Class 1/2 certification – Investigation of Suspected Coronary Artery Disease

Suspected coronary artery disease (note 1)

Unfit

Cardiology review (note 2)
Shall require:
- Exercise ECG or Coronary Calcium Score (CCS) (note 3)
May require:
- 24 hour ECG (note 4)
- Echocardiogram (note 5)

Abnormal exercise ECG or CCS >100

CCS 1-100
CCS 0

Abnormal result

Abnormal result

Normal result

Normal result

New abnormal or abnormal result

Shall require: Angiogram (note 7)

Shall require: Myocardial perfusion scan, MRI perfusion scan or Stress echocardiogram (note 6)

Results acceptable to the AMS (note 8)

No significant disease Class 1/2 unrestricted
Minor disease Class 1 OML / Class 2 unrestricted or OSL

Follow-up (note 9)

NOTES:

1) Includes symptoms of chest pain/angina, breathlessness, abnormal resting ECG, and/or accumulation of cardiovascular risk factors. Class 1 pilots without symptoms may continue to fly at discretion of AMS.

2) By a cardiology specialist.

3) Exercise ECG - should be symptom limited to a minimum of Bruce stage 4 or equivalent, with no evidence of myocardial ischaemia or significant rhythm disturbance.

4) 24 hour ECG - may be necessary to evaluate any significant rhythm disturbance on resting or exercise ECG.

5) Echocardiogram – may be necessary to assess myocardial structure/function and show no important abnormality of wall motion and a LV ejection fraction of 50% or more.

6) Myocardial perfusion scan, MRI perfusion scan, or stress echocardiogram (dobutamine or exercise) - showing no evidence of reversible ischaemia. Cases with suspicion of reversible ischaemia or silent infarction require angiographic evidence to decide if anatomical and functional evidence are congruent.

7) Angiogram - An invasive angiogram will normally be required. If a CT angiogram is performed it will only be acceptable when the coronary calcium score is less than 400 (this is to ensure good imaging of the vessels) and the anatomical requirements stated in note 8 are met.

8) The cardiology report will be reviewed by the Authority Medical Section (AMS) for class 1 or AME for Class 2. It may be necessary to see the investigations, in which case the actual tracings/films/videos will be requested. Further investigations may be required. In difficult cases a secondary review panel will be convened.

There shall be no stenosis more than 50% in any major vessel. More than two stenoses between 30% and 50% within the vascular tree should not be acceptable. The whole coronary vascular tree shall be assessed (particular attention should be paid to multiple stenoses). A stenosis greater than 30% in the left main or the proximal left anterior descending coronary artery should not be acceptable.

A normal angiogram (no stenoses >10%) is compatible with unrestricted certification. Class 1 certification of asymptomatic acceptable minor disease may require a multi-pilot limitation (OML). Unrestricted Class 2 certification is possible with acceptable minor disease; a safety pilot (OSL) restriction may be appropriate in borderline cases.

9) Periodic follow-up (normally annual) for established disease shall include a specialist cardiology review, cardiovascular risk assessment and an acceptable exercise ECG (as in note 3 above).

PLEASE PRINT THIS DOCUMENT AND TAKE TO YOUR SPECIALIST ADVISOR