Box 1a: Initial investigation of children with suspected PIMS-TS

1. Children presenting to hospital with fever, abdominal pain, gastro-intestinal, respiratory or neurological symptoms who are not unstable and have no other clear cause for their symptoms should have the following initial blood tests performed to help to identify whether they have PIMS-TS: Full blood count*; C-Reactive Protein*; Urea, creatinine and electrolytes*; Liver function tests*

Footnote: The current definition for PIMS-TS includes persistent fever as a presenting complaint. As more cases are reported this may change but currently most experts feel that PIMS-TS should only be considered in febrile children. The ongoing study by the British Paediatric Surveillance Unit will provide further details around this.

Box 1b: Second – line investigations for children with suspected PIMS-TS

Haematological and biochemical investigation of children who meet the criteria for PIMS-TS

1. In addition to the tests above, children presenting with features which meet the criteria for PIMS-TS should have measurement of the following blood tests within 12 hours of admission: Blood gas and lactate**; Fibrinogen*; Ferritin*; D-Dimer*; Troponin*; N-terminal pro-B-type natriuretic peptide (NT-proBNP)**; Lactate Dehydrogenase***

2. SARS-CoV-2 reverse transcriptase polymerase chain reaction (RT-PCR) test on an appropriate respiratory sample and SARS-CoV-2 serology*

3. Septic and viral screen* (lumbar puncture only if specifically indicated**)

4. 12 lead Electrocardiogram (ECG)*

5. Chest Radiograph*

6. Echocardiogram*

7. In children with abdominal pain who meet the criteria for PIMS-TS and require imaging, abdominal ultrasound scan should be the first-line investigation to rule out alternative diagnoses such as appendicitis.**

8. Echocardiogram is not routinely recommended for children presenting with symptoms which do not meet the criteria for PIMS-TS.**

9. Children who are physiologically unstable should have a daily echocardiogram.*

10. There is no consensus about the frequency of subsequent echocardiograms for physiologically stable children with PIMS-TS. We recommend that this is determined by a paediatric cardiologist based on the previous echocardiography findings, the clinical status of the patient and the change in blood markers of inflammation.

11. All children with coronary artery dilatation should be discussed with a paediatric cardiologist.*

12. Contrast enhanced computed tomography of the coronary vessels is not routinely recommended for children with PIMS-TS.*

* determined in phase 2
** determined in phase 3
*** determined during consensus meeting

Figure 2. Investigation of children with suspected PIMS-TS