#### SIMILARITIES BETWEEN ME/CFS AND D-LACTIC ACIDOSIS

# Supplementary Information for

Examining Clinical Similarities between Myalgic Encephalomyelitis/Chronic Fatigue

Syndrome and D-Lactic Acidosis: A Systematic Review

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### This PDF file includes:

**Supplementary Table 2.** Episodes that reported *matching* or *ambiguous/other* D-lactic acidosis (D-la) symptoms as a function of age and sex.

### Other supplementary material for this manuscript includes the following:

Additional file 1: Supplementary Table 1 (excel file) Demographic and clinical data summary of D-lactic acidosis episodes (n = 59) included in the qualitative synthesis.

Legend: All episodes simultaneously reported at least one high D-lactate level (from blood or urine analysis) and documented neurological symptoms. Episodes were screened for information about patient demographics, neurological symptoms, non-neurological symptoms, D-lactate levels, L-lactate levels, anion gap, pH levels, microbial composition, proposed triggers, medical history/comorbid conditions and treatment. Numbers in brackets (1) and (2) indicate separate episodes for the same patient. The letters *a* and *b* identify different patient cases reported in the same reference. Episodes from non-SBS patients are marked with an asterix (\*).

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**Supplementary Table 2.** Episodes that reported *matching* or *ambiguous/other* D-lactic acidosis (D-la) symptoms as a function of age and sex.

ME/CFS ICC	D-la <sub>b</sub> symptom overlap with ME/CFS	<b>Episode Case Numbers</b>					
		Paediatric (≤ 17 years)			Adult (≥ 18 years)		
		Male	Female	NI	Male	Female	
Α.	Matching	14, 48, 50, 66,	40	-	36, 42	12b, 13, 58b,	
Postexertional		53, 8, 47a, 47b				39	
neuroimmune							
exhaustion	Ambiguous/other	-	-	-	-	-	
B.	Matching	48, 47a, 30,	37, 17, 51b,	11	12a, 10, 29,	6, 16 <sub>1</sub> , 16 <sub>2</sub> , 65,	
Neurological		19, 52, 56, 66,	4, 40, 35		44, 58a, 25,	20, 34 <sub>2</sub> , 57,	
impairments		43, 53, 14, 50,			24, 49, 64, 59,	28, 41, 58b,	
		8			25, 42, 62, 9,	60, 21, 12b,	
					15, 23, 27, 33	13, 34 <sub>1</sub>	
	Ambiguous/other	43, 56, 66, 14,	35, 37	11	9, 29, 44, 58a,	57, 21, 13, 31,	
		18, 51a, 8, 19,			42, 64, 15, 24,	39, 58b, 43 <sub>2</sub> ,	
		48, 53, 30			25, 49, 55, 23,	6, 16 <sub>1</sub> , 16 <sub>2</sub> , 65,	
					26, 10, 62, 27,	20, 34 <sub>1</sub> , 12b	
					33		
	Ambiguous/other	43, 56, 66	35	11	9, 29, 44, 58a,	57, 21, 13, 31,	
	B1-B4				42, 64, 15, 24,	39, 58b	
					25, 49, 33		
	Speech/Language	14, 48, 66, 53,	37, 35	11	10, 15, 44, 62,	6, 16 <sub>1</sub> , 16 <sub>2</sub> , 65,	
		8, 30, 19			64, 9, 23, 25,	20, 34 <sub>1</sub> , 57,	
					58a, 27, 33	21, 12b	
	Consciousness	14, 18, 51a, 8,	-	-	55, 9, 23, 26,	34 <sub>2</sub> , 57, 21	
		19			49		
C. Immune,	Matching	50, 47b, 66	-	-	10, 62, 42, 44,	162, 60, 161,	
gastrointestinal					36, 15	65	
and genitourinary	Ambiguous/other	-	-	-	-	-	

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<b>D.</b> Energy	Matching	56, 66, 48,	51b, 17, 35	-	55, 42, 25, 49,	60, 39
production/		51a, 52, 8, 43,			9, 29, 62	
transportation		19				
impairments	Ambiguous/other	-	-	-	42, 23	-
Mood /	Matching	52, 53	40	-	9, 10	60, 31, 16 <sub>2</sub>
Behavior	Ambiguous/other	50, 56, 30, 66,	-	-	44, 58a, 62, 33	31, 58b, 20
		53, 19				
Uncategoriz	zed D-la Symptoms					
	Metabolic	14, 18, 48, 50,	35, 51b, 37,	11	10, 15, 29, 44,	6, 12b, 16 <sub>1</sub> ,
	acidosis	51a, 52, 66,	40, 4, 17		55, 62, 64, 9,	16 <sub>2</sub> , 60, 65,
		53, 56, 8, 43,			12a, 23, 24,	13, 20, 31,
		47a, 47b, 30,			25, 26, 49,	34 <sub>1</sub> , 34 <sub>2</sub> , 57,
		19			58a, 59, 27,	58b, 21, 28, 41
					36, 42, 33	
	Other	66, 43, 47a,	-	-	9, 2, 15, 26,	16 <sub>1</sub> , 58b
	abnormalities	47b			59, 33	

ambiguous/other: symptoms that were not clearly identified as consistent with ME/CFS presentation (see Table 2 for detailed symptom delineation); D-la: D-lactic acidosis; ICC: International Consensus Criteria; matching: mapped overlap between ME/CFS and D-la symptoms; ME/CFS: myalgic encephalomyelitis/chronic fatigue syndrome; NI: sex not identified.

Legend. Subscript numbers (1 and 2) indicate separate episodes for the same patient. The letters a and b identify different patient cases reported in the same reference. ME/CFS broad category B. Neurological impairments are highlighted as the primary focus of this review and to show three subcategories of delineation under *ambiguous/other* symptoms (i.e., in accordance with specific ICC criteria (B1 – B4), speech/language symptoms, and level of consciousness; see Table 2). Therefore, the same episode code number can be shown several times to represent multiple symptoms during each D-la episode (see Table 1 for references). Descriptions of drunkenness were referred to in several studies. Adult males self-reported *feeling* "drunk" (12a, 27) whereas females were described as *appearing* "drunk" (161, 162, 20,

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58b). Rather than using this ambiguous term, the specific symptoms that were also referred to in each of these studies were categorized in the table. See Table 3 for a summary of symptom frequencies.