



## Curriculum Vitae Europass

### Informazioni personali

Nome(i) / Cognome(i) **Diego Martinelli**

Telefono(i)

Fax

E-mail

Cittadinanza Italiana

Codice fiscale

Data di nascita

### Occupazione desiderata/Settore professionale

### Esperienza professionale

Date Anno 2016-2021

Lavoro o posizione ricoperti Dirigente Medico I livello

Principali attività e responsabilità Medico Strutturato UOC Patologia Metabolica

Nome e indirizzo del datore di lavoro Ospedale Pediatrico Bambino Gesù, Piazza S. Onofrio 4, 00165, Roma

Tipo di attività o settore Pediatria – Malattie metaboliche

### Istruzione e formazione

Date Anno 2014 -2016

Titolo della qualifica rilasciata Post-Doctoral Visiting Fellow

Nome e tipo di organizzazione National Institute of Child Health and Human Development, National Institutes of Health

Erogatrice dell'istruzione e formazione

Date Anno 2012

Titolo della qualifica rilasciata Dottorato di Ricerca in Neuroscienze dello Sviluppo

Nome e tipo d'organizzazione

erogatrice dell'istruzione e formazione Facoltà di Medicina, Università Cattolica del Sacro Cuore, Roma, Italia

Date Anno 2009

Titolo della qualifica rilasciata Specializzazione in Neuropsichiatria Infantile, voto 50/50 e lode

Nome e tipo d'organizzazione Facoltà di Medicina, Università Cattolica del Sacro Cuore, Roma, Italia

erogatrice dell'istruzione e formazione Facoltà di Medicina, Università Cattolica del Sacro Cuore, Roma, Italia

Date Anno 2003

Titolo della qualifica rilasciata Laurea in Medicina e Chirurgia, voto 110/110 e lode

Nome e tipo d'organizzazione Facoltà di Medicina, Università Cattolica del Sacro Cuore, Roma, Italia

erogatrice dell'istruzione e formazione Facoltà di Medicina, Università Cattolica del Sacro Cuore, Roma, Italia

### Capacità e competenze personali

Madrelingua(e) **Italiano**

Altra(e) lingua(e) **Inglese – Francese – Portoghese**

Autovalutazione

Livello europeo (\*)

TRIAL CLINICI

Comprensione				Parlato				Scritto	
Ascolto		Lettura		Interazione orale		Produzione orale			
I	si	I	si	I	si	I	si	I	si
F	si	F	si	F	si	F	si	F	si
P	si	P	si	P	si	P	si	P	si

Start Date (YYYY)	Phase (I,II,III,IV)	Indicazione
2019	Retrospective	Retrospective study of Vatiquinone efficacy and safety for the treatment of patients with pontocerebellar hypoplasia type 6 (rars2 syndrome). Sub-investigator
2019	III	A Randomised, Controlled , Open-Label Parallel Arm Study of the Safety, Pharmacokinetics and Ammonia Contraindication of RAVICTI® (Glycerol Phenylbutyrate [GPB]) Oral Liquid and Sodium Phenylbutyrate (NaPBA) in Phenylbutyrate Treatment Naive Patients with Urea Cycle Disorders (UCDs). HPN-100-021, Principal investigator
2013-2016	II	EPI-743 in Cobalamin C defect: effects on Visual and Neurological Impairment (NCT01793090). Principal investigator
2015	II/III	Studio in aperto, multinazionale, multicentrico di fase 2/3 per valutare l'efficacia e la sicurezza di ALXN1101 nei neonati con deficit del cofattore molibdeno (MOCD) di tipo A. protocollo ALXN1101-MCD-202. Sub-investigator
2013-ongoing	II	An open-label study of EPI-743 in Leigh Syndrome (OPBGC&RS 2011-004_CA2012). Sub-investigator
2011-2012	II	An open-label study of EPI-743 in Leigh Syndrome (EPI-2011-004) EudraCT Number: 2012-001294-84. Sub-investigator
2007-2008	II	Investigation of Sodium Valproate in Boys with Fragile X Syndrome and ADHD. NPL-005-1-FMR. Sub-investigator
2006-2008	II	An Open-Label Study of the Efficacy of Atomoxetine hydrochloride on Quality of Life of Children and Adolescents with Attention-Deficit/Hyperactivity Disorder with or without comorbid condition. Sub- investigator

## Attività di ricerca

- La mia attività di ricerca è soprattutto rivolta all'elucidazione dei meccanismi patogenetici e all'identificazione di nuovi geni malattia e biomarcatori negli errori congeniti del metabolismo, in particolare malattie mitocondriali, disturbi del metabolismo del rame, malattie neurometaboliche, neuromuscolari e neurocutanee, difetti del ciclo dell'urea e acidurie organiche. Ho diretto numerosi progetti di medicina traslazionale, focalizzati sulla caratterizzazione clinica e biochimica di pazienti con errori congeniti del metabolismo e sullo sviluppo di nuovi protocolli di valutazione, linee guida e nuovi approcci terapeutici nelle malattie metaboliche e nei disordini del neurosviluppo. Tale attività di ricerca è stata svolta in collaborazione con molti centri in Europa (Francia, Svizzera, Paesi Bassi, Germania, Regno Unito) negli Stati Uniti e Australia.

## Ulteriori informazioni

- Autore di 132 pubblicazioni in extenso su riviste internazionali
- Autore di numerosi Capitoli su libri/testi italiani ed esteri
- Invitato come relatore/moderatore a numerosi congressi Nazionali ed Internazionali
- Membro del SSIEM (European Society for the Study of Inborn Errors of Metabolism)
- Vicepresidente della SIMMESN (Società italiana per lo studio delle Malattie Metaboliche Ereditarie e lo Screening Neonatale.)
- Membro del gruppo di lavoro per le linee guida dell' E-HOD (European Network and Registry for Homocystinurias and Methylation Defects)
- Membro del gruppo di lavoro per le linee guida dell'E-IMD (European Network and Registry for Intoxication Type Metabolic diseases)
- Membro del Board del Consorzio U-IMD (Unified registry for inborn error of metabolism)
- Membro dello Steering committee Bioelectron Technology Corporation –OPBG
- Membro del METABERN-Subnetwork Mitochondrial Diseases –corresponsabile line guida
- Membro del METABERN- Co-cordinator Subnetwork Carbohydrate, fatty acid oxidation and ketone bodies disorders
- Founder Member of the DC and NIH chapter of ISSNAF (Italian Scientists and Scholars in North America Foundation)
- Former Representative of Italians at NIH scientific group
- SSIEM AWARD 2012 for the best late breaking new “MEDNIK syndrome: a novel defect of copper metabolism treatable by zinc acetate therapy”.
- Primo premio al Simposio Nazionale della società Italiana di malattia metaboliche 2012 (SIMMESN – SIMGePeD) per la presentazione orale “Sindrome MEDNIK: un nuovo difetto del metabolismo del rame trattabile con zinco acetato”.
- Prize for best poster presentation - International Workshop “HUMAN DISORDERS OF COPPER METABOLISM: RECENT ADVANCES AND MAIN CHALLENGES”. Johns Hopkins University, Baltimore, Maryland. April 8-9, 2013.
- NICHD Collaboration Award 2014. National Institutes of Child Health and Human Development, National Institutes of Health.
- Oral presenter at the Twelfth Annual NICHDFellows Retreat
- Vincitore nel 2019 di Finanziamento di 110.00 euro da parte della Bioelectron inc per lo studio retrospettivo: “Retrospective study of Vatiquinone efficacy and safety for the treatment of patients with pontocerebellar hypoplasia type 6 (rars2 syndrome)”
- Vincitore come PI della Ricerca Finalizzata 2018 –sezione Giovani Ricercatori con ricerca dal Titolo “Clinical-instrumental definition of the phenotypic spectrum, response to treatment and natural history in Pearson and Kearns-Sayre syndrome” - Finanziamento: 243.980 euro.
- Vincitore come PI del Grant Telethon 2020 con ricerca dal titolo: “Il ruolo dell'infiammazione nelle malattie legate all'integrità del DNA mitocondriale: nuovi potenziali biomarcatori e bersagli terapeutici”. Finanziamento: 153.780 euro
- H Index: 31 (SCOPUS, WEB of SCIENCE)
- Scopus Author Id: 36163327600; ORCID ID: orcid.org/0000-0002-9324-2871 RESEARCH ID: K-9723-2016.

- Idoneità a Professore di seconda fascia in Genetica Medica, abilitazione Scientifica nazionale 2016-2018 quarto quadrimestre
- In corso valutazione per idoneità a Professore di seconda fascia in Pediatria e Neuropsichiatria Infantile, abilitazione Scientifica nazionale 2021
- Patente: WIPO Patent Application WO/2013/006736, Kind Code:A1, titolo: "TREATMENT OF LEIGH SYNDROME AND LEIGH-LIKE SYNDROME, INCLUDING COMPLICATIONS OF SUCLA2 MUTATIONS, WITH TOCOTRIENOL QUINONE". Autori Guy Miller, Carlo Dionisi-Vici, Enrico Silvio Bertini, Diego Martinelli. 10/01/2013
- Patente: United States Patent Application 20150057363 Kind Code: A1, titolo "TREATMENT OF METHYLMALONIC ACIDURIA, ISOVALERIC ACIDURIA, AND OTHER ORGANIC ACIDURIAS WITH TOCOTRIENOL QUINONES". Autori Guy Miller, Carlo Dionisi-Vici, Enrico Silvio Bertini, Diego Martinelli. 26/02/2015
- Docenza nel Corso Alta Formazione "Disturbi del movimento nel bambino: nuove acquisizioni scientifiche e strategie diagnostiche", responsabile scientifico Prof. V. Leuzzi, DIPARTIMENTO DI PEDIATRIA E NEUROPSICHIATRIA INFANTILE "SAPIENZA" Università di Roma, Anno 2016-2017
- Docenza nel Corso Alta Formazione "Neurologia infantile: nuove acquisizioni scientifiche, nuove malattie, nuove strategie diagnostiche, nuovi approcci terapeutici", responsabile scientifico Prof. V. Leuzzi, DIPARTIMENTO DI PEDIATRIA E NEUROPSICHIATRIA INFANTILE "SAPIENZA" Università di Roma, Anno 2016-2017
- Docenza Master - La neuroriabilitazione e le neuroscienze dell'età evolutiva - consorzio Humanitas/Lumsa/2019-2020 con lezione dal titolo: "Il bambino con malattia neurodegenerativa"
- Docenza nell'ambito del corso di formazione "Novità sulla Patogenesi e il trattamento delle Malattie Metaboliche Ereditarie" organizzato dalla SIMMESN (società italiana malattie metaboliche ereditarie e screening neonatale).
- Docente nell'ambito del Master sulle Malattie Metaboliche Ereditarie e Screening Neonatale – Direttore Prof. Andrea Pession organizzato dalla Università di Bologna in collaborazione con la SIMMESN

## Publicazioni

- 1) Baban, A., Lodato, V., Parlapiano, G., Di Mambro C, Adorisio R, Bertini E, Dionisi-Vici C, Drago, F., Martinelli, D. Myocardial and Arrhythmic Spectrum of Neuromuscular Disorders in Children. *Biomolecules*, 2021, 11(11), 1578.
- 2) Brennenstuhl, H., Nashawi, M., Schröter, J., ...Kozich, V., Scarpa, M. Phenotypic diversity, disease progression, and pathogenicity of MVK missense variants in mevalonic aciduria. *Journal of Inherited Metabolic Disease*, 2021, 44(5), pp. 1272–1287.
- 3) Laugwitz L, Seibt A, Herebian D, Peralta S, Kienzle I, Buchert R, Falb R, Gauck D, Müller A, Grimm M, Beck-Woedel S, Kern J, Daliri K, Katibeh P, Danhauser K, Leiz S, Alesi V, Baertling F, Vasco G, Steinfeld R, Wagner M, Caglayan AO, Gumus H, Burmeister M, Mayatepek E, Martinelli D, Tamhankar PM, Tamhankar V, Joset P, Steindl K, Rauch A, Bonnen PE, Froukh T, Groeschel S, Krägeloh-Mann I, Haack TB, Distelmaier F. Human COQ4 deficiency: delineating the clinical, metabolic and neuroimaging phenotypes. *J Med Genet* 2021 Oct 16; jmedgenet-2021-107729.
- 4) Ardisson A, Bruno C, Diodato D, Donati A, Ghezzi D, Lamantea E, Lamperti C, Mancuso M, Martinelli D, Primiano G, Procopio E, Rubegni A, Santorelli F, Schiaffino MC, Servidei S, Tubili F, Bertini E, Moroni I. Clinical, imaging, biochemical and molecular features in Leigh syndrome: a study from the Italian network of mitochondrial diseases *Orphanet J Rare Dis*. 2021 Oct 9;16(1):413.
- 5) Battaglia DI, Gambardella ML, Veltri S, Contaldo I, Chillemi G, Veredice C, Quintiliani M, Leoni C, Onesimo R, Verdolotti T, Radio FC, Martinelli D, Trivisano M, Specchio N, Dravet C, Tartaglia M, Zampino G. Epilepsy and BRAF Mutations: Phenotypes, Natural History and Genotype-Phenotype Correlations *Genes (Basel)*. 2021 Aug 26;12(9):1316.

- 6) Ferreira CR, Martinelli D, Blau N. Clinical and biochemical footprints of inherited metabolic diseases. VI. Metabolic dermatoses. *Mol Genet Metab*. 2021 Sep-Oct;134(1-2):87-95.
- 7) Ticci C, Orsucci D, Ardissonne A, Bello L, Bertini E, Bonato I, Bruno C, Carelli V, Diodato D, Doccini S, Donati MA, Dosi C, Filosto M, Fiorillo C, La Morgia C, Lamperti C, Marchet S, Martinelli D, Minetti C, Moggio M, Mongini TE, Montano V, Moroni I, Musumeci O, Pancheri E, Pegoraro E, Primiano G, Procopio E, Rubegni A, Scalise R, Sciacco M, Servidei S, Siciliano G, Simoncini C, Tolomeo D, Tonin P, Toscano A, Tubili F, Mancuso M, Battini R, Santorelli FM. Movement Disorders in Children with a Mitochondrial Disease: A Cross-Sectional Survey from the Nationwide Italian Collaborative Network of Mitochondrial Diseases. *J Clin Med* 2021 May 12;10(10):2063.
- 8) Olivieri G, Martinelli D, Longo D, Grimaldi C, Liccardo D, Di Meo I, Pietrobattista A, Sidorina A, Semeraro M, Dionisi-Vici C. Ethylmalonic encephalopathy and liver transplantation: long-term outcome of the first treated patient. *Orphanet J Rare Dis*. 2021 May 19;16(1):229. doi: 10.1186/s13023-021-01867-5.
- 9) Di Mambro C, Martinelli D, Tamborrino PP, Drago F. Involvement of the cardiac conduction system in Kearns-Sayre syndrome is progressive: Authors' reply. *Europace*. 2021 Jun 7;23(6):980. doi: 10.1093/europace/euab056
- 10) Maines E, Franceschi R, Martinelli D, Soli F, Lepri FR, Piccoli G, Soffiati M. Hypoglycemia due to PI3K/AKT/mTOR signaling pathway defects: two novel cases and review of the literature. *Hormones (Athens)*. 2021 Apr 20. doi: 10.1007/s42000-021-00287-1.
- 11) Rossi A, Hoogeveen IJ, Lubout CMA, de Boer F, Fokkert-Wilts MJ, Rodenburg IL, van Dam E, Grünert SC, Martinelli D, Scarpa M; CONNECT MetabERN collaboration group, Dekker H, Te Boekhorst ST, van Spronsen FJ, Derks TGJ. A generic emergency protocol for patients with inborn errors of metabolism causing fasting intolerance: a retrospective, single-center study and the generation of [www.emergencyprotocol.net](http://www.emergencyprotocol.net). *J Inher Metab Dis*. 2021 Apr 12. doi: 10.1002/jimd.12386.
- 12) Torraco A, Nasca A, Verrigni D, Pennisi A, Zaki MS, Olivieri G, Assouline Z, Martinelli D, Maroofian R, Rizza T, Di Nottia M, Invernizzi F, Lamantea E, Longo D, Houlden H, Prokisch H, Rötig A, Dionisi-Vici C, Bertini E, Ghezzi D, Carrozzo R, Diodato D. Novel NDUFA12 variants are associated with isolated complex I defect and variable clinical manifestation. *Hum Mutat*. 2021 Mar 14.
- 13) Diamanti A, Calvitti G, Martinelli D, Santariga E, Capriati T, Bolasco G, Iughetti L, Pujia A, Knafelz D, Maggiore G. Etiology and Management of Pediatric Intestinal Failure: Focus on the Non-Digestive Causes. *Nutrients*. 2021 Feb 27;13(3):786
- 14) Diociaiuti A, Martinelli D, Nicita F, Cesario C, Pisaneschi E, Macchiaiolo M, Rossi S, Condorelli AG, Zambruno G, El Hachem M. Two Italian Patients with ELOVL4-Related Neuro-Ichthyosis: Expanding the Genotypic and Phenotypic Spectrum and Ultrastructural Characterization. *Genes (Basel)*. 2021 Feb 26;12(3):343.
- 15) Pettinato F, Mostile G, Battini R, Martinelli D, Madeo A, Biamino E, Frattini D, Garozzo D, Gasperini S, Parini R, Sirchia F, Sortino G, Sturiale L, Matthijs G, Morrone A, Di Rocco M, Rizzo R, Jaeken J, Fiumara A, Barone R. Clinical and radiological correlates of activities of daily living in cerebellar atrophy caused by PMM2 mutations (PMM2-CDG). *Cerebellum*. 2021 Feb 22
- 16) Masnada S, Martinelli D, Correa-Vela M, Agolini E, Baide-Mairena H, Marcé-Grau A, Parazzini C, Veggiotti P, Perez-Duenas B, Tonduti D. PRKRA-Related Disorders: Bilateral Striatal Degeneration in Addition to DYT16 Spectrum. *Mov Disord*. 2021 Apr;36(4):1038-1040. doi: 10.1002/mds.28492.
- 17) Opladen T, Gleich F, Kozich V, Scarpa M, Martinelli D, Schaefer F, Jeltsch K, Juliá-Palacios N, García-Cazorla Á, Dionisi-Vici C, Kölker S. U-IMD: the first Unified European registry for inherited metabolic diseases. *Orphanet J Rare Dis*. 2021 Feb 18;16(1):95. doi: 10.1186/s13023-021-01726-3.
- 18) Fony P, Hörster F, Ballhausen D, Chakrapani A, Chapman KA, Dionisi-Vici C, Dixon M, Grünert SC, Grunewald S, Haliloglu G, Hochuli M, Honzik T, Karall D, Martinelli D, Molema F, Sass JO, Schöll-Bürgi S, Tal G, Williams M, Huemer M, Baumgartner MR. Guidelines for the diagnosis and management of methylmalonic acidemia and propionic acidemia: First revision. *J Inher Metab Dis*. 2021 Feb 17. doi: 10.1002/jimd.12370.

- 19) Di Mambro C, Tamborrino PP, Silvetti MS, Yammine ML, Marcolin C, Righi D, Baban A, Martinelli D, Vici CD, Drago F. Progressive involvement of cardiac conduction system in paediatric patients with Kearns-Sayre syndrome: how to predict occurrence of complete heart block and sudden cardiac death? *Europace*. 2020 Dec 18:euaa335.
- 20) Polovitskaya MM, Barbini C, Martinelli D, Harms FL, Cole FS, Calligari P, Bocchinfuso G, Stella L, Ciolfi A, Niceta M, Rizza T, Shinawi M, Sisco K, Johannsen J, Denecke J, Carrozzo R, Wegner DJ, Kutsche K, Tartaglia M, Jentsch TJ. A Recurrent Gain-of-Function Mutation in CLCN6, Encoding the CIC-6 Cl<sup>-</sup>/H<sup>+</sup>-Exchanger, Causes Early-Onset Neurodegeneration. *Am J Hum Genet*. 2020 Dec 3;107(6):1062-1077. doi: 10.1016/j.ajhg.2020.11.004.
- 21) Pasquini L, Guarnera A, Rossi-Espagnet MC, Napolitano A, Diodato D, Martinelli D, Longo D. Reply to: "Is the spinal cord truly affected in half of the patients with Kearns-Sayre syndrome?" and "Spinal cord and heart involvement in Kearns Sayre Syndrome: which link?". *Neuroradiology*. 2021 Jan;63(1):9-10. doi: 10.1007/s00234-020-02593-8. Epub 2020 Nov 3.
- 22) Pasquini L, Guarnera A, Rossi-Espagnet MC, Napolitano A, Martinelli D, Deodato F, Diodato D, Carrozzo R, Dionisi-Vici C, Longo D. Correction to: Spinal cord involvement in Kearns-Sayre syndrome: a neuroimaging study. *Neuroradiology*. 2020 Dec;62(12):1725. doi: 10.1007/s00234-020-02573-y. Erratum for: *Neuroradiology*. 2020 Oct;62(10):1315-1321.
- 23) Molema F, Martinelli D, Hörster F, Kölker S, Tangeraas T, de Koning B, Dionisi-Vici C, Williams M; additional individual contributors of MetabERN. Liver and/or kidney transplantation in amino and organic acid-related inborn errors of metabolism: An overview on European data. *J Inherit Metab Dis*. 2020 Sep 30.
- 24) Bösch F, Landolt MA, Baumgartner MR, Zeltner N, Kölker S, Gleich F, Burlina A, Cazzorla C, Packman W, V D Schwartz I, Vieira Neto E, Ribeiro MG, Martinelli D, Olivieri G, Huemer M. Health-related quality of life in paediatric patients with intoxication-type inborn errors of metabolism: Analysis of an international data set. *J Inherit Metab Dis*. 2021 Jan;44(1):215-225.
- 25) Casetta B, Malvagia S, Funghini S, Martinelli D, Dionisi-Vici C, Barone R, Fiumara A, Donati MA, Guerrini R, la Marca G. A new strategy implementing mass spectrometry in the diagnosis of congenital disorders of N-glycosylation (CDG). *Clin Chem Lab Med*. 2020 Aug 10;59(1):165-171
- 26) Maines E, Catesini G, Boenzi S, Mosca A, Candusso M, Dello Strologo L, Martinelli D, Maiorana A, Liguori A, Olivieri G, Taurisano R, Piemonte F, Rizzo C, Spada M, Dionisi-Vici C. Plasma methylcitric acid and its correlations with other disease biomarkers: The impact in the follow up of patients with propionic and methylmalonic acidemia. *J Inherit Metab Dis*. 2020 Nov;43(6):1173-1185.
- 27) Marti-Sanchez L, Baide-Mairena H, Marcé-Grau A, Pons R, Skouma A, López-Laso E, Sigatullina M, Rizzo C, Semeraro M, Martinelli D, Carrozzo R, Dionisi-Vici C, González-Gutiérrez-Solana L, Correa-Vela M, Ortigoza-Escobar JD, Sánchez-Montañez Á, Vazquez É, Delgado I, Aguilera-Albesa S, Yoldi ME, Ribes A, Tort F, Pollini L, Galosi S, Leuzzi V, Tolve M, Pérez-Gay L, Aldamiz-Echevarría L, Del Toro M, Arranz A, Roelens F, Urreiziti R, Artuch R, Macaya A, Pérez-Dueñas B. Delineating the neurological phenotype in children with defects in the ECHS1 or HIBCH gene. *J Inherit Metab Dis*. 2021 Mar;44(2):401-414.
- 28) Martinelli D, Schiff M, Semeraro M, Agolini E, Novelli A, Dionisi-Vici C. CUGC for lysinuric protein intolerance (LPI). *Eur J Hum Genet*. 2020 Aug;28(8):1129-1134.
- 29) Martinelli D, Fiermonte G, Häberle J, Boenzi S, Goffredo BM, Travaglini L, Agolini E, Porcelli V, Dionisi-Vici C. CUGC for hyperornithinemia-hyperammonemia-homocitrullinuria (HHH) syndrome. *Eur J Hum Genet*. 2020 Jul;28(7):982-987.
- 30) Summa S, Schirinzi T, Favetta M, Romano A, Minosse S, Diodato D, Olivieri G, Martinelli D, Sancesario A, Zanni G, Castelli E, Bertini E, Petrarca M, Vasco G. A wearable video-oculography based evaluation of saccades and respective clinical correlates in patients with early onset ataxia. *J Neurosci Methods*. 2020 May 15;338:108697. doi: 10.1016/j.jneumeth.2020.108697. Epub 2020 Mar 20. PMID: 32205159.
- 31) Hengel H, Bosso-Lefèvre C, Grady G, Szenker-Ravi E, Li H, Pierce S, Lebigot É, Tan TT, Eio MY, Narayanan G, Utami KH, Yau M, Handal N, Deigendesch W, Keimer R, Marzouqa HM, Gunay-Aygun M, Muriello MJ, Verhelst H, Weckhuysen S, Mahida S, Naidu S, Thomas TG, Lim JY, Tan ES, Hays D, Willemsen MAAP,

- Oegema R, Mitchell WG, Pierson TM, Andrews MV, Willing MC, Rodan LH, Barakat TS, van Slechtenhorst M, Gavrilova RH, Martinelli D, Gilboa T, Tamim AM, Hashem MO, AlSayed MD, Abdulrahim MM, Al-Owain M, Awaji A, Mahmoud AAH, Faqeh EA, Asmari AA, Algain SM, Jad LA, Aldhalaan HM, Helbig I, Koolen DA, Riess A, Kraegeloh-Mann I, Bauer P, Gulsuner S, Stamberger H, Ng AYJ, Tang S, Tohari S, Keren B, Schultz-Rogers LE, Klee EW, Barresi S, Tartaglia M, Mor-Shaked H, Maddirevula S, Begtrup A, Telegrafi A, Pfundt R, Schüle R, Ciruna B, Bonnard C, Pouladi MA, Stewart JC, Claridge-Chang A, Lefeber DJ, Alkuraya FS, Mathuru AS, Venkatesh B, Barycki JJ, Simpson MA, Jamuar SS, Schöls L, Reversade B. Loss-of-function mutations in UDP-Glucose 6-Dehydrogenase cause recessive developmental epileptic encephalopathy. *Nat Commun.* 2020 Jan 30;11(1):595. doi: 10.1038/s41467-020-14360-7. PubMed PMID: 32001716; PubMed Central PMCID: PMC6992768.
- 32)** Ticci C, Sicca F, Ardisson A, Bertini E, Carelli V, Diodato D, Di Vito L, Filosto La Morgia C, Lamperti C, Martinelli D, Moroni I, Musumeci O, Orsucci D, Pancheri E, Peverelli L, Primiano G, Rubegni A, Servidei S, Siciliano G, Simoncini C, Tonin P, Toscano A, Mancuso M, Santorelli FM. Mitochondrial epilepsy: a cross-sectional nationwide Italian survey. *Neurogenetics.* 2020 Jan 3. doi: 10.1007/s10048-019-00601-5. [Epub ahead of print] PubMed PMID: 31900734.
- 33)** Agolini E, Cherchi C, Bellacchio E, Martinelli D, Cocciadiferro D, Cutrera R, Chiarini Testa MB, Barone C, Bianca S, Novelli A. Expanding the clinical and molecular spectrum of Lethal Congenital Contracture Syndrome 8 associated with biallelic variants of ADCY6. *Clin Genet.* 2019 Dec 17. doi: 10.1111/cge.13691. [Epub ahead of print] PubMed PMID: 31846058.
- 34)** Rossi-Espagnet MC, Pro S, Martinelli D, Diodato D, Napolitano A, Longo D. Reply to: Viability of diffusion tensor imaging for assessing retrochiasmatic involvement in Kearns-Sayre syndrome remains elusive. *Neuroradiology.* 2020 Feb;62(2):133-134. doi: 10.1007/s00234-019-02344-4. Epub 2019 Dec 14. PubMed PMID: 31838563.
- 35)** Rossi-Espagnet MC, Lucignani M, Pasquini L, Napolitano A, Pro S, Romano A, Diodato D, Martinelli D, Longo D. Visual pathways evaluation in Kearns Sayre syndrome: a diffusion tensor imaging study. *Neuroradiology.* 2020 Feb;62(2):241-249. doi: 10.1007/s00234-019-02302-0. Epub 2019 Nov 4. PubMed PMID: 31680196.
- 36)** Molema F, Gleich F, Burgard P, van der Ploeg AT, Summar ML, Chapman KA, Lund AM, Rizopoulos D, Kölker S, Williams M, Hörster F, Jelsig AM, de Lonlay P, Wijburg FA, Bosch A, Freisinger P, Posset R, Augoustides-Savvopoulou P, Avram P, Deleanu C, Baumgartner MR, Häberle J, Blasco-Alonso J, Burlina AB, Rubert L, Cazorla AG, Saladelafont ECI, Dionisi-Vici C, **Martinelli D**, Dobbelaere D, Mention K, Grünwald S, Chakrapani A, Hwu WL, Chien YH, Lee NC, Karall D, Scholl-Bürgi S, De Laet C, Matsumoto S, de Meirleir L Schiff M, Peña-Quintana L, Djordjevic M, Sarajlija A, Sykut-Cegielska J, Wisniewska A, Leao-Teles E, Alves S, Vara R, Vives-Pinera I, Gil-Ortega D, Morris A, Zeman J, Honzik T, Chabrol B, Arnaudo F, Cano A, Thompson N, Eyskens F, Lindner M, Lüsebrink N, Jalan A, Sokal E, Legros V, Nassogne MC, Barić I. Decreased plasma l-arginine levels in organic acidurias (MMA and PA) and decreased plasma branched-chain amino acid levels in urea cycle disorders as a potential cause of growth retardation: Options for treatment. *Mol Genet Metab.* 2019 Feb 25. pii: S1096-7192(18)30658-9. doi: 10.1016/j.ymgme.2019.02.003.
- 37)** Ricci D, Martinelli D, Ferrantini G, Lucibello S, Gambardella ML, Olivieri G, Chieffo D, Battaglia D, Diodato D, Iarossi G, Donati A, Dionisi-Vici C, Battini R, Mercuri E. Early neurodevelopmental characterization in children with cobalamin C/defect. *J Inher Metab Dis.* 2019 Sep 10. doi:10.1002/jimd.12171.
- 38)** Olivieri G, Pro S, Diodato D, Di Capua M, Longo D, Martinelli D, Bertini E, Dionisi-Vici C. Corticospinal tract damage in HHH syndrome: a metabolic cause of hereditary spastic paraplegia. *Orphanet J Rare Dis.* 2019 Aug 23;14(1):208. doi: 10.1186/s13023-019-1181-7.
- 39)** Magini P, Marco-Marin C, Escamilla-Honrubia JM, Martinelli D, Dionisi-Vici C, Faravelli F, Forzano F, Seri M, Rubio V, Panza E. P5CS expression study in a new family with ALDH18A1-associated hereditary spastic paraplegia SPG9. *Ann Clin Transl Neurol.* 2019 Aug;6(8):1533-1540. doi:10.1002/acn3.50821.

- 40) Ranucci G, Rigoldi M, Cotugno G, Bernabei SM, Liguori A, Gasperini S, Goffredo BM, Martinelli D, Monti L, Francalanci P, Candusso M, Parini R, Dionisi-Vici C. Chronic liver involvement in urea cycle disorders. *J Inherit Metab Dis.* 2019 Jul 1. doi: 10.1002/jimd.12144.
- 41) Häberle J, Burlina A, Chakrapani A, Dixon M, Karall D, Lindner M, Mandel H, Martinelli D, Pintos-Morell G, Santer R, Skouma A, Servais A, Tal G, Rubio V, Huemer M, Dionisi-Vici C. Suggested guidelines for the diagnosis and management of urea cycle disorders: First revision. *J Inherit Metab Dis.* 2019 Apr 14. doi:10.1002/jimd.12100.
- 42) Amor DJ, Stephenson SEM, Mustapha M, Mensah MA, Ockeloen CW, Lee WS, Tankard RM, Phelan DG, Shinawi M, de Brouwer APM, Pfundt R, Dowling C, Toler TL, Sutton VR, Agolini E, Rinelli M, Capolino R, Martinelli D, Zampino G, Dumić M, Reardon W, Shaw-Smith C, Leventer RJ, Delatycki MB, Kleefstra T, Mundlos S, Mortier G, Bahlo M, Allen NJ, Lockhart PJ. Pathogenic Variants in GPC4 Cause Keipert Syndrome. *Am J Hum Genet.* 2019 May 2;104(5):914-924. doi:10.1016/j.ajhg.2019.02.026.
- 43) Ditrói T, Nagy A, Martinelli D, Rosta A, Kožich V, Nagy P. Comprehensive analysis of how experimental parameters affect H(2)S measurements by the monobromobimane method. *Free Radic Biol Med.* 2019 May 20;136:146-158. doi: 10.1016/j.freeradbiomed.2019.04.006.
- 44) Kahn-Kirby AH, Amagata A, Maeder CI, Mei JJ, Sideris S, Kosaka Y, Hinman A, Malone SA, Bruegger JJ, Wang L, Kim V, Shrader WD, Hoff KG, Latham JC, Ashley EA, Wheeler MT, Bertini E, Carozzo R, Martinelli D, Dionisi-Vici C, Chapman KA, Enns GM, Gahl W, Wolfe L, Saneto RP, Johnson SC, Trimmer JK, Klein MB, Holst CR. Targeting ferroptosis: A novel therapeutic strategy for the treatment of mitochondrial disease-related epilepsy. *PLoS One.* 2019 Mar 28;14(3):e0214250. doi: 10.1371/journal.pone.0214250. eCollection 2019.
- 45) Panza E, Martinelli D, Magini P, Dionisi Vici C, Seri M. Hereditary Spastic Paraplegia Is a Common Phenotypic Finding in ARG1 Deficiency, P5CS Deficiency and HHH Syndrome: Three Inborn Errors of Metabolism Caused by Alteration of an Interconnected Pathway of Glutamate and Urea Cycle Metabolism. *Front Neurol.* 2019 Feb 22;10:131.
- 46) Rotoli BM, Barilli A, Ingoglia F, Visigalli R, Bianchi MG, Ferrari F, Martinelli D, Dionisi-Vici C, Dall'Asta V. Analysis of LPI-causing mutations on  $\gamma$ -LAT1 function and localization. *Orphanet J Rare Dis.* 2019 Mar 4;14(1):63. doi: 10.1186/s13023-019-1028-2.
- 47) Verrigni D, Nottia MD, Ardisson A, Baruffini E, Nasca A, Legati A, Bellacchio E, Fagiolari G, **Martinelli D**, Fusco L, Battaglia D, Trani G, Versienti G, Marchet S, Torracco A, Rizza T, Verardo M, D'Amico A, Diodato D, Moroni I, Lamperti C, Petrini S, Moggio M, Goffrini P, Ghezzi D, Carozzo R, Bertini E. Clinical-genetic features and peculiar muscle histopathology in infantile DNM1L-related mitochondrial epileptic encephalopathy. *Hum Mutat.* 2019 Feb 22. doi: 10.1002/humu.23729. [Epub ahead of print]
- 48) Molema F, Gleich F, Burgard P, T. van der Ploeg A, Summar ML, Chapman KA, Lund AM, Kölker S, Williams M; Additional individual contributors from E-IMD: M. Jelsig, P. de Lonlay, F. A. Wijburg, A. Bosch, P. Freisinger, K. Jeltsch, R. Posset, N. Boy, K. Mengler, P. Augoustides-Savvopoulou, P. Avram, I. Barić, M. R. Baumgartner, J. Häberle, J. Blasco-Alonso, A. B. Burlina, L. Rubert, A. Garcia Cazorla, E. Cortes i Saladelafont, M. L. Couce, C. Dionisi-Vici, D. **Martinelli, D**, Chung Lee, D. Karall, S. Scholl-Bürgi, C. De Laet, R. Lachmann, S. Matsumoto, L. de Meirleir C. Mühlhausen, M. Schiff, L. Peña-Quintana, A. Chakrapani, M. Djordjevic, A. Sarajlija, J. Sykut-Cegielska, R. Vara, I. V. Pinera, A. Morris. Evaluation of dietary treatment and amino acid supplementation in classic organic acidurias and urea-cycle disorders. On the basis of the information from a European multicenter database (E-IMD). *J Inherit Metab Dis*, *in press*.
- 49) Porta F, Chiesa N, **Martinelli D**, Spada M. Clinical, biochemical, and molecular spectrum of short/branched-chain acyl-CoA dehydrogenase deficiency: two new cases and review of literature. *J Pediatr Endocrinol Metab.* 2019 Feb 25;32(2):101-108.



**50)** **Martinelli D**, Goffredo BM, Stefania Falvella F, Marano M. Acute hyperammonemia in children under deferasirox treatment: cutting the Gordian knot. *Clin Toxicol (Phila)*. 2018 Nov 16;1-2. doi: 10.1080/15563650.2018.1523425. [Epub ahead of print] PubMed PMID: 30442064.

**51)** Huemer M, Diodato D, **Martinelli D**, Olivieri G, Blom H, Gleich F, Kölker S, Kožich V, Morris AA, Seifert B, Froese DS, Baumgartner MR, Dionisi-Vici C; EHOD consortium, Alcalde Martin C, Baethmann M, Ballhausen D, Blasco-Alonso J, Boy N, Bueno M, Burgos Peláez R, Cerone R, Chabrol B, Chapman KA, Couce ML, Crushell E, Dalmau Serra J, Diogo L, Ficocioglu C, García Jimenez MC, García Silva MT, Gaspar AM, Gautschi M, González-Lamuño D, Gouveia S, Grünwald S, Hendriksz C, Janssen MCH, Jesina P, Koch J, Konstantopoulou V, Lavigne C, Lund AM, Martins EG, Meavilla Olivas S, Mention K, Mochel F, Mundy H, Murphy E, Paquay S, Pedrón-Giner C, Ruiz Gómez MA, Santra S, Schiff M, Schwartz IV, Scholl-Bürgi S, Servais A, Skouma A, Tran C, Vives Piñera I, Walter J, Weisfeld-Adams J. Phenotype, treatment practice and outcome in the cobalamin-dependent remethylation disorders and MTHFR deficiency: data from the E-HOD registry. *J Inher Metab Dis*. 2018 Sep 3. doi: 10.1007/s10545-018-0238-4. [Epub ahead of print] PubMed PMID: 30178268.

**52)** Diodato D, Olivieri G, Pro S, Maiorani D, **Martinelli D**, Deodato F, Taurisano R, Di Capua M, Dionisi-Vici C. Axonal peripheral neuropathy in propionic acidemia: A severe side effect of long-term metronidazole therapy. *Neurology*. 2018 Sep 18;91(12):565-567. doi: 10.1212/WNL.0000000000006209. Epub 2018 Aug 17. PubMed PMID: 30120134.

**53)** Torraco A, Stehling O, Stümpfig C, Rösser R, De Rasmio D, Fiermonte G, Verrigni D, Rizza T, Voza A, Di Nottia M, Diodato D, **Martinelli D**, Piemonte F, Dionisi-Vici C, Bertini E, Lill R, Carrozzo R. ISCA1 mutation in a patient with infantile-onset leukodystrophy causes defects in mitochondrial [4Fe-4S] proteins. *Hum Mol Genet*. 2018 Oct 15;27(20):3650. doi: 10.1093/hmg/ddy273. PubMed PMID: 30113620.

**54)** Haddad MR, Choi EY, Zervas PM, Yi L, **Martinelli D**, Sullivan P, Goldstein DS, Centeno JA, Brinster LR, Ralle M, Kaler SG. Cerebrospinal Fluid-Directed rAAV9-rsATP7A Plus Subcutaneous Copper Histidinate Advance Survival and Outcomes in a Menkes Disease Mouse Model. *Mol Ther Methods Clin Dev*. 2018 Jul 9;10:165-178. doi: 10.1016/j.omtm.2018.07.002. eCollection 2018 Sep 21. PubMed PMID: 30090842; PubMed Central PMCID: PMC6080355.

**55)** Repp BM, Mastantuono E, Alston CL, Schiff M, Haack TB, Rötig A, Ardisson A, Lombès A, Catarino CB, Diodato D, Schottmann G, Poulton J, Burlina A, Jonckheere A, Munnich A, Rolinski B, Ghezzi D, Rokicki D, Wellesley D, **Martinelli D**, Wenhong D, Lamantea E, Ostergaard E, Pronicka E, Pierre G, Smeets HJM, Wittig I, Scurr I, de Coo IFM, Moroni I, Smet J, Mayr JA, Dai L, de Meirleir L, Schuelke M, Zeviani M, Morscher RJ, McFarland R, Seneca S, Klopstock T, Meitinger T, Wieland T, Strom TM, Herberg U, Ahting U, Sperl W, Nassogne MC, Ling H, Fang F, Freisinger P, Van Coster R, Strecker V, Taylor RW, Häberle J, Vockley J, Prokisch H, Wortmann S. Clinical, biochemical and genetic spectrum of 70 patients with ACAD9 deficiency: is riboflavin supplementation effective? *Orphanet J Rare Dis*. 2018 Jul 19;13(1):120. doi: 10.1186/s13023-018-0784-8. PubMed PMID: 30025539; PubMed Central PMCID: PMC6053715.

**56)** Posset R, Garbade SF, Boy N, Burlina AB, Dionisi-Vici C, Dobbelaere D, Garcia-Cazorla A, de Lonlay P, Teles EL, Vara R, Ah Mew N, Batshaw ML, Baumgartner MR, McCandless S, Seminara J, Summar M, Hoffmann GF, Kölker S, Burgard P; Additional individual contributors of the UCDC and the E-IMD consortium. Transatlantic combined and comparative data analysis of 1095 patients with urea cycle disorders-a successful strategy for clinical research of rare diseases. *J Inher Metab Dis*. 2018 Jul 4. doi: 10.1007/s10545-018-0222-z. [Epub ahead of print] PubMed PMID: 29974348.

**57)** Torraco A, Stehling O, Stümpfig C, Rösser R, De Rasmio D, Fiermonte G, Verrigni D, Rizza T, Voza A, Di Nottia M, Diodato D, **Martinelli D**, Piemonte F, Dionisi-

Vici C, Bertini E, Lill R, Carrozzo R. ISCA1 Mutation In A Patient With Infantile-Onset Leukodystrophy Causes Defects In Mitochondrial [4Fe-4S] Proteins. *Hum Mol Genet*. 2018 May 14. doi: 10.1093/hmg/ddy183. [Epub ahead of print] PubMed PMID: 29767723.

**58)** Ashikov A, Abu Bakar N, Wen XY, Niemeijer M, Rodrigues Pinto Osorio G, Brand-Arzamendi K, Hasadsri L, Hansikova H, Raymond K, Vicogne D, Ondruskova N, Simon MEH, Pfundt R, Timal S, Beumers R, Biot C, Smeets R, Kersten M, Huijben K; CDG group, Linders PTA, van den Bogaart G, van Hijum SAFT, Rodenburg R, van den Heuvel LP, van Spronsen F, Honzik T, Foulquier F, van Scherpenzeel M, Lefeber DJ; CDG group, Mirjam W, Han B, Helen M, Helen M, Peter VH, Jiddeke VK, **Martinelli D**, M, Lars M, Katja BH, Jozef H, Majid A, Kevin C, Johann TWN. Integrating glycomics and genomics uncovers SLC10A7 as essential factor for bone mineralization by regulating post-Golgi protein transport and glycosylation. *Hum Mol Genet*. 2018 Sep 1;27(17):3029-3045. doi: 10.1093/hmg/ddy213. PMID: 29878199

**59)** Marano M, Serafinelli J, Cairoli S, **Martinelli D**, Pisani M, Palumbo G, Cefalo MG, Cecchetti C, Di Nardo M, Falvella FS, Goffredo BM. Eltrombopag-Induced Acute Liver Failure in a Pediatric Patient: A Pharmacokinetic and Pharmacogenetic Analysis. *Ther Drug Monit*. 2018 Aug;40(4):386-388. doi: 10.1097/FTD.0000000000000522. PubMed PMID: 29683873.

**60)** Semeraro M, Boenzi S, Carrozzo R, Diodato D, **Martinelli D**, Olivieri G, Antonetti G, Sacchetti E, Catesini G, Rizzo C, Dionisi-Vici C. The urinary organic acids profile in single large-scale mitochondrial DNA deletion disorders. *Clin Chim Acta*. 2018 Jun;481:156-160. doi: 10.1016/j.cca.2018.03.002. Epub 2018 Mar 10. PubMed PMID: 29534959.

**61)** Posset R, Garcia-Cazorla A, Valayannopoulos V, Leão Teles E, Dionisi-Vici C, Brassier A, Burlina AB, Burgard P, Cortès-Saladelafont E, Dobbelaere D, Couce ML, Sykut-Cegielska J, Häberle J, Lund AM, Chakrapani A, Schiff M, Walter JH, Zeman J, Vara R, Kölker S; Additional individual contributors of the E-IMD consortium. Correction to: Age at disease onset and peak ammonium level rather than interventional variables predict the neurological outcome in urea cycle disorders. *J Inher Metab Dis*. 2018 Jul;41(4):743-744. doi: 10.1007/s10545-017-0117-4. PubMed PMID: 29330779.

**62)** Piano Mortari E, Folgiero V, Marcellini V, Romania P, Bellacchio E, D'Alicandro V, Bocci C, Carrozzo R, **Martinelli D**, Petrini S, Axiotis E, Farroni C, Locatelli F, Schara U, Pilz DT, Jungbluth H, Dionisi-Vici C, Carsetti R. The Vici syndrome protein EPG5 regulates intracellular nucleic acid trafficking linking autophagy to innate and adaptive immunity. *Autophagy*. 2018;14(1):22-37. doi: 10.1080/15548627.2017.1389356. Epub 2018 Jan 2. PubMed PMID: 29130391; PubMed Central PMCID: PMC5846549.

**63)** Manara Renzo, Rocco Maria Chiara, D'Agata Lauracarmen, Cusmai Raffaella, Freri Elena, Giordano Lucio, Darra Francesca, Procopio Elena, Toldo Irene, Peruzzi Cinzia, Vittorini Roberta, Spalice Alberto, Fusco Carlo, Nosadini Margherita, Longo Daniela°, Sartori Stefano°, and the Menkes Working Group in the Italian Neuroimaging Network for Rare Diseases: Mardari Rodica, Zanus Caterina, Di Rosa Gabriella, Consoddu Consolata, Severino Mariasavina, Ermani Mario, Laura Farina, Stecco Alessandro, Polonara Gabriele, Maria Alice Donati, Pinelli Lorenzo, Dionisi Vici Carlo, **Martinelli Diego**, Aba Tocchet, Fariello Giuseppe. Neuroimaging changes in Menkes disease. Pars II. *Am J Neuroradiol*. 2017 Oct;38(10):1850-1857. doi: 10.3174/ajnr.A5186. Epub 2017 May 11. Review

**64)** Manara Renzo, D'Agata Laura Carmen, Rocco Maria Chiara, Cusmai Raffaella, Freri Elena, Giordano Lucio, Darra Francesca, Procopio Elena, Mardari Rodica, Zanus Caterina, Di Rosa Gabriella, Consoddu Consolata, Severino Mariasavina, Ermani Mario, Longo Daniela°, Sartori Stefano°, and the Menkes Working Group in the Italian Neuroimaging Network for Rare Diseases: Toldo Irene, Peruzzi Cinzia, Vittorini Roberta, Spalice Alberto, Fusco Carlo, Nosadini Margherita, Laura

Farina, Stecco Alessandro, Polonara Gabriele, Maria Alice Donati, Pinelli Lorenzo, Dionisi Vici Carlo, **Martinelli Diego**, Aba Tocchet, Fariello Giuseppe. Neuroimaging changes in Menkes disease. *Pars I. AJNR Am J Neuroradiol.* 2017 Oct;38(10):1850-1857. doi: 10.3174/ajnr.A5186. Epub 2017 May 11. Review

**65)** Sferra A, Baillat G, Rizza T, Barresi S, Flex E, Tasca G, D'Amico A, Bellacchio E, Ciolfi A, Caputo V, Cecchetti S, Torella A, Zanni G, Diodato D, Piermarini E, Niceta M, Coppola A, Tedeschi E, **Martinelli D**, Dionisi-Vici C, Nigro V, Dallapiccola B, Compagnucci C, Tartaglia M, Haase G, Bertini E. TBCE Mutations Cause Early-Onset Progressive Encephalopathy with Distal Spinal Muscular Atrophy. *Am J Hum Genet.* 2016 Oct 6;99(4):974-983. doi: 10.1016/j.ajhg.2016.08.006. PubMed PMID: 27666369; PubMed Central PMCID: PMC5065657.

**66)** Torraco A, Ardisson A, Invernizzi F, Rizza T, Fiermonte G, Niceta M, Zanetti N, **Martinelli D**, Voza A, Verrigni D, Di Nottia M, Lamantea E, Diodato D, Tartaglia M, Dionisi-Vici C, Moroni I, Farina L, Bertini E, Ghezzi D, Carozzo R. Novel mutations in IBA57 are associated with leukodystrophy and variable clinical phenotypes. *J Neurol.* 2017 Jan;264(1):102-111. doi: 10.1007/s00415-016-8312-z. PubMed PMID: 27785568.

**67)** Ulrick N, Goldstein A, Simons C, Taft RJ, Helman G, Pizzino A, Bloom M, Vogt J, Pysden K, Diodato D, **Martinelli D**, Monavari A, Buhas D, van Karnebeek CD, Dorboz I, Boespflug-Tanguy O, Rodriguez D, Tétreault M, Majewski J, Bernard G, Ng YS; Care4Rare Canada Consortium., McFarland R, Vanderver A. RMND1-Related Leukoencephalopathy With Temporal Lobe Cysts and Hearing Loss-Another Mendelian Mimicker of Congenital Cytomegalovirus Infection. *Pediatr Neurol.* 2017 Jan;66:59-62. Doi: 10.1016/j.pediatrneurol.2016.09.003. PubMed PMID: 27843092.

**68)** Ng YS, Alston CL, Diodato D, Ulrick N, Haghghi A, Kmoch S, Houstek J, **Martinelli D**, Santra Saikat, Ragge N, Monavari A, Pysden K, Raven K, Casey J, Khan A, Chakrapani A, Vasallo G, O'Sullivan S, Childs A, Østergaard E, Vanderver A, Amy Goldstein A, Vogt J, Taylor RW, McFarland R. The clinical, biochemical and genetic features associated with RMND1-related mitochondrial disease. Accepted on *Journal of Clinical Genetics*.

**69)** Barba C, Darra F, Cusmai R, Procopio E, Dionisi Vici C, Keldermans L, Vuillaumier-Barrot S, Lefeber DJ, Guerrini R; CDG Group. Congenital disorders of glycosylation presenting as epileptic encephalopathy with migrating partial seizures in infancy. *Dev Med Child Neurol.* 2016 May 13. doi: 10.1111/dmcn.13141. [Epub ahead of print] PubMed PMID: 27172925.

**70)** Posset R, Garcia-Cazorla A, Valayannopoulos V, Teles EL, Dionisi-Vici C, Brassier A, Burlina AB, Burgard P, Cortès-Saladelafont E, Dobbelaere D, Couce ML, Sykut-Cegielska J, Häberle J, Lund AM, Chakrapani A, Schiff M, Walter JH, Zeman J, Vara R, Kölker S; Additional individual contributors of the E-IMD consortium. Age at disease onset and peak ammonium level rather than interventional variables predict the neurological outcome in urea cycle disorders. *J Inher Metab Dis.* 2016 Apr 22. [Epub ahead of print] PubMed PMID: 27106216.

**71)** Torraco A, Bianchi M, Verrigni D, Gelmetti V, Riley L, Niceta M, **Martinelli D**, Montanari A, Guo Y, Rizza T, Diodato D, Di Nottia M, Lucarelli B, Sorrentino F, Piemonte F, Francisci S, Tartaglia M, Valente EM, Dionisi-Vico C, Christodoulou J, Bertini E, Carozzo R. A novel mutation in NDUFB11 unveils a new clinical phenotype associated with lactic acidosis and sideroblastic anemia. *Clin Genet.* 2016 Apr 21. doi: 10.1111/cge.12790. [Epub ahead of print] PubMed PMID: 27102574.

**72)** Dallabona C, Abbink TE, Carozzo R, Torraco A, Legati A, van Berkel CG, Niceta M, Langella T, Verrigni D, Rizza T, Diodato D, Piemonte F, Lamantea E, Fang M, Zhang J, **Martinelli D**, Bevivino E, Dionisi-Vici C, Vanderver A, Philip SG, Kurian MA, Verma IC, Bijamiah-Mahay S, Jacinto S, Furtado F, Accorsi P, Ardisson A, Moroni I,

Ferrero I, Tartaglia M, Goffrini P, Ghezzi D, van der Knaap MS, Bertini E. LYRM7 mutations cause a multifocal cavitating leukoencephalopathy with distinct MRI appearance. *Brain*. 2016 Mar;139(Pt 3):782-94. doi: 10.1093/brain/awv392.

**73)** **Martinelli D**, Bernardi B, Napolitano A, Colafati GS, Dionisi-Vici C. Too much sugar in the brain: galactitol peak and fatal cerebral edema in classic galactosemia. *Neurology*. 2016 Jan 19;86(3):e32-3. doi: 10.1212/WNL.0000000000002284.

**74)** Maio N, Ghezzi D, Verrigni D, Rizza T, Bertini E, **Martinelli D**, Zeviani M, Singh A, Carozzo R, Rouault TA. Molecular basis of succinate dehydrogenase deficiency in infantile leukoencephalopathy caused by mutations in SDHAF1 and implications for treatment. *Cell Metabolism*, 2016 Feb 9;23(2):292-302. doi: 10.1016/j.cmet.2015.12.005.

**75)** Bertini E, Sferra A, Rizza T, Tasca G, D'Amico A, Zanni G, Barresi S, Diodato D · E, Piermarini E, **Martinelli D**, Dionisi-Vici C, Niceta M, Dallapiccola B, Tartaglia M, Compagnucci C. Distal spinal muscular atrophy and ataxia with cerebellar atrophy in two unrelated patients; a new phenotypic variant of HRD and recessive KCS syndrome related to TBCE. *Neuromuscular Disorders* 10/2015; 25: S222.

**76)** Haddad MR, **Martinelli D**, Choi E, Zervas PM, Sullivan P, Goldstein DS, Brinster LR, Abebe D, Centano AJ, Kaler SG. CSF-directed AAV gene therapy plus subcutaneous copper provides superior rescue in a mouse model of MENKES disease. *Molecular Therapy* (2015); 23 (1): S78-S78

**77)** Diodato D, Tasca G, Verrigni D, D'Amico A, Rizza T, Tozzi G, **Martinelli D**, Verardo M, Invernizzi F, Nasca A, Bellacchio E, Ghezzi D, Piemonte F, Dionisi-Vici C, Carozzo R, Bertini E. A novel AIFM1 mutation expands the phenotype to an infantile motor neuron disease. *Eur J Hum Genet*. 2015 Jul 15. doi: 10.1038/ejhg.2015.141.

**78)** Bertini E, Sferra A, Rizza T, Tasca G, D'Amico A, Zanni G, Barresi S, Diodato D · E, Piermarini E, **Martinelli D**, Dionisi-Vici C, Niceta M, Dallapiccola B, Tartaglia M, Compagnucci C. Distal spinal muscular atrophy and ataxia with cerebellar atrophy in two unrelated patients; a new phenotypic variant of HRD and recessive KCS syndrome related to TBCE. *Neuromuscular Disorders* 10/2015; 25: S222.

**79)** Haddad MR, **Martinelli D**, Choi E, Zervas PM, Sullivan P, Goldstein DS, Brinster LR, Abebe D, Centano AJ, Kaler SG. CSF-directed AAV gene therapy plus subcutaneous copper provides superior rescue in a mouse model of MENKES disease. *Molecular Therapy*, in press

**80)** Kölker S, Valayannopoulos V, Burlina AB, Sykut-Cegielska J, Wijburg FA, Teles EL, Zeman J, Dionisi-Vici C, Barić I, Karall D, Arnoux JB, Avram P, Baumgartner MR, Blasco-Alonso J, Boy SP, Rasmussen MB, Burgard P, Chabrol B, Chakrapani A, Chapman K, Cortès I, Saladelafont E, Couce ML, de Meirleir L, Dobbelaere D, Furlan F, Gleich F, González MJ, Gradowska W, Grünewald S, Honzik T, Hörster F, Ioannou H, Jalan A, Häberle J, Haege G, Langereis E, de Lonlay P, **Martinelli D**, Matsumoto S, Mühlhausen C, Murphy E, de Baulny HO, Ortez C, Pedrón CC, Pintos-Morell G, Pena-Quintana L, Ramadža DP, Rodrigues E, Scholl-Bürgi S, Sokal E, Summar ML, Thompson N, Vara R, Pinera IV, Walter JH, Williams M, Lund AM, Cazorla AG. Erratum to: The phenotypic spectrum of organic acidurias and urea cycle disorders. Part 2: the evolving clinical phenotype. *J Inherit Metab Dis*. 2015 Jun 16. [Epub ahead of print] PubMed PMID: 26077421.

**81)** Kölker S, Cazorla AG, Valayannopoulos V, Lund AM, Burlina AB, Sykut-Cegielska J, Wijburg FA, Teles EL, Zeman J, Dionisi-Vici C, Barić I, Karall D, Augoustides-Savvopoulou P, Aksglaede L, Arnoux JB, Avram P, Baumgartner MR, Blasco-Alonso J, Chabrol B, Chakrapani A, Chapman K, I Saladelafont EC, Couce ML, de Meirleir L, Dobbelaere D, Dvorakova V, Furlan F, Gleich F, Gradowska W, Grünewald S, Jalan A, Häberle J, Haege G, Lachmann R, Laemmle A, Langereis E, de Lonlay P,

**Martinelli D**, Matsumoto S, Mühlhausen C, de Baulny HO, Ortez C, Peña-Quintana L, Ramadža DP, Rodrigues E, Scholl-Bürgi S, Sokal E, Staufner C, Summar ML, Thompson N, Vara R, Pinera IV, Walter JH, Williams M, Burgard P. Erratum to: The phenotypic spectrum of organic acidurias and urea cycle disorders. Part 1: the initial presentation. *J Inherit Metab Dis*. 2015 Jun 16. [Epub ahead of print] PubMed PMID: 26077420.

**82)** Kölker S, Valayannopoulos V, Burlina AB, Sykut-Cegielska J, Wijburg FA, Teles EL, Zeman J, Dionisi-Vici C, Barić I, Karall D, Arnoux JB, Avram P, Baumgartner MR, Blasco-Alonso J, Boy SP, Rasmussen MB, Burgard P, Chabrol B, Chakrapani A, Chapman K, Cortès I, Saladelafont E, Couce ML, de Meirleir L, Dobbelaere D, Furlan F, Gleich F, González MJ, Gradowska W, Grünewald S, Honzik T, Hörster F, Ioannou H, Jalan A, Häberle J, Haege G, Langereis E, de Lonlay P, **Martinelli D**, Matsumoto S, Mühlhausen C, Murphy E, de Baulny HO, Ortez C, Pedrón CC, Pintos-Morell G, Pena-Quintana L, Ramadža DP, Rodrigues E, Scholl-Bürgi S, Sokal E, Summar ML, Thompson N, Vara R, Pinera IV, Walter JH, Williams M, Lund AM, Garcia Cazorla A. The phenotypic spectrum of organic acidurias and urea cycle disorders. Part 2: the evolving clinical phenotype. *J Inherit Metab Dis*. 2015 Apr 15. [Epub ahead of print] PubMed PMID: 25875216.

**83)** Kölker S, Cazorla AG, Valayannopoulos V, Lund AM, Burlina AB, Sykut-Cegielska J, Wijburg FA, Teles EL, Zeman J, Dionisi-Vici C, Barić I, Karall D, Augoustides-Savvopoulou P, Aksglaede L, Arnoux JB, Avram P, Baumgartner MR, Blasco-Alonso J, Chabrol B, Chakrapani A, Chapman K, I Saladelafont EC, Couce ML, de Meirleir L, Dobbelaere D, Dvorakova V, Furlan F, Gleich F, Gradowska W, Grünewald S, Jalan A, Häberle J, Haege G, Lachmann R, Laemmle A, Langereis E, de Lonlay P, **Martinelli D**, Matsumoto S, Mühlhausen C, de Baulny HO, Ortez C, Peña-Quintana L, Ramadža DP, Rodrigues E, Scholl-Bürgi S, Sokal E, Staufner C, Summar ML, Thompson N, Vara R, Pinera IV, Walter JH, Williams M, Burgard P. The phenotypic spectrum of organic acidurias and urea cycle disorders. Part 1: the initial presentation. *J Inherit Metab Dis*. 2015 Apr 15. [Epub ahead of print] PubMed PMID: 25875215.

**84)** **Martinelli D**, Diodato D, Ponzi E, Monné M, Boenzi S, Bertini E, Fiermonte G, Dionisi-Vici C. The hyperornithinemia-hyperammonemia-homocitrullinuria syndrome. *Orphanet J Rare Dis*. 2015 Mar 11;10:29. doi: 10.1186/s13023-015-0242-9. PubMed PMID: 25874378; PubMed Central PMCID: PMC4358699.

**85)** Magner M, Dvorakova V, Tesarova M, Mazurova S, Hansikova H, Zahorec M, Brennerova K, Bzduch V, Spiegel R, Horovitz Y, Mandel H, Eminoğlu FT, Mayr JA, Koch J, **Martinelli D**, Bertini E, Konstantopoulou V, Smet J, Rahman S, Broomfield A, Stojanović V, Dionisi-Vici C, van Coster R, Morava E, Sperl W, Zeman J, Honzik T. Erratum to: TMEM70 deficiency: long-term outcome of 48 patients. *J Inherit Metab Dis*. 2015 May;38(3):583-4. doi: 10.1007/s10545-015-9833-9. PubMed PMID: 25778942.

**86)** Brea-Calvo G, Haack TB, Karall D, Ohtake A, Invernizzi F, Carrozzo R, Kremer L, Dusi S, Fauth C, Scholl-Bürgi S, Graf E, Ahting U, Resta N, Laforgia N, Verrigni D, Okazaki Y, Kohda M, **Martinelli D**, Freisinger P, Strom TM, Meitinger T, Lamperti C, Lacson A, Navas P, Mayr JA, Bertini E, Murayama K, Zeviani M, Prokisch H, Ghezzi D. COQ4 mutations cause a broad spectrum of mitochondrial disorders associated with CoQ10 deficiency. *Am J Hum Genet*. 2015 Feb 5;96(2):309-17. doi: 10.1016/j.ajhg.2014.12.023. PubMed PMID: 25658047; PubMed Central PMCID: PMC4320255.

**87)** Caterino M, Pastore A, Strozzi MG, Di Giovamberardino G, Imperlini E, Scolamiero E, Ingenito L, Boenzi S, Ceravolo F, **Martinelli D**, Dionisi-Vici C, Ruoppolo M. The proteome of cblC defect: in vivo elucidation of altered cellular pathways in humans. *J Inherit Metab Dis*. 2015 Jan 14. [Epub ahead of print] PubMed PMID: 25585586.

**88)** Diodato D, Tasca G, Verrigni D, D'Amico A, Rizza T, Tozzi G, **Martinelli D**, Verardo M, Invernizzi F, Nasca A, Bellacchio E, Ghezzi D, Piemonte F, Dionisi-Vici C, Carrozzo R, Bertini E. A novel AIFM1 mutation expands the phenotype to an infantile

motor neuron disease. *Eur J Hum Genet.* 2016 Mar;24(3):463-6. doi: 10.1038/ejhg.2015.141. Epub 2015 Jul 15.

**89)** **Martinelli D**, Bernardi B, Napolitano A, Colafati GS, Dionisi-Vici C. Too much sugar in the brain: galactitol peak and fatal cerebral edema in classic galactosemia. *Neurology.* 2016 Jan 19;86(3):e32-3. doi: 10.1212/WNL.0000000000002284.

**90)** Barone R, Carrozzi M, Parini R, Battini R, **Martinelli D**, Elia M, Spada M, Lilliu F, Ciana G, Burlina A, Leuzzi V, Leoni M, Sturiale L, Matthijs G, Jaeken J, Di Rocco M, Garozzo D, Fiumara A. A nationwide survey of PMM2-CDG in Italy: high frequency of a mild neurological variant associated with the L32R mutation. *J Neurol.* 2014 Oct 30. [Epub ahead of print] PubMed PMID: 25355454.

**91)** Magner M, Dvorakova V, Tesarova M, Mazurova S, Hansikova H, Zahorec M, Brennerova K, Bzduch V, Spiegel R, Horovitz Y, Mandel H, Eminoğlu FT, Mayr JA, Koch J, **Martinelli D**, Bertini E, Konstantopoulou V, Smet J, Rahman S, Broomfield A, Stojanović V, Dionisi-Vici C, van Coster R, Morava-Kozicic E, Sperl W, Zeman J, Honzik T. TMEM70 deficiency: long-term outcome of 48 patients. *J Inher Metab Dis.* 2014 Oct 18. [Epub ahead of print] PubMed PMID: 25326274.

**92)** la Marca G, Malvagia S, Materazzi S, Della Bona ML, Boenzi S, Martinelli D, Dionisi-Vici C. Correction to LC-MS/MS Method for Simultaneous Determination on a Dried Blood Spot of Multiple Analytes Relevant for Treatment Monitoring in Patients with Tyrosinemia Type I. *Anal Chem.* 2014 Oct 21;86(20):10501. doi: 10.1021/ac5034787. Epub 2014 Sep 30. PubMed PMID: 25269025.

**93)** Carrozzo R, Torracco A, Fiermonte G, Martinelli D, Di Nottia M, Rizza T, Vozza A, Verrigni D, Diodato D, Parisi G, Maiorana A, Rizzo C, Pierri CL, Zucano S, Piemonte F, Bertini E, Dionisi-Vici C. Riboflavin responsive mitochondrial myopathy is a new phenotype of dihydrolipoamide dehydrogenase deficiency. The chaperon-like effect of vitamin B2. *Mitochondrion.* 2014 Sep 22. pii: S1567-7249(14)00129-9. doi: 10.1016/j.mito.2014.09.006. [Epub ahead of print] PubMed PMID: 25251739.

**94)** Baumgartner MR, Hörster F, Dionisi-Vici C, Haliloglu G, Karall D, Chapman KA, Huemer M, Hochuli M, Assoun M, Ballhausen D, Burlina A, Fowler B, Grünert SC, Grünwald S, Honzik T, Merinero B, Pérez-Cerdá C, Scholl-Bürgi S, Skovby F, Wijburg F, MacDonald A, **Martinelli D**, Sass JO, Valayannopoulos V, Chakrapani A. Proposed guidelines for the diagnosis and management of methylmalonic and propionic acidemia. *Orphanet J Rare Dis.* 2014 Sep 2;9:130. doi: 10.1186/s13023-014-0130-8. PubMed PMID: 25205257; PubMed Central PMCID: PMC4180313.

**95)** Boenzi S, Deodato F, Taurisano R, **Martinelli D**, Verrigni D, Carrozzo R, Bertini E, Pastore A, Dionisi-Vici C, Johnson DW. A new simple and rapid LC-ESI-MS/MS method for quantification of plasma oxysterols as dimethylaminobutyrate esters. Its successful use for the diagnosis of Niemann-Pick type C disease. *Clin Chim Acta.* 2014 Nov 1;437:93-100. doi: 10.1016/j.cca.2014.07.010. Epub 2014 Jul 16. PubMed PMID: 25038260.

**96)** Baranello G, Alfei E, **Martinelli D**, Rizzetto M, Cazzaniga F, Dionisi-Vici C, Gellera C, Castellotti B. Hyperargininemia: 7-month follow-up under sodium benzoate therapy in an Italian child presenting progressive spastic paraparesis, cognitive decline, and novel mutation in ARG1 gene. *Pediatr Neurol.* 2014 Sep;51(3):430-3. doi: 10.1016/j.pediatrneurol.2014.05.029. Epub 2014 Jun 4. PubMed PMID: 24997092.

**97)** **Martinelli D**, Dionisi-Vici C. AP1S1 defect causing MEDNIK syndrome: a new adaptinopathy associated with defective copper metabolism. *Ann N Y Acad Sci*. 2014 May;1314:55-63. doi: 10.1111/nyas.12426. Epub 2014 Apr 22. PubMed PMID: 24754424.

**98)** **Martinelli D**. Disorders leading to an impairment of urea cycle and hyperammonemia. *Journal of Pediatric Biochemistry* 4 (2014) 45–55. DOI 10.3233/JPB-140105

**99)** Diociaiuti A, Fortugno P, El Hachem M, Angelo C, Proto V, De Luca N, **Martinelli D**, Boldrini R, Castiglia D, Zambruno G. Early immunopathological diagnosis of ichthyosis with confetti in two sporadic cases with new mutations in keratin 10. *Acta Derm Venereol*. 2014 Sep;94(5):579-82. doi: 10.2340/00015555-1796. PubMed PMID: 24626314.

**100)** Fischer S, Huemer M, Baumgartner M, Deodato F, Ballhausen D, Boneh A, Burlina AB, Cerone R, Garcia P, Gökçay G, Grünewald S, Häberle J, Jaeken J, Ketteridge D, Lindner M, Mandel H, **Martinelli D**, Martins EG, Schwab KO, Gruenert SC, Schwahn BC, Sztriha L, Tomaske M, Trefz F, Vilarinho L, Rosenblatt DS, Fowler B, Dionisi-Vici C. Clinical presentation and outcome in a series of 88 patients with the cblC defect. *J Inherit Metab Dis*. 2014 Sep;37(5):831-40. doi: 10.1007/s10545-014-9687-6. Epub 2014 Mar 6. PubMed PMID: 24599607.

**101)** Catteruccia M, Verrigni D, **Martinelli D**, Torraco A, Agovino T, Bonafé L, D'Amico A, Donati MA, Adorisio R, Santorelli FM, Carrozzo R, Bertini E, Dionisi-Vici C. Persistent pulmonary arterial hypertension in the newborn (PPHN): a frequent manifestation of TMEM70 defective patients. *Mol Genet Metab*. 2014 Mar;111(3):353-9. doi: 10.1016/j.ymgme.2014.01.001. Epub 2014 Jan 8. PubMed PMID: 24485043.

**102)** Dionisi-Vici C, **Martinelli D**, Ceravolo F, Boenzi S, Pastore A. Optimizing the dose of hydroxocobalamin in cobalamin C (cblC) defect. *Mol Genet Metab*. 2013 May 29.

**103)** Mancuso M, Orsucci D, Angelini C, Bertini E, Carelli V, Comi GP, Minetti C, Moggio M, Mongini T, Servidei S, Tonin P, Toscano A, Uziel G, Bruno C, Caldarazzo, Ienco E, Filosto M, Lamperti C, **Martinelli D**, Moroni I, Musumeci O, Pegoraro E, Ronchi D, Santorelli FM, Sauchelli D, Scarpelli M, Sciacco M, Spinazzi M, Valentino ML, Vercelli L, Zeviani M, Siciliano G. Phenotypic heterogeneity of the 8344A>G mtDNA "MERRF" mutation. *Neurology*. 2013; 80:2049-2054.

**104)** Pastore A, Petrillo S, Tozzi G, Carrozzo R, **Martinelli D**, Dionisi-Vici C, Di Giovamberardino G, Ceravolo F, Klein MB, Miller G, Enns GM, Bertini E, Piemonte F. Glutathione: A redox signature in monitoring EPI-743 therapy in children with mitochondrial encephalomyopathies. *Mol Genet Metab*. 2013 Jun;109(2):208-14. doi: 10.1016/j.ymgme.2013.03.011.

**105)** Pastore A, **Martinelli D**, Piemonte F, Tozzi G, Boenzi S, Di Giovamberardino G, Petrillo S, Bertini E, Dionisi-Vici C. Glutathione metabolism in cobalamin deficiency type C (cblC). *J Inherit Metab Dis* 2013 Apr 9.

**106)** **Martinelli D**, Travaglini L, Drouin CA, Ceballos-Picot I, Rizza T, Bertini E, Carrozzo R, Petrini S, de Lonlay P, El Hachem M, Hubert L, Montpetit A, Torre G, Dionisi-Vici C. MEDNIK syndrome: a novel defect of copper metabolism treatable by zinc acetate therapy. *Brain* 2013;136:872-81.

**107)** **Martinelli D**, Catteruccia M, Piemonte F, Pastore A, Tozzi G, Dionisi-Vici C, Pontrelli G, Corsetti T, Livadiotti S, Kheifets V, Hinman A, Shrader WD, Thoolen M, Klein MB, Bertini E, Miller G. EPI-743 reverses the progression of the pediatric mitochondrial disease -genetically defined Leigh Syndrome. *Mol Genet Metab* 2012;107:383-8.

**108)** Mancuso M, Angelini C, Bertini E, Carelli V, Comi GP, Minetti C, Moggio M, Mongini T, Servidei S, Tonin P, Toscano A, Uziel G, Zeviani M, Siciliano G; Nation-wide Italian Collaborative Network of Mitochondrial Diseases. Fatigue and exercise intolerance in mitochondrial diseases. Literature revision and experience of the Italian Network of mitochondrial diseases. *Neuromuscul Disord.* 2012 Dec;22 Suppl 3:S226-9.

**109)** Torraco A, Verrigni D, Rizza T, Meschini MC, Vazquez-Memije ME, **Martinelli D**, Bianchi M, Piemonte F, Dionisi-Vici C, Santorelli FM, Bertini E, Carozzo R. TMEM70: a mutational hot spot in nuclear ATP synthase deficiency with a pivotal role in complex V biogenesis. *Neurogenetics.* 2012;13:375-86.

**110)** Boenzi S, Pastore A, **Martinelli D**, Goffredo BM, Boiani A, Rizzo C, Dionisi-Vici C. Creatine metabolism in urea cycle defects. *J Inherit Metab Dis* 2012;35:647-53

**111)** Haeberle J, Boddaert N, Burlina A, Chakrapani A, Dixon M, Huemer M, Karall D, **Martinelli D**, Sanjurjo Crespo P, Santer R, Servais A, Valayannopoulos V, Lindner M, Rubio V, Dionisi-Vici C. Suggested Guidelines for the Diagnosis and Management of Urea Cycle Disorders. *Orphanet J Rare Dis* 2012 May 29;7:32.

**112)** Steenweg ME, Ghezzi D, Haack T, Abbink TE, **Martinelli D**, van Berkel CG, Bley A, Diogo L, Grillo E, Te Water Naudé J, Strom TM, Bertini E, Prokisch H, van der Knaap MS, Zeviani M. Leukoencephalopathy with thalamus and brainstem involvement and high lactate 'LTBL' caused by EARS2 mutations. *Brain* 2012 May; 135:1387-94.

**113)** Barilli A, Rotoli BM, Visigalli R, Bussolati O, Gazzola GC, Gatti R, Dionisi-Vici, **Martinelli D**, Goffredo BM, Font-Llitjós M, Mariani F, Luisetti M, Dall'Asta V. Impaired phagocytosis in macrophages from patients affected by lysinuric protein intolerance. *Mol Genet Metab* 2012 Apr;105:585-9.

**114)** Cusmai R, **Martinelli D**, Moavero R, Dionisi Vici C, Vigeveno F, Castana C, Elia M, Bernabei S, Bevivino E. Ketogenic diet in early myoclonic encephalopathy due to non ketotic hyperglycinemia. *Eur J Paediatr Neurol* 2012;16:509-13.

**115)** **Martinelli D**, Häberle J, Rubio V, Giunta C, Hausser I, Carozzo R, Gougeard N, Marco-Marín C, Goffredo BM, Meschini MC, Bevivino E, Boenzi S, Colafati GS, Brancati F, Baumgartner MR, Dionisi-Vici C. Understanding pyrroline-5-carboxylate synthetase deficiency: clinical, molecular, functional, and expression studies, structure-based analysis, and novel therapy with arginine. *J Inherit Metab Dis* 2012;35:761-76.

**116)** la Marca G, Malvagia S, Materazzi S, Della Bona ML, Boenzi S, **Martinelli D**, Dionisi-Vici C. LC-MS/MS method for simultaneous determination on a dried blood spot of multiple analytes relevant for treatment monitoring in patients with tyrosinemia type I. *Anal Chem.* 2012;84:1184-8.

**117)** Bianchi M, Rizza T, Verrigni D, **Martinelli D**, Tozzi G, Torraco A, Piemonte F, Dionisi-Vici C, Nobili V, Francalanci P, Boldrini R, Callea F, Santorelli FM, Bertini E, Carozzo R. Novel large-range mitochondrial DNA deletions and fatal multisystemic disorder with prominent hepatopathy. *Biochem Biophys Res Commun* 2011;415:300-4.

**118)** Vissers LE, Fano V, **Martinelli D**, Campos-Xavier B, Barbuti D, Cho TJ, Dursun A, Kim OH, Lee SH, Timpani G, Nishimura G, Unger S, Sass JO, Veltman JA, Brunner HG, Bonafé L, Dionisi-Vici C, Superti-Furga A. Whole-exome sequencing detects somatic mutations of IDH1 in metaphyseal chondromatosis with D-2-hydroxyglutaric aciduria (MC-HGA). *Am J Med Genet A* 2011;155:2609-16.

**119)** Fiermonte G, Parisi G, **Martinelli D**, De Leonardis F, Torre G, Pierrì CL, Saccari A, Lasorsa FM, Voza A, Palmieri F, Dionisi-Vici C. A new Caucasian case of neonatal intrahepatic cholestasis caused by citrin deficiency (NICCD): A clinical, molecular, and functional study. *Mol Genet Metab* 2011;104:501-6.



**120)** Boenzi S, Rizzo C, Di Ciommo VM, **Martinelli D**, Goffredo BM, la Marca G, Dionisi-Vici

C. Simultaneous determination of creatine and guanidinoacetate in plasma by liquid chromatography-tandem mass spectrometry (LC-MS/MS). *J Pharm Biomed Anal.* 2011;56:792-8.

**121)** Mazzone E, Vasco G, Sormani MP, Torrente Y, Berardinelli A, Messina S, D'Amico A, Doglio L, Politano L, Cavallaro F, Frosini S, Bello L, Bonfiglio S, Zucchini E, De Sanctis R, Scutifero M, Bianco F, Rossi F, Motta MC, Sacco A, Donati MA, Mongini T, Pini A, Battini R, Pegoraro E, Pane M, Gasperini S, Previtali S, Napolitano S, **Martinelli D**, Bruno C, Vita G, Comi G, Bertini E, Mercuri E. Functional changes in Duchenne muscular dystrophy: A 12-month longitudinal cohort study. *Neurology.* 2011;77:250-6

**122)** Achouitar S, Mohamed M, Gardeitchik T, Wortmann SB, Sykut-Cegielska J, Ensenauer R, de Baulny HO, Ounap K, **Martinelli D**, de Vries M, McFarland R, Kouwenberg D, Theodore M, Wijburg F, Grünwald S, Jaeken J, Wevers RA, Nijtmans L, Elson J, Morava

E. Nijmegen paediatric CDG rating scale: a novel tool to assess disease progression. *J Inherit Metab Dis.* 2011;34:923-7.

**123)** Ferrara P, Romano V, Gatto A, Vitelli O, Liberatore P, Passera S, Bottaro G, Del Bufalo F, Martinelli D, Del Re M, Battaglia D. Atypical presentation of renal angiomyolipomas in a child with tuberous sclerosis complex. *Iran J Pediatr.* 2011;21:256-7.

**124)** Mazzone E, Bianco F, **Martinelli D**, Glanzman AM, Messina S, Sanctis RD, Main M, Eagle M, Florence J, Krossschell K, Vasco G, Pelliccioni M, Lombardo M, Pane M, Finkel R, Muntoni F, Bertini E, Mercuri E. Assessing upper limb function in nonambulant SMA patients: Development of a new module. *Neuromuscul Disord* 2011; 21:406-12.

**125)** **Martinelli D**, Dotta A, Massella L, Picca S, Di Pede A, Boenzi S, Aiello C, Dionisi-Vici C. Cobalamin C defect presenting as severe neonatal hyperammonemia. *Eur J Pediatr.* 2011;170:887-90.

**126)** Chieffo D, Ricci D, Baranello G, **Martinelli D**, Veredice C, Lettori D, Battaglia D, Dravet C, Mercuri E, Guzzetta F. Early development in Dravet syndrome; visual function impairment precedes cognitive decline. *Epilepsy Res.* 2011 Jan;93(1):73-9

**127)** Mariotti P, Nociti V, Cianfoni A, Stefanini C, De Rose P, **Martinelli D**, Dittoni S, Vollono C, Batocchi AP, Della Marca G. Migraine-like headache and status migrainosus as attacks of multiple sclerosis in a child. *Pediatrics* 2010;126:e459-64.

**128)** **Martinelli D**, Deodato F, Dionisi-Vici C. Cobalamin C defect: natural history, pathophysiology, and treatment. *J Inherit Metab Dis.* 2011;34:127-35

**129)** Torrioli M, Vernacotola S, Setini C, Bevilacqua F, **Martinelli D**, Snape M, Hutchison JA, Di Raimo FR, Tabolacci E, Neri G. Treatment with valproic acid ameliorates ADHD symptoms in fragile X syndrome boys. *Am J Med Genet A.* 2010;152A:1420-7

**130)** Mazzone E, **Martinelli D**, Berardinelli A, Messina S, D'Amico A, Vasco G, Main M, Doglio L, Politano L, Cavallaro F, Frosini S, Bello L, Carlesi A, Bonetti AM, Zucchini E, Sanctis RD, Scutifero M, Bianco F, Rossi F, Motta MC, Sacco A, Donati MA, Mongini T, Pini A, Battini R, Pegoraro E, Pane M, Pasquini E, Bruno C, Vita G, Waure CD, Bertini E, Mercuri E. North Star Ambulatory Assessment, 6-minute walk test and timed items in ambulant boys with Duchenne muscular dystrophy. *Neuromuscul Disord* 2010; 20:712-6.

**131)** Massimi L, Battaglia D, Paternoster G, **Martinelli D**, Sturiale C, Di Rocco C. Segmental spinal myoclonus and metastatic cervical ganglioglioma: an unusual

association. J Child Neurol. 2009;24:365-9

**132)** Battaglia D, Lettori D, Contaldo I, Veredice C, Sacco A, Vasco J, **Martinelli D**, Chieffo D, Tartaglione T, Colosimo C, Di Rocco C, Guzzetta F. Seizure semiology of lesional frontal lobe epilepsies in children. Neuropediatrics. 2007; 38:287-91.

**Data 15 novembre 2021**

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".

*Il/La Sottoscritto/a, ai sensi degli artt. 46 e 47 D.P.R. n. 445/2000, consapevole delle sanzioni penali previste dall'art. 76 D.P.R. n. 445/2000 nel caso di mendaci dichiarazioni, falsità negli atti, uso o esibizione di atti falsi o contenenti dati non più corrispondenti a verità, dichiara che quanto sopra riportato corrisponde a verità.*

*Dichiaro inoltre che i titoli e gli allegati sono, su richiesta, disponibili in copia fotostatica conforme agli originali.*

**Firma**