Choice of rate-control agent in Atrial Fibrilation

Comorbidity	First-line	Second-line	Less effective or desirable
No heart disease	Beta-blockers* OR Calcium channel blockers**		Digoxin*** (can be first-line in people unlikely to be active)
Hypertension	Beta-blockers* OR Calcium channel blockers**		Digoxin***
Ischaemic heart disease	Beta-blockers*	Calcium channel blockers** OR Digoxin***	Ablation and pacing
Congestive Heart Failure	Digoxin in overt heart failure Carvedilol or metoprolol in stable heart failure	Beta-blockers* (excluding carvedilol and metoprolol) OR Diltiazem	Amiodarone Ablation and pacing should be considered
COPD	Calcium channel blockers**	Beta-blockers* (unless there is reversible bronchospasm)	Digoxin***

* excluding sotalol
** diltiazem or verapamil
*** as monotherapy (can be used in combination with other rate-control agents)

Oral pharmacological agents for rate control in people with atrial fibrillation/atrial flutter

Drug	Oral loading dose	Onset of action	Commonly used oral maintenance doses	Adverse effects	Comments
Beta-blockers					
Atenolol	N/A	2 - 3 hr	25 - 50 mg	Hypotension, heart block, bradychardia, asthma, heart failure	In people with heart failure lower doses may be advisable (negative inotropic effect)
Carvedilol	N/A	60 - 90 min	6.25 - 25 mg/bd		
Metoprolol	N/A	4 - 6 hr	23.75 - 200 mg/day*		
Nadolol	N/A	3 - 4 hr	20 - 80 mg/day		
Propranolol	N/A	60 - 90 min	80 - 240 mg/day		
Calcium channel blockers					
Diltiazem	N/A	1 - 4 hr	120 - 360 mg/day	Hypotension, heart block, heart failure	In people with heart failure, lower doses may be advisable
Verapamil	N/A	1 - 2 hr	120 - 360 mg/day	Hypotension, heart block, heart failure, digoxin interaction	In people with heart failure, lower doses may be advisable (negative inotropic effect)
Other					
Digoxin	0.5 - 1.0 mg	2 hr	0.0625 - 0.375 mg/day	Digoxin toxicity, heart block, bradychardia	First-line therapy only for people unlikely to be active (e.g, older people or infirm) and for people with heart failure. Less effective in hyperadrenergic states
Amiodarone	400 - 800 mg/day for 1 week	1 - 3 week	200 mg/day	Photosensitivity and other skin reactions, pulmonary toxicity, polyneuropathy, gastrointestinal upset, bradychardia, hepatic toxicity, thyroid dysfunction, torsades de pointes (rare)	Although there is fairly good evidence of efficacy, this is an agent of last resort in this indication, due to its long-term toxicity

* The controlled release presentation of metoprolol is most commonly used.
N/A = Not applicable

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