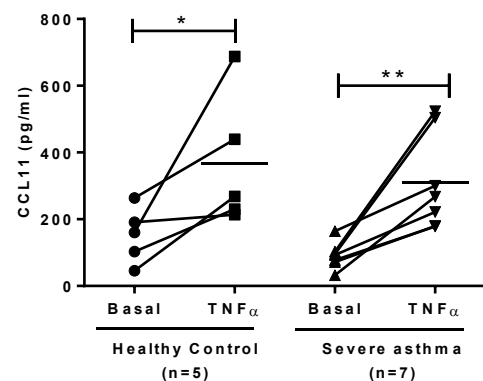
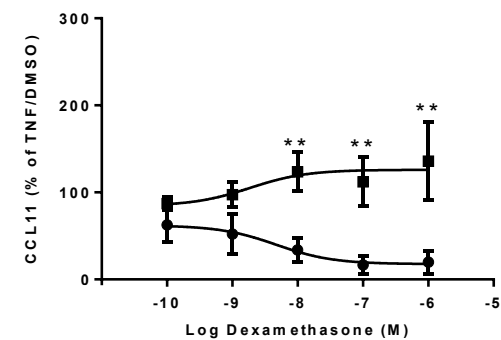
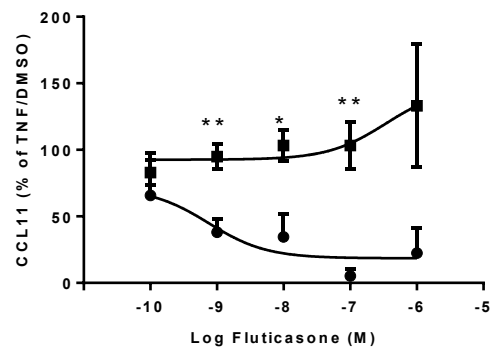


Figure 1

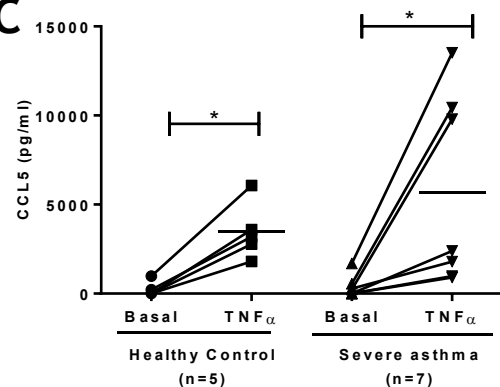
A



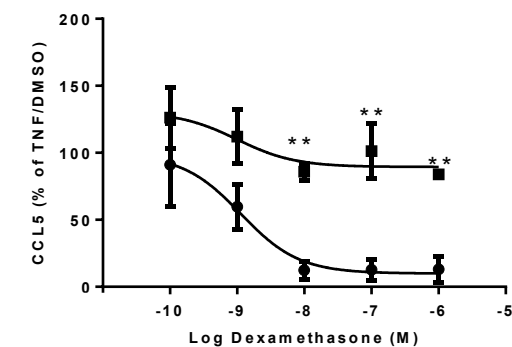
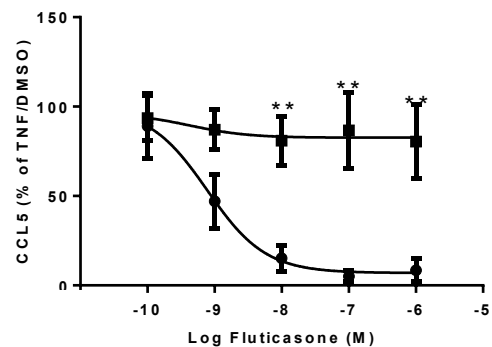
B



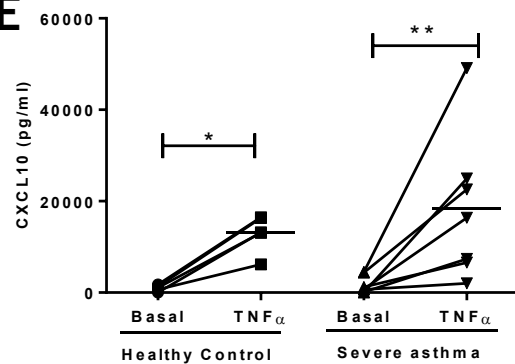
C



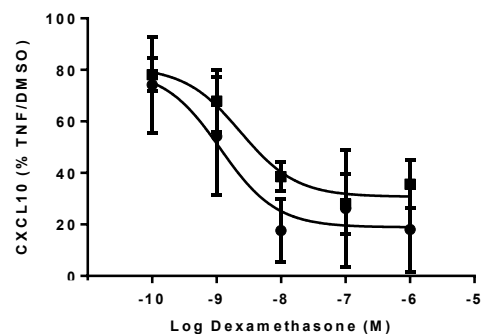
D



E



F



● Healthy controls (n=5)
■ Severe asthma (n=7)

Figure 2

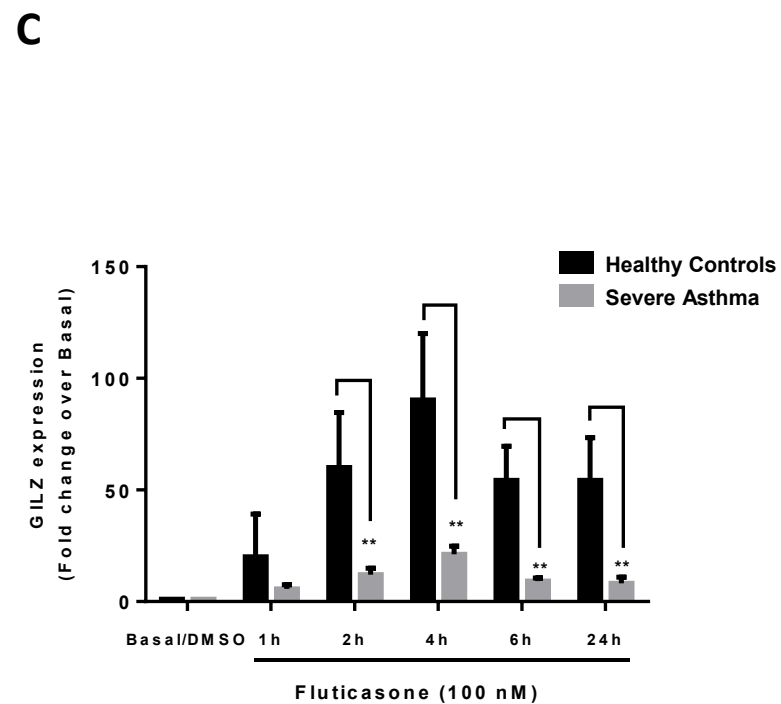
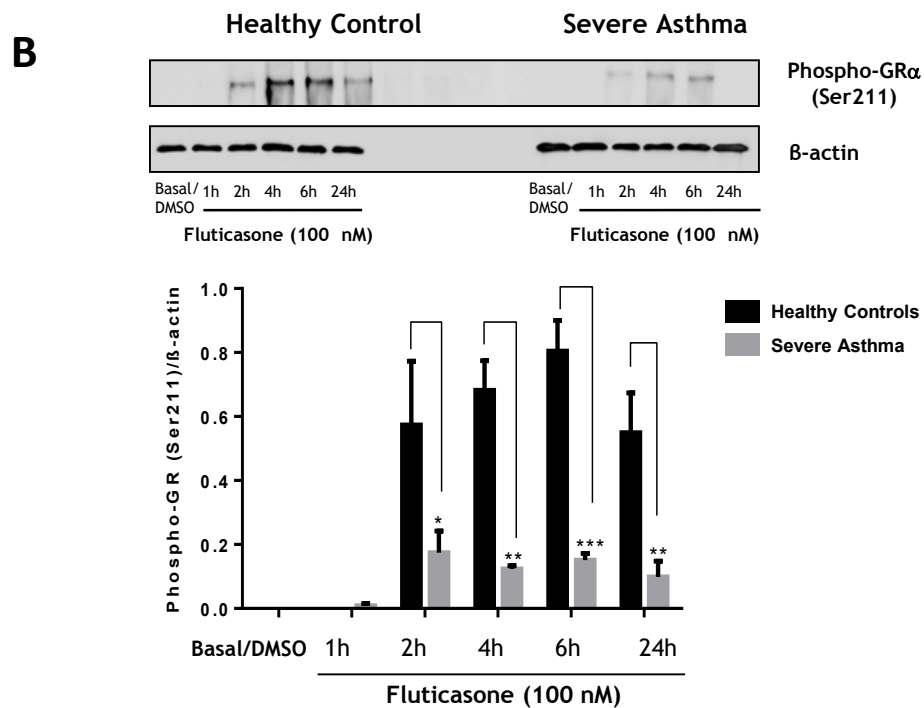
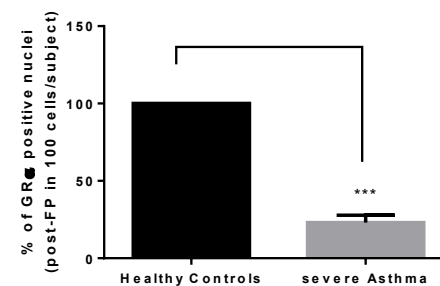
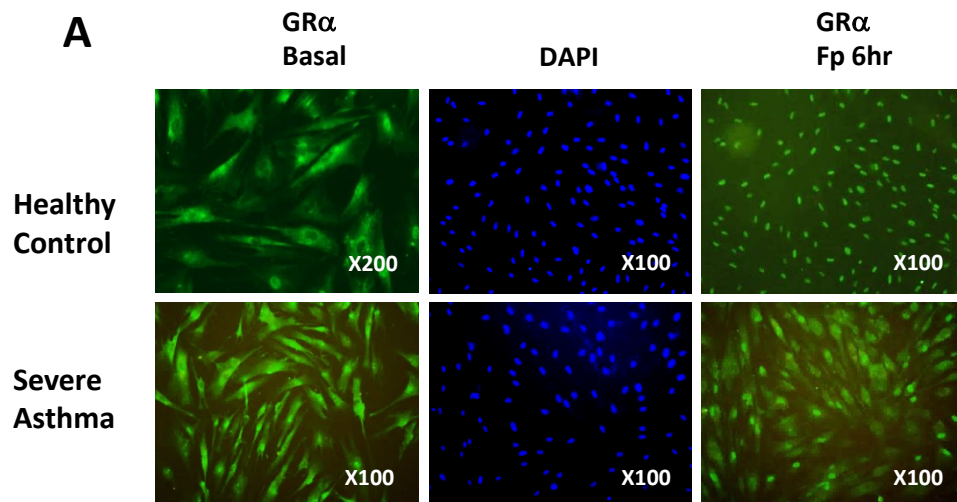


Figure 3

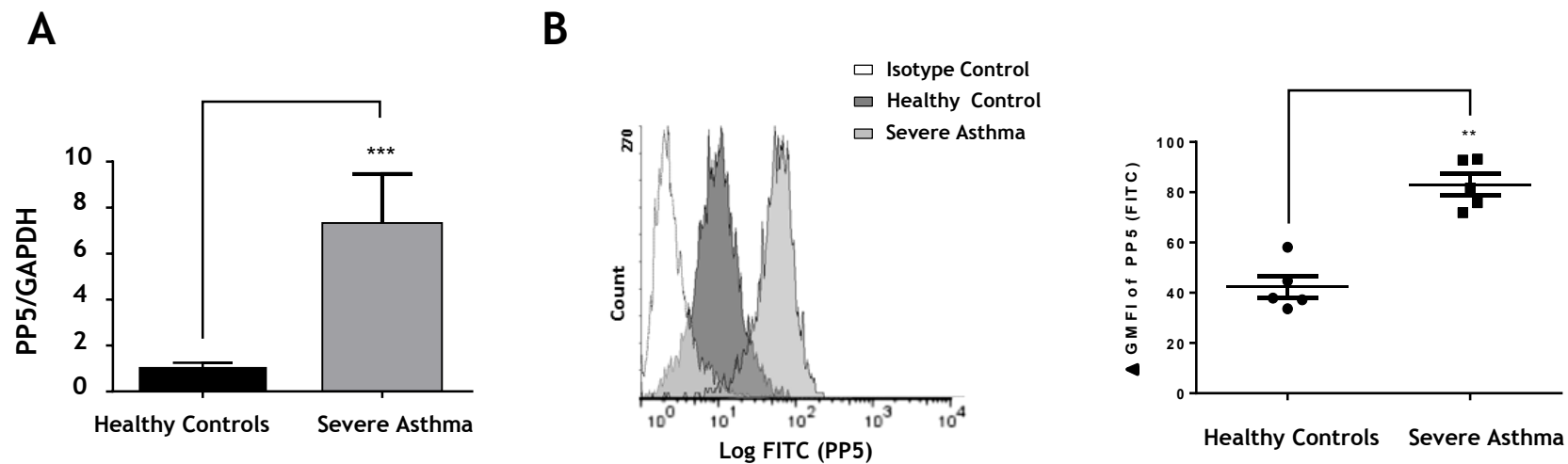
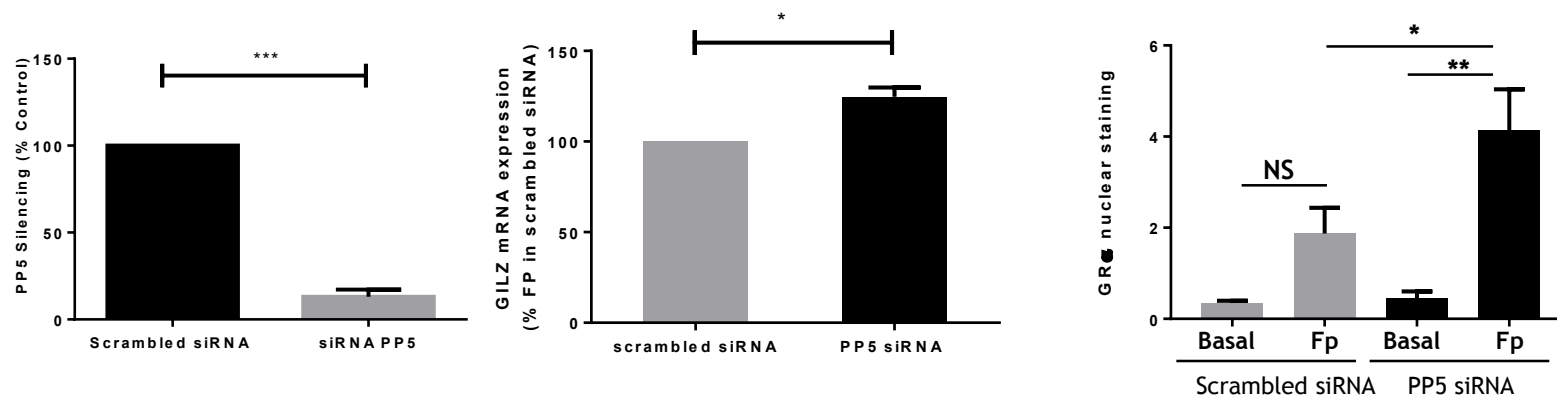
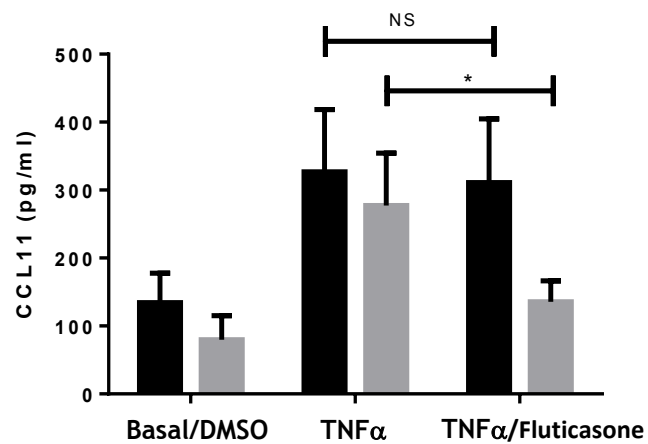


Figure 4

A



B



C

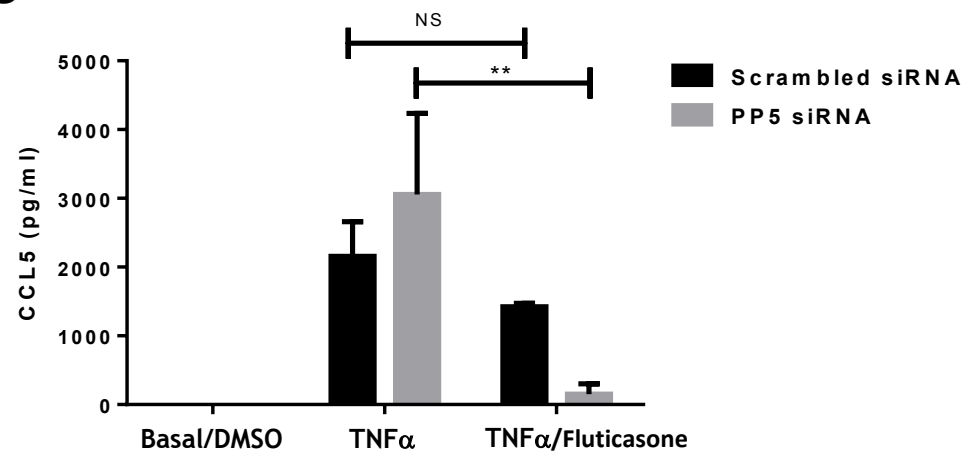
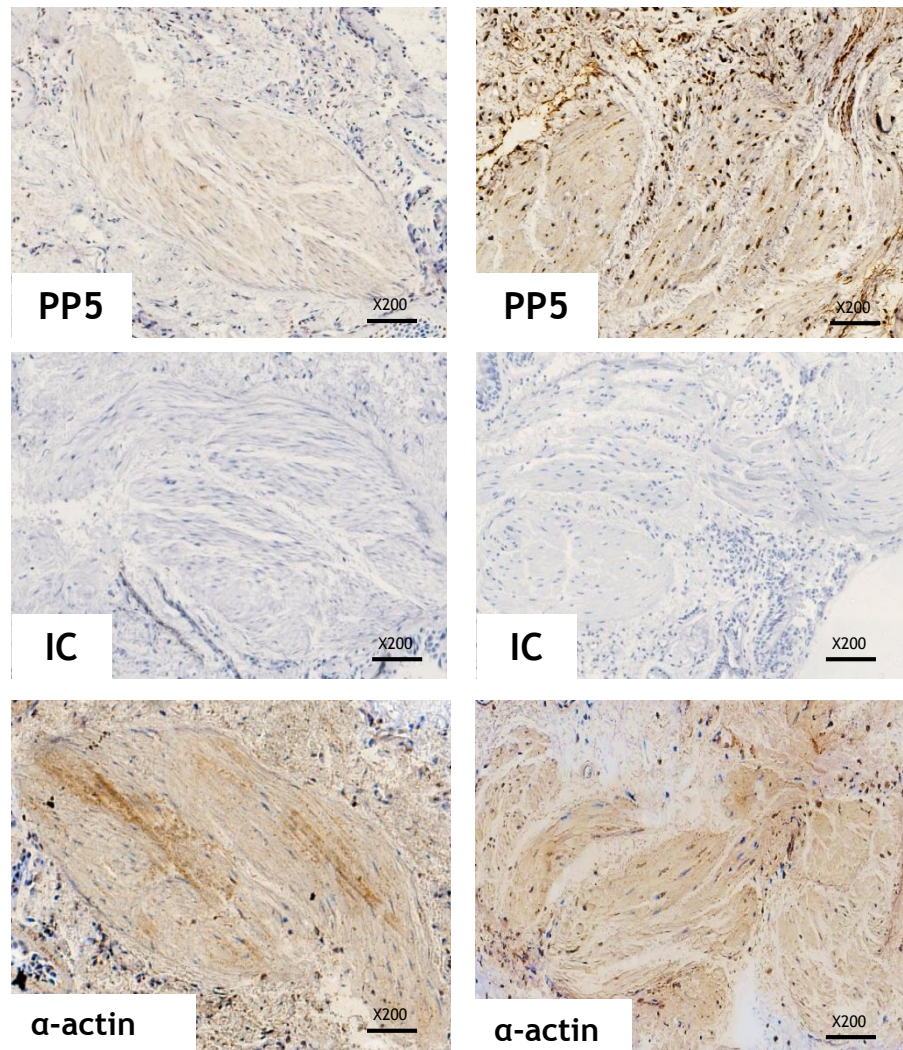


Figure 5

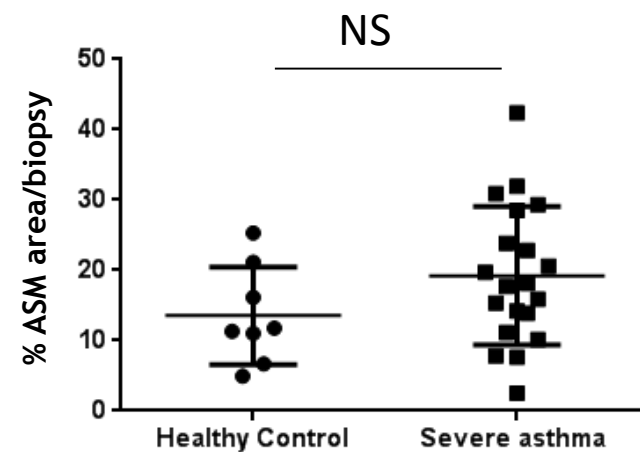
A

Healthy Control

Severe Asthma



B



C

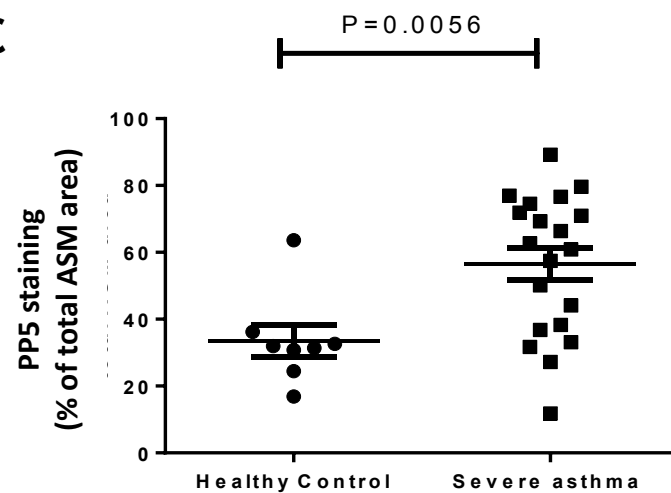


Table 1

	Healthy Control subjects	Severe asthma patients
Number	8	14
Gender, M/F	2/4	8/6
Age (years)	43.83 (5.63)	49.2 (3.45)
FEV1 (L)	3.48 (0.47)	2.6 (0.22)*
FEV1 % predicted	87.48 (5.21)	79.1 (5.42)
FEV1 / FVC (%)	83.38 (4.12)	70.7 (3.27)*
ICS (µg)	NA	1271.4 (135.24)
Receiving oral corticosteroids (no.)	NA	5
Age of asthma onset	NA	32.8 (3.66)
PC20 (mg/ml)	>16	6.7±1.31
Atopic (no.)	0	10

Subjects demographics and clinical characteristics (*In-Vitro* Experiments).

Data are shown as means (SEMs). *P < 0.05, **<0.01 versus healthy control. FEV1 (forced expiratory volume in 1 second), FVC (forced vital capacity); ICS (inhaled corticosteroid); NA (Data not available), ICS, inhaled corticosteroids. PC20, provocative concentration of methacholine to induce a 20% reduction in FEV1.

Table 2

	Healthy Control subjects	Severe asthma patients
Number	8	20
Gender, M/F	8/0	18/2
Age (years)	45 (5.21)	46.5 (2.5)
FEV1 (L)	3.91 (0.3)	2.87 (0.19)*
FEV1 % predicted	108.5 (2.53)	84.48 (4.29)**
FVC (L)	4.92 (0.35)	3.96(0.25)*
ICS (µg)	0	962.66 (67.21)
Receiving oral corticosteroids (no.)	0	20
PC20 (mg/ml)	>16	6.21 (1.70)
IgE (IU/ml)	NA	643.57 (270.14)

Subjects demographics and clinical characteristics (*immunohistochemistry studies*).

Data are shown as means (SEMs). *P < 0.05, **<0.01 versus healthy control.

FEV1 (forced expiratory volume in 1 second), FVC (forced vital capacity); ICS (inhaled corticosteroid); NA (Data not available), ICS, inhaled corticosteroids. PC20, provocative concentration of methacholine to induce a 20% reduction in the FEV1.