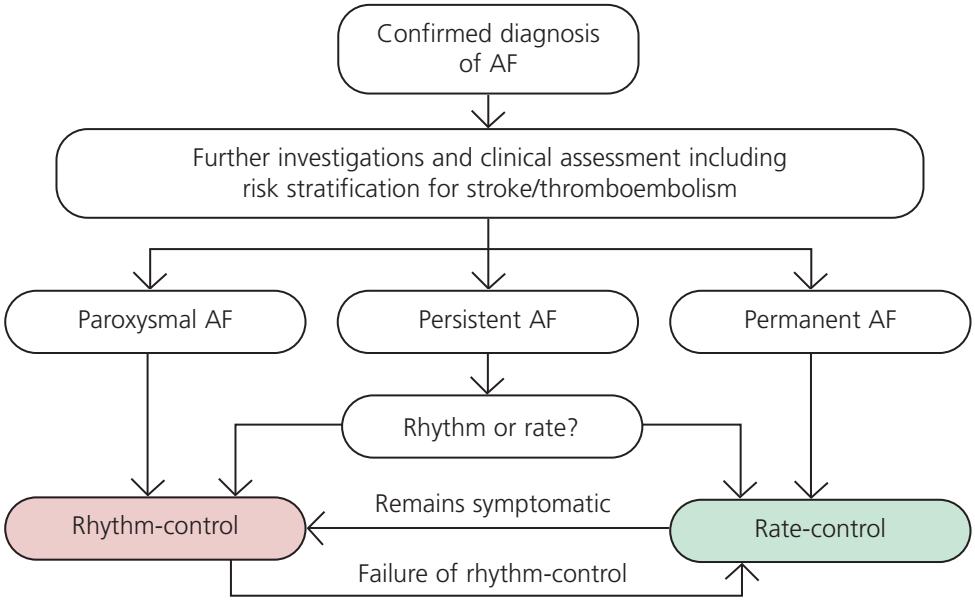
Treatment strategy decision tree



Try rhythm-control first for patients with persistent AF:

- who are symptomatic
- who are younger
- presenting for the first time with lone AF
- secondary to a treated or corrected precipitant
- with congestive heart failure.

Try rate-control first for patients with persistent AF:

- over 65
- with coronary artery disease
- with contraindications to antiarrhythmic drugs
- unsuitable for cardioversion[3].

In all cases:

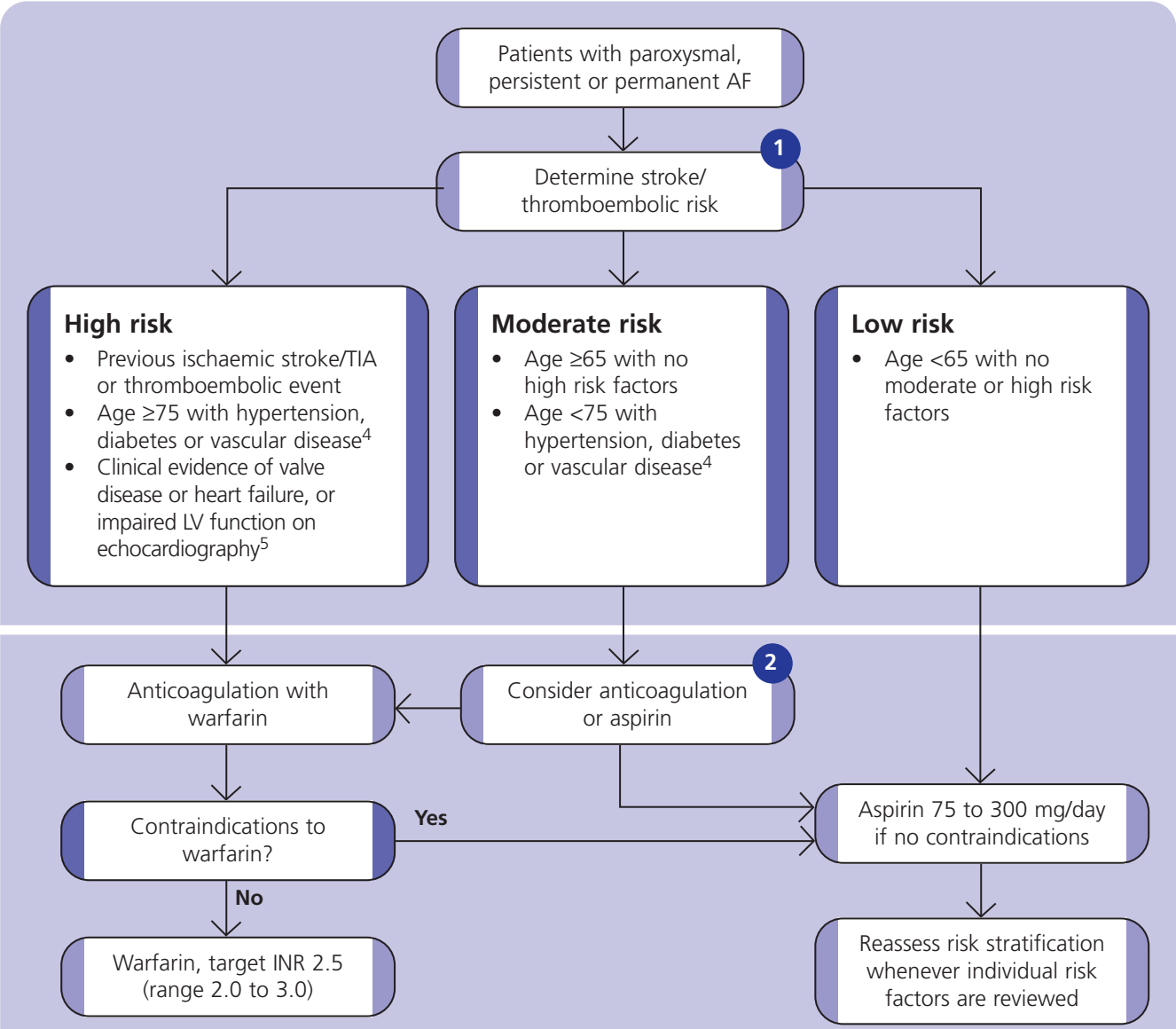
- explain the advantages and disadvantages of each strategy to the patient before you decide which to use
- take into account comorbidities when deciding which to use
- use appropriate antithrombotic therapy.

- For rhythm-control, see pages 11 and 15.
- For rate-control, see page 14.

[3]Patients unsuitable for cardioversion include those with: contraindications to anticoagulation; structural heart disease (e.g. large left atrium >5.5 cm, mitral stenosis) that precludes long-term maintenance of sinus rhythm; a long duration of AF (usually >12 months); a history of multiple failed attempts at cardioversion and/or relapses, even with concomitant use of antiarrhythmic drugs or non-pharmacological approaches; an ongoing but reversible cause of AF (e.g. thyrotoxicosis).

Stroke risk stratification and thromboprophylaxis

Stroke risk stratification



1 Note that risk factors are not mutually exclusive, and are additive to each other in producing a composite risk. Since the incidence of stroke and thromboembolic events in patients with thyrotoxicosis appears similar to that in patients with other aetiologies of AF, antithrombotic treatments should be chosen based on the presence of validated stroke risk factors.

2 Owing to lack of sufficient clear-cut evidence, treatment may be decided on an individual basis, and the physician must balance the risks and benefits of warfarin versus aspirin. As stroke risk factors are cumulative, warfarin may, for example, be used in the presence of two or more moderate stroke risk factors. Referral and echocardiography may help in cases of uncertainty.

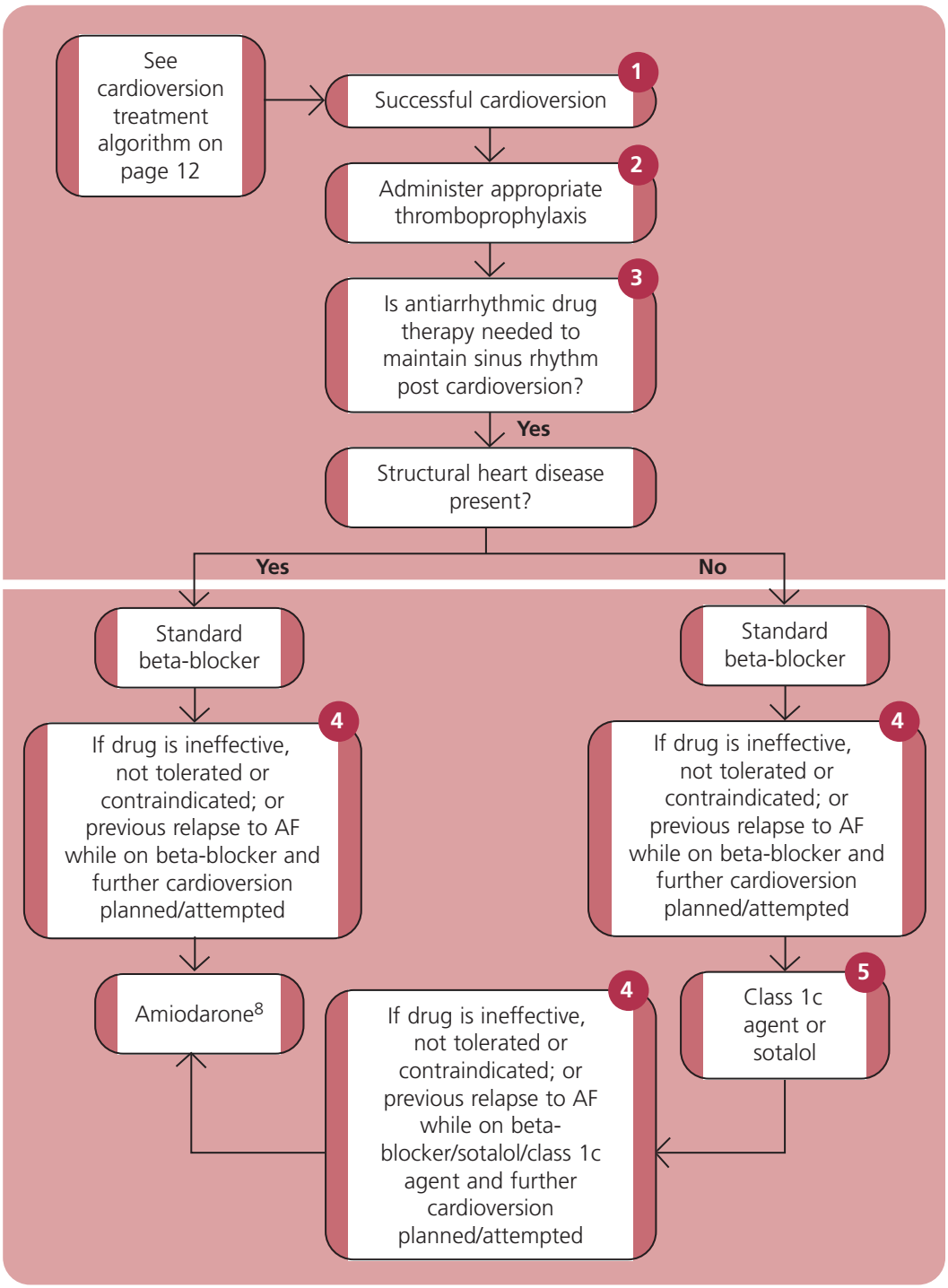
[4]Coronary artery disease or peripheral artery disease.

[5]An echocardiogram is not needed for routine assessment, but refines clinical risk stratification in the case of moderate or severe LV dysfunction and valve disease.

Treatments for AF

Rhythm-control for persistent AF, including cardioversion

Rhythm-control treatment



1 Patients with persistent AF who have been selected for a rhythm-control treatment strategy.

2 Based on stroke risk stratification algorithm and cardioversion treatment algorithm.

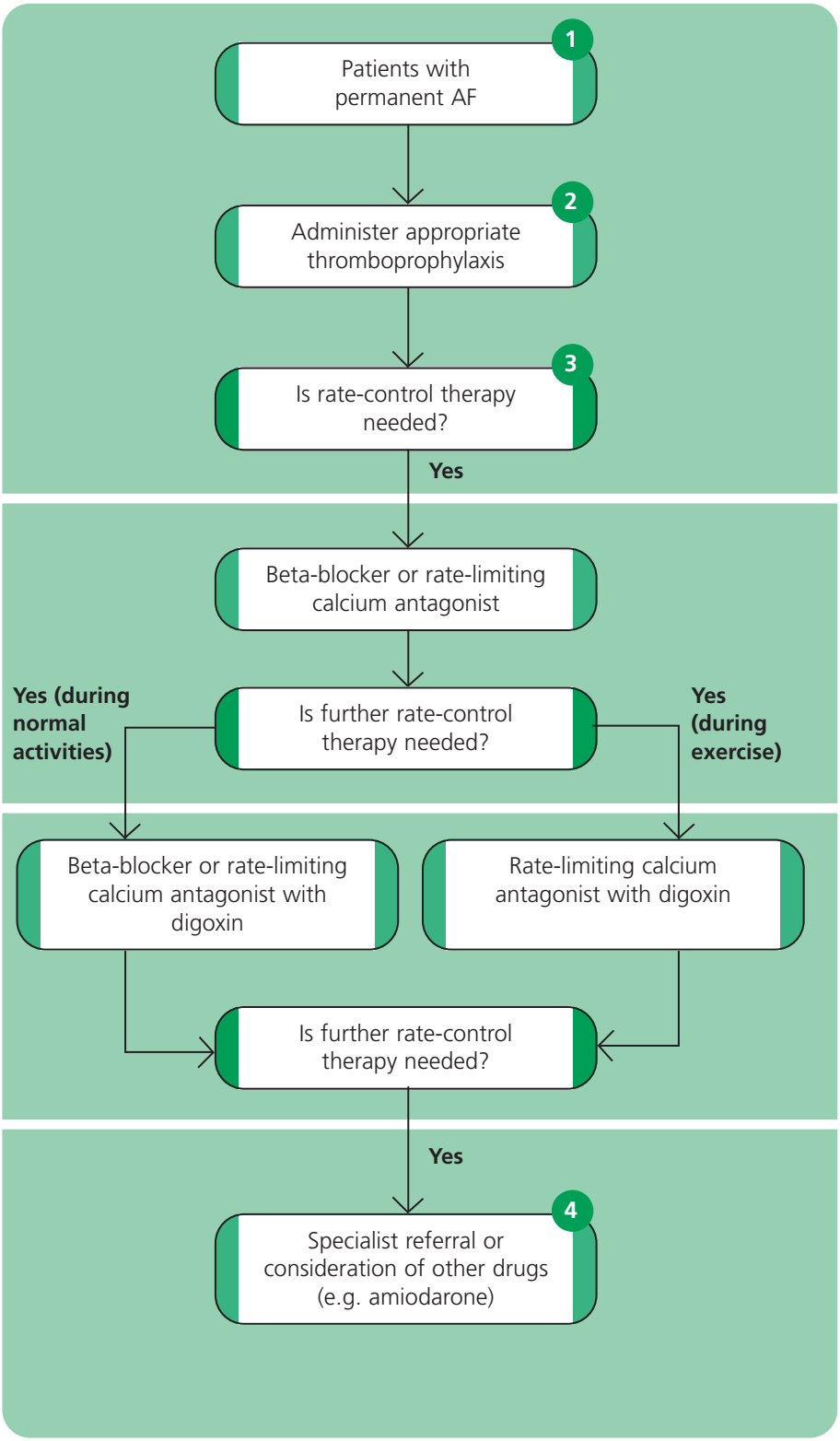
3 An antiarrhythmic drug is not required to maintain sinus rhythm for those patients in whom a precipitant (such as chest infection, fever etc.) has been corrected and cardioversion has been performed successfully.

4 Routine follow-up to assess the maintenance of sinus rhythm should take place at 1 and 6 months post cardioversion. Any patients found at follow-up to have relapsed back into AF should be fully re-evaluated for a rate-control or rhythm-control strategy[8].

5 Class 1c agents include flecainide and propafenone. Sotalol to be progressively titrated from 80 mg twice daily up to 240 mg twice daily.

[8] If rhythm-control fails, consider the patient for rate-control strategy, or specialist referral for those with lone AF or ECG evidence of underlying electrophysiological disorder (e.g. Wolff–Parkinson–White [WPW] syndrome).

Rate-control for persistent and permanent AF



1 Patients with permanent AF includes those with persistent AF who have been selected for a rate-control treatment strategy.

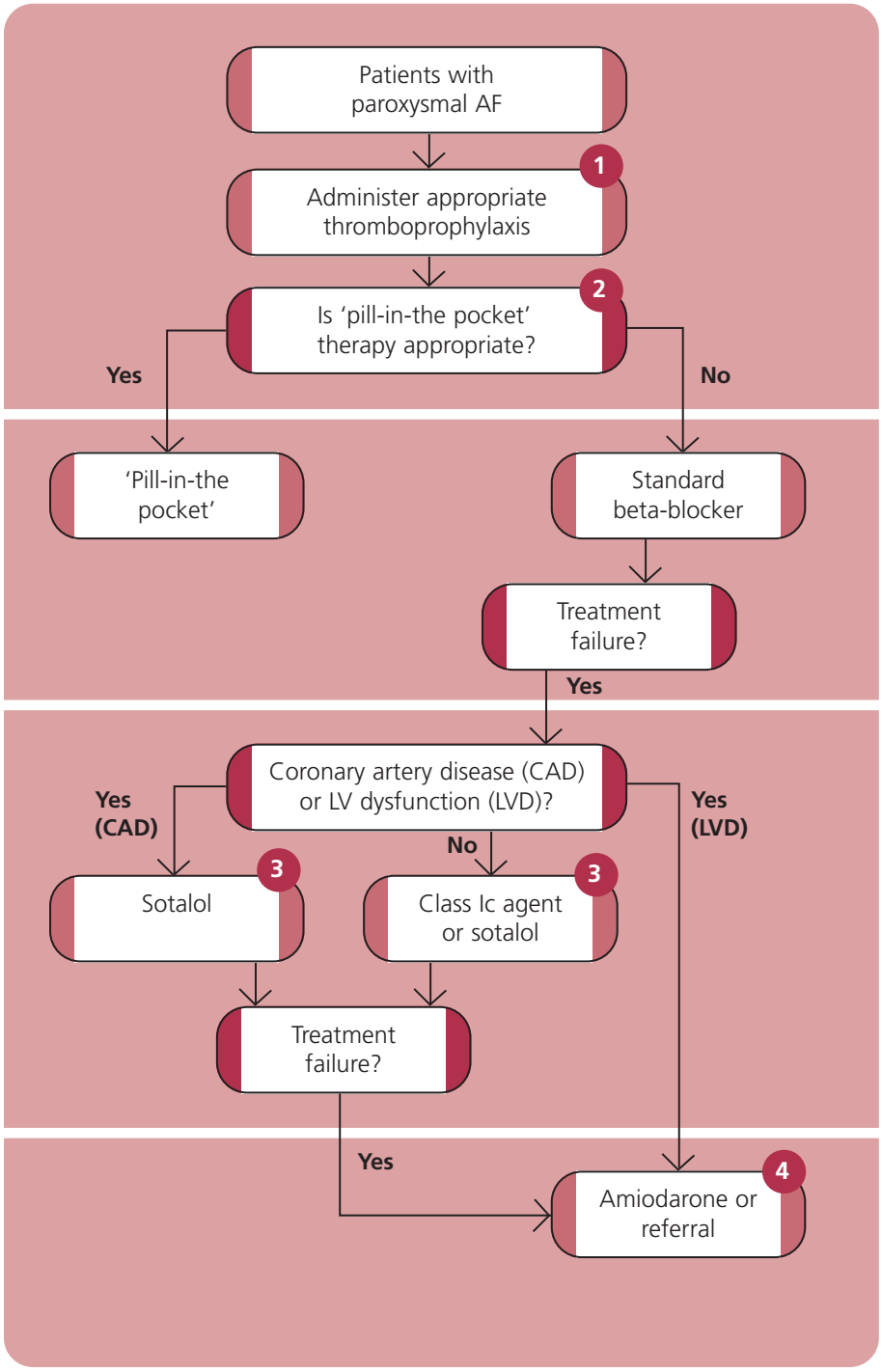
2 Based on stroke risk stratification algorithm (see page 7).

3 Target a resting heart rate of less than 90 bpm (110 bpm for those with recent-onset AF). Target an exercise heart rate of less than 110 bpm (inactive), 200 minus age (active).

4 Referral for further specialist investigation should be considered especially in those with lone AF or ECG evidence of an underlying electrophysiological disorder (e.g. WPW syndrome) or where pharmacological therapy has failed.

Rhythm-control for paroxysmal AF

Treatment



1 Based on stroke risk stratification algorithm (see page 7).

2 Consider a 'pill-in-the-pocket' strategy for those who i) have no history of LV dysfunction, or valvular or ischaemic heart disease, ii) have a history of infrequent symptomatic episodes of paroxysmal AF, iii) have a systolic blood pressure > 100 mmHg and a resting heart rate above 70 bpm, iv) are able to understand how and when to take the medication.

3 Sotalol to be progressively titrated from 80 mg twice daily up to 240 mg twice daily.

4 Referral for further specialist investigation should be considered, especially in those with lone AF or ECG evidence of an underlying electrophysiological disorder (e.g. WPW syndrome) or where pharmacological therapy has failed.

Long-term review

- Keep patients who are on long-term medication for paroxysmal AF under review to assess the need for continued treatment and the development of any adverse effects.