSI G, MARCONI A, FOSSATI F, GATTO R, FABBRIS V, TAGLIAFERRI A, DI CREDICO C, BANFI P, CORBO M, PALMIERI A, AMADEI G

CW10 TO LIVE WITH AMYOTROPHIC LATERAL SCLEROSIS: A LONGITUDINAL STUDY OF DISABILITY AND HEALTH

KIERKEGAARD M, LITTORIN S, CRÖDE WIDSELL G, WIDÉN HOLMQVIST L

CW11 THE END-OF-LIFE EXPERIENCE OF PEOPLE WITH MND COMPARED TO THOSE WITH CANCER: FAMILY CARERS' PERSPECTIVES

BENTLEY B, O'CONNOR M, EDIS R, VOJKOVIC S, MCNAMARA B

CW12 IMPROVING SYMPTOM MANAGEMENT FOR PEOPLE WITH AMYOTROPHIC LATERAL SCLEROSIS (ALS)

MURPHY A, WOLFF J, SHAPIRO J, SIMPSON E, GLASS J, MITSUMOTO H, FORSHEW D, CWIK V, LARKINDALE J, MILLER R, CUDKOWICZ M, ATASSI N

CW13 NATURAL HISTORY OF DEPRESSION IN ALS

PAGANONI S, YU H, DENG J, ATASSI H, SHERMAN A, COOK A, YERRAMILI-RAO P, CUDKOWICZ M, ATASSI N

CW14 PERSONALIZED BRAIN-COMPUTER INTERFACES AS COMMUNICATION TOOLS IN ALS

GERONIMO A, SCHIFF S, SIMMONS Z

CW15 THE PRESENT STATUS AND PROBLEM OF THE COMMUNICATION SUPPORT FOR ALS PATIENTS: EXPLORE THE DIRECTION OF IT COMMUNICATION SUPPORT AND QUALITY OF LIFE FOR ALS PATIENTS IN FUTURE

HASEGAWA Y, AHN H, KIRIHARA N

CW16 VALIDITY OF RESPIRATORY PHYSIOTHERAPY FOR ALS PATIENTS USING BAG VALVE MASKS –A CASE STUDY IN WHICH LUNG INSUFFLATION CAPACITY (LIC) TRAINING PRODUCED EXCELLENT RESULTS FOR A PATIENT SUFFERING FROM ATELECTASIS WHO HAD ATTACHED TRACHEOTOMY POSITIVE PRESSURE VENTILATION (TPPV) APPARATUS

YORIMOTO K, MAENO T, MORI M, TAKAHASHI Y, KOBAYASHI Y, MURATA M

CW17 ALS AND NIV: A RETROSPECTIVE STUDY

DE MATTIA E, GARABELLI B, IATOMASI M, ROMA E, FALCIER E, SANSONE V, LUNETTA C, RAO F

CW18 ASSOCIATION BETWEEN FATTY LIVER DISEASE AND AMYOTROPHIC LATERAL SCLEROSIS

OH SI, HWANG BK, OH KW, CHOI WJ, KIM SH

CW19 TRANSDERMAL SCOPOLAMINE OINTMENT FOR REDUCTION OF DROOLING IN JAPANESE PATIENTS WITH AMYOTROPHIC LATERAL SCLEROSIS

ODACHI K, NARITA Y, TAMURA A, SASAKI R, TANIGUCHI A, TOMIMOTO H

CW20 A PROSPECTIVE MULTI-CENTRE EVALUATION OF GASTROSTOMY IN PATIENTS WITH MND

STAVROULAKIS T, WALSH T, SHAW P, MCDERMOTT C

CW21 IS BMI ALONE A RELIABLE INDICATOR OF NUTRITIONAL STATUS PRIOR TO GASTROSTOMY INSERTION IN MND/ALS PATIENTS?

YATES S

CW22 COELIAC DISEASE MIMICKING ALS

BERSANO E, SERVO S, STECCO A, CANTELLO R, MAZZINI L

CW23 DTI AND TRACTOGRAPHY OF THE CERVICAL SPINAL CORD IN PLS AND HSP PATIENTS

MEODED A, SCHANZ O, SARLLS J, RODA R, BLACKSTONE C, PIERPAOLI C, FLOETER MK

CW24 INVESTIGATING CORTICAL GRAY MATTER ASYMMETRY IN AMYOTROPHIC LATERAL SCLEROSIS

DEVINE M, PANNEK K, COULTHARD A, MCCOMBE P, ROSE S, HENDERSON R

CW25 SENSORY ABNORMALITIES IN AMYOTROPHIC LATERAL SCLEROSIS: ANATOMICAL AND FUNCTIONAL EVIDENCE IN HUMANS

IGLESIAS C, EL MENDILI M-M, SANGARI S, MORIZOT-KOULIDIS R, BENALI H, PRADAT F-P, MARCHAND-PAUVERT V

CW26 MULTIPLT DISCHARGES ARE RELATED TO INCREASED SUPERNOMALITY IN ALS AND PMA PATIENTS

SLEUTJES B, MONTFOORT I, VAN DOORN P, VISSER G, BLOK J

CW28 TAKOTSUBO CARDIOMYOPATHY: A POTENTIAL CAUSE OF SUDDEN DEATH IN ALS?

PETERLE E, QUERIN G, BRUNI A, D'ASCENZO C, GAIANI A, BERTOLIN C, ANGELINI C, PEGORARO E, SORARÙ G

CW30 EMOTIONAL PROCESSING AND SOCIAL COGNITION IN ALS/MND

WATERMEYER T, BROWN R, GOLDSTEIN L

CW31 ELECTRONIC (E)-MULTIDISCIPLINARY MONITORING TO IMPROVE AMYOTROPHIC LATERAL SCLEROSIS (ALS) CARE: THE UMBRIA REGION (ITALY) ALS INTEGRATED DELIVERY E-SYSTEM

NARDI K, BRUNORI P, PERTICONI S, CHIARINI A, CANTISANI TA

CW32 MEASUREMENT OF STEROID HORMONE CONCENTRATIONS IN ALS SERUM

RYBERG H, PERSSON L

CW33 THE USE OF QUANTITATIVE MUSCLE ULTRASONOGRAPHY TO DETECT STRUCTURAL CHANGES IN BULBAR MUSCLES IN EARLY STAGE AMYOTROPHIC LATERAL SCLEROSIS

WEIKAMP JG, VAN DEN ENGEL -HOEK L, VOERMANS NC, VAN ALFEN N

CW34 USING STRENGTH MEASURES TO PREDICT FUNCTIONAL CHANGES IN PATIENTS WITH ALS

ANDRES P, MACKLIN E, CUDKOWICZ M

CW35 PUTATIVE BIOMARKERS FOR ALS RISK DERIVED FROM TRANSCRIPTOMICS ANALYSIS IN MUSCLE OF FTLD PATIENTS

HENRIQUES A, ECHANIZ-LAGUNA A, SELLAL F, LOEFFLER JP, GONZALEZ DE AGUILAR JL

CW36 LACK OF ASSOCIATION BETWEEN NUCLEAR FACTOR ERYTHROID-DERIVED 2-LIKE 2 PROMOTER GENE POLIMORPHISMS AND OXIDATIVE STRESS BIOMARKERS IN AMYOTROPHIC LATERAL SCLEROSIS PATIENTS

LOGERFO A, CHICO L, BORGIA L, PETROZZI L, ROCCHI A, D'AMELIO A, CARLES C, CALDARAZZO-IENCO E, MANCUSO M, SICILIANO G

CW37 INFLAMMATION IN AMYOTROPHIC LATERAL SCLEROSIS: EVALUATION OF IL-18 CSF AND BLOOD LEVELS

CARLES C, SICILIANO G, CALDARAZZO-IENCO E, LOGERFO A, GIUNGATO P, ITALIANI P, BOSSÙ P, BORRONI B, MIGLIORINI P, BORASCHI D

CW38 DEEP SEQUENCING OF ALS MUSCLE SAMPLES REVEALS UNIQUE GENE EXPRESSION PATTERNS

SI Y, CUI X, WIANS R, OH S, ALSHARABATI M, LU L, CLAUSSEN G, ANDERSON T, MORGAN D, KAZAMEL M, KING PH

CW39 THE GERMAN PRE-SYMPOMATIC ALS RISK-CARRIER STUDY (GPS-ALS)

WEYDT P, KNEHR A, MADINGER M, BÖHM S, KASSUBEK J, WEISHAUP T, LUDOLPH A

CW40 EXPLORATORY ANALYSIS OF ALS RISK FACTORS IN A CASE-CONTROL STUDY

CALLER T, ANDREW A, FIELD N, DOOLIN J, STOMMEL E

CW41 INTAKES OF CAFFEINE, COFFEE, AND TEA AND RISK OF AMYOTROPHIC LATERAL SCLEROSIS: RESULTS FROM FIVE LARGE COHORT STUDIES

FONDELL E, O'REILLY E, FITZGERALD K, FALCONE G, MCCULLOUGH M, PARK Y, LE MARCHAND L, ASCHERIO A

CW42 EVIDENCE FOR AN ENVIRONMENTAL EFFECT ON SURVIVAL IN ALS

KEREN N, AL-CHALABI A

CW43 PARKINSON-DEMANTIA COMPLEX AND ALS (PDC AND ALS)

IDRISOGLU H. A, IDRISOGLU F. M, IDRISOGLU M, POLAT N

CW44 PHENOTYPING KENNEDY'S DISEASE – A CLINICOGENETIC, ENDOCRINOLOGICAL AND METABOLIC STUDY

HIRSCH S, PRUDLO J, WEYDT P, HERRMANN A, ROSENBOHM A, KREß W, KASSUBEK J, WEISHAUP T, DREYHAUPT J, VOLK A, STOCKMANN M, KUBISCH C, BÖHM B, LUDOLPH A

Friday 6 December

07.00 – 18.00	Registration International Symposium	<i>Hotel Reception, Ground Floor</i>
07.00 – 18.00	Speaker Room	<i>VIP Room, Ground Floor</i>
07.15 – 08.15	NEALS	<i>Pegaso, Basement Level 1</i>
09.00 – 10.30	Symposium Joint Opening Session 1	<i>Aquarium, Ground Floor</i>
10.30 / 15.30	Refreshment breaks am/pm	<i>Aquarium/Mizar Lobby, Ground Floor</i>
11.00 – 17.30	Symposium Scientific Sessions 2A/3A/4A	<i>Mizar, Ground Floor</i>
11.00 – 17.30	Symposium Clinical Sessions 2B/3B/4B	<i>Aquarium, Ground Floor</i>
12.30 – 14.00	Lunch	<i>Andromeda, Ground Floor</i>
17.45 – 19.30	Poster Session A	<i>Aquarium/Quasar, Ground Floor /Basement Level 1</i>

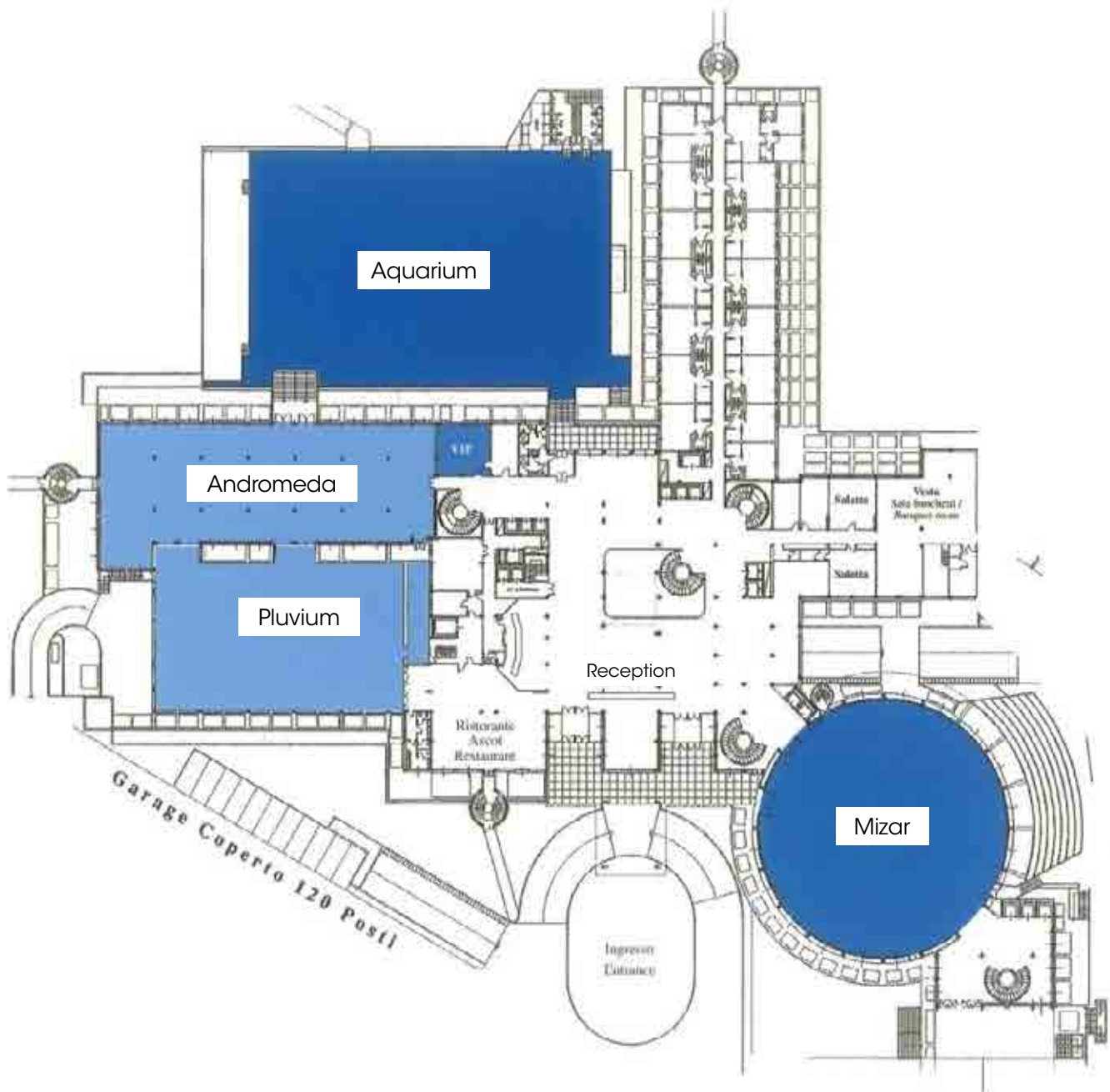
Saturday 7 December

07.00 – 08.00	ALS/RG	<i>Pegaso, Basement Level 1</i>
07.00 – 18.00	Speaker Room	<i>VIP Room, Ground Floor</i>
07.30 – 18.00	Registration International Symposium	<i>Hotel Reception, Ground Floor</i>
08.30 – 17.30	Symposium Scientific Session 5A/6A/7A/8A	<i>Mizar, Ground Floor</i>
08.30 – 17.30	Symposium Clinical Session 5B/6B/7B/8B	<i>Aquarium, Ground Floor</i>
10.00 / 15.30	Refreshment breaks am/pm	<i>Aquarium/Mizar Lobby, Ground Floor</i>
12.30 – 14.00	Lunch	<i>Andromeda, Ground Floor</i>
17.30 – 19.00	Cochrane Neuromuscular Group	<i>Pegaso, Basement Level 1</i>
17.45 – 19.30	Poster Session B	<i>Aquarium/Quasar, Ground Floor /Basement Level 1</i>

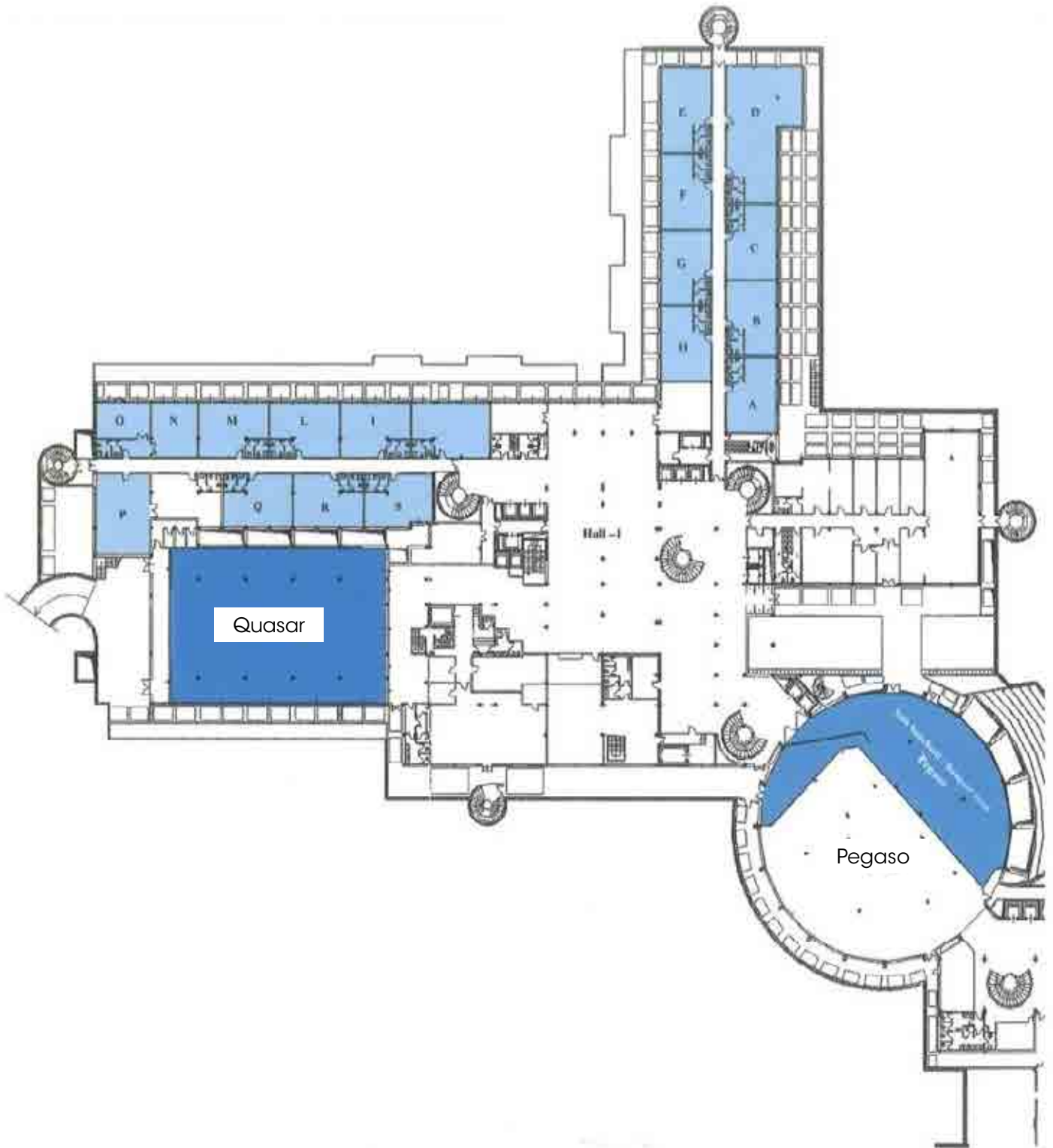
Sunday 8 December

07.00 – 08.30	WALS	<i>Pegaso, Basement Level 1</i>
07.00 – 14.00	Speaker Room	<i>VIP Room, Ground Floor</i>
07.30 – 1300	Registration International Symposium	<i>Hotel Reception, Ground Floor</i>
08.30 – 12.30	Symposium Scientific Sessions 9A/10A	<i>Mizar, Ground Floor</i>
08.30 – 12.45	Symposium Clinical Sessions 9B/10B	<i>Aquarium, Ground Floor</i>
10.30 – 11.00	Refreshment break	<i>Aquarium/Mizar Lobby, Ground Floor</i>
12.30 – 14.00	Lunch	<i>Andromeda, Ground Floor</i>
14.00 – 15.00	Symposium Joint Closing Session 11	<i>Mizar, Ground Floor</i>

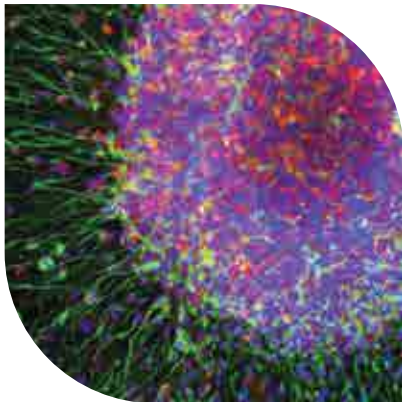
Ground floor



Basement



Brussels 2014



5-7 December 2014, **Brussels, Belgium**

Provisional abstract
submission deadline:
16 May 2014

For further information please contact:

Motor Neurone Disease Association
PO Box 246, Northampton NN1 2PR

Tel: + 44 (0) 1604 611 845

Fax: + 44 (0) 1604 624 726

Email: symposium@mndassociation.org

Email: abstracts@mndassociation.org

www.mndassociation.org/symposium