

ASTHMA: Diagnosis and Chronic Management in Adults and Adolescents 12+ years

Key Facts

- Most common chronic non-communicable disease.
- Most of the morbidity and mortality associated with asthma is preventable, particularly with use of inhaled corticosteroids.
- Single Maintenance and Reliever Therapy (also called SMART or MART) using Budesonide-formoterol is now recommended from step 1.

Clinical Presentation

Breathlessness, wheeze, chest tightness, or cough that is:

- ✓ Worse at night and early morning
- ✓ Comes with/after exercise
- ✓ Come with allergen exposure or cold air.
- ✓ Come on after taking aspirin/beta-blockers

Investigation

- ✓ A good history is more important than any test. Focus on the features above (Xrays and blood tests only helpful if another condition suspected)
- ✓ Spirometry is the gold standard for diagnosis, but rarely necessary and currently not available in Kijabe.
- ✓ Trial of treatment with SABA (as needed) and 8 weeks of inhaled steroids can be used to confirm the diagnosis.

NOTE: In adults over 35 years, exclude COPD which also presents with cough/wheeze but lacks the pattern described above. (See separate COPD protocol)

Management

Transfer patient to Casualty if features of Asthma exacerbation: unstable vitals, patient can't complete sentences, difficulty in breathing with use of accessory muscles.

Management of chronic stable asthma

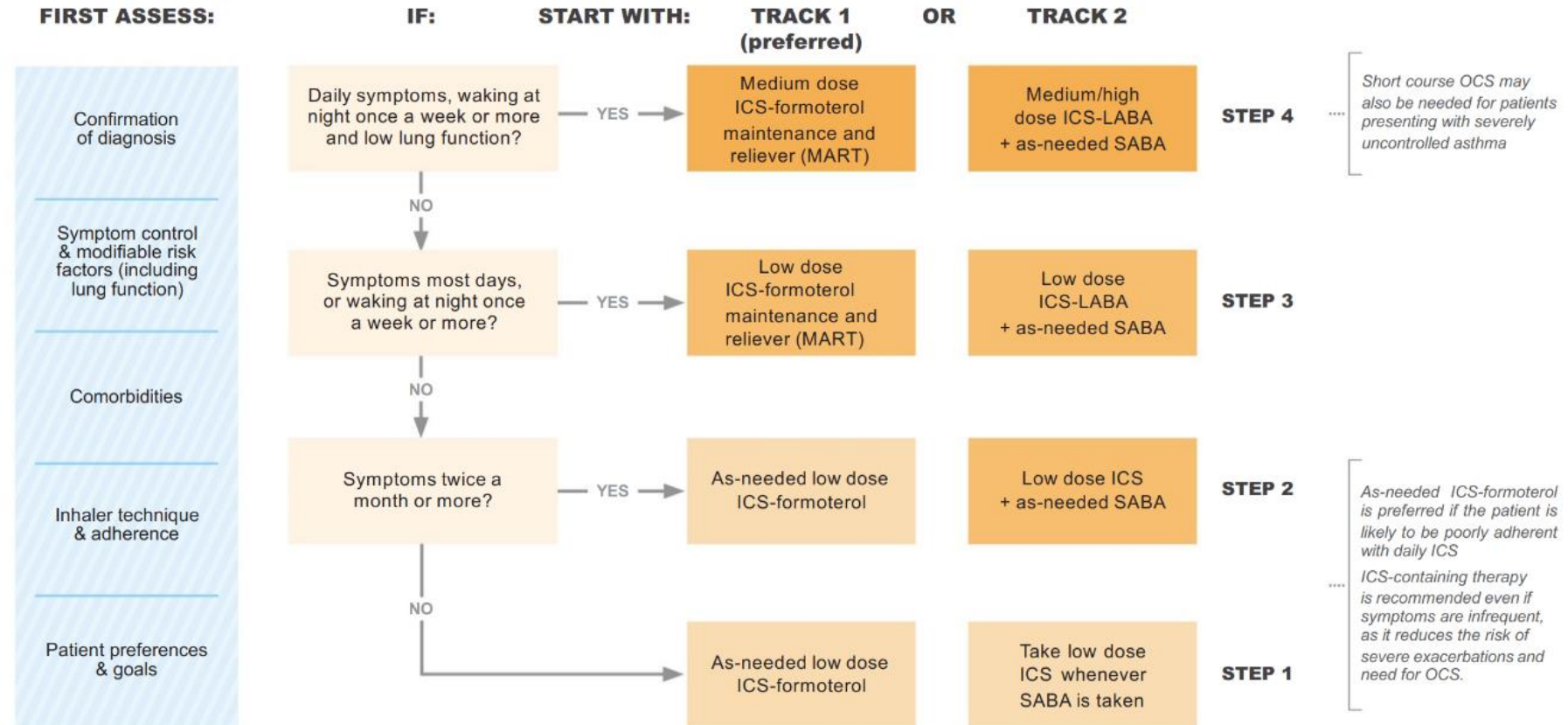
See attached GINA 2021 stepwise management on the next page.

- ✓ Seek OPD consultant advice before escalating to step 3.
- ✓ A spacer device should **always** be used with an aerosol/MDI inhaler
- ✓ Check inhaler/spacer technique before escalating to the next step (see separate protocol on 'Inhaler technique in asthma and COPD').
- ✓ Track 1 is the preferred option, but where cost is a challenge, track 2 is cheaper.



STARTING TREATMENT

in adults and adolescents 12+ years with a diagnosis of asthma



Bronchodilators available in Kijabe Pharmacy:

Class	Drug	Dose
SABA (Short acting beta agonist)	Salbutamol 100mcg	200mcg as needed
ICS (Inhaled corticosteroids)	Beclomethasone 100mcg	Low dose: 200-500mcg/day Medium dose: 500-1000mcg/day High dose: >1000mcg/day
ICS+LABA	Budesonide+Formoterol 200+6 or 400+6 Inhaler Budesonide+Formoterol 160/4.5mcg Turbuhaler	Low dose: 200-400mcg/day Medium dose: 400-800mcg/day High dose: >800mcg/day

Red flags: Must be discussed with consultant

- Before going to step 3
- Other cardiovascular comorbidities
- Abnormal vital signs

- Asthma in pregnancy
- Asthma not responding to reliever medication

References:

2019 Primary Care International COPD Clinical Guide
Global Initiative for Asthma (GINA) 2021 Guideline