Stillbirth investigations

Core investigations

**Maternal**
- History—medical, obstetric, social, family, travel infectious diseases risk areas
- Examination
- Kleihauer-Betke or flow cytometry

**Baby**
- External examination
- Anthropometric measurements
- Clinical photographs
- Standard radiographic, CT or MRI babygram
- Full autopsy
  - If no parental consent partial autopsy* should be considered

**Placenta and cord (fresh and unfixed)**
- Macroscopic examination
- Histopathology
- Chromosomal micro-array

Findings

**Personal/family history of VTE**

**Pruritus (without rash) in pregnancy and/or Risk factors for obstetric cholestasis**

LGA

HbA1c

SGA

HbA1c

CMV

APS** tests

Infections as indicated:
- Rubella
- Syphilis
- Zika
- Malaria

Check:
- Blood group and antibody screen
- Kleihauer/flow cytometry result
- Parvovirus

Hydropic

Anaemic

Jaundiced

Fetal anomalies

Check:
- Chromosomal micro-array result
- Infections as indicated
  - Rubella
  - Syphilis
  - Zika
- Consider clinical genetics review

Placental abruption/infarction

APS** tests

Infection

Check:
- PPROM history
- Cervical insufficiency if chorioamnionitis
- Infections as indicated

**APS tests—Antiphospholipid syndrome tests**
- Anticardiolipin antibodies
- Lupus anticoagulant
- Anti-B2 glycoprotein-1 antibodies

*Partial autopsy may be minimally invasive or non-invasive depending on parents wishes and consent
Includes:
- Above except full autopsy
- Needle biopsies, laparoscopic autopsy or access to tissue from small incisions

Refer also to PSANZ guidelines

Abbreviations: APS Antiphospholipid syndrome; CMV Cytomegalovirus; CT: Computed tomography; HbA1c: Glycated haemoglobin; LFTs: Liver function tests; LGA: large for gestational age; MRI: Medical resonance imaging; PPROM: Preterm prolonged rupture of membranes; PSANZ: Perinatal Society of Australia and New Zealand; SGA: small for gestational age; VTE: venous thromboembolism