TABLE 1: Common Long COVID symptoms and differential diagnoses to consider during assessment<sup>†</sup>

Symptom Category	Common Symptoms	<b>Differential Diagnoses to Consider</b> (New, Worsening, or Underlying)
Physical fatigue <sup>2</sup>	Severe exhaustion after minimal physical, cognitive, or emotional exertion     The sense of being weighed down all day     Post-exertional malaise (PEM)/Post-exertional symptom exacerbation (PESE): "Crashing" after having a "good day" of increased activity level, requiring several days of recovery.      Persistent tiredness or exhaustion after sleep/upon waking	<ul> <li>MCAS<sup>52</sup></li> <li>Autoimmune/inflammatory disorders</li> <li>Cardiopulmonary disorders</li> <li>Sleep disorders/deprivation</li> <li>Psychiatric disorders</li> <li>Medication side effects</li> <li>Malignancies</li> </ul>
Breathing, respiratory <sup>4</sup>	<ul> <li>Dyspnea at rest or disproportionate dyspnea with activity</li> <li>Chest discomfort: pain, tightness, constriction, and/or pressure</li> <li>Inability to take a full deep breath</li> <li>New or progressive cough or chest congestion</li> </ul>	Non-pulmonary contributions (e.g., neurologic, cardiovascular, neuromuscular) Other pulmonary and airway conditions (e.g., asthma)
Cardiovascular <sup>5</sup>	<ul> <li>Chest pain, palpitations, or racing heart</li> <li>Dyspnea, exercise intolerance, fatigue, dizziness</li> <li>Autonomic dysfunction</li> <li>Leg swelling, orthopnea</li> </ul>	Complex arrhythmias     Structural heart disease and/or ventricular dysfunction     Coronary heart disease     Myocarditis/pericarditis
Autonomic <sup>6</sup>	<ul> <li>Dizziness or lightheadedness with postural changes</li> <li>Pre-syncopal or syncopal episodes</li> <li>Any other autonomic symptoms (e.g., racing heart, temperature intolerance, changes to digestion, perspiration)</li> </ul>	<ul> <li>Vertigo or other vestibular pathology</li> <li>Sleep disorders/deprivation</li> <li>MCAS</li> <li>Cardiac abnormalities</li> <li>Small fiber neuropathy</li> <li>Hypermobility spectrum disorders</li> </ul>
Cognitive impairment <sup>3</sup>	Executive function, processing speed, memory, attention, word-finding difficulty (a.k.a., brain fog)     Mental fatigue: Decrease in cognitive ability when participating in tasks requiring sustained attention and executive function     Cognitive symptoms independent of deficits from primary sleep dysfunction (e.g., daytime sleepiness) or lack of motivation	<ul> <li>B12 deficiency</li> <li>Hypothyroidism</li> <li>Mood disorders</li> <li>Sleep disorders/deprivation</li> <li>ADHD</li> <li>Underlying infectious etiology (e.g., latent syphilis)</li> </ul>
Mental health <sup>9</sup>	Depression, especially anhedonia Anxiety, including panic PTSD, which can manifest as grief, survivor's remorse, or suicidal ideation Psychosis, OCD (less common)	Cardiorespiratory disorders     Cognitive or sleep disorders     Primary fatigue or dysautonomia     Primary or other secondary causes of mental health symptoms
Neurologic <sup>8</sup>	<ul> <li>Neuropathic pain or other sensation (e.g., internal feeling of vibration, change in pain/temperature sensation)</li> <li>Muscle or joint pain</li> <li>Headaches</li> <li>Sleep dysfunction</li> <li>Focal or diffuse weakness, tremors, or gait changes</li> <li>Changes in hearing, vision, taste, smell, swallowing (i.e., cranial nerve abnormalities)</li> </ul>	Small fiber neuropathy Central nervous system lesions (e.g., vasculitis, stroke, demyelinating or neurodegenerative conditions) Peripheral nervous system lesions (e.g., AIDP, GBS) Vitamin deficiency (e.g., B1, B6, B12) Paraneoplastic conditions (e.g., NMDA receptor encephalitis) Sleep disorders/deprivation

†Other symptoms not in this table can also be associated with Long COVID, including vision changes and eye redness; tinnitus; smell and taste changes; abdominal pain, bowel habit changes, and heartburn; rashes and hair loss; symptoms of mast cell dysfunction such as with MCAS (e.g., episodic itching, flushing, hives, rhinitis, tachycardia, dyspnea, abdominal pain, diarrhea, and/or headache);<sup>62</sup> and changes in menstrual cycles and fertility.<sup>63</sup>

Abbreviations: PEM (post-exertional malaise), PESE (post-exertional symptom exacerbation), MCAS (mast cell activation syndrome), ADHD (attention-deficit/hyperactivity disorder), PTSD (post-traumatic stress disorder), OCD (obsessive-compulsive disorder), AIDP (acute inflammatory demyelinating polyneuropathy), GBS (Guillain-Barré Syndrome), NMDA (N-methyl-D-aspartate).



