

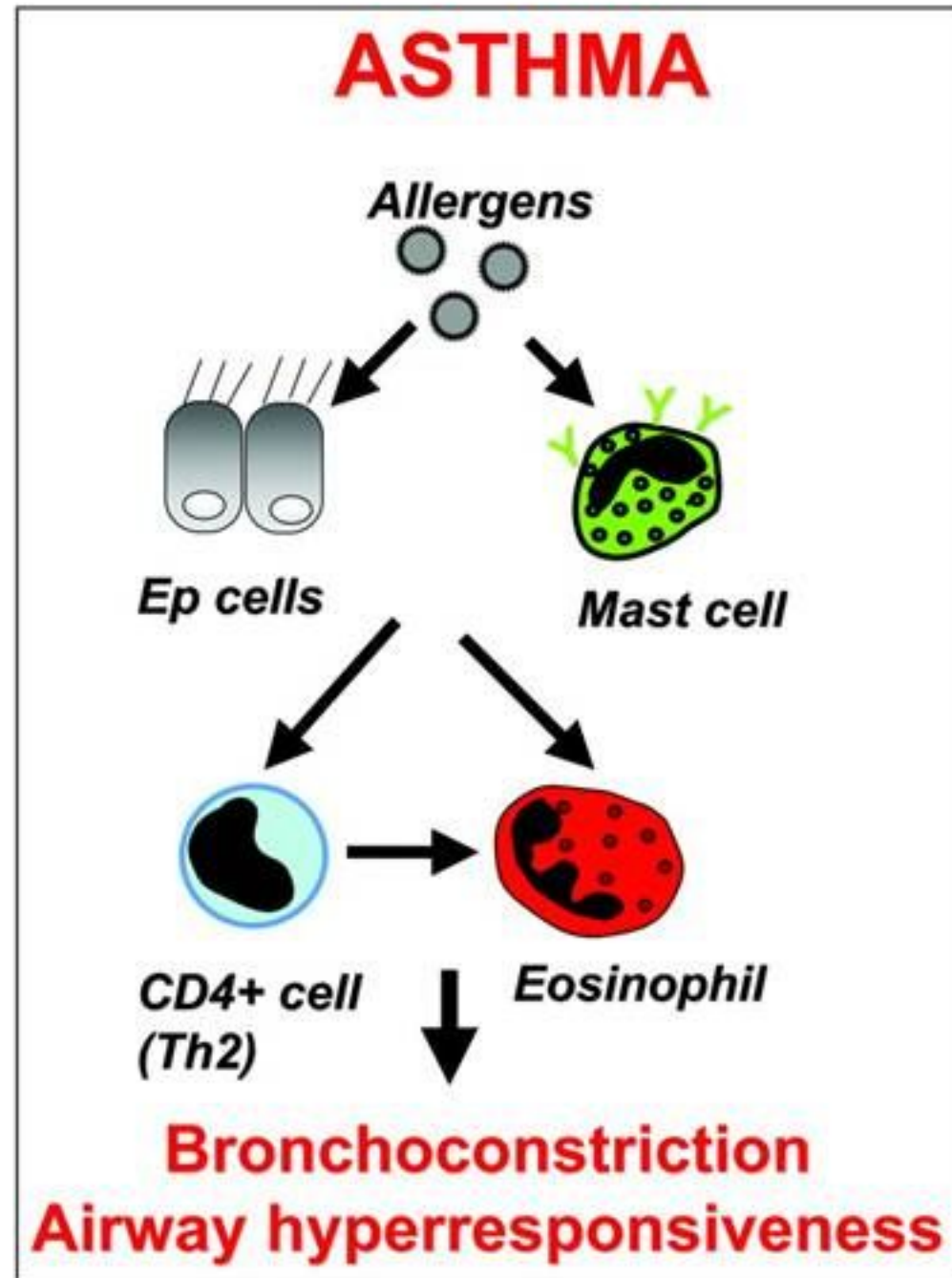
ICS in treatment acute asthma



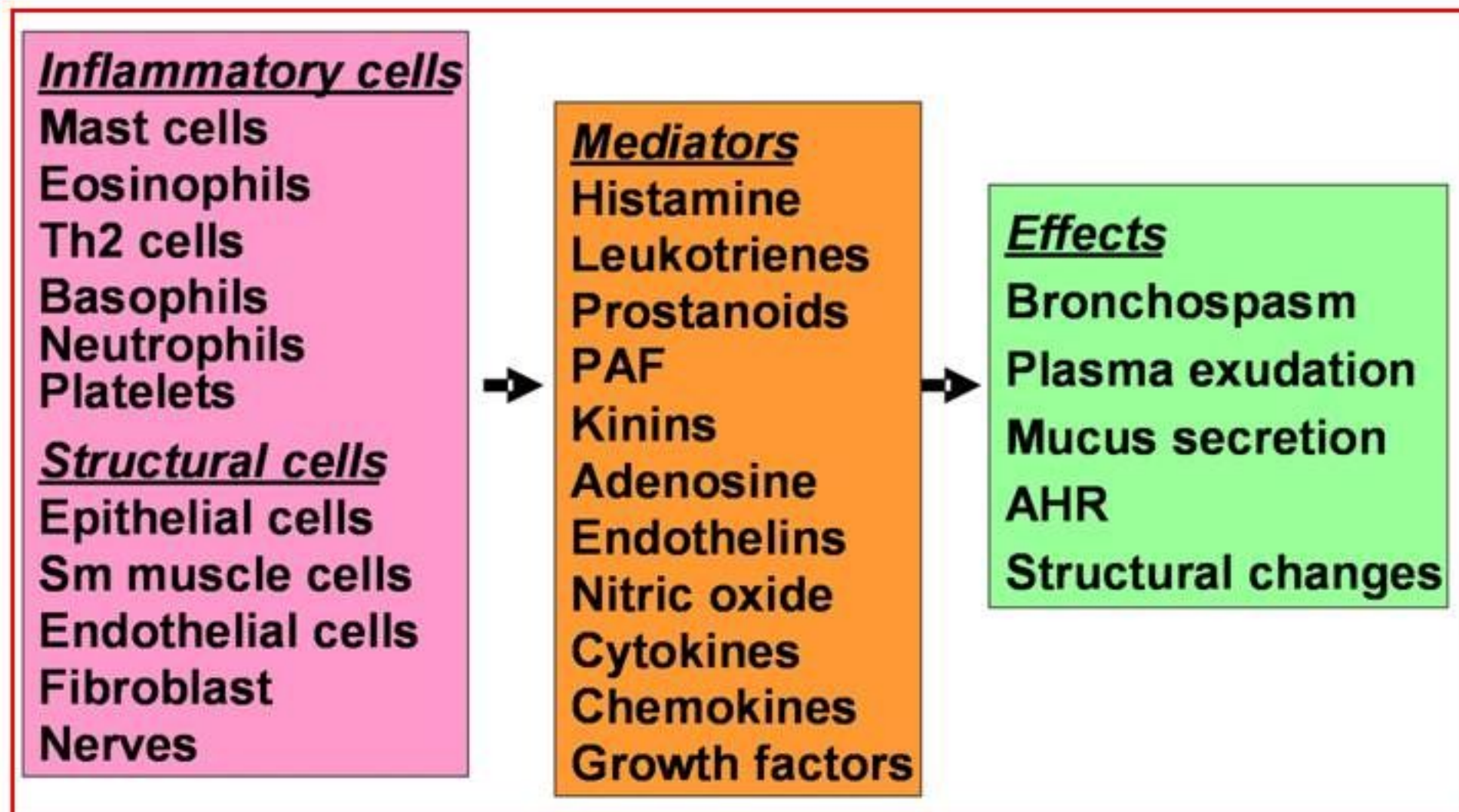
Asthma

- Chronic inflammatory disease.
- inflammatory cells
- Increasing pulmonary tract respond.
- Obstructive pulmonary.
- Could be stopped by itseft or treatment.

Inflammatory mechanism



Inflammatory cells & mediators



Asthmatic bronchiole

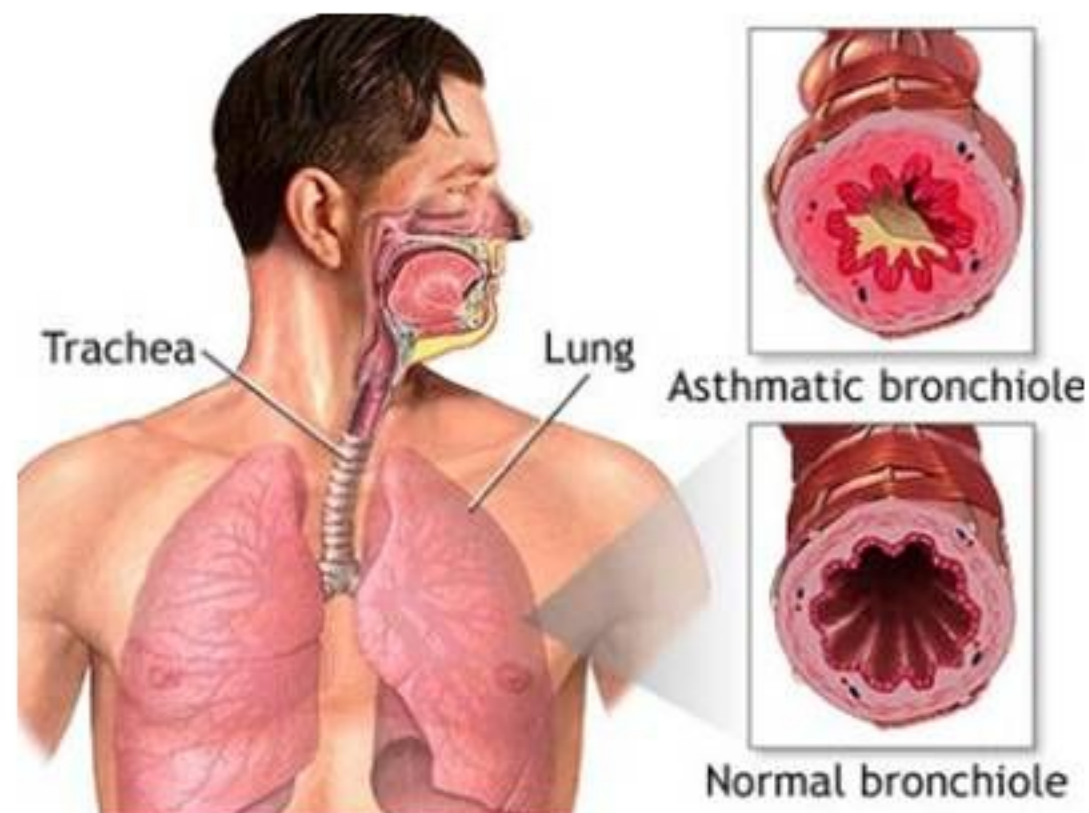


Normal bronchiole



Corticosteroide roles

- ❑ Treatment to achieve control
- ❑ Acute Asthma Exacerbations





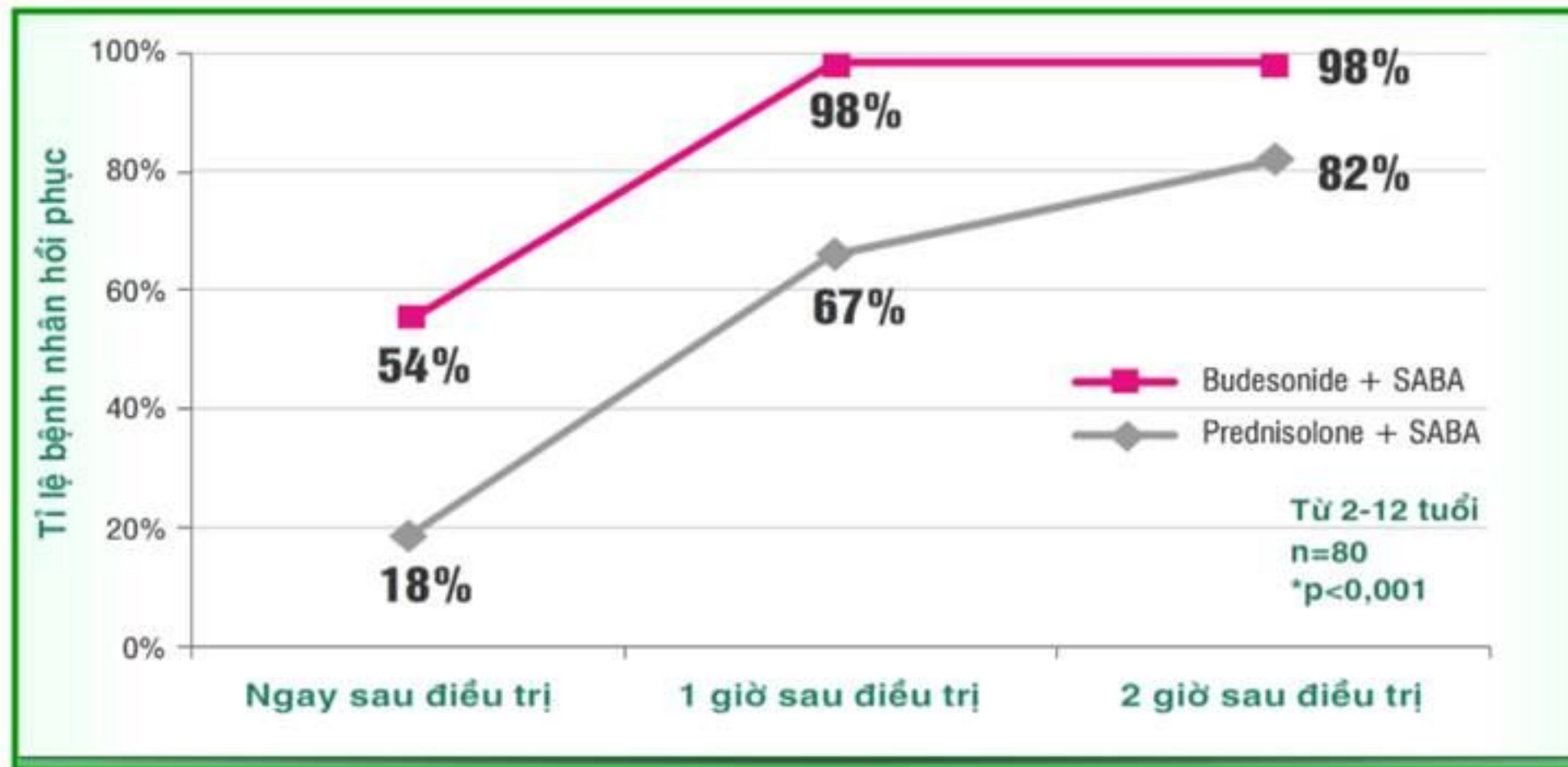
Corticosteroide roles in acute asthma

- ICS: effective in acute asthma treatment
- High dose of ICS + Salbutamol : more effective than Salbutamol. (evidence B)
- High dose of ICS + β_2 : more effective than GCS + β_2 on symptoms, signs, PEF. (evidence B)

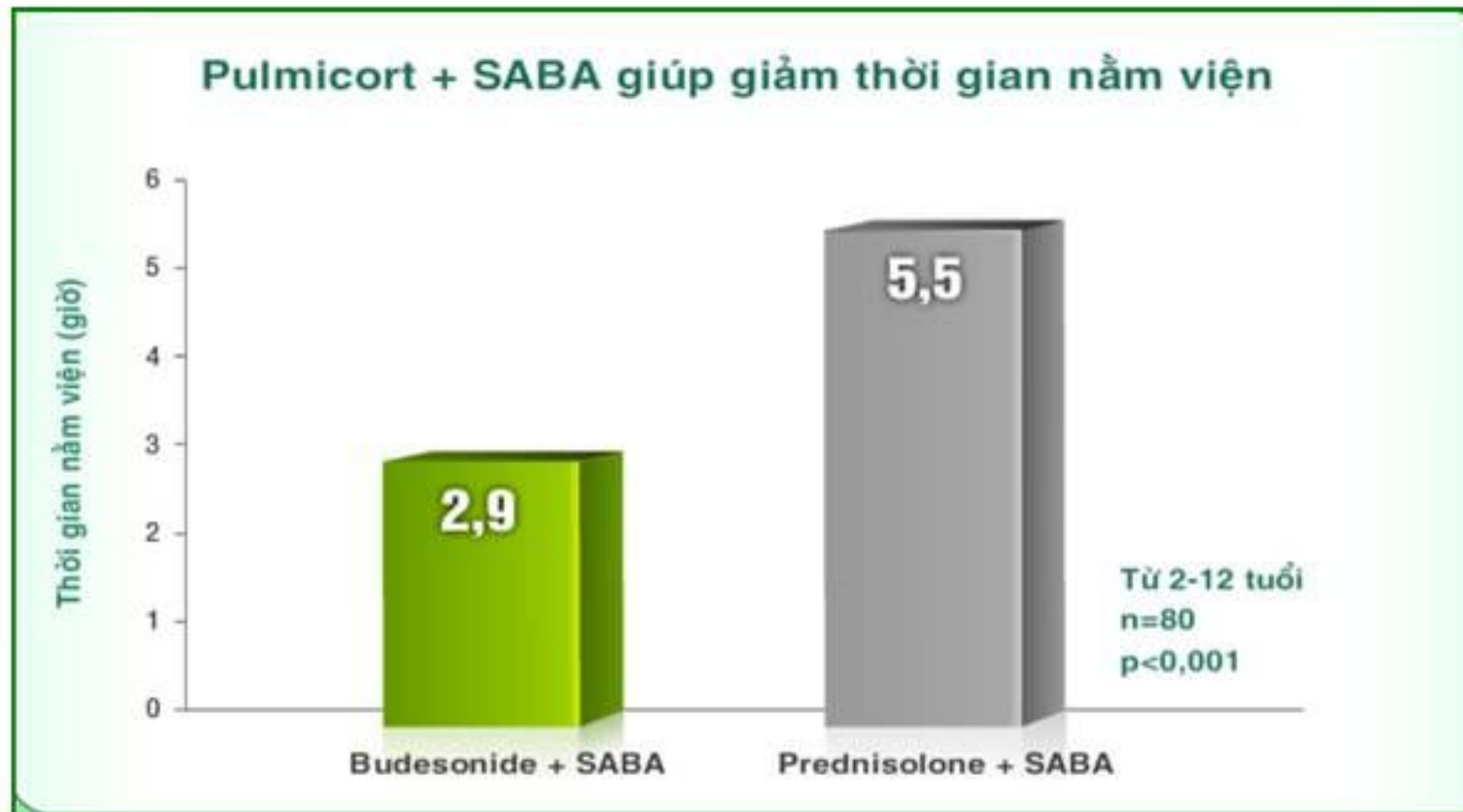
Early High dose ICS treatment – Fast release symptoms of acute asthma

- 100 patients with moderate acute asthma
- Age: 1-18
 - group 1 : treatment with high dose ICS < 72 hours
 - group 2 : treatment with high dose ICS > 72 hours
- **Results:**
 - Group 1: 6% need oral steroids for release symptoms.
 - Group 2: 36% need oral steroids for release symptoms but not fast.
- **Conclusion::**
 - Early high dose ICS <72 hours helps fast release symptoms and decrease using oral steroids.

Effect of ICS vs Prednisolone in acute asthma treatment



ICS +SABA = decrease hospital time because of acute asthma



Rapid effect ICS in acute asthma

- RCT (MEDLINE, EMBASE, the Cochrane Controlled Trials Register).
- 17 studies (1996-2006), including: 470 adults and 663 children.
- Evaluation: hospitalization rates and likely out of the ER.
- Results:
 - After 2 to 4 h, the rate of hospitalization decreased significantly in trials using multiple doses of ICS ([OR], 0.30; 95%, [CI]:0.16 to 0.55)
 - Patients treated with ICS : rapid clinical improvement (CI: 2.97 to 7.42; $p = 0.0001$).
 - Resp. function in 60 minutes early.
 - The efficiency is only achieved when patients receiving multi-dose ICS
- Conclusions: ICS for effective early (1 to 2 h) when using multiple doses ≤ 30 minutes.

CONCLUSION

- Asthma is a chronic inflammatory conditions. Corticosteroids have a clear role in the control of asthma.
- ICS is a component in the treatment of asthma, help improve early symptoms and resp. function.
- ICS is effective in preventing recurrent acute asthma as oral corticosteroids and reduce acute asthma relapse after leaving the emergency room.

