Asthma + Respiratory FOUNDATION NZ

ADULT ASTHMA

GUIDE SUMMARY

This summary provides busy health professionals with key guidance for assessing and treating adult asthma.

Its source document "**Asthma and Respiratory Foundation NZ Adult Asthma Guidelines**" is available for download at ***nzasthmaguidelines.co.nz*** or ***asthmaandrespiratory.org.nz***

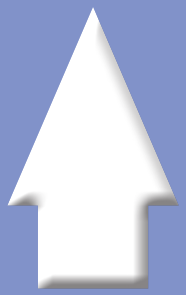
DIAGNOSIS

The diagnosis of asthma starts with the recognition of a characteristic pattern of symptoms and signs, in the absence of an alternative explanation.

The key to making the diagnosis of asthma is to take a careful clinical history, and then to undertake a clinical examination, document variable expiratory airflow limitation and assess response to inhaled bronchodilator and/or inhaled corticosteroid (ICS) treatment. There is no reliable single 'gold standard' diagnostic test.

Clinical features that increase or decrease the probability of asthma in adults

Asthma **more** likely



- Two or more of these symptoms:
  - Wheeze (most sensitive and specific symptom of asthma)
  - Breathlessness
  - Chest tightness
  - Cough
- Symptom pattern:
  - Typically worse at night or in the early morning
  - Provoked by exercise, cold air, allergen exposure, irritants, viral infections, beta blockers, aspirin or other NSAIDs.
  - Recurrent or seasonal
  - Began in childhood
- History of atopic disorder or family history of asthma
- Widespread wheeze heard on chest auscultation
- Symptoms rapidly relieved by inhaled short-acting beta-2 agonist (SABA)
- Airflow obstruction on spirometry ($FEV_1/FVC < 0.7$)
- Increase in FEV_1 following bronchodilator, >10%; the greater the increase the greater the probability
- Variability in PEF over time (highest-lowest PEF/mean), >15%; the greater the variability the greater the probability

Asthma **less** likely

- Chronic productive cough in absence of wheeze or breathlessness
- No wheeze when symptomatic
- Normal spirometry or PEF when symptomatic
- Symptoms beginning later in life, particularly in people who smoke
- Increase in FEV_1 following bronchodilator, <10%; the lesser the increase the lower the probability
- Variability in PEF over time, <15%; the lesser the variability the lower the probability
- No response to trial of asthma treatment

Measurement of bronchial hyperresponsiveness, blood eosinophils and FeNo may be informative.

Asthma + Respiratory FOUNDATION NZ

STEPWISE APPROACH TO PHARMACOLOGICAL TREATMENT OF ADULT ASTHMA

In the stepwise approach to asthma management, patients step up and down as required to achieve and maintain control of their asthma and reduce the risk of exacerbations.

STEP UP to achieve control and reduce risk of exacerbations

STEP DOWN after a period of prolonged control to find and maintain lowest required step

At every step consider treatable traits, including overlapping disorders, comorbidities, environmental and behavioural factors

STEP 1
SABA reliever therapy

STEP 2
Maintenance standard dose ICS and SABA reliever therapy

STEP 3
Maintenance standard dose ICS/LABA and SABA reliever therapy
or
Standard dose Single ICS/LABA Maintenance and Reliever Therapy (SMART regimen)

STEP 4
Maintenance high dose (not standard) ICS/LABA and SABA reliever therapy
or
High dose (not standard) Single ICS/LABA Maintenance and Reliever Therapy (SMART regimen)

STEP 5
Maintenance high dose (not standard) ICS/LABA and SABA reliever therapy
or
High dose (not standard) Single ICS/LABA Maintenance and Reliever Therapy (SMART regimen)
and
Consider add on treatment and seek specialist advice

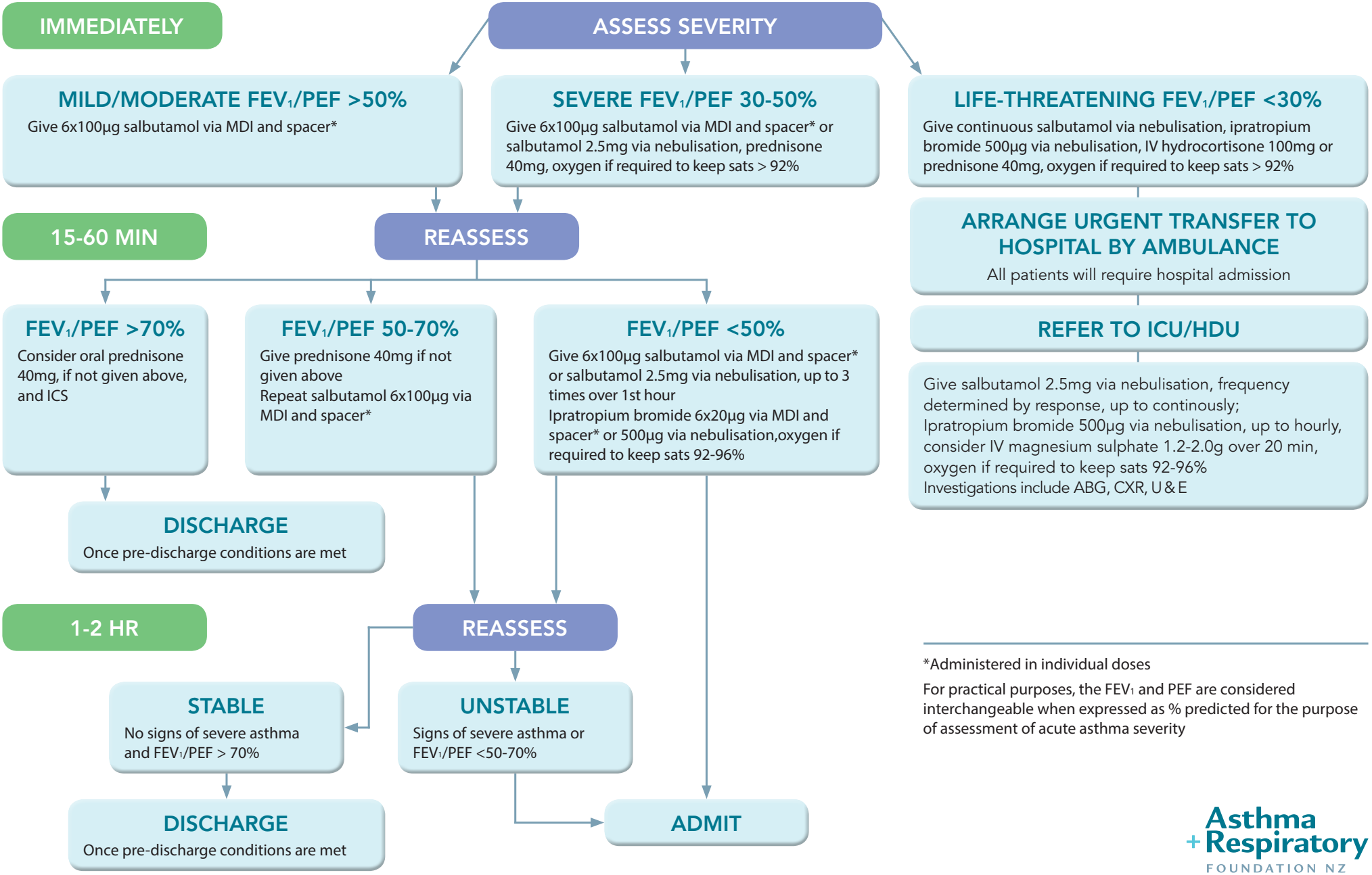
RECOMMENDED ICS/LABA DOSES IN ADULT ASTHMA

STEP 3		STEP 4 + 5	
FP/Salm 50/25 2 inh BD	+ SABA for relief	FP/Salm 125/25 2 inh BD	+ SABA for relief
FP/Salm 100/50 1 inh BD	+ SABA for relief	FP/Salm 250/50 1 inh BD	+ SABA for relief
Bud/Form 100/6 2 inh BD	+ SABA for relief	Bud/Form 200/6 2 inh BD	+ SABA for relief
Bud/Form 200/6 1 inh BD	+ SABA for relief	FF/Vilanterol 100/25 1 inh OD	+ SABA for relief
Or		[FF/Vilanterol 200/25 currently not funded]	
SMART regimen		*Or*	
Bud/Form 100/6 2 inh BD	+ 1 inh for relief	SMART regimen	
Bud/Form 200/6 1 inh BD	+ 1 inh for relief	Bud/Form 200/6 2 inh BD	+ 1 inh for relief
		[Bud/Form 400/12 is not recommended]	

FP/Salm: Fluticasone Propionate/Salmeterol; Bud/Form: Budesonide/Formoterol;
FF/Vilanterol: Fluticasone Furoate/Vilanterol; OD: once daily; BD: twice daily;
SMART: Single ICS/LABA Maintenance and Reliever Therapy

Asthma + Respiratory FOUNDATION NZ

ALGORITHM FOR MANAGEMENT OF SEVERE ASTHMA



*Administered in individual doses

For practical purposes, the FEV_1 and PEF are considered interchangeable when expressed as % predicted for the purpose of assessment of acute asthma severity

Asthma + Respiratory FOUNDATION NZ

THE FOUR STEP ADULT ASTHMA CONSULTATION

1 Assess asthma control

Complete the Asthma Control Test (ACT) score

20-25:	well controlled
16-19:	partly controlled
5-15:	poorly controlled

Review lung function tests

Peak flow monitoring and/or Spirometry

Review history of severe asthma attacks in last 12 months (requiring urgent medical review, oral steroids or bronchodilator nebuliser use)

2 Consider other relevant clinical issues

Ask about compliance with maintenance treatment

Check inhaler technique

Enquire about clinical features associated with an increased risk

Consider treatable traits

Decide whether peak flow monitoring is indicated

3 Decide if increase or decrease in maintenance therapy required

Is a step up in the level of treatment required if asthma is not adequately controlled, poor lung function or recent severe exacerbation?

Is a step down in the level of treatment possible if there has been a sustained period of good control?

Is a change to the SMART regimen required in patients prescribed ICS/LABA treatment who have had a recent severe exacerbation?

4 Complete the asthma action plan

Decide which plan to use:

- 3 stage maintenance ICS + SABA reliever
- 4 stage maintenance ICS + SABA reliever
  [This includes the instruction to increase dose and frequency of ICS in worsening asthma]
- 3 stage ICS/LABA + SABA reliever
- Single ICS/LABA Maintenance and Reliever Therapy [SMART]

For those with peak flow instructions, enter personal best recent peak flow and peak flow at each level in the plan. The recommended cut points of <80% for getting worse, <60 to 70% for severe asthma and <50% for an emergency are a reference guide only and can be adjusted according to clinical judgement depending on the patient.

Enter the prednisone regimen. The standard regimen in severe asthma is 40mg daily for 5 days. An alternative regimen is 40mg daily until there is definite improvement and then 20mg daily for the same number of days.

Enter additional instructions in the box provided. This may include avoidance of provoking factors such as aspirin.

Asthma + Respiratory FOUNDATION NZ

Better breathing,
better living

Level 3, Ranchhod Tower, 39 The Terrace, Wellington 6011 PO Box 1459, Wellington 6140
04 499 4592 04 499 4594 info@asthmaandrespiratory.org.nz asthmaandrespiratory.org.nz

Registered Charity CC53035

Asthma + Respiratory FOUNDATION NZ