

## Pathology

### Definitive diagnosis of MPM on effusion cytology specimens

- Effusion cytology for definitive diagnosis of MPM remains a controversial topic and is still generally not recommended [IV, C].
- If effusion cytology is frankly malignant, the diagnosis may be strongly suggested but confirmation by biopsy, if possible, is recommended [A, no level of evidence].
- IHC is invaluable to characterise the nature of atypical effusion cells and sample preparation to facilitate IHC should be carried out if at all possible [A, no level of evidence].

### Definitive diagnosis of MPM on tissue biopsy specimens

- The recognition of tissue invasion is required for definitive diagnosis of MPM [IV, A].
- Larger and directly targeted biopsy samples facilitate definitive diagnosis. Surgical-type samples are preferred for diagnosis [IV, A].
- A major subtype diagnosis (epithelioid, biphasic, sarcomatoid) should be given in all cases of MPM [IV, A].

### IHC in the diagnosis of MPM

- IHC is recommended for all primary diagnoses of MPM [IV, A].
- At least two 'mesothelial' markers and at least two '(adeno)carcinoma' markers should be used [V, A].
- Sarcomatoid MPM often does not express usual 'mesothelial' markers [IV, A].