

# Multidisciplinary collaborative guidance on the assessment and treatment of patients with Long COVID: A compendium statement

**TABLE 3: Labs and procedures (See Table 1 for differential diagnoses)**

Symptom Category	Assessment Details
<b>Holistic assessment</b> (Recommended for all patients)	<ul style="list-style-type: none"> <li>To rule out other (potentially treatable) conditions<sup>†‡</sup> <ul style="list-style-type: none"> <li>CBC with diff; CMP; TSH</li> <li>Also consider: ESR; CRP; CK; vitamins D, B1, and B12</li> </ul> </li> </ul>
<b>Physical fatigue</b> 	<ul style="list-style-type: none"> <li>To identify treatable contributors, consider:           <ul style="list-style-type: none"> <li>Ferritin, iron profile</li> <li>Testosterone, estradiol<sup>§¶</sup></li> </ul> </li> </ul>
<b>Breathing and respiratory sequelae</b> 	<ul style="list-style-type: none"> <li>If not already performed, consider:           <ul style="list-style-type: none"> <li>Chest XR</li> </ul> </li> <li>If breathing discomfort not improving <math>\geq</math> 8 weeks after acute COVID-19 infection, or if new/worsened breathing discomfort later in Long COVID course, consider:           <ul style="list-style-type: none"> <li>PFTs (FEV1/VC and DLCO)</li> <li>EKG, echocardiogram</li> </ul> </li> <li>If pulmonary exam, chest XR, or PFT abnormalities, consider:           <ul style="list-style-type: none"> <li>Non-contrast chest CT</li> </ul> </li> </ul>
<b>Cardiovascular complications<sup>§</sup></b> 	<ul style="list-style-type: none"> <li>If chronic chest pain present and concern for myocarditis, consider:           <ul style="list-style-type: none"> <li>Troponin (preferably high-sensitivity)</li> </ul> </li> <li>If concern for decompensated heart failure, consider:           <ul style="list-style-type: none"> <li>BNP (preferably NT-proBNP)</li> </ul> </li> <li>If concern for PE, consider:           <ul style="list-style-type: none"> <li>D-dimer</li> </ul> </li> <li>If not already performed, consider:           <ul style="list-style-type: none"> <li>EKG, chest XR</li> <li>Cardiac MRI (for myocarditis, if chronic chest pain and positive troponin)</li> <li>Echocardiogram (for heart failure/valve abnormalities)</li> <li>CT PE protocol (for PE)</li> </ul> </li> <li>If concern for arrhythmia, consider:           <ul style="list-style-type: none"> <li>Holter monitor for symptoms nearly daily</li> <li>14-day monitor for symptoms every few days</li> <li>Implantable event monitor for infrequent symptoms</li> </ul> </li> <li>If initial work-up is unrevealing and/or to guide activity plan, consider:           <ul style="list-style-type: none"> <li>Cardiopulmonary stress test</li> </ul> </li> </ul>
<b>Autonomic dysfunction</b> 	<ul style="list-style-type: none"> <li>If concerned for PE, consider D-dimer</li> <li>To identify treatable contributors, consider if relevant: <sup>‡</sup> <ul style="list-style-type: none"> <li>Autoimmune: ANA, RF, Sjogren's Syndrome panel, antiphospholipid antibodies</li> <li>Iron deficiency: Ferritin, iron profile</li> </ul> </li> <li>If recurrent palpitations, tachycardia, or syncope, consider basic cardiac work-up (See Table 9 [Cardiac table])</li> <li>If negative 10-minute stand test, consider tilt table test           <ul style="list-style-type: none"> <li>Tilt table test is not required to diagnose or treat autonomic dysfunction and can cause a symptom flare</li> </ul> </li> </ul>
<b>Cognitive impairment</b> 	<ul style="list-style-type: none"> <li>To rule out other conditions, consider:           <ul style="list-style-type: none"> <li>Thiamine, folate, homocysteine, magnesium, RPR, HIV</li> <li>Neuroimaging based on history, exam, and lab findings</li> </ul> </li> </ul>
<b>Mental health</b> 	(See Table 12 for mental health screening tools)
<b>Neurologic sequelae</b> 	<ul style="list-style-type: none"> <li>To rule out other conditions, consider:           <ul style="list-style-type: none"> <li>HgbA1c, vitamin B6, magnesium, RPR, HIV</li> </ul> </li> <li>Consider neuroimaging based on history, exam, and lab findings           <ul style="list-style-type: none"> <li>Consider consultation with a neurologist to guide imaging and further testing</li> </ul> </li> </ul>

