

ASTMA

Update 2026

Samuel De Bontridder
Nikolaas De Maeyer

*Dichtbij
beter.*



ASTMA

1. Langetermijnmanagement
2. Acute exacerbaties
3. Verwijzen?

*Dichtbij
beter.*



GINA 2026 Resources



www.ginasthma.org

- GINA Strategy Report 2026
- GINA Slide Sets 2026
- GINA Podcasts 2026

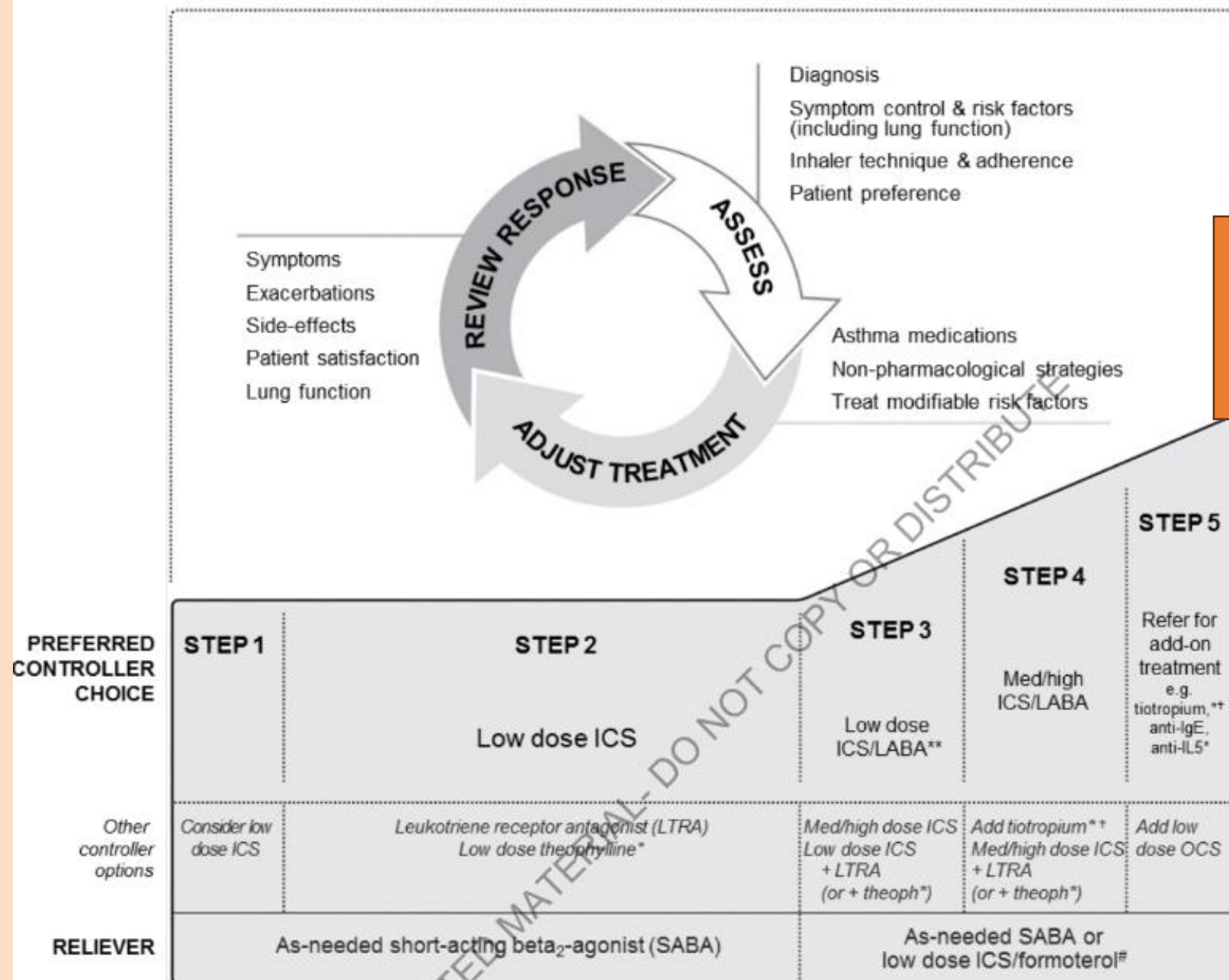


For more information, please visit
www.ginasthma.org

1. Langetermijnmanagement

- **Ongecontroleerd astma**
 - Frequente symptomen en/of exacerbaties.
 - *Mogelijk mild en relatief makkelijk behandelbaar astma*
- **Moeilijk behandelbaar astma (*difficult-to-treat asthma*)**
 - **≠ "moeilijke patiënt".**
 - ongecontroleerd **ondanks** behandeling met een **middelmatige of hoge dosis ICS-LABA**.
 - onjuiste diagnose; verkeerde inhalatietechniek; onvoldoende therapietrouw; comorbiditeiten; overmatig gebruik van SABA; andere beïnvloedbare risicofactoren.
- **Ernstig astma (*severe asthma*)**
 - ongecontroleerd **ondanks maximaal geoptimaliseerde behandeling** én aanpak van bijdragende factoren, **of verslechtert wanneer hoge dosis ICS wordt afgebouwd**
 - **retrospectieve diagnose**: pas nadat behandeling is geoptimaliseerd en beïnvloedbare factoren zo goed mogelijk zijn aangepakt

GINA 2018



GINA 2026 Adults & adolescents 12+ years

Personalized asthma management

Assess, Adjust, Review
for individual patient needs

GINA 2026

Symptoms
Exacerbations
Side-effects
Comorbidities
Lung function
Consider biomarkers
Patient (and parent/caregiver) satisfaction



Confirmation of diagnosis if necessary
Symptom control & modifiable risk factors
Comorbidities
Inhaler technique & adherence
Patient (and parent/caregiver) preferences and goals

Treatment of modifiable risk factors and comorbidities
Non-pharmacological strategies
Asthma medication including ICS
Education & skills training, action plan

TRACK 1: PREFERRED CONTROLLER and RELIEVER

Using ICS-formoterol* as the reliever reduces the risk of exacerbations compared with using a SABA reliever, and Track 1 is a simple, single inhaler, strategy

STEPS 1 – 2

AIR-only:* as-needed low dose ICS-formoterol

STEP 3

MART* with
low dose maintenance
ICS-formoterol

STEP 4

MART* with
medium dose
maintenance
ICS-formoterol

STEP 5

Consider add-on LAMA. Refer for assessment of phenotype. Consider trial of high dose maintenance ICS-formoterol. Consider anti-IgE, anti-IL5/5R, anti-IL4Rα, anti-TSLP

RELIEVER: As-needed low dose ICS-formoterol*

See GINA
severe
asthma guide

TRACK 2: Alternative CONTROLLER and RELIEVER

Before considering a regimen with a SABA reliever, check if the patient is likely to adhere to their ICS treatment

STEP 1

AIR-only:* as-needed low
dose ICS+SABA (combination
or separate inhalers)

STEP 2

Low dose
maintenance ICS

STEP 3

Low dose
maintenance
ICS-LABA

STEP 4

Medium dose
maintenance
ICS-LABA

STEP 5

Consider add-on LAMA. Refer for assessment of phenotype. Consider trial of high dose maintenance ICS-LABA. Consider anti-IgE, anti-IL5/5R, anti-IL4Rα, anti-TSLP

RELIEVER: As-needed low dose ICS-SABA* (or, if not available, as-needed SABA)

Symptoms
Exacerbations
Side-effects
Comorbidities
Lung function
Consider biomarkers
Patient (and parent/caregiver)
satisfaction



Confirmation of diagnosis if necessary
Symptom control & modifiable
risk factors
Comorbidities
Inhaler technique & adherence
Patient (and parent/caregiver)
preferences and goals

Treatment of modifiable risk factors
and comorbidities
Non-pharmacological strategies
Asthma medications including ICS
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FIGURE 6. Track 1 (preferred) treatment Steps 1–4 for adults and adolescents

GINA TRACK 1 example with
budesonide-formoterol 160/4.5 mcg
or BDP-formoterol 100/6 mcg,
by DPI or pMDI

STEPS 1 – 2

Take 1 inhalation as needed
(AIR-only*)

STEP 3

Take 1 inhalation morning
and evening, and 1 inhalation
as needed (Step 3 MART*)

STEP 4

Take 2 inhalations morning
and evening, and 1 inhalation
as needed (Step 4 MART*)

STEP 5

Refer for expert
assessment,
phenotyping,
and add-on
treatment for
severe asthma

See Box 4-8 for other formulations.

GINA TRACK 1: the **PREFERRED treatment for adults and adolescents.**

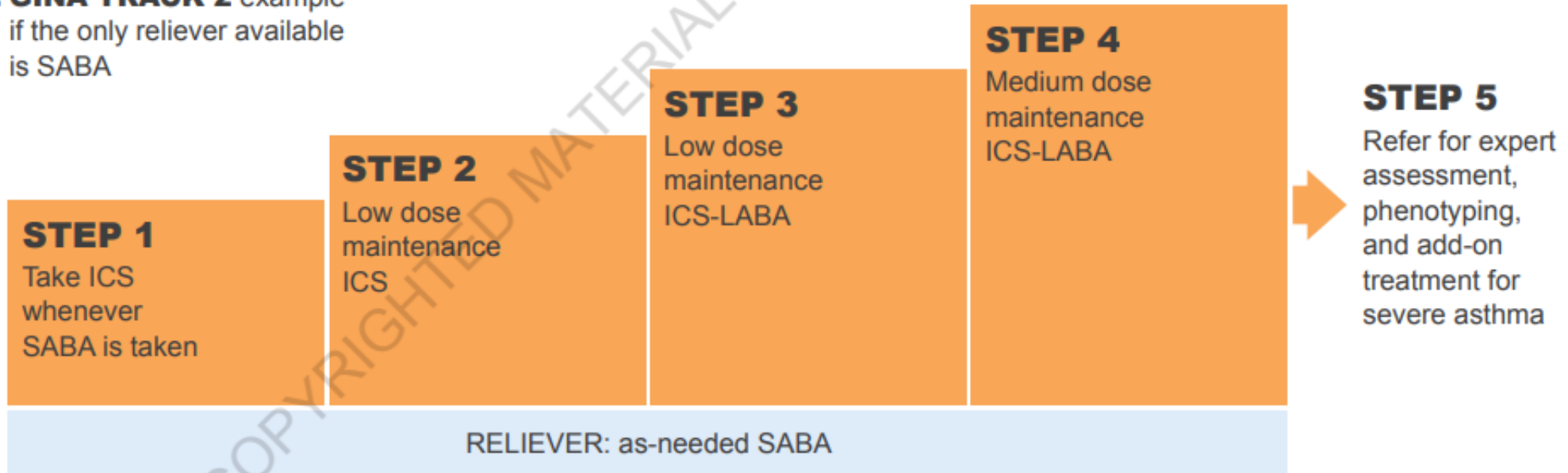
Using low dose ICS-formoterol as an anti-inflammatory reliever (AIR*), with or without maintenance ICS-formoterol, reduces the risk of exacerbations compared with using a SABA reliever, and is a simple regimen, with a single medication, device and dose across treatment steps.



ICS-formoterol?



B. GINA TRACK 2 example
if the only reliever available
is SABA



GINA TRACK 2: Alternative **CONTROLLER and **RELIEVER** for adults and adolescents, if the only reliever available is SABA.**

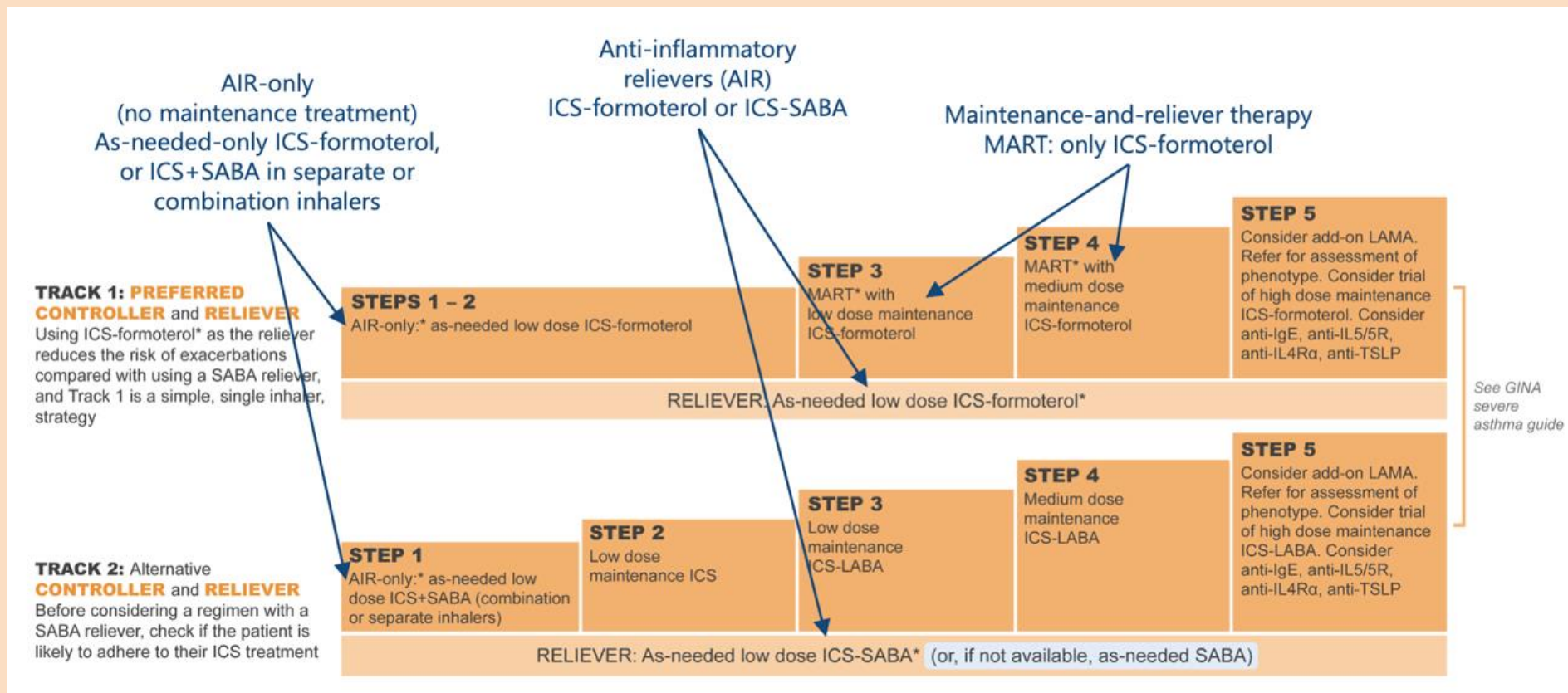
Before considering a regimen with SABA reliever, check if the patient is likely to adhere to daily ICS treatment. If controller and reliever are in different types of inhaler device, or if changing steps requires a change in device, train patient in the correct inhaler technique.

TABLE 3. Suggested initial treatment for adults and adolescents with asthma

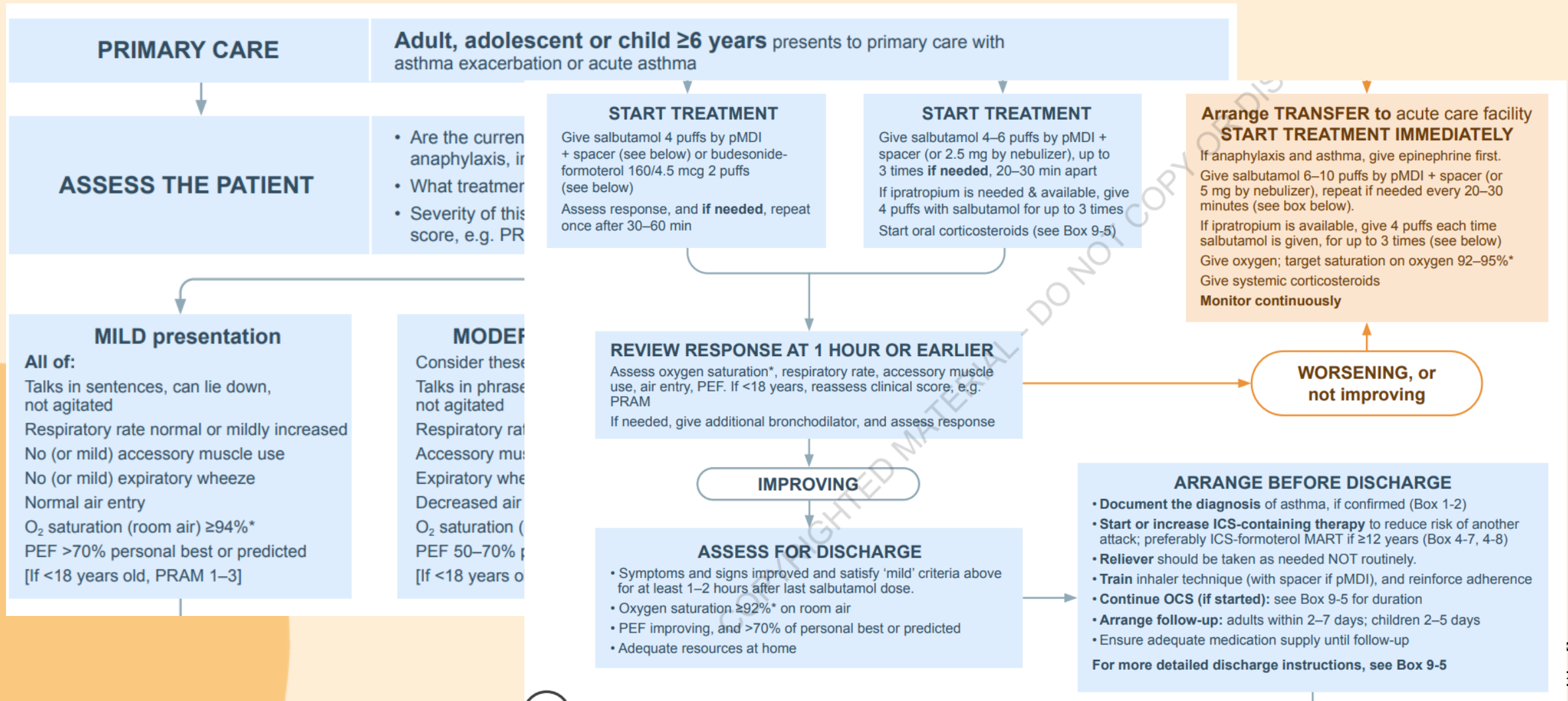
Presenting symptoms	Preferred INITIAL treatment (GINA Track 1)	Alternative INITIAL treatment (GINA Track 2)
Infrequent asthma symptoms (for example, 2 days/week or less)	As-needed low-dose ICS-formoterol	As-needed low-dose ICS+SABA in combination or separate inhalers
Asthma symptoms less than 3–5 days/week, with normal or mildly reduced lung function		Regular daily low-dose ICS, plus low-dose ICS-SABA or SABA as needed
Asthma symptoms most days (e.g., ≥ 4 days/week), or night waking due to asthma once a week or more, or low lung function.	Low-dose ICS-formoterol maintenance-and-reliever therapy (MART)	Regular daily low-dose ICS-LABA, plus low-dose ICS-SABA or SABA
Daily asthma symptoms or waking at night with asthma once a week or more, and with low lung function or recent exacerbation.	Medium-dose ICS-formoterol maintenance-and-reliever therapy (MART)	Regular daily medium-dose ICS-LABA, plus low-dose ICS-SABA or SABA
Initial asthma presentation is during an acute exacerbation	Treat exacerbation (page 34), including short course of OCS if severe; commence medium-dose MART	Treat exacerbation (page 34). Start medium-dose ICS-LABA, plus low-dose ICS-SABA or SABA as needed



Terminologie: AIR, AIR-only & MART



2. Aanpak exacerbaties



MILD presentation

All of:

Talks in sentences, can lie down,
not agitated

Respiratory rate normal or mildly increased

No (or mild) accessory muscle use

No (or mild) expiratory wheeze

Normal air entry

O₂ saturation (room air) ≥94%*

PEF >70% personal best or predicted

[If <18 years old, PRAM 1–3]

START TREATMENT

Give salbutamol 4 puffs by pMDI
+ spacer (see below) or budesonide-
formoterol 160/4.5 mcg 2 puffs
(see below)

Assess response, and **if needed**, repeat
once after 30–60 min

MODERATE presentation

Consider these features:

Talks in phrases, prefers sitting to lying,
not agitated

Respiratory rate increased but ≤30/min

Accessory muscle use

Expiratory wheezing

Decreased air entry

O₂ saturation (room air) ≥92%*

PEF 50–70% personal best or predicted

[If <18 years old, PRAM 4–7]

START TREATMENT

Give salbutamol 4–6 puffs by pMDI +
spacer (or 2.5 mg by nebulizer), up to
3 times **if needed**, 20–30 min apart

If ipratropium is needed & available, give
4 puffs with salbutamol for up to 3 times

Start oral corticosteroids (see Box 9-5)

START TREATMENT

Give salbutamol 4 puffs by pMDI + spacer (see below) or budesonide-formoterol 160/4.5 mcg 2 puffs (see below)

Assess response, and **if needed**, repeat once after 30–60 min

START TREATMENT

Give salbutamol 4–6 puffs by pMDI + spacer (or 2.5 mg by nebulizer), up to 3 times **if needed**, 20–30 min apart
If ipratropium is needed & available, give 4 puffs with salbutamol for up to 3 times
Start oral corticosteroids (see Box 9-5)

Arrange **TRANSFER** to acute care facility **START TREATMENT IMMEDIATELY**

If anaphylaxis and asthma, give epinephrine first.

Give salbutamol 6–10 puffs by pMDI + spacer (or 5 mg by nebulizer), repeat if needed every 20–30 minutes (see box below).

If ipratropium is available, give 4 puffs each time salbutamol is given, for up to 3 times (see below)

Give oxygen; target saturation on oxygen 92–95%*

Give systemic corticosteroids

Monitor continuously

REVIEW RESPONSE AT 1 HOUR OR EARLIER

Assess oxygen saturation*, respiratory rate, accessory muscle use, air entry, PEF. If <18 years, reassess clinical score, e.g. PRAM

If needed, give additional bronchodilator, and assess response

**WORSENING, or
not improving**

IMPROVING

ASSESS FOR DISCHARGE

- Symptoms and signs improved and satisfy 'mild' criteria above for at least 1–2 hours after last salbutamol dose.
- Oxygen saturation $\geq 92\%$ * on room air
- PEF improving, and $>70\%$ of personal best or predicted
- Adequate resources at home

ARRANGE BEFORE DISCHARGE

- **Document the diagnosis** of asthma, if confirmed (Box 1-2)
- **Start or increase ICS-containing therapy** to reduce risk of another attack; preferably ICS-formoterol MART if ≥ 12 years (Box 4-7, 4-8)
- **Reliever** should be taken as needed NOT routinely.
- **Train** inhaler technique (with spacer if pMDI), and reinforce adherence
- **Continue OCS (if started)**: see Box 9-5 for duration
- **Arrange follow-up**: adults within 2–7 days; children 2–5 days
- Ensure adequate medication supply until follow-up

For more detailed discharge instructions, see Box 9-5

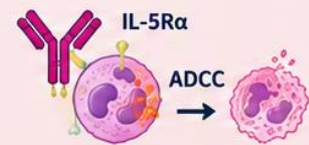
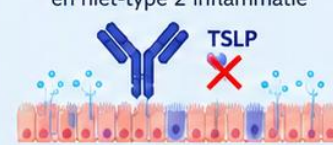
3. Verwijzen?

- Wie & Waarom?
 - Diagnostische twijfel of atypisch beloop
 - 25-35% astma in 1^e lijn zou verkeerde diagnose hebben
 - Differentieeldiagnose en overlap (COPD, bronchiolitis...)
 - Inschatten ernst / baseline evaluatie
 - Onvoldoende therapierespons / moeilijk behandelbaar astma
 - Toenemend aantal mogelijkheden biologicals
 - Complexiteit door comorbiditeiten

3. Verwijzen?

- Hoe?
 - Onder therapie = geen probleem bij gekende diagnose
 - Bloedanalyse?
 - Eosinofilie (basaal & op moment van klachten, zeker voor opstart corticoïden)
 - IgE totaal & specifiek
 - Huisstofmijt & Aspergillus Fumigatus
 - Timotheegras, berkenpollen, dierenepitheel (als & ifv blootstelling in omgeving)
- Documenteren van opstoten en gebruik corticoïden

3. Biologics: wat hebben we (tot zover)?

Biologics bij matig tot ernstig astma Werkingsmechanisme, indicaties, toediening en relevante comorbiditeiten					
	Omalizumab (Xolair®)	Mepolizumab (Nucala®)	Benralizumab (Fasenra®)	Dupilumab (Dupixent®)	Tezepelumab (Tezspire®)
Werkingsmechanisme en doelwit	Anti-IgE Bindt vrij IgE → ↓ binding aan FcεRI op mestcellen/basofielen 	Anti-IL-5 Neutraliseert IL-5 → ↓ overleving en activatie van eosinofielen 	Anti-IL-5Rα Bindt IL-5Rα → ADCC → depletie van eosinofielen 	Anti-IL-4Rα/13 Blokeert IL-4 en IL-13 signaal (type 2 inflammatie) 	Anti-TSLP Neutraliseert TSLP (epitheliale alarmin) → remt upstream type 2 en niet-type 2 inflammatie 
Belangrijkste indicatie/criteria (zoals in studies en richtlijnen)	Ongecontroleerde symptomen van allergisch astma met sensibilisatie voor een perenriaal (luchtweg)allergeen ondanks ICS-gebruik	Eosinofiel astma (AEC ≥ 150 cellen/μL) met exacerbaties (≥ 2 per jaar) ondanks gebruik van ICS-LABA	Eosinofiel astma (AEC ≥ 300 cellen/μL) met exacerbaties (≥ 2 per jaar) ondanks gebruik van hoge-dosis ICS-LABA	Eosinofiel astma (AEC ≥ 150) met steroidafhankelijkheid of met exacerbaties ondanks gebruik van ICS-LABA	Ongecontroleerd astma met exacerbaties ondanks gebruik van medium tot hoge dosis ICS-LABA (type 2 hoog of laag)
Toedieningsweg	Subcutaan	Subcutaan	Subcutaan	Subcutaan	Subcutaan
Dosering en interval	Elke 2 of 4 weken, volgens lichaamsgewicht en totaal IgE	100 mg elke 4 weken	30 mg elke 4 weken × 3, daarna elke 8 weken	200 mg of 300 mg elke 2 weken (overweeg startdosis)	210 mg elke 4 weken
Belangrijke comorbiditeiten (waar relevant en volgens richtlijnen)	CRSwNP; chronische spontane urticaria; IgE-gemedieerde voedselallergieën	CRSwNP; EGPA/HES (300 mg maandelijks doseringsregime)	EGPA (maandelijks doseringsregime)	Atopische dermatitis; CRSwNP; eosinofiele oesofagitis (300 mg wekelijks bij > 40 kg); COPD (AEC ≥ 300 cellen/μL)	CRSwNP
AEC = absolute eosinofientelling; ADCC = antibody-dependent cellular cytotoxicity; CRSwNP = chronische rinosinusitis met neuspoliepen; EGPA = eosinofiele granulomatose met polyangiitis; HES = hyper-eosinofiel syndroom; ICS = inhalatiecorticosteroïd; LABA = langwerkende β ₂ -agonist; IL-4Rα = IL-4 receptor alpha subunit; TSLP = thymic stromal lymphopoietin.					

Bedankt!

