

## CURRICULUM VITAE

NAME:	Barbara K. Burton, M.D.
ADDRESS:	
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Business:	Division of Genetics, Birth Defects and Metabolism Ann & Robert H. Lurie Children's Hospital 225 E. Chicago Avenue, Box 59 Chicago, IL 60611 Phone: (312)-227-6120 Fax: (312)-227-9413 Email: bburton@luriechildrens.org
EDUCATION:	
9/66-9/69	Northwestern University Evanston, Illinois Honors Program in Medical Education B.S. in Medicine, awarded 1970
9/69-6/73	Northwestern University Feinberg School of Medicine Chicago, Illinois M.D. with Distinction
POSTDOCTORAL TRAIN	ING:
7/73-6/75	Children's Memorial Hospital Chicago, Illinois

	Pediatric Residency (PL I and PL II) Chief of Service: Henry L. Nadler, M.D.
7/75-6/77	Children's Memorial Hospital Chicago, Illinois Fellowship in Medical Genetics Program Director: Henry L. Nadler, M.D.

## **PROFESSIONAL LICENSURE:**

Illinois, #036-051197

**NPI NUMBER:** 1699743088

## SPECIALTY CERTIFICATION:

1978	American Board of Pediatrics
1982	<ul><li>American Board of Medical Genetics</li><li>Clinical Genetics</li><li>Clinical Biochemical Genetics</li></ul>

### HONORS AND AWARDS:

1972	Elected to Alpha Omega Alpha
1973	Ross Award for Pediatric Research, presented by the Midwest Society for Pediatric Research
1974	Medical Foundation Clinical Scholar Wake Forest University Medical School
2003	Archibald Hoyne Award, presented annually by the Chicago Pediatric Society to a single individual for outstanding Contributions to the clinical practice of Pediatrics in the Chicago area
1994-2020	Listed every year, Best Doctors in America
1994-2017	Chicago Magazine: Best Doctors in Chicago
2017	Lifetime Achievement Award: March of Dimes Illinois Chapter
2018	PKU Hero Award: National PKU Alliance

## ACADEMIC AND ADMINISTRATIVE APPOINTMENTS:

5/99-Present	Professor of Pediatrics Northwestern University Feinberg School of Medicine Chicago, IL
5/99-Present	Member Center for Genetic Medicine Northwestern University Feinberg School of Medicine Chicago, IL
5/99-12/19	Clinical Practice Director Division of Genetics Ann & Robert H. Lurie Children's Hospital of Chicago (formerly Children's Memorial Hospital) Chicago, IL
6/15-Present	Co-Director Leukodystrophy Center of Excellence Ann & Robert H. Lurie Children's Hospital of Chicago Chicago, IL
1/05-Present	Director MPS/ML Treatment Program Ann & Robert H. Lurie Children's Hospital of Chicago Chicago, IL
2/01-Present	Consulting Geneticist Institute for Fetal Health Ann & Robert H. Lurie Children's Hospital of ChicagoChicago, IL
5/99-Present	Director PKU Clinic Ann & Robert H. Lurie Children's Hospital of Chicago Chicago, IL
8/1-9/03	Consulting Geneticist Department of Obstetrics and Gynecology Northwestern University Feinberg School of Medicine Chicago, IL
7/00-6/13	Co-Director Joint Fellowship Training Program in Clinical Genetics Northwestern University-University of Chicago Chicago, IL

5/99-12/06	Lecturer in Pediatrics Lecturer in Obstetrics and Gynecology University of Illinois College of Medicine Chicago, IL
1/89-4/99	Professor and Head Division of Genetics and Metabolism Department of Pediatrics Professor of Obstetrics and Gynecology University of Illinois College of Medicine Chicago, IL
1/91-4/99	Program Director Medical Genetics Residency Program University of Illinois College of Medicine Chicago, IL
1/88-4/99	Director Genetics Diagnostic Laboratory Michael Reese Hospital and Medical Center Chicago, IL
1/89-4/99	Director Center for Medical and Reproductive Genetics Michael Reese Hospital and Medical Center Chicago, IL
7/87-12/88	Head Section on Medical Genetics Professor of Pediatrics Wake Forest University School of Medicine Winston-Salem, NC
12/77-12/88	Director Biochemical Genetics Laboratory Wake Forest University Medical Center Winston-Salem, NC
2/78-12/88	Director Western North Carolina Screening Program For Neural Tube Defects Winston-Salem, NC
7/80-12/88	Director Fetal Alcohol Syndrome Prevention Program Wake Forest University Medical Center Winston-Salem, NC

7/82-6/87	Associate Professor of Pediatrics Wake Forest University School of Medicine Winston-Salem, NC
12/77-6/82	Assistant Professor of Pediatrics Wake Forest University School of Medicine Winston-Salem, NC

## HOSPITAL APPOINTMENTS:

8/01-3/19	Consulting Physician Northwestern Memorial Hospital Chicago, IL
4/99-Present	Attending Physician Division of Genetics, Metabolism & Birth Defects Ann & Robert H. Lurie Children's Hospital of Chicago Chicago, IL
10/99-12/03	Adjunct Attending Evanston Northwestern Healthcare (Evanston and Glenbrook Hospitals) Evanston, IL
1/93-6/98	Consulting Physician Grant Hospital Chicago, IL
3/90-3/00	Attending Physician University of Illinois Hospital Chicago, IL
2/90-3/00	Consulting Physician Children's Hospital of Illinois St. Francis Medical Center Peoria, IL
1/89-4/99	Attending Physician Michael Reese Hospital and Medical Center Chicago, IL
1/82-12/88	Consulting Physician Forsyth Memorial Hospital Winston-Salem, NC

> 12/77-12/88 Attending Physician North Carolina Baptist Hospital Winston-Salem, NC

### **GRANTS AND CONTRACTS:**

- Denali Therapeutics
   April 5, 2023- ongoing
   Budget dependent on number of subjects enrolled
   DNLI-E-007: A Phase 2/3, Multicenter, Double-Blind, Randomized Study to Determine
   The Efficacy and Safety of DNL310 vs. Idursulfase in Pediatric Participants with
   Neuronopathic and Non-Neuronopathic Mucopolysaccharidosis Type II.
- Denali Therapeutics April 5, 2023-ongoing Budget dependent on number of subjects recruited "A Phase III Double-blind Randomized Controlled Study of DNL 310 vs. Idursulfase in Patients with Mucopolysaccharidosis Type II (Hunter Syndrome)"
- JCR Pharmaceuticals January 1, 2022- ongoing Budget dependent on number of subjects recruited
  "A Phase III Study of JR-141 in Mucopolysaccharidosis Type II (Hunter Syndrome) Patients"
- Denali Therapeutics
   November, 2020- open ended
   Budget dependent on number of subjects recruited
   "A Phase 1/2 Multicenter, Open-Label Study to Determine the Safety, Pharmacokinetics and Pharmacodynamics of DNL310 in Pediatric Patients with Hunter Syndrome.
- Biomarin Pharmaceutical January 1, 2020- Open ended Budget dependent on number of subjects recruited
  "BMRN 307-902: A Prospective Clinical Study of Phenylketonuria"
- Biomarin Pharmaceutical May 1, 2020- open ended Budget dependent on number of subjects recruited

"BMRN 307-201: A Phase ½ Open-Label Dose Escalation Study to Determine the Safety and Efficacy of BMRN 307 in Adeno-Associated Viral Vector-Mediated Gene Transfer of Human Phenylalanine Hydroxylase in Subjects with Phenylketonuria and Phe Levels >600 umol/L".

6 .Shire HGT (a Takeda company)

February 1, 2019- open ended

Budget dependent on number of subjects recruited

"SHP611-201: A Global, Multicenter, Open-Label, Matched Historical Control Study of Intrathecal SHP611 in Subjects with Late Infantile Metachromatic Leukodystrophy"

7. Reneo Pharma Ltd.

March 1, 2019- December 31, 2020

Budget dependent on number of patients recruited

"REN001-102: An Open-Label Study to Determine the Safety and Tolerability of 12 Weeks Treatment with Oral REN001 in Subjects with Fatty Acid Oxidation Disorders (FAOD)."

8. Moderna Therapeutics

January 1, 2019- open ended Budget dependent on number of patients recruited "MaP: Mapping the Patient Journey in Methylmalonic Acidemia and Propionic Acidemia: A Longitudinal, Exploratory, Natural History Study to Further Characterize and Describe The Signs and Symptoms of Patients with Organic Acidemias (mRNA-3704-P001)"

9. Homology Medicines

March 1, 2019- open ended

Budget dependent on number of subjects recruited "HMI-102-101: A Phase ½ Open-Label, Randomized, Concurrently-Controlled, Dose Escalation Study to Evaluate the Safety and Efficacy of HMI-102 in Adult PKU Subjects With PAH Deficiency"

- Shire HGT (a Takeda company)
  July 1, 2018- June 30, 2019
  Budget \$101,786
  "Followup of Newborn Screening for Mucopolysaccharidosis Type II"
- Sangamo Biosciences, Inc. January 1, 2017 – Open ended
  Budget dependent on number of subjects recruited
  "SB-913-1602: A Phase 1, Multicenter, Open- label Single – dose, Dose Ranging Study to Assess the Safety and Tolerability in Subjects with Mucopolysaccharidosis II. (MPS II)
- 12. Armagen

March 4, 2015 – May 31, 2017.

Budget dependent on numbers of subjects recruited

"AGT-182-102: A Phase 1 Safety and Dose – finding Study of a Human Insulin Receptor Monoclonal Antibody – Human Iduronate 2-Sulfatase (IDS) Fusion Protein, AGT-182 in Adult patients with Mucopolysaccharidosis II (MPS II)"

13. Armagen

September 30, 2015 – March 30, 2017

Budget dependent on number of subjects recruited

"AGT – 181-101: A Phase I Safety and Dose Finding Study of a Human Insulin Receptor Monoconal Antibody Human Alpha-L-Iduronidase (HIRMAb-IDUA) Fusion Protein, AGT-181 in Adult Patients with Mucopolysaccharidosis I (MPS I)

14. Shire HGT

March 1, 2014 – March 30, 2017

Budget dependent on number of subjects recruited

"HGT-HIT094: A Controlled, Randomized Two-Arm Open-Label, Assessor-Blinded, Multicenter Study of Intrathecal Elaprase-IT Administered in Conjunction with Elaprase in Pediatric Patients with Hunter Syndrome and Early Cognitive Impairment"

15. Ultragenyx Pharmaceutical

November 1, 2013 – June 30, 2020 Budget dependent on number of subjects recruited "UX007-CL201: An Open-Label Phase 2 Study to Assess Safety and Clinical Effects of UX007 in Subject with Long-Chain Fatty Acid Oxidation Disorders (LC-FAOD)"

16. Shire HGT

April 1, 2013 – February, 2016 Budget dependent on number of subjects recruited "HGT-MLD-092: A Natural History Study of Children with Metachromatic Leukodystrophy"

## 17. Biomarin Pharmaceutical

April 1, 2013 – Open ended Budget dependent on number of subjects recruited "BMRN 009-901: Collection and Storage of Human Biospecimens for Research into Rare Diseases and Medical Conditions"

## 18. Synageva Pharma

March 1, 2013 – February, 2015 Budget dependent on number of subjects recruited "ARISE: A Phase 3 Multicenter, "A Double-Blind, Placebo-Controlled Trial of SBC-100 in Patients with Cholesterol Ester Storage Disease"

19. Shire HGT

February 1, 2013 – June 30, 2017 Budget dependent on number of subjects recruited "HGT-HIT-090: A Study of the Natural History of Cognitive Decline in Patients with Hunter Syndrome (MPS II) Associated with Cognitive Impairment"

- 20. Biomarin Pharmaceutical June 1, 2013 – August, 2016 Budget dependent on number of subjects recruited "PRISM 301: A Phase 3 Study of Pegylated Phenylalanine Ammonia Lyase (PEG- PAL) in Patients with PKU Naïve to the Study Drug"
- Biomarin Pharmaceutical July 1, 2013 – September 30, 2018
  Budget dependent on number of subjects recruited
  "PRISM 302: A Phase 3 Randomized Discontinuation and Long Term Extension Study of Pegylated Phenylalanine Ammonia Lyase (PEG-PAL) in Subjects with PKU"
- 22. Shire Human Genetic Therapies August 4, 2011 – December 31, 2016 \$156,178
  "Follow-up Assessment of a Pilot Newborn Screening Program for Lysosomal Storage Disorders"
- Biomarin Pharmaceuticals
  June 1, 2011 July, 2014
  Budget dependent on number of subjects recruited
  "PKU-016: A Double-Blind, Placebo-Controlled Randomized Study to
  Evaluate the Safety and Therapeutic Effects of Sapropterin Dihydrochloride on
  Neuropsychiatric Symptoms in Subjects with Phenylketonuria (PKU ASCEND)"
- 24. Shire Human Genetic Therapies September 24, 2009 – March 31, 2011 \$126,238
  "Does Enzyme Replacement Therapy Reduce the Incidence and/or Severity of Infectious Illnesses in Patients with Mucopolysaccharidosis?"
- 25. BioMarin Pharmaceuticals

April 1, 2011 – December 31, 2013 Budget dependent on number of subjects recruited "MOR-004: A Multicenter, Multinational Double-Blind, Placebo-Controlled Study of the Safety and Efficacy of 2mg/kg/week and 2mg/kg/every other week BMN 110 in patients with Mucopolysaccharidosis IVA (Morquio IVA)"

BioMarin Pharmaceuticals
March 1, 2012 – April 30, 2014
Budget dependent on number of subjects recruited

"MOR-005: A Multicenter, Multinational Extension Study to Evaluate the Long-Term Efficacy and Safety of BMN 110 in patients with Mucopolysaccharidosis IVA (Morquio A Syndrome)"

- 27. BioMarin Pharmaceuticals March 1, 2012 – November 30, 2014 Budget dependent on number of subjects recruited "MOR-008: A Randomized Double-Blind Pilot Study of the Safety and Physiological Effects of Two Doses of BMN 110 in patients with Mucopolysaccharidosis IVA (Morquio A Syndrome)"
- 28. NIH Subcontract with Michigan Public Health Institute March 1, 2011 – February 28, 2016 \$40,547 for year 1
  "Inborn Errors of Metabolism Information System (IBEM-IS)"
- 29. Cytonet GMBH & Co February 1, 2011 – Open ended Budget dependent on number of subjects recruited "An Open Prospective, Historic-Controlled, Multicenter Study to Evaluate the Safety and Efficacy of Infusion of Liver Cell Suspension (hhlivc) in Children with Urea Cycle Disorders"
- BioMarin Pharmaceuticals
  July 1, 2009 December 30, 2012
  Budget dependent on number of subjects recruited
  "PAL-002: A Phase 2, Open-Label Dose-Finding Study to Evaluate the Safety, Efficacy,
  and Tolerability of Multiple Subcutaneous Doses of rAvPAL-PEG in Subjects with PKU"
- 31. BioMarin Pharmaceuticals
  July 1, 2009 Open ended
  Budget dependent on number of subjects recruited
  "PAL-003: Long Term Extension of a Phase 2, Open-Label Dose-Finding Study to Evaluate the Safety, Efficacy, and Tolerability of Multiple Subcutaneous Doses of rAvPAL-PEG in Subjects with PKU"
  - BioMarin Pharmaceuticals
    March 1, 2009 Open ended
    Budget dependent on number of subjects recruited
    "PKU-015: A Phase 3b Open-Label Study to Evaluate the Effect of Kuvan on Neurocognitive Function, Maintenance of Blood Phenylalanine Concentrations, Safety and Population Pharmacokinetics in Young Children with Phenylketonuria"
  - BioMarin Pharmaceuticals
     March 1, 2009 February 28, 2010
     Budget dependent on number of subjects recruited (subcontract with Washington University)

"Behavioral Effects of Kuvan® on Children with Mild PKU"

- BioMarin Pharmaceuticals
   September 1, 2008 May 30, 2014
   Budget dependent on number of subjects recruited
   "MOR-001: A Multicenter, Multinational Cross-Sectional Clinical Assessment Study of Subjects with Mucopolysaccharidosis IVA (Morquio Syndrome)"
- 35. BioMarin Pharmaceuticals October 1, 2008 – Open ended Budget dependent on number of subjects recruited "PKUDOS: A Long Term Observational Registry of Patients with PKU Exposed to Kuvan"
- 36. BioMarin Pharmaceuticals July 1, 2008 – June 30, 2009 \$120, 238
  "Adult PKU Outreach Program"
- BioMarin Pharmaceuticals
  March 1, 2008 March 31, 2009
  Budget dependent on number of subjects recruited
  "rAvPAL-PEG-001: A Phase 1, Multicenter, Open-Label Study to Evaluate the Safety and Tolerability of rAvPAL-PEG in Patients with PKU"
- 38. Shire Human Genetic Therapies January 16, 2008 – July 15, 2009 \$100,743
  "Screening for Mucopolysaccharidosis in Patients with Inguinal or Umbilical Hernias"
- 39. Shire Human Genetic Therapies January 16, 2007 – July 15, 2008 \$109,281
  "Screening for Mucopolysaccharidosis in Patients with Kyphosis"
- 40. Shire Human Genetic Therapies November 1, 2005 – January 15, 2007 \$75,000
  "Mucopolysaccharidosis (MPS) Treatment Center"
- BioMarin Pharmaceuticals
  March 17, 2006 July, 2008
  Budget dependent on number of subjects recruited
  "PKU-008: A Phase 3b, Multicenter, Open-Label Extension Study of Phenoptin in Subjects with Phenylketonuria Who Participated in Studies PKU-004 or PKU-006
- 42. BioMarin Pharmaceuticals

March 20, 2006 – April, 2009

Budget dependent on number of subjects recruited "PKU-007: A Phase 2, Multicenter, Open-Label Study to Evaluate the Safety and Efficacy of Phenoptin in Subjects with Hyperphenylalaninemia Due to Primary BH4 Deficiency"

43. BioMarin Pharmaceuticals

October 13, 2005 – March, 2007

Budget dependent on number of subjects recruited "PKU-006: A Phase 3, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Safety and Efficacy of Phenoptin 20mg/kg/day to Increase Phenylalanine Tolerance in Phenylketonuric Children on a Phenylalanine-restricted Diet"

44. BioMarin Pharmaceuticals

June 6, 2005 – June, 2007

Budget dependent on number of subjects recruited "PKU-004: A Phase 3, Multicenter, Open-Label Extension Study of Phenoptin in Subjects with Phenylketonuria Who Have Elevated Phenylalanine Levels"

45. BioMarin Pharmaceuticals

March 3, 2005 – February, 2006 Budget dependent on number of subjects recruited "PKU-003: A Phase 3, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Safety and Efficacy of Phenoptin in Subjects with Phenylketonuria"

### 46. BioMarin Pharmaceuticals

October 1, 2004 – February, 2006 Budget dependent on number of subjects recruited "PKU-001: A Phase 2, Multicenter, Open-Label Study to Evaluate the Response to and Safety of a 7-day Course of Phenoptin in Subjects with Phenylketonuria Who Have Elevated Phenylalanine Levels"

- 47. The Mid-Atlantic Connection for PKU and Allied Disorders, Inc. September, 2002-Sept. 2003 \$10,500
  "Evaluation of Tetrahydrobiopterin Responsiveness in Patients with Phenylalanine Hydroxylase Deficiency"
- 48. PKU Organization of Illinois July, 2002-Nov., 2003 \$8,900
  "Evaluation of Tetrahydrobiopterin (BH4) Responsiveness in Patients with Phenylalanine Hydroxylase Deficiency"
- 49. National Institutes of Health (Subcontract with Children's Hospital of Los Angeles)

January, 2000-Dec 31, 2000 \$12,500 "Phenylketonuria in Adulthood: A collaborative study"

- 50. Welch's Corporation
  July 1, 1994 June 30, 1995
  \$20,000
  Pediatric Birth Defects Clinic
- 51. Columbia Michael Reese Hospital Intramural Research Grant Program September 1, 1994 - August 31, 1995
   \$35,000
   Preimplantation Diagnosis of Cytogenetic Disorders
- 52. State of Illinois Department of Health July 1, 1992 - June 30, 1999; renewed annually \$50,000/year Genetic Counseling Outreach Program
- 53. Women's Board
  Michael Reese Hospital and Medical Center January 1, 1991 - December 31, 1991
  \$50,000 Total Support Research in Medical Genetics
- 54. Junior Medical Research Institute Council Michael Reese Hospital and Medical Center July 1, 1990 - June 30, 1992
  \$50,000 Total Support Prospective Evaluation of a New Prenatal Screening Test for Down Syndrome"
- 55. March of Dimes Birth Defects Foundation July 1, 1986 - June 30, 1988
  \$30,000 Total Support Fetal Alcohol Syndrome Information Service
- 56. State of North Carolina Developmental Disabilities Council October 1, 1983 - September 30, 1986
  \$295,679 Total Support "Comprehensive Fetal Alcohol Syndrome Project"
- 57. National Center for Health Services Research July 1, 1981 - June 30, 1984
  \$296,469 Total Support
  "Emotional and Developmental Impact of MSAFP Screening"

- 58. March of Dimes Birth Defects Foundation Basil O'Connor Starter Research Grant September 1, 1978 - June 30, 1981 \$55,401 Total Support "Lysosomal Acid Lipase and Its Relationship to Inborn Errors of Metabolism"
- 59. Intramural Research Support Program Bowman Gray School of Medicine July 1, 1978 - June 30, 1979
  \$3,000 Total Support Lysosomal Acid Lipase and Its Relationship to Inborn Errors of Metabolism"
- 60. State of North Carolina Department of Human Resources July 1, 1981 - December 31, 1988 \$11,082 annually "Genetic Satellite Clinics"
- 61. State of North Carolina Department of Human Resources July 1, 1986 - December 31, 1988 \$175,824 annually Genetic Counseling Program
- 62. State of North Carolina Department of Human Resources July 1, 1986 - June 30, 1989
  \$46,000 annually
  "Fetal Substance Abuse Prevention Project"
- 63. State of North Carolina Department of Human Resources July 1, 1979 - December 31, 1988
  \$236,581 annually
  "Regional Screening Program for Neural Tube Defects"

### **PROFESSIONAL MEMBERSHIPS**, past and present:

American Medical Association American Society of Human Genetics Illinois Chapter, American Academy of Pediatrics Executive Committee 2000-2004 Chicago Pediatric Society Executive Committee 1994-2002 President 1999-2000 American College of Medical Genetics Society for Pediatric Research Society for Inherited Metabolic Disease (Board of Directors 1996-2011; Treasurer 1999-2002; Secretary 2002; Program Director 2003-2005; President-Elect 2005-2007, President 2007-2009) Genetics Task Force of Illinois (President 1992-1993)

### JOURNAL REVIEWER:

American Journal of Medical Genetics American Journal of Obstetrics and Gynecology Clinical Genetics Journal of Pediatrics Molecular Genetics and Metabolism MGM Reports Obstetrics and Gynecology Orphanet Journal of Rare Disease Pediatric Research Pediatrics Prenatal Diagnosis Journal of Inherited Metabolic Disease JIMD Reports

## EDITORIAL BOARDS

International Journal of Newborn Screening

### **NIH STUDY SECTIONS:**

2015-2021	Permanent member Therapeutic Approaches to Genetic Disease (TAG) study section.
2013-2014	Ad Hoc reviewer. Therapeutic Approaches to Genetic Diseases study section.

### NATIONAL COMMITTEES:

2022-present	Member, Scientific Advisory Board, National MPS Society
2021-present	ACMG Committee to Develop Revised Clinical Practice Guidelines for PKU
2011-2012	NIH Workgroup on Phenylketonuria Long Term Outcomes
2011-2012	ACMG Ad Hoc Committee to Develop Clinical Practice Guidelines for Phenylketonuria (PKU)

2007-2011	Secretary's Advisory Committee on Heritable Disorders and Genetic Diseases in Newborns and Children U.S. Department of Health and Human Services (SIMD Liaison Representative)
2006-2010	Executive Committee Public Health Special Interest Group American College of Medical Genetics
2003-2005	Program Committee American College of Medical Genetics
2002-2006	Clinical Practices Committee Section of Genetics American Academy of Pediatrics
2002-Present	Medical Advisory Board Propionic Acidemia Foundation
1996-2000	Medical Advisory Board KURE (Kids with Urea Cycle Defects Research Enterprise)
1993-2000	Medical Advisory Board National Urea Cycle Defects Foundation
1990-1993	Subcommittee on Alpha-Fetoprotein Genetic Services Committee American Society of Human Genetics
1988-1992	Subcommittee on MSAFP Screening Council on Regional Genetic Networks (CORN)
1979-1982	Ethics Committee Birth Defects and Clinical Genetics Society

# STATE AND REGIONAL COMMITTEES:

2017-Present	Member, Rare Disease Commission State of Illinois Department of Public Health
2015-2021	Member, Genetic and Metabolic Screening Advisory Committee. State of Illinois Department of Public Health Chairman, 2018-2021
2009–2020	Chairman, Subcommittee on LSD Screening

	State of Illinois Department of Public Health
2006-2008	Steering Committee Illinois State Genetic Services State Plan
2006-2008	Chairman, Genetic and Metabolic Screening Advisory Committee State of Illinois Department of Public Health
2002-2008 and 1993-1994	Member, Genetic and Metabolic Screening Advisory Committee State of Illinois Department of Public Health
2004–2008	Chairman, Subcommittee on Cystic Fibrosis Newborn Screening Genetic and Metabolic Screening Advisory Committee State of Illinois Department of Public Health
2004–Present	Laboratory Subcommittee Genetic and Metabolic Screening Advisory Committee State of Illinois Department of Public Health
2004–2016	Region 4 Genetics Collaborative (A HRSA-Funded Public Health Initiative Involving 7 States) Long Term Newborn Screening Follow-up and Evaluation of Clinical Outcomes Working Group Illinois Representative
2001-2002	Task Force for Implementation of Expanded Newborn Screening State of Illinois Department of Health
1990-1992	Committee on Access to Genetic Services Genetics Task Force of Illinois
1986-1988	Task Force on Prevention of Fetal Alcohol Syndrome State of North Carolina Department of Human Resources
1983-1988	Screening Committee North Carolina Medical Genetics Association (Chairman, 1985-1986)
1983-1988	Advisory Committee on Newborn Screening State of North Carolina Division of Health Services
1982-1983	Work Group on Child Health North Carolina 2000 Project of the State Goals and Policy Board State of North Carolina

## **MEDICAL SCHOOL COMMITTEES:**

2000-2019	Co-Chairman Committee on Appointments, Promotions and Tenure Department of Pediatrics Northwestern University Feinberg School of Medicine
2004	Search Committee Palliative Care Director Children's Memorial Hospital
2001-2006	Clinical Board Department of Pediatrics Northwestern University Feinberg School of Medicine
2001-2002	Search Committee Endocrine Division Head Department of Pediatrics Northwestern University Medical School
2000-2002	Advocacy Council Department of Pediatrics Northwestern University Feinberg School of Medicine
1995-1998 &	Faculty Senate
1991-1994	University of Illinois at Chicago
1995-1997	Department of Pediatrics Advisory Committee University of Illinois College of Medicine
1992-1994	Woman's and Children's Task Force Strategic Planning Program University of Illinois College of Medicine
1990-1991	Dean's Advisory Council University of Illinois College of Medicine
1988	Adopt-a-School Program Wake Forest University Medical Center
1987-1988	Faculty Forum Committee Wake Forest University Medical Center
1987-1988	Associate Dean's Advisory Council

	Wake Forest Medical Center
1986-1988	Admissions Committee Wake Forest University Medical Center
1985-1986	Ad Hoc Promotions Committee Wake Forest University Medical Center
1982-1987	Chairman Security Advisory Committee Wake Forest University Medical Center
1982	Chairman Ad Hoc Committee on Special Research Requirements Wake Forest University Medical Center
1978-1981	Intramural Research Support Committee Wake Forest University Medical Center

## HOSPITAL COMMITTEES:

2011-2012	Test Utilization Committee Children's Memorial Hospital
2003	Service Excellence Committee Children's Memorial Hospital
2001	Ambulatory Access Task Force Children' s Memorial Hospital
1996-1998	Summer Student Research Program Subcommittee Michael Reese Hospital and Medical Center (Chairman)
1990-1992	Patient Care Committee Michael Reese Hospital and Medical Center
1988-1999	Research Committee Michael Reese Hospital and Medical Center (Vice-Chairman 1998-1999)

## COMMUNITY SERVICE:

2001-2008	Medical Advisory Council
	Make a Wish Foundation

	Northern Illinois Chapter
2006-2008	Co-Chairman Illinois Folic Acid Council Sponsored by March of Dimes Birth Defects Foundation Greater Chicago Chapter
2008-Present	Member, Emeritus Board of Directors March of Dimes Birth Defects Foundation Greater Chicago Chapter
2003-2008	Member, Board of Directors March of Dimes Birth Defects Foundation Greater Chicago Chapter
1998-2008	Member, Community Service Grants Committee March of Dimes Birth Defects Foundation Greater Illinois Chapter
1998-2001	Chairperson Genetics and Your Practice Education Program for Primary Care March of Dimes Birth Defects Foundation Greater Illinois Chapter
1998-2000	Member, Health Leadership Awards Committee March of Dimes Birth Defects Foundation Greater Illinois Chapter

### BIBLIOGRAPHY

#### **Books**

Kumar P, Burton BK, eds. Congenital Malformations: Evidence-Based Evaluation and Management. New York: McGraw-Hill, 2008.

Blair N, Burton BK, Thony B, Van Spronsen FJ, Waisbren S. Phenylketonuria and BH4 Deficiencies. Bremen: UNI-MED, 2010; Revised edition 2021

#### **Chapters in Books:**

Nadler HL, Burton BK. Enzymes in the amniotic fluid and the prenatal diagnosis of inborn errors of metabolism. In: Fairweather DVI, Eskes TKAB, eds. Amniotic fluid. Amsterdam: Excerpta Medica, 1973:223-261.

Burton BK, Gerbie AB, Nadler HL. Enzymes in the amniotic fluid and the prenatal diagnosis of inborn errors of metabolism. In: Fairweather DVI, Eskes TKAB, eds. Amniotic fluid: research and clinical application, 2<sup>nd</sup> ed Amsterdam: Excerpta Medica, 1978:225-245.

Burton, BK. Empiric recurrence risks for congenital hydrocephalus. Birth Defects: Original Articles Series 1979:15(5c):107-115.

Burton, BK, Nadler, HL. Screening the newborn for genetic and metabolic disorders. In: Moss A, ed. Pediatric update: review for physicians. New York: Elsevier, 1979:131-142.

Burton BK, Gerbie AB, Nadler HL. Biochemical and biologic pitfalls in the use of cell culture for prenatal diagnosis. In: Milunsky A, ed. Genetic disorders and the fetus: diagnosis, prevention and treatment. New York: Plenum, 1979:369-377.

Nadler HL, Burton, BK. Genetics. In: Kretchmer N, Quilligan EJ, eds. Fetal and maternal medicine. New York: Wiley & Sons, 1980:59-107.

Nadler HL, Burton BK. Genetics in surgery. In: Raffensperger J, ed. Swenson's pediatric surgery. New York: Appleton-Century-Crofts, 1980:85-103.

Sowers SG, Burton BK. The clinical significance of low maternal serum alpha-fetoprotein in obstetric practice. In: Nyhan WL, Jones K, etc. Annual review of birth defects, 1981 New York: Alan R. Liss, Inc., 1982:181-184.

Burton BK, Nadler HL. Biological and biochemical pitfalls in the prenatal diagnosis of inborn errors of metabolism by amniocentesis. In: Milunsky A, ed. Genetic disorders and the fetus: diagnosis, prevention and treatment, 2<sup>nd</sup> ed. New York: Plenum, 1986:437-451.

Nelson LH, Burton BK, Sowers SG. Maternal serum alpha-fetoprotein. In: Sabbagha RE, ed. Diagnostic ultrasound applied to obstetrics and gynecology, 2<sup>nd</sup> ed. Philadelphia:Lippincott, 1987:252-263.

Burton BK. Unexplained elevated MSAFP and adverse perinatal outcome. In: Elias S, Simpson JL, eds. Maternal Serum Screening for Fetal Genetic Disorders. New York: Churchill-Livingstone, 1992:109-119.

Burton BK. Inherited metabolic disorders. In: Avery GB, Fletcher MA, MacDonald MG, eds. Neonatology, 4<sup>th</sup> Ed., Philadelphia, J.B.Lippincott, 1994:726-743.

Cusick W, Burton BK, Buttino L Jr. Management of the pregnancy complicated by fetal congenital heart defects. In: Eikayam U and Gleicher N, eds. Cardiac Problems in Pregnancy 3<sup>rd</sup> Ed. New York: Wiley-Liss, 1998:725-732.

Burton, BK. Patient counseling, ethical and legal issues. In: Santolaya-Forgas, J and Lemery, D, eds. Interventional Ultrasound in Obstetrics and Gynecology. Oxford: Blackwell Scientific Publications, 1998:3-11.

Burton, BK. Inherited metabolic disorders. In: Avery GB, Fletcher MA, MacDonald MG, eds. Neonatology, 5<sup>th</sup> Ed., Philadelphia, J.B. Lippincott, 1999: 962-998.

Burton, BK. Urea cycle disorders. In: Bezerra JA and Balistreri WF, eds. Clinics in Liver Disease, Philadelphia, W.B. Saunders, 2000;4:815-830.

Burton BK. Enzyme deficiency diseases, In: Bolognia JL, Jorizzo JL, Rapini RP,eds. Dermatology. Philadelphia: Mosby, 2003:893-899.

Burton BK. Chromosome abnormalities. In: Green T, Franklin W, Tanz RR, eds. Pediatrics: Just the Facts. New York: McGraw-Hill, 2005:333-335.

Burton BK. Submicroscopic chromosome anomalies (contiguous gene syndromes). In: Green T, Franklin W, Tanz RR, eds. Pediatrics: Just the Facts. New York: McGraw-Hill, 2005:335-336.

Burton BK, Charrow J. Amino acid and organic acid disorders. In: Green T, Franklin W, Tanz RR, eds. Pediatrics: Just the Facts. New York: McGraw-Hill, 2005:336-340.

Burton BK, Charrow J. Carbohydrate metabolism. In: Green T, Franklin W, Tanz RR, eds. Pediatrics: Just the Facts. New York: McGraw-Hill, 2005:341-343.

Burton BK. Fatty acid oxidation disorders. In: Green T, Franklin W, Tanz RR, eds. Pediatrics: Just the Facts. New York: McGraw-Hill, 2005:343. Burton BK, Charrow J. Other important single gene disorders. In: Green T, Franklin W, Tanz RR, eds. Pediatrics: Just the Facts. New York: McGraw-Hill, 2005:345-349.

Burton BK. Newborn screening. In: Green T, Franklin W, Tanz RR, eds. Pediatrics: Just the Facts. New York: McGraw-Hill, 2005:349-350.

Burton BK. Inherited metabolic disorders. In: MacDonald MG, Seshie MMK, Mullett, MD, eds. Neonatology: Pathophysiology and Management of the Newborn, 6<sup>th</sup> ED., Philadelphia: Lippincott, Williams and Wilkins, 2005:965-980.

Burton BK. Enzyme deficiency diseases. In: Bolognia JL, Torizzo JL, Rapini RR, eds. Dermatology, 2<sup>nd</sup> ED., Oxford: Elsevier, 2008:863-868.

Burton BK, Sapropterin treatment of phenylketonuria. In: Thoene JG, ed. Small Molecule Therapy for Genetic Disease, New York: Cambridge University Press, 2010:76-85.

Burton BK. Inherited Metabolic disorders. In: MacDonald MG, Seshia MMK, eds. Avery's Neonatology: Pathophysiology and Management of the Newborn, 7<sup>th</sup> ED, Philadelphia: Wolters Kluwer, 2016: 740-9.

Burton BK. Inherited Metabolic Disorders. In: Boardman JP, Groves AM, Ramascthu J, Eds. Avery and MacDonald's Neonatology: Pathophysiology and Management of the Newborn, 8<sup>th</sup> edition., Philadelphia, Wolters Kluwer, 2021.

Burton, BK. Mucopolysaccharidosis type II, in Lysosomal Storage Disorders: A Practical Guide, AB Mehta and B Winchester, eds. Wiley, 2022.

### JOURNAL ARTICLES:

Burton BK, Gerbie AB, Nadler HL. Present status of intrauterine diagnosis. Am J Obstet Gynecol, 1974;118:718-746.

Burton BK, Nadler HL. Schilders disease: abnormal cholesterol retention and accumulation in cultivated fibroblasts. Pediatr Res, 1974;8:170-175.

Burton BK, Chacko CM, Nadler HL. Aldolase in cultivated human fibroblasts. Proc Soc Exp Biol Med 1974;146:605-607.

Burton BK, Hauser L, Nadler HL. Congenital scalp defects with distal limb anomalies: report of a family. J Med Genet 1976;13:466-468.

Burton BK, Nadler HL. Primary type 1 hyperlipoproteinemia with normal lipoprotein lipase activity. J Pediatr 1977;90:777-779.

Burton BK, Nadler HL. Nager acrofacial dysostosis: report of a case. J Pediatr 1977;16:47-53.

Burton BK, Marr TJ, Traisman HS, Davis AJ. Salmonella typhi meningitis in a neonate. Am J Dis Child 1977:1031-1033.

Burton BK, Nadler HL. Prenatal diagnosis of biochemical defects. Contemp Ob/Gyn 1977;10:39-44.

Ben-Yoseph Y, Burton BK, Nadler HL. Quantitation of the enzymatically deficient cross reacting material in GM<sub>1</sub> gangliosidoses. Am J Hum Genet 1977;29:575-580.

Ben-Yoseph Y, Shapira E, Edelman D, Burton BK, Nadler HL. Purification and properties of neutral beta-galactosidases from human liver. Arch Biochem Biophys 1977;184:373-379.

Burton BK, Nadler HL. Mannosidosis: separation and characterization of two acid alpha-mannosidase forms in mutant fibroblasts. Enzyme 1978;23:29-35.

Burton BK, Nadler HL. The clinical diagnosis of the inborn errors of metabolism in the neonatal period. Pediatrics 1978;61:398-405.

Burton BK, Ben-Yoseph Y, Nadler HL. Lactosylceramidosis: deficient activity of neutral beta-galactosidase in liver and cultivated fibroblasts. Clin Chim Acta 1978;8:483-493.

Burton BK, Emery DE, Mueller H. Lysosomal acid lipase in cultivated fibroblasts: characterization of enzyme activity in normal and enzymatically deficient cell lines. Clin Chim Acta 1980;101:25-32.

Burton BK. Recurrence risks for congenital hydrocephalus. Clin Genet 1979;16:47-53.

Burton BK, Nadler HL. Antenatal diagnosis of metabolic disorders. Clin Obstet Gynecol 1981;24:1041-1054.

Burton BK, Mueller HW. Purification and properties of human placental acid lipase. Biochem Biphys Acta 1980;618:449-460.

Burton BK, Intrauterine diagnosis of biochemical disorders. Semin Perinatol 1980;4:179-187.

Burton BK, Reed SP. Acid lipase cross-reacting material in Wolman disease and cholesterol ester storage disease. Am J Hum Genet 1981;33:203-208.

Gardner S, Burton BK, Johnson AM. Maternal serum alpha-fetoprotein screening: a report of the Forsyth County Project. Am J Obstet Gynecol 1981;31:746-748.

Fischer AQ, Challa VR, Burton BK, McLean WT Jr. Cerebellar hemorrhage complicating isovaleric acidemia: a case report. Neurology 1981;31:746-748.

Burton BK, Reed SP, Remy WT. Hyperpipecolic acidemia: clinical and biochemical observations in two male siblings. J Pediatr 1981;99:729-734. Burton BK. Dominant inheritance of microcephaly with short stature. Clin Genet 1981;20:25-27.

Sowers SG, Burton BK. The clinical significance of low maternal serum alphafetoprotein in obstetric practice. Birth Defects 1981;18:(3A);181-184.

Nelson LH, Anderson SG, Sowers SG, Burton BK. Ultrasound and a neural tube screening program in North Carolina. NC Med J 1982;43:283-286.

Batshaw ML, Brusilow S, Waber L, Blom W, Brubakk A, Burton BK, Cann HM,

Kerr D, Mamunes P, Matalon R, Myerberg D, Schafer I. Treatment of inborn errors of urea synthesis. Activation of alternative pathways of waste nitrogen synthesis and excretion. N Engl J Med 1982;306:1387-1392.

Moyer DB, Marquis PJ, Shertzed ME, Burton BK. Brief clinical report: Cockayne syndrome with early onset of manifestations. Am J Med Genet 1982;13:225-230.

Burton BK, Sowers SG, Nelson LH: Maternal serum alpha-fetoprotein screening in North Carolina: experience with more than twelve thousand pregnancies. Am J Obstet Gynecol 1983;146:439-444.

Sowers SG, Reish RL, Burton BK: Fetal sex-related differences in maternal serum alpha-fetoprotein during the second trimester of pregnancy. Am J Obstet Gynecol 1983;146:786-789.

Challa VR, Geisinger KR, Burton BK. Pathologic alterations in the brain and liver in hyperpipecolic acidemia. J Neuropathol Exp Neurol 1983;42:627-638.

Burton BK, Dillard RG. Brief clinical report: prune belly syndrome: observations supporting the hypothesis of abdominal overdistention. Am J Med Genet 1984;17:669-672.

Lorentz WB, Burton BK, Trillo A, Browning MC. Failure to thrive, hyperuricemia and renal insufficiency in early infancy secondary to partial hypoxanthine-guanine phosphoribosyl transferase deficiency. J Pediatr 1984;104:94-97.

Brusilow SW, Danney M, Waber LJ, Batshaw M, Burton BK, Levitsky L, Roth K, McKeethren C, Ward J. Treatment of episodic hyperammonemia in children with inborn errors of urea synthesis. N Engl J Med 1984;310:1630-1634.

Burton BK, Remy WT, Rayman L. Cholesterol ester and triglyceride metabolism in intact fibroblasts from patients with Wolman disease and cholersterol ester storage disease. Pediatr Res 1984;18:1242-1245.

Burton BK, Dillard RG, Clark EN. The psychological impact of false positive MSAFP elevations. Am J Obstet Gynecol 1985;151:77-82.

Burton BK, Dillard RD, Clark EN. Maternal serum alpha-fetoprotein screening. The effect of participation on anxiety and attitude toward pregnancy in women with normal results. Am J Obstet Gynecol 1985;152:540-543.

Burton BK, Dillard RG. Outcome in infants born to mothers with unexplained

elevations of maternal serum alpha-fetoprotein. Pediatrics 1986;77:582-586.

Nelson LH, Burton BK, Sowers SG. Screening pregnancies with maternal serum alpha-fetoprotein. Fem Patient 1986 May;11:106,109,111,115-116,121,125,128.

Burton BK, Sumner T, Langer LO Jr, Rimoin DL, Adomian GE, Lachman RS, Nicastro JF, Kelly DL, Weaver RG. A new skeletal dysplasia: clinical, radiologic and pathologic findings. J Pediatr 1986;109:642-648.

Burton BK. Alpha-fetoprotein screening. Adv Pediatr 1986;33:181-196.

Burton BK. Positive amniotic fluid acetylcholinesterase: distinguishing between open spina bifida and ventral wall defects. Am J Obstet Gynecol 1986;155:984-986.

Burton BK. Inborn errors of metabolism: the clinical diagnosis in early infancy. Pediatrics 1987;79:359-369.

Till JS, Roach ES, Burton BK. Sialidosis (neuraminidase deficiency) types I and II: Neuro-ophthalmic manifestations. J Clin Neuro Ophthalmol 1987;7:40-44.

Burton BK, Roach ES, Wolf B, Weissbecker KA. Sudden death associated with biotinidase deficiency (Letter) Pediatrics 1987;79:482-483.

Nelson LH, Burton BK, Sowers SG. Ultrasonography in patients with low maternal serum alpha-fetoprotein. J Ultrasound Med 1987;6:59-61.

Burton BK, Dillard RD, Weaver RG. Brief clinical report: Walker-Warburg syndrome with cleft lip and cleft palate in two sibs. Am J Med Genet 1987;27:537-541.

Dyer SN, Burton BK, Nelson LH. Elevated maternal serum alpha-fetoprotein levels and oligohydramnios: poor prognosis for pregnancy outcome. Am J Obstet Gynecol 1987;157:336-339.

Nelson LH, Bensen J, Burton BK. Outcomes in patients with unusually high maternal serum alpha-fetoprotein levels. Am J Obstet Gynecol 1987;157:572-575.

Bensen JT, Dillard RG, Burton BK. Open spina bifida: does cesarean section delivery improve the prognosis? Obstet Gynecol 1988;71:532-534.

Burton BK. Elevated maternal serum alpha-fetoprotein (MSAFP): interpretation and follow-up. Clin Obstet Gynecol 1988;31:29Burton BK. Outcome of pregnancy in patient with unexplained elevated or low levels of maternal serum alpha-fetoprotein (MSAFP). Obstet Gynecol 1988;72:709-713.

Burton BK, Nelson LH, Pettanati MJ. False positive acetylcholinesterase with

early amniocentesis. Obstet Gynecol 1989;74:607-610.

Burton BK, Pettanati MJ, Block SM, Bensen J, Roach ES. Non-ketotic hyperglycinemia in a patient with the 9p-syndrome. Amer J Med Genet 1989;32:504-505.

Pettenati MJ, Weaver RG, Burton BK. Translocation t(5;11)(q13.1;p13) associated with familial isolated aniridia. Amer J Med Genet 1989;34:230-232.

Burton BK. Maternal serum alpha-fetoprotein screening. Ped Annals 1989;18:687-697.

Warner AA, Pettenati MJ, Burton BK. Risk of fetal chromosome anomalies in patients with elevated maternal serum alpha-fetoprotein. Obstet Gynecol 1990;75:64-66.

Hommes FA, Blitzer MG, Brewster MA, Burton BK, Buist NRM, Colombo JP, Elsas LJ, Goldsmith BM. Hammond J, Kruckeberg WC, Leichtman LG, Lin KT, Marken RS, Matalon R, Naylor EW, O' Brien WE, Roe CR, Roesel AR, Shapira E, Taylor HA, Tedesco TA, Thompson JN, Tocci PM, Ward JC, Wilson WG. Proficiency testing for biochemical genetics laboratories: the first ten rounds of testing. Am J Hum Genet 1990;46:1001-1004.

Albright S, Warner AA, Seeds JS, Burton BK. Congenital nephrosis as a cause of MSAFP elevations. Obstet Gynecol 1990;76:969-971.

Pettenati MJ, Wheeler M, Bartlett DJ, Subrt I, Rao N, Kroovand RL, Burton BK, Kahler S, Park HK, Cosper P, Kelly DR, Ranells JD. 45,X/47,XYY mosaicism: clinical discrepancy between prenatally and postnatally diagnosed cases. Am J Med Genet 1991;39:42-47.

Bensen JT, Nelson LH, Pettenati MJ, Brock SM, Brusilow SW, Livingston LR, Burton BK. The first report of management and outcome of pregnancies associated with hereditary orotic aciduria. Amer J Med Genet 1991;41:426-431.

Burton BK, Schulz CJ, Burd LI. Limb anomalies associated with chorionic villus sampling. Obstet Gynecol 1992;79:726-730.

Burton BK, Prins GS, Verp MS. A prospective trial of prenatal screening for Down syndrome using maternal serum alpha-fetoprotein, human chorionic gonadotropin and unconjugated estriol. Amer J Obstet Gynecol 1993;169:526-530.

Burton BK, Schulz CJ, Burd LI. Spectrum of limb disruption defects associated with chorionic villus sampling. Pediatrics 1993;91:989-993.

Gruber B, Burton BK. Oromandibular-limb hypogenesis syndrome following chorionic villus sampling. Internat J Ped Otorhinolaryn 1994;29:59-63.

Angle B, Holgado S, Burton BK, Miller MT, Shapiro MJ, Opitz JM. Microcephaly lymphedema and chorioretinal dysplasia: report of two additional cases. Amer J Med Genet 1994;53:99-101.

Santolaya-Forgas J, Burd LI, Burton BK. Clinical significance of low levels of second-trimester maternal serum human chorionic gonadotropin. Fetal Diagn Ther 1994;9:362-366.

Burton BK, Schulz CJ, Angle B, Burd LI. An increased incidence of hemangiomas in infants born following chorionic villus sampling (CVS). Prenatal Diagnosis 1995;15:209-214.

Robin NH, Feldman GJ, Aronson AL, Mitchell HF, Weksberg R, Leonard CL, Burton BK, Josephson KD, Laxova R, Aleck KA, Allanson JE, Guion-Almeida ML, Martin RA, Leichtman LG, Price RA, Opitz JM, Muenke M. Opitz syndrome is heterogeneous with one locus on Xp22 and a second locus on 22q11.2. Nature Genetics 1995;11:459-461.

Santolaya-Forgas J, Jessup J, Burd LI, Prins GS, Burton BK. Pregnancy outcome in women with low mid-trimester maternal serum unconjugated estriol. J Repro Med 1996;41:87-90.

Santolaya-Forgas J, Meyer WL, Burton BK, Scommegna A. Altered newborn gender distribution in patients with low mid-trimester maternal serum human chorionic gonadotropin. J Matern-Fetal Med 1997;6:111-114.

Wang M, Wang J-Y, Cisler J, Imaizumi K, Burton BK, Jones MC, Lamberti JJ, Godfrey M. Three novel fibrillin mutations in exons 25 and 27: classic versus neonatal Marfan syndrome. Hum Mut 1997;9:359-362.

Weinberg GL, Laurito CE, Geldner P, Pygon BH, Burton BK. Malignant ventricular dysrhythmias in a patient with isovaleric acidemia receiving general and local anesthesia for suction lipectomy. J Clin Anesth 1997;9(8):668-70.

Angle B, Burton BK. Familial leg ulcers. Lancet 1998;351:1031-2.

Burton BK. Inborn errors of metabolism in infancy: a guide to diagnosis. Pediatrics 199

Batshaw ML, Robinson M, Ye X, Pabin C, Daikhim Y, Burton BK, Wilson J, Yudkoff M. Correction of ureagenesis following gene transfer and liver transplantation in ornithine transcarbamylase deficiency. Pediatr Res 1999; 46:588-593.

Rios AS, Silber EN, Bavishi N, Varga P, Burton BK, Clark WA, Denes P. Effect of long-term beta-blockade on aortic root compliance in patients with Marfan syndrome. Amer Heart J 1999;137:1057-61.

Verghese S, Newlin A, Miller MT, Burton BK. Mosaic trisomy 7 in a patient with pigmentary abnormalities. Amer J Med Genet 1999;87:371-4.

Koch R, Burton BK. Hoganson G, et al. Phenylketonuria in adulthood: a collaborative study. J Inher Metab Dis 2002;25:333-46.

Bassuk AG, Joshi A, Burton BK, Larsen MB, Burrowes DM, Stack C. Alexander Disease with serial MRS and a new mutation in the glial fibrillary Acidic protein gene. Neurology. 2003;61:1014-15.

Ensenauer R, Vockley J, Willard JM, Huey JC, Sass JO, Edland SD, Burton BK, Berry SA, Santer R, Grunert S, Koch HG, Marquart I, Rinaldo P, Hahn S, Matern, D. A common mutation is associated with a mild, potentially asymptomatic phenotype in patients with isovaleric acidemia diagnosed by newborn screening. Am J Hum Genet 2004;75:1136-42.

Grewal SS, Wynn R, Abdenur JE, Burton BK, Gharib M, Haase C, Hayashi RJ, Shenoy S, Sillence D, Tiller GE, Dudek ME, Royen-Kerkof A, Wraith JE,Woodard P, Young GA, Wulffraat N, Whitley CB, Peters C. Safety and efficacy of enzyme replacement therapy in combination with hematopoietic stem cell transplantation in Hurler syndrome. Genet Med 2005;7:105-110.

Baris H, Bejjani BA, Tan W-H, Coulter DL, Martin JA, Storm AL, Burton BK, Saitta SC, Gajecke M, Ballif BC, Irons MB, Shaffer LG, Kimonis VE. Identification of a novel polymorphism – the duplication of the NPHP1 (nephronophthisis 1) gene. Am J Med Genet A 2006;140A:1876-9.

Oglesbee D, He M, Majumder N, Vockley J, Ahamad A, Angle B, Burton B, Charrow J, Ensenauer R, Ficicioglu CH, Keppen LD, Marsden D, Tortorelli S, Hahn SH, Matern, D. Development of a newborn screening followup algorithm for the diagnosis of isobutyryl-CoA dehydrogenase deficiency. Genet Med 2007;108-116.

Seto ML, Hing AV, Chang J, Hu M, Kapp-Simon KA, Patel PK, Burton BK, Kane A, Smyth MD, Hopper R, Ellenbogen RG, Stevenson K, Speltz ML, Cunningham ML. Isolated sagittal and coronal craniosynostosis associated with TWIST Box mutations. Am J Med Genet 2007;Part A 143A:678-86.

Edelmann L, Prosnitz A, Pardo S, Bhatt J, Cohen N, Lauriat T, Duchanov L, Gonzalez PJ, Manghi ER, Bondy P, Esquivel M, Monge S. Delgado MF, Splendore A, Francke U, Burton BK, McInnes LA. An atypical deletion of the Williams Beuren syndrome interval implicates genes associated with defective visuospatial processing and autism. J Med Genet 2007;44:136-43.

Burton BK, Grange DK, Milanowski A, Vockley G, Feillet F, Crombez E, Abadie V, Harding CO, Cederbaum S, Dobbelaere D, Smith A, Dorenbaum. The response of patients with phenylketonuria and elevated serum phenylalanine to treatment with oral

sapropterin dihydrochloride (6R-tetrahydrobiopterin): a phase II, multicenter, openlabel, screening study. J Inherit Metab Dis 2007;30:700-707.

Kane JM, Rossi J, Tsao S, Burton BK. Metabolic cardiomyopathy and mitochondrial disorders in the pediatric intensive care unit. J Pediatr 2007;151:538-41.

Burton BK. A 30 month old with speech delay. Fragile X syndrome. Pediatr Ann 2007; 36:280-1.

Burton BK. A 12 year old with scoliosis. Marfan syndrome. Pediatr Ann 2007; 36:272-274.

Burton BK. An 8 year old girl with short stature. Noonan syndrome. Pediatr Ann 2007; 36:267-8.

Levy HL, Burton B, Cederbaum S, Scriver C. Recommendations for evaluation of responsiveness to tetrahydrobiopterin (BH4) in phenylketonuria and its use in treatment. Molec Genet Metab 2007;92:287-291.

Angle B, Burton BK. Risk of sudden death and acute life-threatening events in patients with glutaric acidemia type II. Molec Genet Metab 2008;93:36-39.

Kim KH, Decker C, Burton BK. Successful management of difficult infusion-related reactions in a young patient with mucopolysaccharidosis type VI receiving recombinant human arylsulfatase B (galsulfase [Naglazyme]). Pediatrics 2008; 121:e714-7.

Nakamine A, Ouchanov L, Gonzalez PJ, Manghi ER, Esquivel M, Monge S, Fallas M, Burton BK, Szomju B, Elsea SH, Marshall CR, Schereer SW, McInnes LA. Duplication of 17(p11.2p11.2) in a male child with autism and severe language delay. Amer J Med Genet A 2008;146:636-43.

Lee P, Treacy EP, Crombez E, Wasserstein M, Waber L, Wolff J, Wendel U, Dorenbaum A, Bebchuk J, Christ-Schmidt H, Seashore M, Giovannini M, Burton BK Morris AA; Sapropterin Research Group. Safety and efficacy of 22 weeks of treatment with sapropterin dihydrochloride in patients with phenylketonuria. Am J Med Genet A 2008;146A(22):2851-9.

Wraith JE, Beck M, Giugliani R, Clarke J, Martin R, Muenzer J; HOS Investigators. Initial report from the Hunter Outcome Survey. Genet Med 2008;10(7):508-16.

Wong LJ, Naviaux RK, Brunetti-Pierri N, Zhang Q, Schmitt ES, Truong C, Milone M, Cohen BH, Wical B, Ganesh J, Basinger AA, Burton BK, Swoboda K, Gilbert DL, Vanderver A, Saneto RP, Maranda B, Arnold G, Abdenur JE, Waters PJ, Copeland WC. Molecular and clinical genetics of mitochondrial diseases due to POLG mutations. Hum Mutat 2008 10;29(9):E150-E172.

Tuchman M, Caldovic L, Daikhin Y, Horyn O Nissim I, Nissim I, Korson M, Burton B, Yudkoff M. N-carbamylglutamate markedly enhances ureagenesis in N-acetylglutamate deficiency and propionic acidemia as measured by isotopic incorporation and blood biomarkers. Pediatr Res 2008;64(2):213-7.

Epstein LG, Jalali A, Chary AN, Khan S, Ross J, Coppinger J, Carlson K, Charrow J, Burton B, Zimmerman D, Curran J, Kim F, Nguyen P, Burrowes D, Angle B, Stack C, Shaffer L, Kessler JA, Bassuk AG. Neuroimaging findings in children with rare or novel de novo chromosomal anomalies. Birth Defects Res A Clin Mol Teratol 2008; 82(4):200-10.

Arnold GL, Koeberl DD, Matern D, Barshop B, Braverman N, Burton B, Cederbaum S, Feigenbaum A, Garganta C, Gibson J, Goodman SI, Harding C, Kahler S, Kronn D Longo N. A Delphi-based consensus clinical practice protocol for the diagnosis and management of 3-methylcrotonyl CoA carboxylase deficiency. Mol Genet Metab 2008; 93(4):363-70.

Feillet F, Clarke L, Meli C. Lipson M, Morris AA, Harmatz P, Mould DR, Green B, Dorenbaum A, Giovannini M, Foehr E; Sapropterin Research Group. Pharmacokinetics of sapropterin in patients with phenylketonuria. Clin Pharmacokinet 2008;47(12):817-25.

Selcen D, Muntoni F, Burton BK, Pegoraro E, Sewry C, Bite AV, Engel AG. Mutation in BAG3 causes severe dominant childhood muscular dystrophy. Ann Neurol 2009 Jan; 65(1):83-9.

Arnold GL, Van Hove J, Freedenberg D, Strauss A, Longo N, Burton B, Garganta C, Ficicioglu C, Cederbaum S, Harding C, Boles RG, Matern D, Chakraborty P, Feigenbaum A. A Delphi clinical practice protocol for the management of very long chain acyl-CoA dehydrogenase deficiency. Mol Genet Metab 2009 Mar;96(3):85-90. (Epub 2009 Jan 20).

Trefz FK, Burton BK, Longo N, Casanova MM, Gruskin DJ, Dorenbaum A, Kakkis ED, Crombez EA, Grange DK, Harmatz P, Lipson MH, Milanowski, A, Randolph LM, Vockley J, Whitley CB, Wolff JA, Bebchuk J, Christ-Schmidt H, Hennermann JB; Sapropterin Study Group. Efficacy of sapropterin dihydrochloride in increasing phenylalanine tolerance in children with phenylketonuria: a phase III, randomized, double-blind, placebo-controlled study. J Pediatr 2009;154:700-7.

Burton BK, Wiesman C, Paras A, Kim K, Katz R. Home infusion therapy is safe and enhances compliance in patients with mucopolysaccharidoses. Mol Genet Metab 2009;97(3):234-6.

Jones SA, Almassy Z, Beck M, Burt K, Clarke JT, Guigliani R, Hendriksz C, Kroepfl T, Lavery L, Lin SP, Malm G, Ramaswami U, Tincheva R, Wraith JE; HOS Investigators. Mortality and cause of death in mucopolysaccharidosis type II-a historical review based on data from the Hunter Outcome Survey (HOS). J Inherit Metab Dis 2009;32(4):534-43.

Feillet F, MacDonald A, Hartung Perron D, Burton B. Outcomes beyond phenylalanine: an international perspective. Mol Genet Metab 2010;99 Suppl 1:S79-85.

Burton BK, Bausell H, Katz R, LaDuca H, Sullivan C. Sapropterin therapy increases stability of blood phenylalanine levels in patients with BH4 – responsive phynylketonuria (PKU). Mol Genet Metab 2010;101:110-114.

Burton BK, Guffon N, Roberts J, Vander Ploeg AT, Jones SA on behalf of the HOS investigators. Home treatment with intravenous enzyme replacement therapy with idursulfase from mucopolysaccharidosis type II-data from the Hunter Outcome Survey. Mol Genet Metab 2010;101:123-129.

Burton BK, Leviton L. Reaching out to the lost generation of adults with early-treated phenylketonuria (PKU). Mol Genet Metab 2010; 101:146-148.

Berry SA, Jurek AM, Anderson C, Bentler K; Region 4 Genetics Collaborative Priority 2 Workgroup. The inborn errors of metabolism information system: A project of the Region 4 Genetics Collaborative Priority 2 Workgroup. Genet Med 2010; 12(12 Suppl): S215-9.

Mendelsohn NJ, Harmatz P, Bodamer O, Burton BK, Giugliani R, Jones SA, Lampe C, Malm G, Steiner RD, Parini R; Hunter Outcome Survey Investigators. Importance of surgical history in diagnosing mucopolysaccharidosis type II (Hunter syndrome): data from the Hunter Outcome Survey. Genet Med 2010;12:816-22.

Burton BK, Adams DJ, Grange DK, Malone JI, Jurecki E, Bausell H, Marra KD, Sprietsma L, Swan KT. Tetrahydrobiopterin therapy for phenylketonuria in infants and young children. J Pediatr 2011;158:410-5.

Simpson MA, Irving MD, Asilmaz E, Gray MJ, Dafou D, Elmslie FV, Mansour S, Holder SE, Brain CE, Burton BK, Kim KH, Pauli RM, Aftimos S, Stewart H, Kim CA, Holder-Espinasse M, Robertson SP, Drake WM, Trembath RC. Mutations in NOTCH2 cause Hajdu-Cheney syndrome, a disorder of severe and progressive bone loss. Nat Genet 2011;43:303-5.

Pyott SM, Schwarze U, Christiansen HE, Pepin MG, Leistritz DF, Dineen R, Harris C, Burton BK, Angle B, Kim K, Sussman MD, Weis M, Eyre DR, Russell DW, McCarthy KJ, Steiner RD, Byers PH. Mutations in PPIB (cyclophilin B) delay type I procollagen chain association and result in perinatal lethal to moderate osteogenesis imperfecta phenotypes. Hum Mol Genet 2011;20:1595-609.

Burton BK, Whiteman DA, HOS investigators. Incidence and timing of infusion – related reactions in patients with mucopolysaccharidosis type II (Hunter syndrome) on

idursulfase therapy in the real-world setting: A perspective from the Hunter Outcome Survey (HOS). Mol Genet Metab 2011;103:113-20.

Burton BK, Nowacka M, Hennermann JB, Lipson M, Grange DK, Chakrapani A, Trefz F, Dorenbaum A, Imperiale M, Kim SS, Fernhoff PM, Safety of extended treatment with saproterin dihydrochloride in patients with phenylketonuria: results of a phase 3b study. Mol Genet Metab 2011;103:315-22.

Wang RY, Bodamer OA, Watson MS, Wilcox WR, ACMG Work Group on Diagnostic Confirmation of Lysosomal Storage Diseases: Diagnostic Confirmation and Management of presymptomatic individuals. Genet Med 2011;13:457-84.

Muenzer J, Bodamer O, Burton B, Clark L, Frenking GS, Giugliani R, Jones S, Rojas MV, Scarpa M, Beck M, Harmatz P. The role of enzyme replacement therapy in severe Hunter syndrome: an expert panel consensus. Eur J Pediatr 2012;171:181-8.

Pena L, Angle B, Burton B, Charrow J. Follow-up of patients with short-chain acid-CoA dehydrogenase and isobutyrl-CoA dehydrogenase deficiencies identified through newborn screening: one center's experience: Genet Med 2012;14:342-7.

Burton BK. Newborn screening for Pompe disease: an update, 2011. AM J Med Genet C Semin Med enet 2012;160:8-12.

Burton BK, Giugliani R. Diagnosing Hunter syndrome in pediatric practice: practical considerations and common pitfalls. Eur, J Pediatr 2012;171:631-9.

Rosenfeld JA, Traylor RN, Schaefer GB, McPherson EW, Ballif BC, Klopocki E, Mundlos S, Shaffer LG, Aylsworth AS; 1q21.1 Study Group. Proximal microdeletions and microduplications of 1q21.1 contribute to variable abnormal phenotypes. Eur J Hum Genet 2012; 20: 754-61.

Pena L, Burton BK. Survey of health status and complications among propionic academia patients. Am J Med Genet A. 2012; 158A:1641-6.

Schrier SA, Bodurtha JN, Burton B, Chudley AE, Chiong MA, D'Avanzo MG, Lynch SA, Musio A, Nyazov DM, Sanchez-Lara PA, Shalev SA, Deardorff MA. The Coffin-Sirius syndrome: A proposed diagnostic approach and assessment of 15 overlapping cases. Am J Med Genet A. 2012;158A: 1856-76.

Solomon BD, Bear KA, Wyllie A, Keaton AA, Dubourg C, David V, Mercier S, Odent S, Hehr U, Paulussen A, Clegg NJ, Delgado MR, Bale SJ, Lacbawan F, Ardinger HH, Aylsworth AS, Bhengu NL, Braddock S, Brookhyser K, Burton B, Gaspar H, Grix A, Horovitz D, Kanetzke E, Kayserili H, Lev D, Nikkel SM, Norton M, Roberts R, Saal H, Schaefer GB, Schneider A, Smith EK, Sowry RE, Spence MA, Shaley SA, Steiner CE, Thompson EM, Winder TL, Balog JZ, Hadley DW, Zhou N, Pineda-Alvarez DE, Roessler E, Muenke M. Genotypic and phenotypic analysis of 396 individuals with mutations in Sonic Hedgehog, J Med Genet 2012: 49: 473-9. Solanki, GA, Alden TA, Burton BK, Giugliani R, Horovitz DD, Jones SA, Lampe C, Martin KW, Ryan ME, Schaefer MK, Siddiqui A, White KK, Harmatz P. A multinational, multi-disciplinary consensus for the diagnosis and management of spinal cord compression among patients with mucopolysaccharidosis VI. Mol Genet Metab 2012; 107:1 15-24.

Burton BK, Leviton L, Vespa H, Coon H, Longo N, Lundy BD, Johnson M, Angelino A, Hamosh A, Bilder D. A diversified approach for PKU treatment: routine screening yields high incidence of psychiatric distress in phenylketonuria clinics. Mol Genet Metab 2013: 108: 8-12.

Wijburg FA, Wegrzyn G, Burton BK, Tylki-Szymanska A. Mucopolysaccharidosis type III (Sanfilippo syndrome) and misdiagnosis of idiopathic developmental delay, attention deficit/hyperactivity disorder or autism spectrum disorder. Acta Paediatr, 2013; 102: 462-70.

Bilder DA, Burton BK, Coon H, Leviton L, Ashworth J, Lundy BD, Vespa H, Bakian AV, Longo N. Psychiatric symptoms in adults with PKU. Mol Genet Metab 2013; 108:155-60.

Harmatz P, Mengel KE, Giugliani R, Valayannopoulos V, Lin SP, Parini R, Guffon N, Burton BK, Hendriksz CJ, Mitchell J, Martins A, Jones S, Guelbert N, Vellodi A, Hollak C, Slasor P, Decker C. The Morquio A Clinical Assessment Program: Baseline results illustrating progressive, multisystemic clinical impairments in Morquio A subjects. Mol Genet Metab 2013; 109: 54-61.

Mirzaa GM, Paciorkowski AR, Marst ED, Berry-Kravis EM, Medre L, Grixa, Wirrell EC, Powell BR, Nickels KC, Burton B, Paras A, Kim K, Chung W, Dobyns WB, Das S. CDKL5 and ARX mutations in males with early-onset epilepsy. Pediatr Neurol 2013; 48: 367-77.

Jones SA, Parini R, Harmatz P, Giugliani R, Fang J, Mendelsohn NJ. HOS Natural History Working Group on behalf of HOS investigators. The effect of idursulfase on growth in patients with Hunter syndrome: data from the Hunter Outcome Survey (HOS). Mol Genet Metab 2013; 109: 41-8.

Kim KH, Dodsworth C, Paras A, Burton BK. High dose genistein aglycone is safe in patients with mucopolysaccharidoses involving the central nervous system. Mol Genet Metab 2013; 109: 382-5.

Longo N, Siriwardena K, Feigenbaum A, Dimmock D, Burton BK, Stickler S, Waisbren S, Lang W, Jurecki E, Zhang C, Prasad S. Long-term developmental progression in infants and young children taking sapropterin for phenylketonuria: a two-year analysis of safety and efficacy. Genet Med 2015; 17:365-73.

Jorgez CJ, Rosenfeld JA, Wilken NR, Vangapandu HV, Sahin A, Pham D, Carvalho CM, Bandholz A, Miller A, Weaver DD, Burton B, Babu D, Bamforth JS, Wilks T, Flynn DP, Roeder E, Patel A, Cheung SW, Lupski JR, Lamb DJ. Genitourinary defects associated with genomic deletions in 2p15 encompassing OTX1. PLoS One. 2014; Sep9;9(9): e107028:doi:10:1371/journal.pone.0107028.eCollection2014

Adams DR, Yuan H, Holyoak T, Arajs KH, Hakimi P, Markello TC, Wolfe LA, Vilboux T, Burton BK, Fajrdo KF, Grahame G, Holloman C, Sincan M, Smith AC, Wells GA, Huang Y, Vega H, Snyder JP, Golas GA, Tifft CJ, Boerkoel CF, Hanson RW, Traynelis SF, Kerr DS, Gahl WA. Three rare diseases in one sib pair: RAI1, PCK1, GRIN2B mutations associated with Smith-Magenis syndrome, cytosolic PEPCK deficiency and NMDA receptor glutamate insensitivity. Mol Genet Metab 2014; 113:161-70.

Hendriksz CJ, Burton B, Fleming TR, Harmatz P, Hughes D, Jones SA, Lin SP, Mengel E, Scarpa M, Valayannopoulos V, Giugliani R; STRIVE Investigators, Slasor P, Lounsbury D, Dummer W. Efficacy and safety of enzyme replacement therapy with BMN-110 (elosulfase alfa) for Morquio A syndrome (mucopolysaccharidosis IVA): a phase 3 randomised placebo-controlled study. J Inherit Metab Dis 2014; 37: 979-90.

Longo N, Harding CO, Burton BK, Grange DK, Vockley J, Wasserstein M, Rice GM, Dorenbaum A, Neuenburg JK, Musson DG, Gu Z, Sile S. Single-dose, subcutaneous recombinant phenylalanine ammonia lyase conjugated with polyethylene glycol in adult patients with phenylketonuria: an open-label, multicenter, phase 1 dose-escalation trial. Lancet 2014; 384: 37-44.

Grange DK, Hillman RE, Burton BK, Yano S, Vockley J, Fong CT, Hunt J, Mahoney JJ, Cohen-Pfeffer JL; Phenylketonuria Demographics Outcomes and Safety (PKUDOS) registry: Maternal Phenylketonuria Observational Program (PKU MOMS) sub-registry. Mol Genet Metab 2014; 112: 9-16.

Camp KM, Parisi MA, Acosta PB, Berry GT, Bilder DA, Blau N, Bodamer OA, Brosco JP, Brown CS, Burlina AB, Burton, BK, et al. Phenylketonuria Scientific Review Conference: state of the science and future research needs. Mol Genet Metab 2014; 112: 87-122.

Lampe C, Bosserhoff AK, Burton BK, Giugliani R, de Souza CF, Bittar C, Muschol N, Olson R, Mendelsohn NJ. Long-term experience with enzyme replacement therapy (ERT) in MPS II patients with a severe phenotype: an international case series. J Inherit Metab Dis 2014; 37: 823-9.

Lampe C, Atherton A, Burton BK, Descartes M, Giugliani R, Horovitz DD, Kyosen SO, Magalhaes TS, Martins AM, Mendelsohn NJ, Muenzer J, Smith LD. Enzyme replacement therapy in mucopolysaccharidoses II patients under 1 year of age. JIMD Rep 2014; 14: 99-113.

Mazariegos G, Shneider B, Burton B, Fox IJ, Hadzic N, Kishnani P, Morton DH, McIntire S, Sokol RJ, Summar M, White D, Chavanon V, Vockley J. Liver transplantation in pediatric metabolic disease. Mol Genet Metab 2014; 111: 418-27.

Lachman RS, Burton BK, Clarke LA, Hoffinger S, Ikegawa S, Jin DK, Kano H, Kim OH, Lampe C, Mendelsohn NJ, Shediac R, Tanpaiboon P, White KK. Mucopolysaccharidosis IVA (Morquio A syndrome) and VI (Maroteaux-Lamy syndrome): under-recognized and challenging to diagnose. Skeletal Radiol 2014; 43: 359-69.

Vockley J, Andersson HC, Antshel KM, Braverman NE, Burton BK, Frazier DM, Mitchell J, Smith WE, Thompson BH, Berry SA. American College of Medical Genetics and Genomics Therapeutics Committee. Phenylalanine hydroxylase deficiency: diagnosis and management guideline. Genet Med 2014; 16: 188-200.

Dodsworth C, Burton BK. Increased incidence of neonatal respiratory distress in infants with mucopolysaccharidosis type II (MPS II, Hunter syndrome).Mol Genet Metab 2014; 111: 203-4.

Burton B, Grant M, Feigenbaum A, Singh R, Hendren R, Siriwardena K, Phillips J 3<sup>rd</sup>, Sanchez-Valle A, Waisbren S, Gillis J, Prasad S, Merilainen M, Lang W, Zhang C, Yu S, Stahl S. A randomized, placebo-controlled, double-blind study of sapropterin to treat ADHD symptoms and executive function impairments in children and adults with sapropterin-responsive phenylketonuria. Mol Genet Metab 2015; 114(3): 415-24

Hendrikz CJ. Giugliani R, Harmatz P, Mengel E, et al. Multi-domain impact of elosulfase alfa in Morquio A syndrome in the pivotal phase III trial. Mol Genct Metab 2015; 114(2): 178-85.

Harmatz PR, Mengel KE, Giugliani R, Valayannopoulos V, Lin SP, Parini R, Guffon N, Burton BK, Hendrikz CJ, Mitchell JJ, Martins AM, Jones SA, Guelbert N, Vellodi A, Wijburg FA, Yang K, Slasor P, Decker C. Longitudinal analysis of endurance and respiratory function from a natural history study of Morquio A syndrome. Mol Genet Metab 2015; 114(2): 186-94.

Longo N. Arnold GL, Pridjian G et al. Long-term safety and efficacy of sapropterin: the PKUDOS registry experience. Mol Genet Metab 2015; 114: 557-63.

Burton BK, Berger KL, Lewis GD, et al. Safety and physiological effects of two different doses of elosulfase alfa in patients with Morquio A syndrome: a randomized, doubleblind, pilot study. Am J Med Genet A. 2015; 167A: 2272-81.

Snijders BL, Madsen E, Juusola J, et al. Mutations in DDX3X are a common cause of unexplained intellectual disability with gender-specific effects on Wnt signaling. Am J Hum Genet 2015, 97: 343-52.

Burton BK, Deegan PB, Enns GM, et al. Clinical features of lysosomal acid lipase deficiency- a longitudinal assessment of 48 children and adults. J Pediatric Gastroenterol Nutr 2015; Aug 6 [Epub ahead of print]

Burton BK, Balwani M, Feillet F, et al. A phase 3 trial of sebelipase alfa in lysosomal acid lipase deficiency. N Engl J Med 2015; 373: 1010-1020.

Opladen T, Lindner M, Das AM, Marquardt T, Khan A, Emre SH, Burton BK, Barshop BA, Bohm T, Meybury J, Zangerl K, Mayorandan S, Burgard P, Durr UH, Rosenkranz B, Rennecke J, Derbinski J, Vudkoff M, Hoffman GF. In vivo monitoring of urea cycle activity with (13)C-acetate as a tracer of ureagenesis. Mol Genet Metab 2016; 117: 19-26.

Kishnani PS, Dickson PI, Muldowney L, Lee JJ, Rosenberg A, Abichandani R, Bluestone JA, Burton BK, Dewey M, Freitas A, Gavin D, Griebel D, Hogan M, Holland S, Tranpaiboon P, Turka LA, Utz JJ, Yang YM, Whitley CB, Kazi ZB, Pariser AR. Immune response to enzyme replacement therapies in lysosomal storage diseases and the role of immune tolerance induction. Mol Genet Metab 2016; 117: 66-83.

Hendriksz, CJ, Parini R, Alsayed MD, Raiman J, Giugliani R, Solano Villarreal ML, Mitchell JJ, Burton BK, Guelbert N, Stewart F, Hughes, DA, Berger KI, Slasor P, Matousek R, Jurecki E, Shaywitz AJ, Harmatz PR. Long-term endurance and safety of elosulfase alfa enzyme replacement therapy in patients with Morquio A Syndrome. Mol Genet Metab 2016 June 16; 119 (1-2):131-43.

Bentler K, Zhai S, Elsbecker SA, Arnold GL, Burton BK, Vockley J, Cameron CA, Hiner SJ, Edick MJ, Berry SA; Inborn Errors of Metabolism Collaborative.\* 221 newbornscreened neonates with medium-chain age- coenzyme A dehydrogenase deficiency: findings from the Inborn Errors of Metabolism Collaborative. Mol Genet Metab. 2016; 119(1-2): 75-82.

Hendriksz CJ, Berger KI, Parini R, Alsayed MD, Raiman J, Giugliani R, Mitchell JJ, Burton BK, Guelbert N, Stewart F, Hughes DA, Matousek R, Jurecki E, Decker C. Harmatz P. Impact of long-term elosulfase alfa treatment on respiratory function in patients with Morquio A Sundrome. Inherit Metab Dis 2016; 39: 839-847.

Shashi V. Pena LD, Kim K., Burton B, Hempel M, Schoch K, Walkiewicz M, McLaughlin HM, Cho M, Stong N, Hickey SE, Shuss CM, Freemark MS, Belle & JS, Keels MA, Bonner MJ, El-Dairi M, Butler M, Kranz PG, Stumpel CT, Klunkenberg S, Oberndorff K, Alawi M, Santer R, Petrovski S, Kuismin O, Korpi-Heikkila S, Pietilainen O, Aarno P, Kurki MI, Hoischen A, Need AC, Goldstein DB, Kortum F. De novo truncating variants in ASXL2 are associated with a unique and recognizable clinical phenotype. Am J Hum Genet 2016; 99: 991-999.

Mitchell J, Berger KI, Bargo A, Braunlin EA, Burton BK, Ghotme KA, Kircher SG, Molter D, Orchard PJ, Palmer J, Pastores GM, Rapport DM, Wang RY, White K. Unique

medical issues in adult patients with mucopolysaccharidosis. Eur J Intern Med 2016; 34: 2-10.

Stewart FJ, Bentley A, Burton BK, Guffon N, Hale SL, Harmatz PR, Kircher SG, Kochhar PK, Mitchell JJ, Plockinger U, Graham S, Sande S, Sisic Z, Johnston TA. Pregnancy in patients with mucopolysaccharidosis: a case series. Mol Genet Metab Rep 2016; 8: 111-5.

Stern D, Cho MT, Chikarmane R, Willaert R, Retterer K, Kendall F, Deardorff M, Hopkins S, Bedoukian E, Slavotinek A, Schrier Vergano S, Spangler B, McDonald M, McConkie-Rosell A, Burton BK, Kim, KH, Oundjian N, Kronn D, Chandy N, Baskin B, McLaughlin HM, McKnight D, Chung WK. Association of the missense variants p. Arg203Trp in PACS1 as a cause of intellectual disability and seizures. Clin Genet 2017; Jan 23. doi: 10. 111/cge. 12956 [Epub ahead of print].

Harmatz PR, Mengel E, Geberhiwot T, Muschol N, Hendricksz CJ, Burton BK, Jameson E, Berger KI, Jester A, Treadwell M, Sisic Z, Decker C. Impact of elosulfase alfa in patients with Morquio A Syndrome who have limited ambulation: an open label phase 2 study. Am J Med Genet A 2017; 173: 375-383.

Burton BK, Silliman N, Marulkar S. Progression of liver disease in children and adults with lysosomal acid lipase deficiency. Curr Med Res Opin 2017; Apr 3: 1-4. doi:10. 1080/03007995. 2017.1309371. [Epub ahead of print]

Vockley J, Burton B, Berry GT, Longo N, Phillips J, Sanchez-Valle A, Tanpaiboon P, Grunewald S, Murphy E, Humphrey R, Mayhew J, Bowden A, Zhang L, Cataldo J, Marsden DL, Kakkis E. UX007 for the treatment of long chain-fatty acid oxidation disorders: safety and efficacy in children and adults following 24 weeks of treatment. Mol Genet Metab 2017; 120: 370-377.

Clarke LA, Atherton AM, Burton BK, Day-Salvatore DL, Kaplan P, Leslie ND, Scott CR, Stockton DW, Thomas JA, Muenzer J. Mucopolysaccharidosis Type I newborn screening: best practices for diagnosis and management. J Pediatr 2017; 182: 363-370

Muenzer J, Jones SA, Tylki-Symanska A, Harmtz P, Mendelsohn NJ, Guffon N, Giugliani R, Burton BK, Scarpa M, Beck M, Jangelind Y, Hernberg-Stahl E, Larsen MP, Pielles T, Whiteman DAH. Ten years of the Hunter Outcome Survey (HOS): insights, achievements and lessons learned from a global patient registry. Orphanet J Rare Dis 2017; 12(1):82, doi: 10.1186/s13023-017-0635-z.

Burton BK, Charrow J. Hoganson GE, Waggoner D. Turkle B. Braddock SR, Schneider M. Grange DK, Nash C, Shyrock H. Barnett R, Shao R. Basheeruddin K, Dizikes G. Newborn screening for lysosomal storage disorders in Illinois: the critical 15-month experience. J Pediatr 2017; 190:130-135.

Burton BK, Jego V. Mikl J, Jones SA. Survival in idursulfase-treated and untreated

patients with mucopolysaccharidosis type II: data from the Hunter Outcome Survey (HOS). J Inherit Metab Dis 2017; 40: 867-874.

Berger KI, Burton BK, Lewis GD, Tarnopolsky M, Harmatz PR, Mitchell JJ, Muschol N. Jones SA, Sutton VR, Pastores GM, Lau H, Sparkes R, Shaywitz AJ. Cardiopulmonary exercise testing reflects improved exercise capacity in response to treatment in Morquio A patients: results of a 52-week pilot study of two different doses of elosulfase alfa. JIMD Rep 2017 Nov 21.doi:10.1007/8904 2017 70. [Epub ahead of print].

Burton BK, Kronn DF, HWU WL, Kishnani PS. Pompe disease newborn screening working group. The initial evaluation of patients after positive newborn screening: recommended algorithms leading to a confirmed diagnosis of Pompe disease. Pediatrics 2017; 140 (Suppl I): S14-S23.

Hendriksz CJ, Parini R, Alsayed MD, Raiman J, Giugliani R, Mitchell SJ, Burton BK, Guelbert N, Stewart FJ, Hughes DA, Matousek R, Hawley SM, Decker C, Harmatz PR. Imapact of long-term elosulfase alfa on activities of daily living in patients with Morquio A syndrome in an open-label multi-center phase 3 extension study. Mol Genet Metab 2018; 123:127-134.

Kwon JM, Matern D, Kurtzberg J, Wrabetz L, Gelb MH, Wenger DA, Ficicioglu C, Waldman AT, Burton BK, Hopkins PV, Orsini JJ. Consensus guidelines for newborn screening, diagnosis and treatment of infantile Krabbe disesase. Orphanet J Rare Dis 2018 Feb 1; 13 (1): 30. doi: 10. 1186/s 13023-018-0766-x. Review.

Harding CO, Amato RS, Stuy M, Longo N, Burton BK, Posner J, Weng HH, Merilainen M, Gu Z, Jiang J, Vockler J, PRISM – 2 investigations. Pegvaliase for the treatment of phenylketonuria: a pivotal double-blind randomized discontinuation Phase 3 clinical trial. Mol Genet Metab 2018; Mar 18. pii S1096-7192 (18)-30020-9. doi:10.1016/j.ymgme. 2018.03.003 [Epub ahead of print].

Vockley J, Burton B, Berry GT, Longo N, Phillips J, Sanchez-Valle A, Tanpaiboon P, Grunewald S, Murphy E, Bowden A, Chen W, Chen CY, Cataldo J, Marsden D, Kakkis E. Results from a 78-week, single-arm, open-label, Phase 2 study to evaluate UX007 in pediatric and adult patients with severe long-chain fatty acid oxidation defects. J Inherit Metab Dis 2018: Jul 9. Doi: 10.1007/s10545-018-0217-9 (Epub ahead of print).

Longo N, Zori R, Wasserstein MP, Vockley J, Burton BK, Decker C, Li M, Lau K, Jiang J, Larimore K, Thomas JA. Long-term safety and efficacy of pegvaliase for the treatment of phenylketonuria in adults: combined phase 2 outcomes through PAL-003 extension study. Orphanet J Rare Dis 2018; Jul 4;13(1):108. Doi: 10.1186/s13023-018-0858-7.

Burton BK, Jones KB, Cederbaum S, Rohr F, Waisbren S, Irwin D, Kim G, Lilienstein J, Alvarez I, Jurecki E, Levy H. Prevalence of comorbid conditions among adult patients diagnosed with phenylketonuria. Mol Genet Metab 2018; 125: 228-234.

Longo N, Dimmock D, Levy H, Viau K, Bausell H, Bilder DA, Burton B, Gross C, Northrup H, Rohr F, Sacharow S, Sanchez-Valle A, Stuy M, Thomas J, Vockley J, Zori R, Harding CO. Evidence- and consensus-based recommendations for the use of pegvaliase in adults with phenylketonuria. Genet Med 2018; Dec 14.doi.10.1038/s41436-018-0403-z.[Epub ahead of print].

Dines JN, Golden-Grant K, LaCroix A, Muir AM, Cintron DL, McWalter K, Cho MT, Sun A, Merritt JL, Thies J, Niyazov D, Burton B, Kim K, Fleming L, Westman R, Karachunski P, Dalton J, Basinger A, Ficicioglu C, Helbig I, Pendziwiat M, Muhle H Helbig KL, Caliebe A, Santer R, Becker K, Suchy S, Douglas G, Millan F, Begtrup A, Monaghan KG, Meffrord HC. TANGO2: expanding the clinical phenotype and spectrum of pathogenic variants. Genet Med 2019; 21: 601-7.

Vockley J, Burton B, Berry GT, et al. Results from a 78-week single-arm open-label phase 2 study to evaluate UX007 in pediatric and adult patients with several long-chain fatty acid oxidation disorders (LC-FAOD). J Inherit Metab Dis 2019; 42:169-77.

Stolerman ES, Francisco E, Stallworth JL, Jones JR, Monaghan KG, Keller-Ramey J, Person R, Wentzensen IM, McWalter K, Keren B, Heron B, Nava C, Heron D, Kim K, Burton B, Al-Musafri F, O'Grady L, Sahai I, Escobar LF, Meuwissen M, Reyniers E, Kooy F, Lacassie Y, Gunay-Aygun M, Schatz KS, Hochstenbach R, Zwijnenburg PJG, Waisfisz Q, van Slegtenhorst M, Mancini GMS, Louie RJ. Genetic variants in the KDM6B gene are associated with neurodevelopmental delays and dysmorphic features. Am J Med Genet A 2019: 179: 1276-1286.

Zori R, Ahring K, Burton B, Pastores GM, Rutsch F, Jha A, Jurecki E, Rowell R, Harding C. Long-term comparative effectiveness of pegvaliase versus standard of care comparators in adults with phenylketonuria. Mol Genet Metab 2019 Aug 7. S1096-7192(19)30363-4.doi: 10.1016/j.ymgme.2019.07.018 [Epub ahead of print].

Burton BK, Hoganson GE, Fleischer J, Grange DK, Braddock SR, Hickey R, Htchins L, Groepper D, Christensen KM, Kirby A, Moody C, Shryock H, Ashbaugh L, Shao R, Basheeruddin K. Population-based newborn screening for mucopolysaccharidosis type II in Illinois: the first year experience. J Pediatr 2019; 214: 165-7.

Lawrence R, Prill H, Vachali PP, Adintori EG de Hart G, Wang RY, Burton BK, Pasquali M, Crawford BE. Characterization of disease-specific chondroitin sulfate nonreducing end accumulation in mucopolysaccharidosis IVA. Glycobiology 2020; 30: 433-45.

Burton BK, Charrow J, Hoganson GE, Fleischer J, Grange DK, Braddock SR, Hitchins L, Hickey R, Christensen KM, Groepper D, Shryock H, Smith P, Shao R, Basheeruddin K. Newborn screening for Pompe disease in Illinois: experience with 684,290 infants. Inter J Neonatal Screening 2020; 6(1),4; <u>https://doi.org/10.3390/ijns6010004</u>

Christ SE, Clocksin HE, Burton BK, Grant ML, Waisbren S, Paulin MC, Bilder DA, White DA, Saville C. Executive function in phenylketonuria (PKU): insights from the

Behavior Rating Inventory of Executive Function (BRIEF) and a large sample of individuals with PKU. Neuropsychology 2020; 34: 456-66.

Burton BK, Longo N, Viockley J, Grange DK, Harding CO, Decker C, Li M, Lau K, Rosen O, Larimore K, Thomas J. Pegvaliase for the treatment of phenylketonuria: results of the phase 2 dose-finding studies with long-term follow-up. Mol Genet Metab 2020; 130: 239-46.

Hillert A, Anikster Y, Belanger-Quintana A, Burlina A, Burton BK, et al. The genetic landscape and epidemiology of phenylketonuria. Am J Hum Genet 2020; 107: 234-250.

Burton BK, Hickey R, Hitchins L. Newborn screening for mucopolysacharidosis type II in Illinois: an update. Int J Neonatal Screen 2020 Sep 3;6(3):73.doi.10.3390/ijns 6030073,eCollection 2020Sep

Hillert A, Anikster Y, Belanger-Quintana A, Burlina A, Burton BK, et al. The genetic landscape and epidemiology of phenylketonuria. Am J Hum Genet 2020; 107: 234-250

Waisbren S, Burton BK, Feigenbaum A, Konczal LI, Lilienstein J, McCandless SE, Rowell R, Sanchez-Valle A, Whitehall RB, Longo N. Long-term preservation of Intellectual functioning in sapropterin-treated infants and young children with phenylketonuria: a seven-year analysis. Mol Genet Metab 2021; 132: 119-27.

Vockley J, Burton B, Berry G, et al. Effects of triheptanoin (UX007) in patients with long-chain fatty acid oxidation disorders: results of an open-label long term extension study. J Inherit Metab Dis 2021; 44: 253-63.

Thompson-Stone R, Ream MA, Gelb M, Matern D, Orsini JJ, Levy PA, Rubin JP, Wenger DA, Burton BK, Escolar ML, Kurtzberg J. Consensus recommendations for the classification and long-term follow up of infants who screen positive for Krabbe disease. Mol Genet Metab 2021; Apr 3:S1096-7192(21)00083-4. doi:10.1016/j.ymgme.2021.03.016. Online ahead of print

Qi Y, Patel G, Henshaw J, Gupta S, Olbertz J, Larimore K, Harding CO, Merilainen M, Zori R, Longo N, Burton BK, Li M, Gu Z, Zoog SJ, Weng HH, Schweighardt B. Pharmacokinetic, pharmacodynamic and immunogenic rationale for optimal dosing of pegvaliase, a PEGylated bacterial enzyme, in adults with phenylketonuria. Clin Transl Sci 2021 May 31. Doi. 10.1111/cts.13043. Online ahead of print

Burton BK, Ellis AG, Orr B, Chatlani S, Yoon K, Shoaff JR, Gallo D. Estimating the prevalence of Niemann-Pick disease type C (NPC) in the United States. Mol Genet Metab 2021; Jul 1: S1096-7192(21)00741—1. Doi:10.1016/j.ymgme.2021.06.011. online ahead of print.

Muenzer J, Botha J, Harmatz P, Giugliani R, Kampmann C, Burton BK. Evaluation of the long term treatment effects of intravenous idursulfase in patients with

mucopolysaccharidosis type II (MPS II) using statistical modeling data from the Hunter Outcome Survey (HOS). Orphanet J Rare Dis 2021; 30:456.

Burton BK, Feillet F, Furuya KN, Manulkar S, Balwani M. Sebelipase alfa in children and adults with lysosomal acid lipase deficiency: final results of the ARISE study. J Hepatol 2021; 10: S0168-8278 (21)02171-1.

Burton BK, Skalicky A, Baerwald C, Bilder DA, Harding CO, Ilan AB, Jurecki E, Longo N, Madden DT, Sivri HS, Wilcox G, Thomas J, Delaney K. A non-interventional, observational study to identify and validate clinical outcome assessments for adults with phenylketonuria for use in clinical trials. Mol Genet Met Rep 2021; 9:29:100810.

Zhou Y, Shapiro M, Burton BK, Mets MB, Kurup SP. Case report: a case of Norrie disease due to deletion of the entire coding region of NDP gene. Am J Ophthalmol Case Rep 2021; Jun 17:23:101151.

Burton BK, Hickey R, Hitchins L, Shively V, Ehrhardt J, Ashbaugh L, Peng Y, Basheeruddin K. Newborn screening for X-linked adrenoleukodystrophy: the initial Illinois experience. Int J Neonatal Screen 2022; 8(1),6, https://doi.org/10.3390/ijns8010006

Herbst ZM, Urdaneta L, Klein T, Burton BK, Basheeruddin K, Liao H-C, Fuller M, Gelb MH. Evaluation of two methods for quantitation of glycosaminoglycan biomarkers In newborn dried blood spots from patients with severe and attenuated mucopolysaccharidosis type II. Int J Neonatal Screen 2022; 8(1),9, https://doi.org/10.3390/ijns8010009

Burton BK, Feillet F, Furuya KN, Marulkar S, Balwani M. Sebelipase alfa in children and adults with lysosomal acid lipase deficiency: final results of the ARISE study. J Hepatol 2022; 76: 577-587.

Burton BK, Sanchez AC, Kostyleva M, Martens AM, Marulkar S, Abel F, Baric I. Longterm sebelipase alfa treatment in children and adults with lysosomal acid lipase deficiency J Ped Gastro Nutr 2022; 74:757-64.

Holtz AM, Vancoil R, Vansickle EA, Carere DA, Withrow K, Torti E, Juusola J, Millan F, Person R, Guillen Sacoto MJ, Si Y, Wentzensen IM, Pugh J, Vasileiou G, Rieger M, Reis A, Argilli E, Sherr EH, Aldinger KA, Dobyns WB, Brunet T, Hoefele J, Wagner M, Haber B, Kotzaeridou U, Keren B, Heron D, Mignot C, Heide S, Courtin T, Buratti J, Murugasen S, Donald KA, O'Heir E, Moody S, Kim KH, Burton BK, Yoon G, Campo MD, Masser-Frye D, Kozenko M, Parkinson C, Sell SL, Gordon PL, Prokop JW, Karaa A, Bupp C, Raby BA. Heterozygous variants in MYH10 associated with neurodevelopmental disorders and congenital anomalies with evidence for primary cilia-dependent defects in Hedgehog signaling. Genet Med 2022; Aug 17; S1098-3600 (22) 00842-5. Doi:10.1016/j.gim.2022.07.005

Burton BK, Hermida A, Belanger-Quintana A, et al. Management of early treated adolescents and young adults with phenylketonuria: development of international consensus recommendations using a modified Delphi approach. Mol Genet Metab 2022; 137: 114-126.

Mitchell JJ, Burton BK, Bober MB, et al. Findings from the Morquio A Registry Study (MARS) after 6 years: long-term outcomes of MPS IVA patients treated with elosulfase alfa. Mol Genet Metab 2022; 137:164-72.

Harmatz P, Prada CE, Burton BK, et al. First in-human in vivo gene editing via AAVzinc finger nucleases for mucopolysaccharidosis types I/II and hemophilia B. Mol Ther 2022; 25: S1515-0016(22)00622-0. doi.10.1016/j.ymthe.2022.10.1010.

Happ HC, Sadleur LG, Zemel M, et al (including Burton, BK). Neurodevelopmental and epilepsy phenotypes in individuals with missense variants in the voltage sensing and pore domain of KCNH5. Neurology 2023; Feb 7; 100(6):e603-e615. Doi:10.1212/WNL 000000000201492. Epub 2022 Oct 28,

Vucko ER, Havens KE, Baker J, Burton BK. Pegvaliase dose escalation to 80 mg daily May lead to efficacy in patients who do not exhibit an optimal response at lower doses. Mol Genet Metab Rep 2022; Aug 1, 32:100905.doi:10:1016/j.ymgmr.2022.100905. eCollection 2022 Sep.

Snijders Blok L, Verseput J, Rots D, et al (including Burton B). A clustering of heterozygous missense variants in the crucial chromatin modifier WDR5 defines a new neurodevelopmental disorder. HGG Adv 2022; Nov 1;4(1):100157.doi.10:1016/j.xhgg. 2022.100157.

Muenzer J, Burton BK, Harmatz P, et al. Intrathecal idursulfase-IT in patients with neuronopathic mucopolysaccharidosis II: results from a phase 2/3 randomized study. Mol Genet Metab 2022; 137: 127-139.

Muenzer J, Burton BK, Harmatz P, et al. Long-term open-label extension study of the safety and efficacy of intrathecal idursulfase-IT in patients with neuronopathic mucopolysaccharidosis II. Mol Genet Metab 2022; 137: 92-103.

Lal M, Cook K, Gomes DA, Liu S, Tabatabaeepour N, Kirson N, Chen E, Lindstrom, K, Whitehall KB, Van Backle J, Burton BK. Real-world treatment, dosing and discontinuation patterns among patients treated with pegvaliase for phenylketonuria: evidence from dispensing data. Mol Genet Metab Rep 2022; Sep 25; 33: 100918. doi:10.1016/j.ymgmr.2022.10918

Burton BK, Shively V, Quadri A, Warn L, Burton J, Grange DK, Christensen K, Groepper D, Ashbaugh L, Ehrhardt J, Basheeruddin K. Newborn screening for mucopolysaccharidosis type II: lessons learned. Mol Genet Metab 2023; Mar 6:107551 doi.10:1016/j.ymgme.203.107557. Online ahead of print.

## ABSTRACTS:

Burton BK, Nadler HL. X-linked Schilders disease: a generalized disorder of cholesterol metabolism? Pediatric Res 1973;7:419.

Ben-Yoseph Y, Burton BK, Nadler HL. Quantitation of  $GM_1$  beta-galactosidase (-gal) cross reacting material (CRM) in  $GM_1$  gangliosidoses ( $GM_1$  gang). Pediatr Res 1977;11:452.

Burton BK. Nadler HL. Lactosylceramidosis: a deficiency of neutral beta galactosidase ( -gal). Am J Hum Genet 1977;29:26A.

Burton BK. Recurrence risks for congenital hydrocephalus. Proceedings of the 1978 Birth Defects Conference;45.

Burton BK. The nature of genetic mutations in Wolman disease and cholesterol ester storage disease. Proceedings of the 2<sup>nd</sup> Basil O'Connor Starter Research Colloquium, National Foundation-March of Dimes, 1979.

Burton BK. Dominant inheritance of microcephaly with other anomalies. Proceedings of the 1980 Birth Defects Conference;10

Burton BK. Acid lipase (AL) cross reacting material (CRM) in Wolman disease (WD) and cholesterol ester storage disease (CESD). Pediatr Res 1980;14:520. Sowers SG, Burton BK. The clinical significance of low maternal serum alpha-fetoprotein (AFP) in obstetrical practice. Proceedings of the 1981 Birth Defects Conference;181.

Burton BK. Hyperpipecolic acidemia:clinical and biochemical observations in siblings. Proceedings of the1981 Birth Defects Conference;138.

Burton BK. Hyperpipecolic acidemia (HPA): clinical, biochemical and pathologic features. Pediatr Res 1981;15:627.

Batshaw M, Sproul G, Mamunes P, Blom W, Matalon R, Koch R, Burton BK, Schafer I, Michels V, Brusilow S. Therapy of neonatal onset urea cycle enzymopathies (UCE). Pediatr Res 1981;15:558.

Sowers SG, Nelson LH, Burton BK. Maternal serum alpha-fetoprotein (MSAFP) elevations and severe oligohydramnios. Proceedings of the 1982 Birth Defects Conference;139.

Burton BK, Dillard RG, Clark EN. Anxiety associated with maternal serum alpha-fetoprotein (MSAFP) elevations and severe oligohydramnios. Proceedings of the 1982 Birth Defects Conference;139.

Burton BK, Dillard RG, Clark EN. Anxiety associated with maternal serum alpha-fetoprotein (AFP) screening. Am J Hum Genet 1982;34:83A.

Burton BK, Remy WT. Cholesterol ester metabolism in intact fibroblasts in Wolman disease (WD) and cholesterol ester storage (CESD). Pediatr Res 1983;17:208A.

Burton BK, Sowers SG. Regional neural tube screening in North Carolina: experience with 12,084 pregnancies. Pediatr Res 1983;17:298A.

Tenenholz B, Dillard RG, Burton BK. A new autosomal recessive disorder resembling the HARD±E syndrome. Am J Hum Genet 1985;37:A79.

Burton BK, Dillard RG. Outcome in infants born to mothers with unexplained elevations of maternal serum alpha-fetoprotein (MSAFP). Am J Hum Genet 1985;37:A214.

Burton BK. Fucosidosis associated with a thermolabile alpha-fucosidase with significant residual activity. Presented at the Seventh International Congress of Human Genetics, Berlin, FRG, September 22-26, 1986.

Burton BK. Follow-up of low MSAFP and Down syndrome screening. Presented at the symposium Alpha-fetoprotein in Diagnosis and Screening, Berlin, FRG September 27, 1986.

Dillard RG, Burton BK. Effects of false positive (F+) results of maternal serum alpha-fetoprotein (MSAFP) screening on mother-infant relationships. Pediatr Res 1986;20(pt2):160A.

Burton BK. Positive amniotic fluid (AF) acetylcholinesterase (ACHE); distinguishing between open spina bifida (OSB) and ventral wall defects (VWD). Am J Hum Genet 1986;39:A251.

Dyer SN, Burton BK, Nelson LH. Elevated maternal serum alpha-fetoprotein (MSAFP) and oligohydramnios: poor prognosis for pregnancy outcome. Am J Hum Genet 1986;39:A253.

Bensen JT, Dillard RG, Burton BK. Open spina bifida (OSB): does c-section delivery (CS) improve prognosis? Am J Hum Genet 1986;39:A250.

Burton BK. Environmental factors and congenital malformations. Presented at the 2<sup>nd</sup> Annual Conference on Drug Use in Pregnancy, Chicago, Illinois, September 11, 1987.

Pettenati MJ, McLeod D, Brock SM, Burton BK. Non-ketotic hyperglycinemia in an infant with the 9p- syndrome. Am J Hum Genet 1987;41(Suppl):A78.

Nyland MH, Whiteman DAH, Pettenati MJ, Bennett TL, Nelson LH, Hopkins

MB, Burton BK. High frequency mosaic tetraploidy in amniotic fluid cell culture:culture artifact or placental contamination? Am J Hum Genet 1987; 41(Suppl):A281.

Jones SA, Burton B, Botha J, Whiteman D. Profile of natural history in patients with mucopolysaccharidosis type II: insights from the Hunter Outcome Survey (HOS). Platform presentation,

Burton BK. Outcome of pregnancy in patients with unexplained elevations of maternal serum alpha-fetoprotein (MSAFP). Am J Hum Genet 1987; 41(Suppl):A268.

Bensen JT, Burton BK. Imperforate anus with hypospadias: evidence for X-linked recessive inheritance. Am J Hum Genet 1988;43(Suppl):A39.

Nyland MH, Burton BK, Nelson LH, Saner M, Pettenati MJ. A 28 month experience with early amniocentesis. Am J Hum Genet 1988;43(Suppl):A243.

Burton BK, Pettenati MJ. False positive acetylcholinesterase (ACHE) with early amniocentesis. Am J Hum Genet 1988;43(Suppl):A227.

Warner AA, Pettenati MJ, Burton BK. Is chromosome analysis indicated when amniocentesis is performed because of elevated maternal serum alpha-fetoprotein (MSAFP) Am J Hum Genet 1988;43(Suppl):A252.

Bensen JT, Pettenati MJ, Nelson LH, Brusilow SW, Burton BK. Hereditary orotic aciduria: an association with an 11;22 balanced translocation and familial inversion of chromosome 4. Am J Hum Genet 1989;45(Suppl):A39.

Pettenati MJ, Wheeler M, Bartlett DJ, Subrt I, Burton BK. Distinct clinical discrepancies between prenatally and postnatally diagnosed cases of 45,X/47.XYY. Am J Hum Genet 1989;45(Suppl):A87.

Schulz CJ, Gamble K, Burd LI, Brandt T, Burton BK. A comparison of transabdominal (TA) and transcervical (TC) chorionic villus sampling (CVS). Am J Hum Genet 1991;49(Suppl):230.

Gamble K, Varga P, Burton BK. First 15 months experience with a multidisciplinary clinic for Marfan syndrome. Am J Hum Genet 1991:49(Suppl):320.

Nieb B, Joyce A, Burton BK. Mid-trimester hCG and uE<sub>3</sub> levels in twin gestations. Am J Hum Genet 1991;(Suppl):221.

Nieb B, Burton BK. Prospective evaluation of Down syndrome screening using maternal serum alpha-fetoprotein (AFP), human chorionic gonadotropin (hCG) and unconjugated estriol (uE<sub>3</sub>). Am J Hum Genet 1991;49(Suppl):227.

Burton BK, Nieb B. Effect of maternal race and weight on human chorionic

gonadotropin (hCG) and unconjugated estriol (uE<sub>3</sub>) levels in the midtrimester. Amer J Hum Genet 1991;49(Suppl):212.

Burton BK, Schulz J, Burd LI. Limb abnormalities associated with chorionic villus sampling (CVS). Pediatr Res 1992;31:69A.

Santolaya J, Jessup J, Nieb B, Burd LI, Anderson RJ, Burton BK. The significance of elevated (elev) and low levels of maternal serum alpha-fetoprotein (AFP), human chorionic gonadotropin (hCG) and unconjugated estriol (uE<sub>3</sub>) in the mid-trimester of pregnancy. Amer J Hum Genet 1992;51(Suppl):263.

Schulz CJ, Burd LI, Burton BK. The spectrum of transverse limb anomalies associated with chorionic villus sampling. Amer J Hum Genet 1992;51 (Suppl):A264.

McCorquodale MM, Burton BK, Artega G, Hauselman E, Chan A. Partial monosomy 22q: a case report. Amer J Hum Genet 1992:52(Suppl):A293.

Niedermeyer KK, Varga P, Silber E, Burton BK. Investigation of the use of a scoring system to assist in the diagnosis of Marfan syndrome. Amer J Hum Genet 1992;51(Suppl):A306.

Nieb B, Truvillion V, Hadro T, Burton BK. Prospective identification of other chromosome abnormalities when screening for trisomy 21 and trisomy 18 using maternal serum alpha-fetoprotein (AFP), human chorionic gonadotropin (hCG) and unconjugated estriol (uE<sub>3</sub>). Amer J Hum Genet 1992;51(Suppl):A413.

Angle B, Schulz CJ, Burd LI, Burton BK. Increased incidence of hemangiomas in infants born following chorionic villus sampling (CVS). Pediatr Res. 1993; 31:69A.

Field FM, Burton BK. Dominantly inherited cleft palate, microcephaly, mental retardation and short stature. Amer J Hum Genet 1993;53(Suppl):A428.

Santolaya-Forgas J, Jessup J, Kahn D, Prins GS, Burton BK. Patients with low mid-trimester maternal serum unconjugated estriol (MSuE<sub>3</sub>) have an increased risk of pregnancy loss. Amer J Hum Genet 1993;53(Suppl):A1454.

Niedermeyer KK, McCorquodale MM, Burton BK. Agnathia-holoprosencephaly associated with a 46,XY,-21,+t(21q;21q) karyotype. Amer J Hum Genet 1994; 55(Suppl):A494.

Brenhofer J, McCorquodale M, Burton BK. Iso X(q)Y karyotype in a phenotypically female child. Amer J Hum Genet 1994;55(Suppl):A562.

Burton BK, Niedermeyer KK. Markedly discrepant forms of craniosynotosis in two siblings with normal parents. Amer J Hum Genet 1994;55(Suppl):A1797.

Newlin AC, McCorquodale MM, Miller MM, Burton BK. Mosaic trisomy 7 in a male with hypomelanosis of Ito and multiple congenital anomalies. Amer J Hum Genet 1995;57(Suppl):A541.

Brenhofer JK, Burton BK, McCorquodale MM. A child with 46,XX,rec(4), dup p, inv(4)(p15.2q32) resulting from a large paternal pericentric inversion. Amer J Hum Genet 1995;57(Suppl):A604.

Brenhofer JK, Dineen R, McCorquodale M, Burton, BK. Pallister-Killian syndrome (PKS) initially misdiagnosed as the Opitz C syndrome. A comparison of the clinical findings in the two disorders. Amer J Hum Genet 1996;59(Suppl)A89.

Verghese S, Newlin A. Miller MT, Burton BK. A possible new syndrome associated with hypotelorism, brachydactyly, hearing impairment and optic atrophy. Amer J Hum Genet 1996;59(Suppl):A107.

Diaz-Nazario JD, McCorquodale MM, McCorquodale DJ, Gould NS, Chatman DL, Cadkin AV, Burton BK. Complete monosomy 21 in a 19 week fetus. Amer J Hum Genet 1996;59(Suppl):A115.

Niedermeyer KK, McCorquodale MM, Gauthier D, Burton BK. Transmission of a Xp21 deletion from a phenotypically normal mother to a female fetus; case report and review of the literature. Amer J Hum Genet 1996;59(Suppl):A127.

Ingala D, Verghese S, Burton BK, Diaz-Nazario JD, McCorquodale DJ, McCorquodale MM. Translocation of satellites and partial centromere from chromosome 13 to the distal long arm of chromosome 4 with probable loss of 4q35. Amer J Hum Genet 1996;59(Suppl):A359.

McCorquodale DJ, Newlin A, Burton BK, Kaufman L, Egel R, McCorquodale MM. Abnormal phenotype in a patient with an apparently balanced 14;21 translocation. Amer J Hum Genet 1996;59(Suppl):A360.

McCorquodale MM, McCorquodale DJ, Burton BK, Santolaya J, Cohen L, Baig Y. Pseudomosaicism for I(21)(q10) in an initial amniotic fluid culture proven to be true mosaicism after birth. Amer J Hum Genet 1996;59(Suppl):A360.

Diaz-Nazario JR, Fontaine M, McCorquodale DJ, Gould NS, Niedermeyer KK, Burton BK, McCorquodale M. Partial trisomy 7q in a 22 week fetus. Amer J Hum Genet 1997;61(Suppl):A122.

Rios A, Sibler E, Bavishi N, Varga P, Burton BK, Clark W, Denes P. The effect of long-term beta-blockade on aortic root compliance in patients with the Marfan syndrome. J Amer Coll Cardiol 1998;32:30A.

Tahmaz FE, Freidine M, McCorquodale MM, Burton BK. Identification of a cryptic reciprocal translocation t(5;10) by FISH resulting in 5p microdeletion in two subsequent pregnancies. Amer J Hum Genet 1999;65(Suppl):A359.

Ensenauer RE, Vockley J, Grunerts, Burton BK, Willard JM, Sass JO, Rinaldo P, Matern D. Novel phenotype of isovaleric acidemia associated with a common mutation identified in patients diagnosed by newborn screening. Molec Genet Metab 2004;81:160.

Burton B, Hartung D. Tetrahydrobiopterin responsiveness in phenylketonuria (PKU). American Soc Hum Genet Annual Meeting 2005; Poster presentation. Abst 3018/F4.

Grewal S, Wynn R, Abdenur J, Burton B, Gharib M, Haase C, Sillence D, Tiller G, Woodard P, Wulffraat N, Young G, Peters C. Enzyme replacement therapy with hematopoietic cell transplant in Hurler syndrome: Multicenter initial experience. Amer Soc Hum Genet Annual Meeting 2005; Poster presentation. Abst 3020/T.

Burton B, Grange D, Milanowski A, Vockey J, Abadie V, Harding C, Crombez EA, Dobbelaere D, Smith A, Dorenbaum A. A multicenter open-label study to evaluate the response to an 8-day course of sapropterin dihydrochloride (tetrahydrobiopterin or 6R-BH4) in subjects with phenylketonuria who have elevated levels of phenylalanine. Amer Soc Hum Genet Annual Meeting 2006; Poster presentation. Abst 2332/C.

Burton BK. Breakthrough research in tetrahydrobiopterin therapy for PKU: diet liberalization. Amer Coll Med Genet Annual Meeting 2007; Industry-Sponsored Symposium, Abst Vol p. 170.

Kim KH, Burton BK. A patient with mucopolysaccharidosis type VI and microdeletion of 8q13.3 encompassing the entire EYA1 gene. Amer Coll Med Genet Annual Meeting 2007; Poster presentation, Abst Vol p. 117.

Burton BK, Grange D, Milanowski A, Vockley G, Feillet F, Crombez E, Abadie V, Harding C, Cederbaum S, Dobbelaere D, Smith A, Dorenbaum A. Sapropterin dihydrochloride reduces phenylalanine levels in patients with phenylketonuria: results of an open-label multicenter, screening study. Amer Coll Med Genet Annual Meeting 2007; Platform presentation, Abst Vol p. 96.

Burton BK. Opportunities and challenges in treatment of patients with intravenous idursulfase. Amer Coll Med Genet Annual Meeting 2007; Industry Sponsored Symposium, Abst Vol p. 170.

Kim KH, Decker C, Burton BK. Management of difficult infusion related reactions in a young patient with mucopolysaccharidosis VI on Naglazyme therapy. Society for Inher Metab Dis Annual Meeting 2007; Poster presentation, Molec Genet Metab 2007; 90:255.

Trefz F, Burton B, Longo N, Levy H, Bebchuk J, Christ-Schmidt H, Martinez-Pardo

M, Gruskin D, Dorenbaum A, Hennermann JB. PKU 006: The effect of sapropterin dihydrochloride (tetrahydrobiopterin or 6R-BH4) treatment on phenylalanine tolerance in children with phenylketonuria controlled on a phe-restricted diet. J Inherit Metab Dis 2007;30(Suppl 1):17.

Beck M, Giugliani R, Burton BK, Muenzer J, Clarke JT, DeMeirleir L, Kroepfl T, Malm G, Wraith JE. Early presentation and diagnosis of Hunter syndrome: new insights from HOS – the Hunter Outcome Survey. J Inherit Metab Dis 2007;30 (Suppl 1):98.

Atkin JF, Moran R, Edelman E, Rigelsky C, Burton B, Coppinger J, Shaffer LG. Clinical features in children with microdeletions of the NF-1 gene detected by array CGH. Annual Meeting of the Amer Soc of Hum Gen 2007; Poster presentation.

Wasserstein M, Burton B, Grange D, Harding C, Lipson M, Longo N, Waber L, Whethers C, Wolff J, Bebchuk J, Dorenbaum A, Vockley G. Dose-related effects of sapropterin dihydrochloride (sapropterin) on blood phenylalanine (phe) in patients with phenylketonuria (PKU). Annual Meeting of the Amer Soc of Hum Gen 2007; Poster presentation.

Arnold GE, Koeberl DD, Barshop BA, Burton BK, Cederbaum S, Feigenbaum A, Harding CO, Kronn D, Matern D, Gibson JB, Garganta CL, Braverman N, Longo N, Kahler SG, and the 3-MCC Working Group. Clinical practice protocols for 3-methylcrotonic CoA carboxylase (3-MCC) deficiency. Annual Meeting of the Amer Soc of Hum Gen 2007; Platform presentation.

Wraith JE, Burton BK, Muenzer J, Beck M, Giugliani R, Clarke J, Martin R, on behalf of the HOS investigators. Clinical characteristics of patients with mucopolysaccharidosis type II: the Hunter Outcome Survey (HOS). Annual Meeting of the Amer Soc of Hum Gen 2007; Poster presentation.

Paras A, Katz R, Burton BK. The challenges of treating patients with Hunter syndrome and CNS disease with enzyme replacement therapy (ERT): A case report. Annual Meeting of the Amer Soc of Hum Gen 2007; Poster presentation.

Burton BK, Wasserstein M, Gruskin D, Dorenbaum A, Bebchuk J, Longo N. Sapropterin dihydrochloride (sapropterin) increases phenylalanine (phe) tolerance in children with phenylketonuria (PKU) maintained on a Phe-restricted diet. Annual Meeting of the Amer Soc of Hum Gen 2007; Platform presentation.

Burton B, Turbeville S, Jurecki E, Pallansch P, Schatz A, DeMarco K, Volz A, Cady R, Nicely H. Preliminary findings from the sapropterin expanded access program for PKU. Poster presentation at the 2008 meeting of the Society for Inherited Metabolic Disorders. Molec Genet Metab 2008;93:259.

Bausell H, Hartung D, Katz R, Burton BK. Identification of sapropterin-responsive phenylketonuria (PKU) patients (pts) in a single PKU clinic during an expanded access program. Poster presentation at the 2008 meeting of the Society for Inherited

Metabolic Disorders. Molec Genet Metab 2008;93:243.

Hartung D, Bausell H, Katz R, Angle B, Burton BK. The outcome of long term treatment with sapropterin dihydrochloride in patients with phenylketonuria (PKU). Amer Coll Med Genet Annual Meeting 2008; Platform presentation.

Kim KH, Burton BK. Clinical surveillance guidelines for patients with Hunter syndrome. Amer Coll Med Genet Annual Meeting 2008; Poster presentation.

Hartley J, D'Achille D, Burton B, Angle B. Phenotype variability in patients with POLG1 mutations. Amer Coll Med Genet Annual Meeting 2008; Poster presentation.

Paras A, Kim KH, Katz R, Burton BK. Enzyme replacement therapy (ERT) for severe mucopolysaccharadosis type II: Clinical response in four patients during the first year of ERT. Amer Coll Med Genet Annual Meeting 2008; Poster presentation.

Burton BK, Clarke J, Steiner R, Eng C, Copeland S, Muenzer J. Airway obstruction in patients with Hunter syndrome (Mucopolysaccharidosis type II): Data from the HOS – the Hunter Outcome Survey. Amer Coll Med Genet Annual Meeting 2008; Poster presentation.

Katz R, Burton B. A home infusion protocol for MPS II patients on enzyme replacement therapy (ERT). Poster presentation at the Lysosomal Disease Network's WORLD Symposium, 2008. Molec Genet Metab 2008;S25-6.

Kim K, Widera S, Burton B. Improved Clinical Outcome in a Pompe disease patient increased from 20 to 40 mg/kg Myozyme® every 2 weeks. Amer Soc Hum Genet Annual Meeting 2008; Poster presentation.

Wasserstein M, Burton B, Cederbaum S, Muenzer J, Scott R, Harding C, Wendel U, Whitley C, Wolff J. Interim results of a Phase II, multicenter, open-label study of Sapropterin dihydrochloride in subjects with hyperphenylalaninemia related to primary BH4 deficiency. Amer Soc Hum Genet Annual Meeting 2008; Poster presentation.

Hartung D, Bausell H, Katz R, Burton BK. Sapropterin (Kuvan®) is safe and effective in patients under 4 years of age with phenylketonuria (PKU). Amer Soc Hum Genet Annual Meeting 2008; Poster presentation.

Arnold GL, Matern D, VanHove J, Freedenburg D, Longo N, Burton B, Garganta C, Ficicioglu C, Cederbaum S, Harding C, Boles R, Feigenbaum, A. A Delphi-based consensus clinical practice protocol for very long chain acyl-CoA dehydrogenase (VLCAD) deficiency. Amer Soc Hum Genet Annual Meeting 2008; Poster presentation.

Fernhoff PM, Burton BK, Nowacka M, Hennerman JB, Kakkis E, Dorenbaum A. PKU-008: an extended, open-label study of sapropterin dihydrochloride (Kuvan®) in PKU subjects. Amer Coll Med Genet Annual Meeting 2009; Poster presentation.

Kim K, Burton BK. Endocrine dysfunction in the mucopolysaccharidoses: A need for further investigation. Amer Soc Hum Genet Annual Meeting 2009; Poster presentation.

Mendelsohn N, Burton BK, Aleck K; on behalf of the HOS Investigators. Surgical intervention in patients with Hunter syndrome: Data from HOS – the Hunter Outcome Survey. Amer Soc Hum Genet Annual Meeting 2009; Poster presentation.

Paras A, Burton BK. Low plasma iduronate-2-sulfatase activity and elevated urinary glycosaminoglycans in brothers following stem cell transplantation (HSCT) for mucopolysaccharidosis type II. Amer Soc Hum Genet Annual Meeting 2009; Poster presentation.

Burton BK, Jones SA. Home therapy with idursulfase for Hunter syndrome: The Hunter Outcome Survey experience. Amer Soc Hum Genet Annual Meeting 2009; Poster presentation.

Katz RH, Burton BK. Does enzyme replacement therapy reduce the frequency of infectious illnesses in patients with Hunter syndrome (MPS II)? Amer Soc Hum Genet Annual Meeting 2009; Poster presentation.

Leviton L, Burton BK. An outreach program for adults living with PKU. 11<sup>th</sup> International Congress of Inborn Errors of Metabolism 2009; Poster presentation Molec Genet Metab 2009;98:23.

Burton BK, Smith L, Giugliani R, Ribeiro E, Karman J. The prevalence and characterization of respiratory involvement in patients with Hunter syndrome in the Hunter Outcome Survey. 6<sup>th</sup> Annual WORLD Symposium 2010; Poster presentation.

Bausell H, Laduca H, Sullivan C, Katz R, Burton BK. Treatment with sapropterin results in increased stability of blood phenylalanine (phe) levels in BH4-responsive patients with phenylketonuria (PKU). Amer Coll Med Genet Annual Meeting 2010; Poster presentation.

Hartung D, Bausell H, Naziri M, Burton BK. High incidence of osteopenia and vitamin D deficiency in patients with phenylketonuria (PKU). Amer Coll Med Genet Annual Meeting 2010; Poster presentation.

Bausell H, Laduca H, Sullivan C, Katz R, Burton BK. Treatment with sapropterin results in increased stability of blood phenylalanine (phe) levels in BH-4-responsive patients with phenylketonuria (PKU). Society for Inherited Metabolic Disorders Annual Meeting 2010; Poster presentation.

Jones SA, Bodamer O, Burton BK, DeMeirleir L, Giugliani R, Harmatz P, Lampe C, Gunilla M, Parini R, Steiner RD, Mendelsohn NJ, on behalf of the HOS Investigatiors Surgical interventions performed before 3 years of age in patients with mucopolysaccharidosis type II in the Hunter Outcome Survey. 11<sup>th</sup> International Symposium on Mucopolysaccharide and Related Diseases 2010; Poster presentation.

Harmatz P, Chang M, Decker C, Lee S, Martell L, Burton B, Guffon N, Hendriksz C, Hollak C, Jones S, Lin S, Mengel E, Mitchell J, Parini R, Valayannopoulos V, Vellodi A, Chang S. A multicenter, multinational, longitudinal clinical assessment study of subjects with mucopolysaccharidosis IVA (Morquio Syndrome). 11<sup>th</sup> International Symposium on Mucopolysaccharide and Related Diseases 2010; Poster presentation.

Giugliani R, Bodmer O, Burton B, DeMeirleir L, Harmatz P, Jones S, Lampe C, Malm G, Parini R, Steiner R, Mendelsohn N, on behalf of the HOS Investigators. Investigating numbers of surgical interventions performed in patients with mucopolysaccharidosis type II (MPS II) using data from the Hunter Outcome Survey (HOS). Society for the Study of Inborn Errors of Metabolism (SSIEM) Annual Meeting 2010; Poster presentation.

Harmatz P, Chang M, Decker C, Lee S, Martell L, Burton B, Guffon N, Hendriksz C, Hollak C, Jones S, Lin S, Mengel E, Mitchell J, Parini R, Valayannopoulos V, Vellodi A, Cheng S. A multicenter, multinational, longitudinal clinical assessment study of subjects with mucopolysaccharidosis IVA (Morquio Syndrome). SSIEM Annual Meeting 2010; Platform presentation.

Kim KH, Burton BK, Parent care-giver administration of home enzyme replacement therapy in the mucopolysaccharidoses (MPS disorders). Annual Meeting of the Amer Soc Hum Genet 2010; Poster presentation.

Bandholz AM, Rosenfeld JA, Torchia BS, Ravnan JB, Schulz RA, Alliman S, Bamforth JS, Babu D, Weaver DD, Miller A, Burton BK, Hartung D, Peterson E, Lafayette D, Smith R, Ellingwood SA, Lamb AN. Molecular and phenotypic characterization of 2p15p16.1 microdeletions and microduplicatons. Annual meeting of the Amer Coll Med Genet 2011; Poster presentation.

Leviton L, Vespa H, Burton BK, Mental health screening in the Phenylketonuria (PKU) Clinic. Annual meeting of the Amer Coll Med Genet 2011; Poster presentation.

Burton BK, Charrow J, Angle B, Widera S, Waggoner D. A pilot newborn screening program for Lysosomal Storage disorders (LSDs) in Illinois. Lysosomal Disease Network WORLD Symposium 2012; Platform presentation.

Kim K, Dodsworth C, Paras A, Burton B. High dose genistein treatment in severe MPS II and III patients. Lysosomal Disease Network WORLD Symposium 2012; Poster presentation.

Kim K, Dodsworth C, Paras A, Burton BK. Assessing high dose genistein treatment in MPS patients with neurologic involvement. Annual meeting of the Amer Coll Med Genet 2012; Poster presentation.

Prasad S, Burton BK, Feigenbaum A, Grant M, Hendren R, Mardach R, Phillips J, Sanchez-Valle A, Singh R, Siriwardena K, Thomas J, Stahl S, Lang W, Kim S, Jurecki E. Baseline findings in the first 60 subjects in PKU ASCEND (016): A double-blind placebo-controlled, randomized study to evaluate the safety and therapeutic effects of sapropterin dihydrochloride on neuropsychiatric symptoms in subjects with phenylketonuria (PKU). Annual meeting of the Amer Coll Med Genet and Soc for Inher Metab Dis 2012; Poster presentation

Grange DK, Arnold GL, Burton BK, Enns GM, Longo N, Mofidi S, Peck D, Waisbren S, White D, Gravance C. Sapropterin treatment for phenylketonuria in the PKU DOS registry:Children four years old and younger. Annual meetings of the Amer Coll Med Genet and Soc for Inher Metab Dis 2012; Poster presentation.

Hillman R, Peck D, Arnold GL, Burton BK, Enns GM, Longo N, Mofidi S, Pridjian G, Waisbren S, White D, Gravance C. Sapropterin use in pregnant phenylketonuria patients:The PKU MOMS subregistry. Annual meetings of the Amer Coll Med Genet and Soc for Inher Metab Dis 2012; Poster presentation.

Kim K, Bausell H, Sale T, Zhou Y, Burton BK. Comparison of phenylketonuria (PKU) patients' height, weight and body mass index (BMI) to the general population. Annual meeting of the Soc for Inher Metab Dis 2012; Poster presentation. Burton B, Kim K, Widera S, Thomas J, Messinger Y. Immune modulation in a patient with mucopolysaccharidosis II (MPS II) on idursulfase therapy with high titer antiidursulfase antibodies. Presented at the Lysosomal Disease Network's WORLD Symposium 2013, Feb 16-18, 2013, Orlando, FL.

Widera S, Charrow J, Burton B, Helgeson M. Newborn screening for Fabry disease leads to a diagnosis in a symptomatic maternal relative. Presented at the Lysosomal Network's WORLD Symposium 2013, Feb 16-18, 2013, Orlando, FL.

Jiang R, Paras A, He M, Valencia CA, Burton B, Hegde M. New preclinical treatment paradigms for ALG12-CDG (CDG-1g). Presented at the 2013 Meeting of the American College of Medical Genetics, March 19-23, Phoenix, AZ.

Longo N, Siriwardena K, Feigenbaum A, Dimmock D, Burton B, Stockler S, Waisbren S, Lang W, Jurecki E, Prasad S. Long term developmental progression in young children taking sapropterin for phenylketonuria: a two-year analysis of safety and efficacy. Presented at the 2013 meeting of the American College of Medical Genetics, March 19-23, Phoenix, AZ.

Hendriksz CJ, Muenzer J, Vandever A, Davis JM, Burton BK, Mendelsohn NJ, Wang N, Pan L, Pano A, Cammarata S, Barbier A. Levels of glycosaminoglycans in the cerebrospinal fluid of healthy young adults, surrogate-normal children, and Hunter syndrome patients with and without cognitive impairment. Platform presentation at the WORLD Symposium of the Lysosomal Disease Network, Feb 12-14, 2014.

Kim KH, Widera S, Messinger Y, Burton BK. Immune modulation therapy in severe MPS II patient: follow up after one year of treatment. Poster presentation at the WORLD Symposium of the Lysosomal Disease Network, Feb 12-14, 2014

Jones SA, Burton BK, Morin I, on behalf of the HOS Investigators. Survival and causes of death in patients with Hunter syndrome: data from the Hunter Outcome Survey (HOS). Poster presentation at the Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Sept 2-5, 2014.

Edano C, Malick M, Burton BK. Infusion management of elosulfase alfa for patients with Morquio A syndrome. (MPS IVA). Poster presentation at the Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Sept 2-5, 2014.

Balwani, M, Burton B, Burrow TA, Quinn AG and the ARISE Investigators. Results of a Global Phase 3, Randomised, Double-Blind, Placebo-Controlled Trial Evaluating the Efficacy and Safety of Sebelipase Alfa as an Enzyme Replacement Therapy in Children and Adults with Lysosomal Acid Lipase Deficiency. Presented at the Annual Meeting of the American Association for the Study of Liver Diseases (AASLD), Nov 7-11, 2014.

Burton B, on behalf of the ARISE Investigators. Results of a global phase 3, randomized of a global phase 3, randomized, double-blind placebo controlled trial evaluating the efficacy and safety of sebelipase alfa as an enzyme replacement therapy in children and adults with lysosomal acid lipase deficiency. Presented at the Lysosomal Disease Network's WORLD symposium, Feb 10-12, 2015.

Burton B, Harmatz P, Mitchell J, Muschol N, Jones S; Pastores G, Lau H, Sparkes R, Sutton VR, Berger K, Lewis G, Tarnopolsky M, Genter F, Haller C, Shaywitz A. Impact of elosulfase alfa on exercise capacity and muscle strength and safety in patients with Morquio syndrome type A. Presented at the Lysosomal Disease Network's WORLD Symposuim, Feb 10-12, 2015.

Morin I, Mendelsohn N, Burton B, Jones SA, Lampe C, Molter D. Ear, nose, and throat and hernia surgeries in children with Hunter syndrome: Data from the Hunter outcome survey (HOS). Presented at the Lysosomal Disease Network's World Symposium, Feb 10-12, 2015.

Thomas JA, Longo N, Zori R, Burton BK, et al. Evaluation of multiple dosing regimens in Phase 2 studies of rAvPAL-PEG (BMN 165, Pegvaliase) in control of blood phenylalanine levels in adults with phenylketonuria. Poster presentation Annual Meeting of the Society for Inherited Metabolic Disorders Mar 28-31, 2015.

Longo N, Thomas JA, Wasserstein M, Burton BK, et al. Evaluation of long-term safety and efficacy with RAVPAL-PEG (BMN.165) for control of blood phenylalanine levels in

adults with phenylketonuria (PKU). Poster presentation, Annual Meeting of the society for Inherited Metabolic Disorders, March 28-31, 2015.

Harding C, Longo N, Thomas JA, Burton BK, et al. Phase 2 studies contribute to RAVPAL-PEG phase 3 trial design. Poster presentation, Annual Meeting of the Society for Inherited Metabolic Disorders, Mar 28-31, 2015.

Khan A, Barshop BA, Burton BK, Vas M, Emre SH. Long term outcome in children with urea cycle disorder after hepatocyte transplantation. Poster presentation. Annual Meeting of the Society for Inherited Metabolic Disorders. Mar 28-31, 2015.

Leeth E, Kirschmann D, Burton B, Kim K, Bucher J, Young L, Jennings L. Identification of a novel SMAD3 variant leads to diagnosis of Loeys-Dietz syndrome in a three generation family previously suspected as probable Marfan syndrome. Poster presentation, Annual Meeting of the American College of Medical Genetics and Genomics, Mar 25-28, 2015.

Thomas JA, Longo N, Zori R, Burton BK, et al. Evaluation of multiple dosing regimens in phase 2 studies of rAvPAL-PEG for control of blood phenylalanine levels in adults with phenylretonueria. Poster presentation, Annual Meeting of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Sept 1-4, 2015.

Burton BK, Harding C, Longo N, Thomas JA, et al. Phase 2 studies contribute to rAvPAL-PEG phase 3 trial design. Poster presentation Annual meeting of the SSIEM, Sept 1-4, 2015.

Burton B, Ficicioglu C, Bosch J, Morin I; Jurecka A, Tylki-Szymanska A. Characteristics of patients with mucopolysaccharidosis type II identified at a very young age: data from the Hunter outcome survey (HOS). Poster presentation, Annual Meeting of the SSIEM, Sept 1-4, 2015.

Amartino H, Burton B, Giugliani R, et al. Development and reliability assessment of the MPS II disease severity score. Poster presentation, Annual Meeting of the SSIEM, Sept 1-4, 2015.

Longo N, Thomas JA, Wasserstein M, Burton BK, et al. Evaluation of long-term safety and efficacy with rAv-PAL-PEG for control of blood phenylalanine levels in adults with phenylketonuria (PKU). Platform presentation, Annual Meeting of the SSIEM, Sept 1-4, 2015.

Burton B, Berger KL, Lewis GD, et al. Impact of elosulfase alfa on exercise capacity in patients with Morquio A syndrome in a randomized double-blind pilot study. Poster presentation, Annual Meeting of the SSIEM, Sept 1-4, 2015

Stewart F Harmatz P, Braulin E, Bentley A, Burton B, et al. Management of fertility and pregnancy in individuals with mucopolysaccharidosis (MPS). Poster presentation, Annual Meeting of the SSIEM, Sept 1-4, 2015.

Burton B, Balwani M, Feillet F, et al. Efficacy and safety of sebelipase alfa in children and adults with lysosomal acid lipase deficiency: results of a phase 3 trial. Platform presentation. Annual Meeting of the SSIEM, Sept 1-4, 2015.

Giugliani R, Burton BK, Harmatz P, et al. Impact of long-term elosulfase alfa treatment on three-minute stair climb test, pulmonary function tests and normalized urine keratin sulfate in patients with Morquio A syndrome. Poster presentation, Annual meeting of the SSIEM, Sept 1-4, 2015.

Harmatz P, Burton BK, Giugliani R, et al. Impact of long-term elosulfase alfa treatment on six-minute walk test distance in patients with Morquio A. syndrome. Poster presentation, Annual meeting of the SSIEM. Sept 1-4, 2015.

Atherton AM, Burton BK, Day-Salvatore DL, et al. Guidelines for the diagnosis and management of infants with MPS I identified through newborn screening. Presented at the American Academy of Pediatrics National Conference and Exhibition, October 24-27, 2015.

Amartino H, Burton BK, Giugliani R, et al. New measure to assess severity of MPS II: the disease severity score. Presented at the Lysosomal Disease Network's WORLD Symposium, Feb 29-Mar 3, 2016.

Burton BK, Jego V, Jones SA. Survival in idursulfase-treated and untreated patients with MPS II: data from the Hunter Outcome Survey (HOS). Presented at the Lysosomal Disease Network's WORLD Symposium, Feb 29-Mar 3, 2016.

Burton BK, Hoganson GE, Charrow J, et al. Newborn screening for lysosomal disorders in Illinois. Presented at the Lysosomal Disease Network's WORLD Symposium, Feb 29-Mar 3, 2016.

Friedman M, Valayannopoulos V, Camarene Grande C, Consuelo Sanchez A, Kane J, Kostyleva M, Tylki-Szymanska A, Sokal E, Sharma R, Rojas-Caro S, Wolfendale N, Burton BK. Safety findings from three trials of treatment with sebelipase alfa in children and adults with lysosomal acid lipase deficiency. Presented at the Lysosomal Disease Network's WORLD Symposium, Feb 29-Mar 3, 2016.

Harmatz PR, Jester A, Mengel E, Treadwell M, Burton BK, Berger KI, Hendriksz CJ, Geberhiwot T, Sisic Z, Decker C. Impact of elosulfase alfa in patients with Morquio syndrome type A who have limited ambulation: an open-label phase 2 study. Presented at the Lysosomal Disease Network's WORLD Symposium, Feb 29-Mar 3, 2016.

Hendriksz CJ, Burton BK, Alsayed MD, Giugliani R, Guelbert N, Hughes D, Mealiffe M, Mitchell JJ, Parini R, Raiman J, Shaywitz HJ, Slasor P, Solano Villarreal M, Stewart F, Berger KI, Itarmatz PR. Impact of long-term elosulfase alfa treatment on pulmonary function in patients with Morquio syndrome type A. Presented at the Lysosomal Disease Network's WORLD Symposium, Feb 29-Mar 3, 2016.

Keating KG, Whiteaker L, Corkery J, Charrow J, Burton B. Pseudodeficiency of alphaiduronidase is a common finding identified from newborn screening in the State of Illinois. Presented at the Lysosomal Disease Network's WORLD Symposium, Feb 29-Mar 3, 2016.

Muenzer J, Burton BK, Harmatz P, Solano Villarreal ML, Amartino HM, Ruiz-Garcia M, Gonzalez Gutierrez-Solana L, Sciarappa K, Alexanderian D, Jones SA. A phase II/III intrathecal enzyme replacement therapy clinical trial for MPS II patients with cognitive impairment. Presented at the Lysosomal Disease Network's WORLD Symposium, Feb 29-Mar 3, 2016.

Stewart F, Harmatz P, Braulin E, Bentley A, Burton B, Guffon N, Hale S, Johnston T, Kircher S, Kochhar P, Mitchell J, Plockinger U, Sisic Z. Pregnancy in individuals with mucopolysaccharidosis (MPS): a case series. Presented at the Lysosomal Disease Network's WORLD Symposium, Feb 29-Mar 3, 2016.

Stewart F, Harmatz P, Braulin E, Bentley A, Burton B, Guffon N, Hale S, Johnston T, Kircher S, Kochhar P, Mitchell J, Plockinger U, Sisic Z. Management of fertility and pregnancy in individuals with mucopolysaccharidosis (MPS). Presented at the Lysosomal Disease Network's WORLD Symposium, Feb 29-Mar 3, 2016.

Tylki-Szymanska A, Ficicioglu C, Morin I, Jurecka A, Burton B. Characteristics of patients with MPS II diagnosed at a very young age: data from the Hunter Outcome Survey (HOS). Presented at the Lysosomal Disease Network's WORLD Symposium, Feb 29-Mar 3, 2016.

Burton B, Jego V, Jones S. Survival in idursulfase-treated and untreated patients with MPS II: data from the Hunter Outcome Survey (HOS). Presented at the Annual Meeting of the American College of Genetics and Genomics, March 8-12, 2016.

Burton BK. An observational study to evaluate neurodevelopmental status in pediatric patients with Hunter syndrome: Study design and methodology. Presented at the Annual Meeting of the American College of Genetics and Genomics, March 8-12, 2016. Wilson DP, Marulkar S, Tripuraneni R, Burton BK. Sebelipase alfa improves atherogenic measures in adults and children with lysosomal acid lipase deficiency. Presented at the Annual Meeting of the National Lipid Association, May 19-22, 2016.

Vockley J, Burton B, Berry G, et al. Interim results from an open-label phase 2 study to assess safety and clinical effects of investigational UX007 long chain fatty acid oxidation disorders (LC-FAOD). Poster presentation, Annual Meeting of the Society for Inherited Metabolic Disorders, Apr 3-6, 2016.

Longo N, Amato S, Vockley J, Wierenga K, Li H, Bilder D, Burton B, Dimmock D, Hardine C, Posner J, Thomas JA, Zori R, Greblikas F, Zhonghua G, Merilainen M, Weng HH, Levy H. Prism 301: An open-label, randomized phase 3 clinical trial evaluating efficacy and safety of pegvaliase for the treatment of adults with phenylketonuria. Poster presentation, Annual Meeting of the Society for Inherited Metabolic Disorders, Apr 3-6, 2016.

Opladin T, Lindner M, Das A, Marquardt T, Khan A, Emre SH, Burton BK, et al. In vivo monitoring of urea cycle activity with 13C-acetate as a tracer of ureagenesis. Poster presentation, Annual Meeting of the Society for Inherited Metabolic Disorders, Apr 3-6, 2016.

Harmatz P Lin SP, Muenzer J, Giugliani R, Guffon N, Jego V, Burton B. Characteristics of patients aged 5 years and older at first signs and symptoms of mucopolysaccharidosis type II: data from the Hunter Outcome Survey (HOS). Poster presentation, Annual Symposium of the Society for the Study of Inborn Errors of Metabolism, Sep 6-9, 2016.

Reynders J, Burton B, DelAngel G. Novel LIPA mutations resulting in lysosomal acid lipase deficiency. Poster presentation, Annual Symposium of the Society for the Study of Inborn Errors of Metabolism, Sep 6-9, 2016.

Levy H, Harding C. Longo N, Bilder D, Burton B, Zori R, Posner J, Thomas J, Olbertz J, Rosen O, Bu Z, Merilainen M, Weng HH, Dimmock D. Phase 3 PRISM-2 long-term extension evaluating efficacy and safety of pegvaliase for treatment of adults with phenylketonuria. Poster presentation, Annual Symposium of the Society for the Study of Inborn Errors of Metabolism, Sep 6-9, 2016.

Harding C, Amato S, Vockley J, Wierenga K, Li H, Bilder D, Burton B, Dimmock D, Longo N, Posner J, Thomas J, Zori R, Rosen O, Greblikas F, Gu, K, Li M, Merilainen M, Weng HH, Levy H. Phase 3 PRISM-1 and PRISM-2 clinical trial results: to evaluate the efficacy and safety of pegvaliase for the treatment of adults with phenylketonuria (PKU). Poster presentation, Annual Symposium of the Society for the Study of Inborn Errors of Metabolism, Sep 6-9, 2016.

Longo N, Thomas J, Wasserstein M, Burton B, Vockley J, Grange D, Decker C, Weng HH, Li M, Schweighardt B, Zori R. Evaluation of long-term safety and efficacy of pegvaliase treatment for adults with phenylketonuria: updated 4-year results. Platform presentation, Annual Symposium of the Society for the Study of Inborn Errors of Metabolism, Sep 6-9, 2016.

Vockley J, Burton B, Berry GT, Longo N, Phillips J, Sanchez-Valle A, Tanpaiboon P, Grunewald S, Murphy E, Bowden A, Zhang L, Catalda J, Marsden D, Kakkis E. Interim results from open-label phase 2 study assessing the safety and clinical effects of investigational UX007 (triheptanoin) in subjects with long-chain fatty acid oxidation disorders (LC-FAOD). Poster presentation, Annual Symposium of the Society for the Study of Inborn Errors of Metabolism, Sep 6-9, 2016.

Burton BK, Marulkar S, Friedman M, Tripuraneni R, Furuya KN. Long-term benefit a sebelipase alfa over 76 weeks in children and adults with lysosomal acid lipase deficiency (LAL-D) (ARISE). Platform presentation, 13<sup>th</sup> Annual World Symposium. Feb 13-17, 2017.

Harmatz P, Lin S-P, Muenzer J, Giugliani R, Guffon N, Jego V, Burton BK, Characteristics of patients with mucopolysaccharidosis type II (MPS II) diagnosed aged < 5 years: data from the Hunter Outcome Survey (HOS). Poster presentation, 13<sup>th</sup> Annual WORLD Symposium, San Diego, CA, Feb 13-17, 2017.

Aleck KA, Tylki-Szymanska A, Ficicioglu C, Burton BK, Jego V, Guffon N. Urinary glycosaminoglycan levels in a mucopolysaccharidosis type II pediatric population receiving idursulfase therapy: data from the Hunter Outcome Survey (HOS) for patients aged < 18 months. Poster presentation. 13<sup>th</sup> Annual WORLD Symposium, San Diego, CA, Feb 13-17, 2017.

Hendriksz CJ, Parini R, Alsayed MD, Raiman J, Giugliani R, Mitchell JJ, Burton BK, et al. Elosulfase alfa treatment and changes in physical functioning and disability in Morquio syndrome type A. Poster presentation. 13<sup>th</sup> Annual WORLD Symposium, San Diego, CA, Feb 13-17, 2017.

Reynders J, Burton BK, del Angel G. Novel LIPA mutations resulting in lysosomal acid lipase deficiency. Poster presentation. 13<sup>th</sup> Annual WORLD Symposium, San Diego, CA, Feb 13-17, 2017.

Thomas J, Vockley J, Longo N, Wasserstein M, Burton B, et al. Long term safety and efficacy of pegvaliase treatment for adults with phenylketonuria: updated year 4 results from phase 2 PAL-003 extension. Presented at the 2017 Meeting of the American College of Medical Genetics, Phoenix, AZ, Mar 21-25, 2017.

Harding C, Thomas J, Levy H, Longo N, Bilder D, Burton B, et al. Phase 3 PRISM-2 long term extension evaluating efficacy and safety of pegvaliase for treatment of adults with phenylketonuria. Poster presentation. 2017 Meeting of the American College of Medical Genetics, Phoenix, AZ, Mar 21-25,2017.

Vockley J, Burton B, Berry G, et al. Results from a 78 week single-arm, open label phase 2 study to evaluate UX007 (triheptanoin) in pediatric and adult long chain fatty acid oxidation disorders (LC-FAOD). Presented at International Congress of Inborn Errors of Metabolism, Rio de Janeiro, Brazil, Sept 5-8, 2017.

Mayhew J, Vockley J, Burton B, et al. Assessments of exercise tolerance and muscle function in long chain fatty acid oxidation disorders (LC- FAOD): results from a phase 2 open label study of UX007. Presented at International Congress of Inborn Errors of Metabolism, Rio de Janeiro, Brazil, Sept.5-8, 2017.

Harmatz P, Lin S-P, Muenzer J, Giugliani R, Guffon N, Jego V, Burton B. Characteristics of patients with mucopolysaccaridosis type II (MPS II) diagnosed aged  $\geq$  5 years: data from the Hunter Outcome Survey (HOS). Presented at the International Congress of Inborn Errors of Metabolism, Rio de Janeiro, Brazil. Sept. 5-8, 2017. Aleck K, Tylki-Szymanska A, Ficicioglu C, Burton B, Jego V, Guffon N. Urinary glycosaminoglycan levels in a mucopolysaccharidosis type II pediatric population aged ≤18 months receiving idursulfase therapy: data from the Hunter Outcome Survey (HOS). Presented at the International Congress of Inborn Errors of Metabolism, Rio de Janeiro, Brazil. Sept. 5-8, 2017.

Vockley J, Levy H, Amato S, Zori R, Thomas J, Burton B, et al., Phase 3 PRISM-2 long term extension study evaluating efficacy and safety of pegvaliase for treatment of adults with phenylketonuria. Presented at the International Congress of Inborn Errors of Metabolism, Rio de Janeiro, Brazil.Sept. 5-8, 2017.

Lilienstein J, Burton B, Grant M, et al. Interim analysis of the phenylketonuria (PKU) patients enrolled in the PKUDOS registry. Poster presentation. International Congress of Inborn Errors of Metabolism, Rio de Janeiro, Brazil. Sept 5-8, 2017.

Goodman Z, Friedman M, Burton B. Change in liver histopathology in a diverse population of children and adults with lysosomal acid, lipase deficiency after 48 and 96 weeks of sebelipase alfa therapy. Presented at the Annual Meeting of the American Association for the Study of Liver Diseases, Oct 20-24, 2017.

Burton B, Feilet F, Furuya K, Friedman M, Marulkar S, Balwani M. Long-term benefit of sebelipase alfa over 100 weeks in children and adults with lysosomal acid lipase deficiency (ARISE STUDY). Presented at the Annual Meeting of the American Association for the Study of Liver Diseases, Oct 20-24, 2017.

Burton B, Sanchez AC, Kostyleva M, Allen K, Friedman M, Martins AM. Long-term benefit of sebelipase alfa over 96 weeks in a diverse population of children and adults with lysosomal acid lipase deficiency. Presented at the Annual Meeting of the American Association for the Study of Liver Diseases, Oct 20-24, 2017.

Goodman Z, Friedman M, Burton B. Change in liver histopathology in a diverse population of children and adults with lysosomal acid lipase deficiency after 48 and 96 weeks of sebelipase alfa therapy. Presented at the Annual Meeting of the American Association for the Study of Liver Diseases, Oct 20-24, 2017.

Harmatz P, Muenzer J, Burton BK, Ficicoglu C, Lau HA, Leslie ND, Conner E, Wong Po Foo C, Vaidya S, Wechsler T, Whitley CB. Update on phase 1/2 clinical trials for MPSI and MPS II using ZFN-mediated in vivo genome editing. Presented at 14<sup>th</sup> Annual WORLD Symposium, San Diego, Feb 6-8, 2018.

Jones SA, Burton BK, Botha J, Whiteman DAH. Profile of natural history in 104 patients with mucopolysaccharidosis type II. Insights from the Hunter Outcome Survey (HOS) Presented at the 14<sup>th</sup> Annual WORLD Symposium, San Diego, Feb 6-8, 2018.

Burton BK, Lampe C, Lagler FB, Botha J, Whiteman DAH. Infusion-related reactions in patients with mucopolysaccharidosis type II on Idursulfase. Presented at the 14<sup>th</sup> Annual WORLD Symposium, San Diego, Feb 6-8, 2018.

Gillis J, Burton B, Inbar-Fergenberg M, Mackrell M, Phornphutkul C, Stockton DW, Khan A. North American experience with laronidase enzyme replacement therapy for mucopolysaccharidosis type I in a home infusion setting. Presented at the 14<sup>th</sup> Annual WORLD Symposium, San Diego, Feb 6-8, 2018.

Lilienstein J, Burton B, Grant M, et al. Interim analysis of the phenylketonuria (PKU) patients enrolled in the PKUDOS registry. Poster presentation. 40<sup>th</sup> Annual Meeting of the Society for Inherited Metabolic Disorders, San Diego, March 11-14, 2018.

Vockley J, Burton B, Berry GT, et al. Results from a 78-week single-arm, open-label phase 2 study to evaluate UX007 in pediatric and adult patients with moderate to severe long-chain fatty acid oxidation disorders (LC-FAOD). Poster presentation. 40<sup>th</sup> Annual Meeting of the Society for Inherited Metabolic Disorders, San Diego, March 11-14, 2018.

Burton B, Cederbaum S, Jurecki E, Lilienstein J, Alverez I, Cohen-Pfeffer J, Irwin D, Levy H, Rohr F. Prevalence of comorbid conditions among phyenylketonuria patients: a retrospective study of US health insurance claims data. Poster presentation. Annual Meeting of the American College of Medical Genetics and Genomics, Charlotte, April 10-14, 2018.

Jones SA, Burton B, Botha J, Whiteman D. Profile of natural history in patients with mucopolysaccharidosis type II: insights from the Hunter Outcome Survey (HOS). Platform presentation, 15<sup>th</sup> International Symposium on MPS and Related Diseases, San Diego, Aug 2-4, 2018.

Aleck K, Tylki-Szymanska A, Ficicioglu C, Burton B, Jego V, Guffon N. Urinary Glycosaminoglycan levels in a mucopolysaccharidosis type II pediatric population' Aged <18 months rece3iving idursulfase therapy: data from the Hunter Outcome Survey (HOS). Poster presentation, 15<sup>th</sup> International Symposium on MPS and Related Diseases, San Diego, Aug 2-4, 2018.

Burton B, Lampe C, Lagler F, Botha J, Whiteman D. Infusion-related reactions in patients with mucopolysaccharidosis type II on idursulfase enrolled in the Hunter Outcome Survey (HOS). Poster presentation, 15<sup>th</sup> International Symposium on MPS and Related Diseases, San Diego, Aug 2-4, 2018.

Muenzer, J, Burton BK, Harmatz P, Gutierrez-Solana LG, Ruiz-Garcia M, Jones SA, Guffon N, Inbar-Feigenberg M, Bratkoviv D, Wu Y, Alexanderian D. Efficacy and safety of intrathecal idursulfase in pediatric patients with Hunter syndrome and early cognitive impairment. Poster presentation, Annual Meeting of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Athens, Greece, Sept 3-7, 2018.

Burton BK, Harding CO, Thomas JA, Longo N, Posner J, Dimmock D, Zori R, Weng

HH, Olbertz J, Gershman A, Rosen O, Gupta S, Jones S, Gu Z, Vockley J. Long-term safety of induction, titration and maintenance dosing of pegvaliase treatment in adults with phenylketonuria. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Athens, Greece, Sept 3-7, 2018. Harding CO, Thomas JA, Burton BK, Zori R, Dimmock D, Vockley J, Weng HH, Olbertz J, Gershman A, Rosen O, Jones S, Li M, Longo N. Phase 3 PRISM clinical trials: characterization of hypophenylalaninemia in pegvaliase treated adults with PKU. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Athens, Greece, Sept. 3-7, 2018.

Burton B. Longo N, Singh R, Stuy M, Vockley J, van Bockle J, Lane P, Alvarez I, Lilienstein J, Jurecki E. The burden of illness in adults with phenylketonuria (PKU): an interim analysis of a cross-sectional study. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Athens, Greece, Sept. 3-7, 2018.

Muntau AC, Feillet F, Burton B, MacDonald A, Wessel A, Alvarez I, Lilienstein J, Lane P, Jurecki E, Longo N. A meta-analysis of growth outcomes in phenylketonuria patients treated with a phenylalanine-restricted diet and sapropterin. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Athens, Greece, Sept. 3-7, 2018.

Feillet F, Ficicioglu C, Lagler FB, Longo N, Alm J, Muntau AC, Burlina A, Belanger-Quintana A, Trefz FK, Kittus R, Jurecki E, Alvarez I, Lilienstein J, Burton B on behalf of the KAMPER and PKUDOS investigators. An interim analysis of the KAMPER and PKUDOS registries: efficacy and safety of sapropterin before and during pregnancy. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Athens, Greece, Sept. 3-7, 2018.

Muenzer J, Burton BK, Harmatz P, Amartino H, Jones SA, Gutierrez-Solana LG, Ruiz-Garcia M, Wu Y, Alexanderian D. Neurodevelopmental status and adaptive behavior of pediatric patients with hunter syndrome in a 2-year observational study. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Athens, Greece, Sept. 3-7, 2018.

Muenzer J, Burton BK, Harmatz P, Botha J, Kampmann C. Evaluation of the long-term Treatment effects of idursulfase using statistical modeling: data from the Hunter Outcome Survey (HOS). Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Athens, Greece, Sept. 3-7, 2018.

Burton BK, Lampe C, Lagler FB, Botha J, Whiteman DAH. Infusion-related reactions In patients with mucopolysaccharidosis type II on idursulfase. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Athens, Greece, Sept. 3-7, 2018.

Burton B, Sanchez AC, Kostyleva M, Allen K, Abel F. Effect of sebelipase alfa on liver parameters over 96 weeks in a diverse population of children and adults with lysosomal

acid lipase deficiency. Poster presentation. EASL-NAFLD 2018 Summit, Geneva, Switzerland, Sept. 20-22.

Muenzer J, Prado C, Lau HA, Burton B, Ficicioglu C, Wong PFC, Vaidya SA, Whitley CB, Harmatz P. Novel treatment of MPS II (Hunter syndrome) with SB-913 ZFNmediated in vivo human genome editing: Update from a Phase 1/2 clinical trial. Oral presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Athens, Greece, Sept. 3-7, 2018.

Burton, B, Cederbaum S, Jurecki E, Lilienstein J, Alvarez I, Cohen-Pfeffer J, Irwin D, Levy H, Rohr F, Jones KB. Prevalence of comorbidities among phenylketonuria patients-A retrospective study of US health insurance claims data. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Athens, Greece, Sept. 3-7, 2018.

Burton BK, Hoganson GE, Grange DK, Braddock SR, Christensen KM, Hitchins L, Hickey R, Shao R, Basheeruddin K. Newborn screening for mucopolysaccharidosis type II (MPS II) in Illinois: The first year's experience. Platform presentation, 15<sup>th</sup> Annual WORLS Symposium, Orlando, Feb 4-8, 2019

Muenzer J, Burton BK, Harmatz P, Amartino H, Jones SA, Gutierrez-Solana LG, Ruiz-Garcia M, Wu Y, Alexanderian D. Neurodevelopmental status and adaptive behavior of pediatric patients with Hunter syndrome: A longitudinal observational Study. Poster presentation. 15<sup>th</sup> Annual WORLD Symposium, Orlando, Feb 4-8, 2019.

Muenzer J, Burton BK, Harmatz P, Botha J, Kampmann C. Evaluation of the long-term treatment effects of idursulfase using statistical modelling: Data from the Hunter Outcome Survey (HOS). Poster presentation. The 15<sup>th</sup> Annual WORLD Symposium, Orlando, Feb 4-8, 2019

Muenzer J, Burton BK, Kampmann C, Botha J, Jones SA. Characteristics of patients with mucopolysaccharidosis type II who have received a bone marrow transplant: Data from the Hunter Outcome Survey. Poster presentation. The 15<sup>th</sup> Annual WORLD Symposium, Orlando, Feb 4-8, 2019.

Muenzer J, Prada CE, Burton B, Lau HA, Ficicioglu C, Po Foo CW, Vaidya SA, Whitley CB, Harmatz P. CHAMPIONS: A phase 1/2 clinical trial with dose escalation of SB-913 ZFN-mediated in vivo human genome editing for treatment of MPS II (Hunter Syndrome). Platform presentation. The 15<sup>th</sup> Annual WORLD Symposium, Orlando, Feb 4-8, 2019.

Harding CO, Thomas JA, Burton, BK, Zori R, Dimmock D, Vockley J, Weng HH, Olbertz J, Gershman A, Rosen O, Jones S, Li M, Longo N. Characterization of hypophenylalaninemia in pegvaliase-treated adults with phenylketonuria. Poster presentation. Annual Meeting of the American College of Medical Genetics and Genomics, Seattle, WA, April 3-6, 2019 Burton BK, Harding CO, Thomas JA, Longo N, Posner J, Dimmock D, Zori R, Weng HH, Olbertz J, Gershman A, Rosen O, Jones S, Gu Z, Vockley J. Longterm safety of induction, titration and maintenance dosing of pegvaliase treatment in adults with phenylketonuria. Poster presentation. Annual Meeting of the American College of Medical Genetics and Genomics, Seattle, WA, April 3-6, 2019.

Paras A, Vucko E, Bausell H, Havens K, Philipp T, Arduini K, Johnson A, Kalb F, Katz R, Shim S, Adams J, Shively V, Widera S, Burton, BK. Pegvaliase treatment protocol and patient outcomes: experience of a single PKU treatment center. Poster presentation. Annual Meeting of the American College of Medical Genetics and Genomics, Seattle WA, April 3-6, 2019.

Burton B, Longo N, Maillot F, Rahman Y, Singh R, Sivri HS, Stuy M, Vockley J, Van Backle J, Jha A, Lane P, Lilienstein J, Jurecki E. The burden of illness in adults with phenylketonuria (PKU): interim analysis of a cross-sectional study. Poster presentation. Annual Meeting of the Society for Inherited Metabolic Disorders, Seattle WA, April 6-9, 2019.

Vockley J, Zori R, Thomas J, Stuy M, Burton BK, Longo N, Rosen O, Gu Z, Olbertz J, Weng HH. Subgroup analysis of pegvaliase in adults with phenylketonuria in Phase 3 PRISM studies: evaluation efficacy and safety based on previous sapropterin response or dietary phenylalanine intake. Poster presentation. Annual Meeting of the Society for Inherited Metabolic Disorders, Seattle WA, April 6-9, 2019.

Rohr F, Burton BK, Longo N, Thomas J, Harding C, Rosen O, Gu Z, Olbertz J, Weng HH. Phase 3 PRISM clinical trials: evaluation change in diet with pegvaliase treatment in adults with phenylketonuria. Poster presentation. Annual Meeting of the Society for Inherited Metabolic Disorders, Seattle WA, April 6-9, 2019.

Muntau A, Feillet F, Burton B, MacDonald A, Wessel A, Alvarez I, Lilienstein J, Lane P, Jurecki E, Longo N. A meta-analysis of growth outcomes in phenylketonuria Patients treated with phenylalanine-restricted diet + sapropterin. Poster presentation, Annual Meeting of the Society for Inherited Metabolic Disorders, Seattle WA, April 6-9, 2019.

Feillet F, Ficicioglu C, Lagler FB, Longo N, Alm J, Muntau A, Burlina A, Belanger-Quintana A, Trefz FK, Jurecki E, Alvarez I, Lilienstein J, Burton B, on behalf of the KAMPER and PKUDOS investigators. An interim analysis of the KAMPER and PKUDOS registries: efficacy and safety of sapropterin before and during pregnancy. Poster presentation. Annual Meeting of the Society for Inherited Metabolic Disorders, Seattle WA, April 6-9, 2019.

Vucko E, Paras A, Bausell H, Havens K, Phillip T, Arduini K, Johnson A, Kalb F, Katz R, Shim S, Adams J, Shively V, Widera S, Burton BK. Pegvaliase treatment protocol and patient outcomes: experience of a single PKU treatment center. Annual Meeting of the Society for Inherited Metabolic Disorders, Seattle WA, April 6-9, 2019.

Burton BK. Newborn Screening for Lysosomal Storage Disorders. Platform presentation. 5<sup>th</sup> International Forum for Lysosomal Storage Disorders. Tokyo, Japan. July 11-13, 2019

Vockley J, Zori R, Stuy M, Burton BK, Longo N, Rosen O, Gu Z, Olbertz J, Weng HH. Efficacy and safety of pegvaliase by sapropterin response or dietary phenylalanine intake in adults with phenylketonuria. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Rotterdam, Netherlands, Sept. 2-6, 2019

Burton BK, Cederbaun S, Lane P, Jurecki E, Lilienstein J, Ali I, Irwin D, Levy H, Rohr F, Jones KB. 50 most prevalent comorbidities among phenylketonuria patients-A retrospective study of US health insurance claims data. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Rotterdam, Netherlands, Sept 2-6, 2019.

Burton BK, Northrup H, Zori R, Posner J, Olbertz J, Lounsbury D, Weng HH, Vockley J. Phase 3 PRISM studies: efficacy and safety of pegvaliase 60 mg dose in adult patients with phenylketonuria. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Rotterdam, Netherlands, Sept. 2-6, 2019

Longo N, Thomas J, Jurecki E, Lane P, Olbertz J, Gershon A, Wang B, Harding CO, Burton BK, Rohr F, van Calcar S. Dietary intakes and adverse events in pegvaliasetreated phenylketonuric adults who had low blood phenylalanine concentrations. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Rotterdam, Netherlands, Sept 2-6, 2019.

Longo N, Rohr F, Burton BK, Thomas J, Harding CO, Rosen O, Gu Z, Olbertz J, Weng HH. Phase 3 PRISM clinical trials: evaluating change in diet with pegvaliase treatment in adults with phenylketonuria. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Rotterdam, Netherlands, Sept. 2-6, 2019

Muenzer J, Burton BK, Kampmann C, Botha J, Jones SH. Characteristics of patients With MPS II who have received a bone marrow transplant. Data from the Hunter Outcome Survey (HOS). Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Rotterdam, Netherlands, Sept. 2-6, 2019

Burton BK. Evaluating short and long-term management goals for lysosomal storage Diseases. Symposium platform presentation. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism, Rotterdam, Netherlands, Sept. 2-6

Burton B, Sanchez AC, Kostyleva M, Martins AM, Marulkar S, Abel F, Baric I. Efficacy and safety of sebelipase alfa over 144 weeks in a diverse population of children and adults with lysosomal acid lipase deficiency .Poster presentation. 70<sup>th</sup> Annual Meeting of the American Association for the Study of Liver Diseases, Boston, MA, Nov 8-12, 2019. Burton B, Feillet F, Furuya K, Marulkar S, Balwani M. Benefits of sebelipase alfa in Children and adults with lysosomal acid lipase deficiency are sustained for up to 5 years (ARISE Study). Poster presentation. 70<sup>th</sup> Annual Meeting of the American Association of for the Study of Liver Diseases, Boston, MA, Nov 8-12, 2019.

Burton B, Guffon N, Ramaswami U, Chien Y-H, Hwu W-L, Lauw M, Longo N, Ngu LH, Pan W, Mitchell J. Long term treatment with elosulfase alfa has an acceptable safety Profile for patients with Morquio syndrome type A: Real-world results from the Morquio A Registry Study (MARS). Poster presentation. WORLD Symposium 2020, Orlando, FL Feb 10-13, 2020.

Harmatz P, Jayakar P, Pena LDM, Cattaneo F, Ceravolo F, Paleari Y, Sutton VR, Burton BK, Longo N. A new randomized placebo-controlled study to establish the safety and efficacy of velmanase alfa ( human recombinant alpha-mannosidase) enzyme replacement therapy for the treatment of alpha-mannosidosis. Poster presentation. WORLD Symposium 2020. Orlando, Florida, Feb 10-13, 2020.

Kim KK, Vucko E, Desai AK, Kishnani P, Burton BK. Development of high sustained IgG antibody titers and corresponding clinical decline in an adolescent with atypical infantile Pompe disease after 11+ years on enzyme replacement therapy with alglucosidase alfa. Poster presentation. WORLD Symposium 2020. Orlando, Florida Feb 10-13, 2020.

Mitchell J, Ramaswami U, Longo N, Chien Y-H, Guffon N, Hwu W-L, Lauw M, Ngu, LH, Pan W, Burton B. Long term clinical outcomes of patients treated with elosulfase alfa: five-year real-world results from the Morquio A Registry Study (MARS). Poster presentation. WORLD Symposium 2020. Orlando, Florida, Feb 10-13, 2020.

Burton BK, Northrup H, Zori RT, Posner J, Olbertz J, Lounsbury D, Weng HH, Vockley J. Phase 3 PRISM studies: efficacy ad safety of pegvaliase 60 mg dose in adult patients with phenylketonuria. American College of Medical Genetics and Genomics Annual Meeting 2020 (virtual).

Burton BK, Rohr F, Longo N, Thomas JT, Harding CO, Rosen O, Gu Z, Olbertz J, Weng HH. Evaluating change in diet with pegvaliase treatment in adults with phenylketonuria; Results from phase 2 and phase 3 clinical trials. American College of Medical Genetics and Genomics Annual Meeting 2020 (virtual).

Thomas JA, Jurecki E, Lane P, Olbertz J, Wang B, Longo N, Harding CO, Burton BK, Rohr F, van Calcar S. Dietary intakes and adverse events in pegvaliase treated phenylketonuria adults who has low blood phenylalanine concentrations. American College of Medical Genetics and Genomics Annual Meeting 2020 (virtual).

Burton BK, Ilan AB, Delaney K, Madden DT, Jurecki E, Longo N, Harding CO, Thomas J. Concept elicitation and outcomes assessment tool mapping with an international cohort of adult phenylketonuria patients. American College of Medical Genetics and Genomics

Annual Meeting 2020 (virtual).

Burton B, Longo N, Maillot F, Rahman Y, Singh R, Sivri HS, Stuy M, Vockley J, Van Backle J, Jha A, Lane P, Lilienstein J, Jurecki E. The burden of illness in adults with phenylketonuria (PKU); interim analysis of a cross-sectional study conducted in North America and Europe. Mol Genet Metab 2020; 127: 259 ( abstract accepted for presentation at meeting of Society for Inherited Metabolic Disorders).

Feillet F, Ficicioglu C, Lagler F, Longo N, Alm J, Muntau A, Burlina A, Berlanger-Quintana A, Trefz F, Jurecki E, Alvarez I, Lilienstein J, Burton B. An interim analysis of The Kamper and PKUDOS registries: efficacy and safety of sapropterin before and during pregnancy. Mol Genet Metab 2020; 127: 267 (abstract accepted for presentation at annual meeting of the Society for Inherited Metabolic Disorders).

Hitchins L, Charrow J, Burton B. A single-center experience with newborn screening for Pompe disease. Mol Genet Metab 2020; 127: 275 (abstract accepted for presentation at the annual meeting of the Society for Inherited Metabolic Disorders).

Rosenfeld JA, Kim KH, Burrage LC, Lu S, Wangler MF, Yamamoto S, Kanca O, Hicks MJ, Kayani S, Stetler M, Undiagnosed Diseases Network, Lee B, Bacino CA, Bellen HJ, Burton BK, Craigen WJ. HIP1R may be associated with a recessive, progressive neurologic disorder. American Society for Human Genetics Annual Meeting 2020.

Quadri A, Kim KH, Hickey R, Paras A, Baker J, Charrow J, Burton B. Population based Newborn screening for mucopolysaccharidosis type II: a single center's experience. 2021 WORLD Symposium on Lysosomal Disorders. Feb 8-12.

Muenzer J, Burton BK, Scarpa M, Botha J, Giugliani R. Genotype-phenotype findings in patients with mucopolysaccharidosis II (MPS II): data from the Hunter Outcome Survey (HOS). Presented at the 2021 WORLD Symposium on Lysosomal Disorders, Feb 8-12.

Muenzer J, Burton BK, Harmatz P, et al. Long-term safety and efficacy of intrathecal idursulfase-IT in patients with neuronopathic mucopolysaccharidosis II: 2-year results from a Phase 2/3 extension study. Presented at the 2021 WORLD Symposium on Lysosomal Disorders. Feb 8-12.

Muenzer J, Burton, BK, Harmatz, et al. Comparison of cognitive function in sibs with neuronopathic mucopolysaccharidosis II: evaluation of early treatment with IV idursulfase and intrathecal idursulfase-IT. Presented at the 2021 WORLD Symposium on Lysosomal Disorders. Feb 8-12.

Muenzer J, Burton BK, Harmatz P, et al. Single-arm open-label, phase 2/3 substudy and extension evaluating safety and efficacy of intrathecal idursulfase-IT in patients younger than 3 years old with neuronopathic mucopolysaccharidosis II. Presented at the 2021 WORLD Symposium on Lysosomal Disorders. Feb 8-12. Harmatz P, Bakardijiev AI, Escolar M, Burton BK, et al. Design and preliminary results of a first in-human 24 week study of intravenous DNL310 (brain penetrant IDS fusion Protein) in MPS II. Presented at the 2021 WORLS Symposium on Lysosomal Disorders, Feb 8-12.

Quadri A, Kim KH, Hickey R, Paras A, Baker J, Charrow J, Burton B. Newborn screening for mucopolysaccharidosis type II: a single center's experience. Presented at the Annual Meeting of the American College of Medical Genetics and Genomics. April 13-16, 2021.

Muenzer J, Burton BK, Scarpa M, Botha J, Giugliani R. Genotype-phenotype findings in patients with mucopolysaccharidosis II (MPS II): data from the Hunter Outcome Survey (HOS). Presented at the Annual Meeting of the American College of Medical Genetics and Genomics, April 13-16, 2021.

Muenzer J, Burton BK, Harmatz P, et al. Long-term safety and efficacy of intrathecal idursulfase-IT in patients with neuronopathic mucopolysaccharidosis II: 2-year results from a Phase 2/3 extension study. Presented at the Annual Meeting of the American College of Medical Genetics and Genomics, April 13-16, 2021.

Muenzer J, Burton, BK, Harmatz, et al. Comparison of cognitive function in sibs with neuronopathic mucopolysaccharidosis II: evaluation of early treatment with IV idursulfase and intrathecal idursulfase-IT. Presented at the Annual Meeting of the American College of Medical Genetics and Genomics, April 13-16, 2021.

Muenzer J, Burton BK, Harmatz P, et al. Single-arm open-label, phase 2/3 substudy and extension evaluating safety and efficacy of intrathecal idursulfase-IT in patients younger than 3 years old with neuronopathic mucopolysaccharidosis II. Presented at the Annual Meeting of the American College of Medical Genetics and Genomics, April 13-16, 2021.

Bodamer O, Burton B, Ile J, Cohn G, White Y, Kane E, Diaz G. The pheNIX trial: firstin-human gene therapy trial for PKU due to phenylalanine hydroxylase (PAH) deficiency. Presented at the Annual Meeting of the American College of Medical Genetics and Genomics, April 13-16, 2021.

Blok LS, Verseput J, Kit D, et al (including BBurton). A clustering of missense variants in the crucial chromatin modifier WDR5 defines a new neurodevelopmental disorder. Presented at the Annual Meeting of the European Society of Human Genetics, June 12-15, 2021.

Burton BK. Arginase-1 deficiency: report of a patient followed for 15 years. Poster Presentation. International Congress of Inborn Errors of Metabolism (ICIEM), Sydney, Australia, Nov 20-23, 2022.

Muenzer J, Scarpa M, Tylki-Szymanska A, Amartino H, Harmatz P, Lin S-P, Link B,

Molter D, Raiman J, Whiteman DH, Botha J, Jakukeviviene D, Fertek D, Audi J, Burton BK. Fifteen years of the Hunter Outcome Survey (HOS): real-world insights into the patient population living with mucopolysaccharidosis type II (MPS II). Platform presentation, WORLD Symposium on Lysosomal Disorders 2022, San Diego, Feb 7-11, 2022.

Quadri A, Shively V, Burton BK. Outcome in infants treated with very early ERT supports newborn screening for mucopolysaccharidosis type II. Poster presentation. WORLD Symposium on Lysosomal Disorders 2022, San Diego, Feb 7-11, 2022.

Walsh C, Hickey RA, Charrow JC, Burton BK, Quadri A, Rubin JA, Kim K, Hitchins L, Baker J. Krabbe disease newborn screening: a single center's experience.. Poster presentation. WORLD Symposium on Lysosomal Disorders 2022, San Diego, Feb 7-11, 2022.

Mitchell J, Burton BK, Bober MB, et al. Long-term outcomes of MPS IVA patients treated with elosulfase alfa: findings from the Morquio A Registry Study (MARS) after 6 years. Platform presentation. WORLD Symposium on Lysosomal Disorders 2022, San Diego, Feb 7-11, 2022.

Sacharow S, Northrup H, Whitehall KB, Rowell R, Lindstrom K, Burton B, Thomas J. Efficacy and safety of the recommended pegvaliase dosing regimen in adults with Phenylketonuria in the phase 3 PRISM studies. Platform presentation. Annual Meeting of the American College of Medical Genetics and Genomics (ACMG), Nashville, TN, March 22-26, 2022

Burton BK, Andersson HC, Clague GC, et al. Long-term safety and efficacy of sapropterin: final results of the phenylketonuria demonstration, outcomes and safety (PKUDOS) registry. Poster presentation. Annual Meeting of the American College of Medical Genetics and Genomics (ACMG), Nashville TN, March 22-26, 2022.

Hickey RA, Rubin JP, Whitehead J, Burton BK. Newborn screening for X-linked adrenoleukodystrophy: identification of isodisomy of X in an affected female infant. Poster presentation. Annual Meeting of the American College of Medical Genetics and Genomics (ACMG), Nashville, TN, March 22-26, 2022.

Vockley J, Burton B, Berry G, et al. Triheptanoin for the treatment of long-chain fatty Acid oxidation disorders (LC-FAOD): final results of an open-label long-term extension study. Platform presentation. Annual Meeting of the American College of Medical Genetics and Genomics (ACMG), Nashville, TN, March 22-26, 2022.

Sacharow S, Northrup H, Whitehall KB, Rowell R, Lindstrom K, Burton B, Thomas J. Efficacy and safety of the recommended pegvaliase dosing regimen in adults with Phenylketonuria in the phase 3 PRISM studies. Poster presentation, Annual Meeting of Society for Inherited Metabolic Disorders 2022, April 10-13, Orlando, Florida.

Muenzer J, Amartino H, Burton BK, Giugliani R, Harmatz P, Lin S-P, Link B, Molter D, Ramaswami U, Scarpa M, Botha J, Audi J. Exploring the unmet needs of adults living with mucopolysaccharidosis II (MPS II): data from the Hunter Outcome Survey (HOS). Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Freiburg, Germany, Aug 29-Sept 1, 2022

Feillet F, Ficicioglu C, Lagler FB, Longo N, Alm J, Muntau AC, Burlina A, Belanger-Quintana A, Trefz FK, Lillienstein J, Clague GE, Rowell R, Burton BK. Efficacy and safety of sapropterin before and during pregnancy: an interim analysis of the Kuvan Advanced Maternal Paediatric European Registry (KAMPER) and Phenylketonuria Developmental Outcomes and Safety (PKUDOS) PKU-MOMS sub-registry. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Freiburg, Germany, Aug 29-Sept 1, 2022.

Burton B, Sacharow S, Northrup H, Whitehall K, Rowell R, Lindstrom K, Thomas J. Efficacy and safety of the recommended pegvaliase dosing regimen in adults with phenylketonuria in the phase 3 PRISM studies. Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Freiburg, Germany, Aug 29-Sept 1, 2022

Stepien KM, Burton B, Bober MB, et al. Long-term outcomes in adults with MPS IVA treated with elosulfase alfa: findings from the Morquio A Registry Study (MARS). Poster presentation. Annual Meeting of the Society for the Study of Inborn Errors of Metabolism (SSIEM), Freiburg, Germany, Aug 29-Sept 1, 2022

Muenzer J, Harmatz P, Burton BK, Rajan D, Jones S, Chen C, et al. Interim 73-week cohorts A,B and C results of a phase 1/2 study of intravenous DNL310 (brain-penetrant enzyme replacement therapy) in MPS II. Presented at the Annual Meeting of the Society For the Study of Inborn Errors of Metabolism (SSIEM), Freiburg, Germany, Aug 29-Sept. 1, 2022

Stepien KM, Burton B, Bober M, et al. Long-term outcomes in adults with MPS IVA t treated with elosulfase alfa: findings from the Morquio A Registry Studay (MARS). Poster presentation. Brazilian Congress of Medical Genetics, Sept. 28-Oct.1, 2022.

Burton B, Sacharow S, Northrup H, Whitehall K, Rowell R, Lindstrom K, Thomas J. Efficacy and safety of the recommended pegvaliase dosing regimen in adults with phenylketonuria in the phase 3 PRISM studies. Poster presentation. Brazilian Congress of Medical Genetics, Sept. 28-Oct. 1, 2022

Burton BK, Shively V, Quadri A, et al. Newborn screening for mucopolysaccharidosis type II (MPS II): lessons learned. Platform presentation. WORLD Symposium 2023, Orlando, FL, Feb 21-6, 2023.

Burton BK, Guffon N, Roberts J, et al. Safety profile of idursulfase administered at home In patients with mucopolysaccharidosis II (MPS II) enrolled in the Hunter Outcome Survey. Poster presentation. WORLD Symposium 2023, Orlando, FL, Feb 21-26, 2023.

Reisewitz P, Hinds D, Dosenovic S, Ma Y, Jha A, Hunt A, Burton B, Guffon N. Realworld impact of enzyme replacement therapy on endurance in patients with MPS IVA. Poster presentation. WORLD Symposium 2023, Orlando, FL, Feb 21-26, 2023.

Burton BK, Ficicioglu C, Pedro H, Pathak R, Robinson I, Wright E, Muenzer J. Clinical characteristics and management of patients with mucopolysaccharidosis II (MPS II) in The United States from the Hunter Outcome Survey. Poster presentation. WORLD Symposium 2023, Orlando, FL, Feb 21-26, 2023.

Burton BK, Ficicioglu C, Pedro H, Pathak R, Robinson I, Wright E, Muenzer J. Clinical characteristics and management of patients with mucopolysaccharidosis II (MPS II) in The United States from the Hunter Outcome Survey. Poster presentation. Annual Meeting of the American College of Medical Genetics and Genomics (ACMG), Salt Lake City, Utah, March 14-18, 2023.

Carey M, Edick MJ, Justice K, Burton B. Neurological and psychological comorbidities In 36 individuals with MSUD enrolled in the IBEM-IS database. Poster presentation. Annual Meeting of the Society for Inherited Metabolic Disorders, Salt Lake City, Utah, March 18-21, 2023.

Schiff M, Schwahn BC, Chabrol B, Merritt JL, Vockley J, Vernon H, Berry GT, Santra S Lee C, Koeberll D, Li H, Burton B, De las Heras J, Diaz G, Faria-Urbina M, Luo J, Attarwala H, Sikirica V, Liang M, Guey LT, Lukacs C, Martini PGV, Glaser R, Carrillo N. MaP natural history study: clinical and biomarker findings in methylmalonic acidemia due to MUT deficiency. Poster presentation. Annual Meeting of the Society for Inherited Metabolic Disorders, Salt Lake City, Utah, March 18-21, 2023.

Schwahn B, Berry GT, Santra S, Vernbon H, Li H, Merritt JL, Schiff M, Chabrol B, De las Heras J, Vockley J, Lee C, Koeberl D, Burton B, Grunewald S, Morgan T, Diaz G, Ficicioglu C, Luo J, Attarwala H, Sikirica V, Liang M, Guey LT, Lukacs C, Martini PGV, Glaser R, Carrillo N. MaP natural history study: clinical and biomarker findings in propionic acidemia. Poster presentation. Annual Meeting of the Society for Inherited Metabolic Disorders, Salt Lake City, Utah, March 18-21, 2023.

Schwahn B, Berry GT, Santra S, Vernbon H, Li H, Merritt JL, Schiff M, Chabrol B, De las Heras J, Vockley J, Lee C, Koeberl D, Burton B, Grunewald S, Morgan T, Diaz G, Ficicioglu C, Luo J, Attarwala H, Sikirica V, Liang M, Guey LT, Lukacs C, Martini PGV, Glaser R, Carrillo N. MaP natural history study: clinical and biomarker findings in propionic acidemia. Poster presentation. Pediatric Academic Societies (PAS) Annual , Meeting, Washington, DC, Apr 27-May 1, 2023.

Schiff M, Schwahn BC, Chabrol B, Merritt JL, Vockley J, Vernon H, Berry GT, Santra S Lee C, Koeberll D, Li H, Burton B, De las Heras J, Diaz G, Faria-Urbina M, Luo J, Attarwala H, Sikirica V, Liang M, Guey LT, Lukacs C, Martini PGV, Glaser R, Carrillo N. MaP natural history study: clinical and biomarker findings in methylmalonic acidemia due to MUT deficiency. Poster presentation. Pediatric Academic Societies (PAS) Annual Meeting, Washington DC, Apr 27-May 1, 2023.

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