

Class 1/2 Certification - Brugada

Brugada pattern seen on ECG (note 1)

NOTES:

- 1) Diagnostic criteria for Brugada pattern: ST segment abnormalities in leads V1-3.

	Type 1	Type 2	Type 3
J point	≥ 2mm	≥ 2mm	≥ 2mm
T wave	Negative	Positive or biphasic	Positive
ST-T configuration	Coved type	Saddleback	Saddleback
ST segment (terminal portion)	Gradually descending	Elevated ≥ 1mm	Elevated < 1mm

Asymptomatic type 1 and type 2 cases may continue to fly Class 1 OML / Class 2 unrestricted.

- 2) Type 1 cases need review by a cardiologist. Investigations should include:

Exercise ECG: to the Bruce protocol or equivalent. The test should be to maximum effort or symptom limited. Bruce stage 4 should be achieved and no significant abnormality of rhythm or conduction, nor evidence of myocardial ischaemia shall be demonstrated. Withdrawal of cardioactive medication prior to the test should be considered (not beta-blockade for atrial fibrillation).

24-hour ambulatory ECG: shall demonstrate no significant rhythm or conduction disturbance.

Echocardiogram: shall show no significant selective chamber enlargement, or significant structural or functional abnormality, and a left ventricular ejection fraction of at least 50%.

Cardiac MRI: should exclude ARVD.

The cardiology report(s) will be reviewed by the Authority Medical Section (AMS). It may be necessary to see the investigations, in which case the actual results will be requested. In difficult cases a secondary review panel of cardiologists may be convened.

Type 1 cases who are symptomatic or have evidence of tachyarrhythmia shall be assessed as unfit.

- 3) At least annual ECG. All ECGs performed to be submitted to the AMS for reading by CAA Cardiologist.

- 4) Applicants wanting to be considered for unrestricted Class 1 will need to undergo a challenge test consisting of Ajmaline 1mg/kg over 5 minutes intravenously or Flecainide 2mg/kg over 15 minutes (maximum dose 150mg).

Indications for termination are to be determined by the prescriber; they may include:

- Development of Type 1 Brugada ECG
- Greater than or equal to 2mm increase in ST elevation in patients with Type 2 Brugada ECG
- The development of VPBs or other arrhythmias
- Widening of QRS greater than or equal to 30% above baseline

If acceptable, applicants will be considered for unrestricted Class 1. If Type 1 changes seen during Ajmaline or Flecainide challenge, the applicant will need to comply with Note 2.

Type 1

Cardiological Review (note 2)

Type 1 (persistent or intermittent) with symptoms or history of:
 1) Documented VF or VT or
 2) Syncope suggestive of tachyarrhythmia or
 3) Nocturnal agonal respiration

Unfit

Type 1 (persistent or intermittent) and asymptomatic

**Class 1 OML
Class 2 unrestricted**

Type 2 (persistent or intermittent) and asymptomatic

**Class 1 OML
Class 2 unrestricted (note 3)**

unsatisfactory ajmaline/flecainide challenge (note 4)

Type 3 (persistent or intermittent) and asymptomatic

Satisfactory ajmaline/flecainide challenge (note 4)

Class 1/2 unrestricted (note 3)

