**FIGURE 13. STEPWISE APPROACH FOR MANAGING ASTHMA LONG TERM IN CHILDREN, 0–4 YEARS OF AGE AND 5–11 YEARS OF AGE**

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
<th>Step 4</th>
<th>Step 5</th>
<th>Step 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intermittent Asthma</strong></td>
<td><strong>Persistent Asthma: Daily Medication</strong></td>
<td><strong>Assess control</strong></td>
<td>Step down if possible (and asthma is well controlled at least 3 months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preferred</strong></td>
<td>SABA PRTN</td>
<td>Low-dose ICS</td>
<td>Medium-dose ICS</td>
<td>Medium-dose ICS</td>
<td>High-dose ICS</td>
</tr>
<tr>
<td><strong>Alternative</strong></td>
<td>Cromolyn or Montelukast</td>
<td>Low-dose ICS</td>
<td>LABA or Montelukast</td>
<td>LABA or Montelukast</td>
<td></td>
</tr>
</tbody>
</table>

**Quick-Relief Medication**

- SABA as needed for symptoms. Intensity of treatment depends on severity of symptoms.
- With viral respiratory symptoms: SABA 0–4-6 hours up to 24 hours (longer with physician consult).
- Consider short course of oral systemic corticosteroids if exacerbation is severe or patient has history of previous severe exacerbations.
- Caution: Frequent use of SABA may indicate the need to step up treatment. See text for recommendations on initiating daily long-term control therapy.

**Children 0–4 Years of Age**

- The stepwise approach is meant to assist, not replace, the clinical decision making required to meet individual patient needs.
- If an alternative treatment is used and response is inadequate, discontinue it and use the preferred treatment before stepping up.
- If clear benefit is not observed within 4–6 weeks, and patient’s family’s management technique and adherence are satisfactory, consider adjusting therapy or an alternative diagnosis.
- Studies on children 0–4 years of age are limited. Step 2 preferred therapy is based on Evidence A. All other recommendations are based on expert opinion and extrapolation from studies in older children.
- Clinicians who administer immunotherapy should be prepared and equipped to identify and treat anaphylaxis that may occur.

**Key:** Alphabetical listing is used when more than one treatment option is listed within either preferred or alternative therapy. ICS, inhaled corticosteroid; LABA, inhaled long-acting beta-agonist; LTIG, leukotriene receptor antagonist; oral corticosteroids, oral systemic corticosteroids; SABA, inhaled short-acting beta-agonist.

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**Children 5–11 Years of Age**

- Steps 2–4: Consider subcutaneous allergen immunotherapy for patients who have persistent, allergic asthma.
- Quick-Relief Medication
  - SABA as needed for symptoms. Intensity of treatment depends on severity of symptoms: up to 3 treatments at 20-minute intervals as needed. Short course of oral systemic corticosteroids may be needed.

Caution: Increasing use of SABA or use >2 days a week for symptom relief (not prevention of EIB) generally indicates inadequate control and the need to step up treatment.

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From the 2007 NHLBI Guidelines for the Diagnosis and Treatment of Asthma