Algorithm C: Pharmacological management of asthma in people aged 12 years and over BTS, NICE and SIGN guideline on asthma

Take into account and try to address the possible reasons for uncontrolled asthma before starting or adjusting medicines for asthma. For example: alternative diagnoses or comorbidities; suboptimal adherence; suboptimal inhaler technique; active or passive smoking (including e-cigarettes); psychosocial factors; seasonal factors; environmental factors (such as air pollution and indoor mould exposure)

Symptom relief

MART

Maintenance therapy

When changing from low- or moderatedose ICS (or ICS/LABA combination inhaler) plus supplementary therapy to MART, consider whether to stop or continue the supplementary therapy based on the degree of benefit achieved when first introduced

Existing diagnosis of asthma on the treatment pathway recommended by previous NICE and BTS/SIGN guidelines SABA only If asthma is uncontrolled on low-dose ICS; low-dose With a ICS/LABA; low-dose ICS plus **SABA** LTRA; or low-dose ICS/LABA plus LTRA If asthma is uncontrolled on moderate-dose ICS; moderate-With a dose ICS/LABA; moderate-dose ICS plus LTRA and/or LAMA; SABA moderate-dose ICS/LABA plus LTRA and/or LAMA If asthma is uncontrolled on high-dose ICS Refer people to a specialist in asthma care

Newly diagnosed asthma in people aged 12 and over Offer low-dose ICS/formoterol combination inhaler to be taken as needed (AIR therapy) If highly If asthma is uncontrolled, offer symptomatic or there are severe Low-dose MART exacerbations, Consider If asthma is offer low-dose controlled, If asthma is uncontrolled, offer consider **MART** stepping Moderate-dose MART down Consider If asthma is uncontrolled, despite good adherence Refer people to Check FeNO level, if available, and blood eosinophil count a specialist in If either is raised asthma care If neither is raised Consider a trial of either LTRA or LAMA used in addition to moderate-dose MART for 8 to 12 weeks unless there are side effects. At the end of the trial: if asthma is controlled, continue the treatment • if control has improved but is still inadequate, continue If asthma is uncontrolled the treatment and start a trial of the other medicine (LTRA or LAMA) if control has not improved, stop the LTRA or LAMA

i

Uncontrolled asthma: Any exacerbation requiring oral corticosteroids or frequent regular symptoms (such as using reliever inhaler 3 or more days a week or night-time waking 1 or more times a week)

British
Thoracic
Society

NICE National Institute for
Health and Care Excellence

LAMA)

ICS, inhaled corticosteroid; LABA, long-acting beta₂ agonist; LAMA, long-acting muscarinic receptor antagonist; LTRA, leukotriene receptor antagonist; MART, maintenance and reliever therapy (using ICS/formoterol combination inhalers); SABA, short-acting beta₂ agonist.

and start a trial of the alternative medicine (LTRA or

