

**Health-Related Quality of Life and Fatigue in Children and Adults with Pyruvate Kinase
Deficiency**

SUPPLEMENTARY APPENDIX

Supplemental Table 1. List of Site Investigators (Enrolling sites)

| Principal Investigator | Institution |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| United States, enrollment: 154 | |
| Heather A. Bradeen, MD | The University of Vermont Children’s Hospital, Burlington, VT |
| Sateesh Chonat, MD | Emory University School of Medicine , Aflac Cancer and Blood Disorders Center, Children’s Healthcare of Atlanta, GA |
| Jenny M. Despotovic, DO | Texas Children’s Hematology Center, Baylor College of Medicine, Houston, TX |
| Bertil Glader, MD, PhD | Lucile Packard Children’s Hospital, Stanford University School of Medicine, Palo Alto, CA |
| Rachael F. Grace, MD | Dana-Farber/Boston Children’s Cancer and Blood Disorders Center, Boston, MA |
| Christine M. Knoll, MD | Phoenix Children’s Hospital, Phoenix, AZ |
| Melissa McNaull, MD | University of Mississippi Medical Center, Jackson, MS |
| D. Holmes Morton, MD | Central Pennsylvania Clinic for Special Children & Adults, Belleville, PA Lancaster General Hospital, Lancaster, PA |
| Peter E. Newburger, MD | University of Massachusetts Medical School, Worcester, MA |
| Janet L. Kwiatkowski, MD, MSCE | Children’s Hospital of Philadelphia and Perelman School of Medicine of the University of Pennsylvania, Philadelphia, PA |
| Latika Puri, MD | St. Jude Children’s Research Hospital, Memphis, TN |
| Yaddanapudi Ravindranath, MD, MBBS | Wayne State University School of Medicine, Children’s Hospital of Michigan, Detroit, MI |

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| Melissa J. Rose, DO | Nationwide Children's Hospital, The Ohio State University College of Medicine, Columbus, OH |
| Jennifer A. Rothman, MD | Duke University Medical Center, Durham, NC |
| Mukta Sharma, MD | Children's Mercy Hospital, Kansas City, MO |
| Sujit Sheth, MD | Weill Cornell Medical College, New York, NY |
| Alexis A. Thompson, MD | Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL |
| Heng Wang, MD, PhD | DDC Clinic for Special Needs Children, Middlefield, OH |
| Hassan M. Yaish, MD | Primary Children's Hospital, University of Utah, Salt Lake City, UT |
| Canada, enrollment: 14 | |
| Vicky R Breakey, MD Madeleine Verhovsek, MD | McMaster University, Hamilton, ON, Canada |
| Kevin H.M. Kuo, MD, MSc, FRCPC | University of Toronto, University Health Network, Toronto, ON |
| Yves D. Pastore, MD | CHU Sainte-Justine, Montreal, Canada |
| Italy, enrollment: 25 | |
| Wilma Barcellini, MD | Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan |
| Netherlands, enrollment: 23 | |
| Eduard J. van Beers, MD | Van Creveldkliniek, University Medical Center Utrecht, Utrecht University, Utrecht |
| Germany, enrollment: 31 | |
| Stefan W. Eber, MD | Schwerpunktpraxis für Pädiatrische Hämatologie-Onkologie and Children's Hospital, Technical University, Munich, Germany |

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| Susanne Holzhauer, MD | Charite, Berlin, Germany |
| Nina Kollmar, MD | Klinikum Kassel GmbH, Kassel, Germany |
| Joachim Kunz, MD, PhD | Zentrum für Kinder-und Jugendmedizin, Heidelberg, Germany |
| Marcin W. Wlodarski, MD, PhD | University of Freiburg, Freiburg, Germany |
| Czech Republic, enrollment: 7 | |
| Dagmar Pospíšilová, MD | Fakultni nemocnice Olomouc, Czech Republic |

Supplemental Table 2. Scoring and availability of quality of life measures by age group and language

| | EQ-5D | FACT-An | PROMIS Fatigue SF-7a | PedsQL 4.0 | pedsFACIT-F | PROMIS Fatigue SF |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Age Group | ≥18 y | ≥18 y | ≥18 y | <u>Parent Proxy:</u> children 2-17 y <u>Child Self-report:</u> 5-17 y | Child report: ages 8-17 y | <u>Parent proxy 10a:</u> children 5-17 y <u>Child Self-report 10a:</u> 8-17 y |
| Languages available for this study | English, Spanish, Canadian French, German, Italian, Dutch | English, French, German, Italian, Russian, Dutch, Spanish, Czech | English, Spanish | English, French, German, Italian, Dutch, Spanish | English, French, German, Italian, Russian, Dutch, Spanish, Czech | English, Spanish |
| Scoring | <u>Visual Analog Scale:</u> Higher score represents best health (0-100) <u>Health Utility Score¹:</u> Higher score represents full health (0 to 1) | Higher score represents low fatigue (0-188) | Higher score represent more fatigue (T-scores: standard score mean of 50, SD 10) | Higher score represents full health (0-100) | Higher score represents low fatigue (0-52) | Higher score represent more fatigue (T-scores: standard score mean of 50, SD 10) |

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|--------------------------------------|--------------------------------------------------------------------------------|---------|--------|-----------------------------------------------------------------|--------|---------------------------------------------------------------------|
| Completion rate at enrollment | <u>Visual Analog Scale:</u> 120/131 <u>Health Utility Score:</u> 86/131 | 126/131 | 60/131 | <u>Parent Proxy:</u> 86/123 <u>Child Self-report:</u> 61/123 | 47/123 | <u>Parent proxy 10a:</u> 48/123 <u>Child Self-report:</u> 36/123 |
|--------------------------------------|--------------------------------------------------------------------------------|---------|--------|-----------------------------------------------------------------|--------|---------------------------------------------------------------------|

¹ Health Utility Score could only be analysed for participants from the US, Germany, and the Netherlands