



Fig. S1. The effects of levocetirizine and fexofenadine on wheal volume. Wheals were provoked by skin pricks with histamine (10 mg/ml) and wheal volume measured 10 min later. Levocetirizine was given as a single 5 mg oral dose at 0 h. Fexofenadine was given as two 60 mg oral doses, one at 0 h and the second at 12 h. Each point is the mean  $\pm$  SEM of measurements in 18 individuals.

The mean wheal volume over the 24-h observation period following the administration of placebo was  $6.90 \pm 0.43$  mm<sup>3</sup>. There were no significant ethnic differences, the mean wheal volumes of the Caucasian and Japanese volunteers being  $6.73 \pm 0.66$  and  $7.07 \pm 0.58$  mm<sup>3</sup>, respectively.

Levocetirizine produced a significant ( $p < 0.025$ ) inhibition of histamine-induced wheal volume by 30 min and a highly significant ( $p < 0.001$ ) inhibition thereafter (Table SIV). In contrast, fexofenadine produced a highly significant ( $p < 0.001$ ) inhibition during the 2 to 6-h period after dosing. It was significant again at 12 and 24 h. The peak effect of both drugs was seen at 4–6 h.

Calculation of the mean 3–8 h percentage inhibitions from placebo wheal volume showed that inhibition produced by levocetirizine of  $80.9 \pm 4.4\%$  was statistically higher ( $p < 0.0001$ ) than that of the  $42.4 \pm 11.2\%$  inhibition produced by fexofenadine. The mean percentage inhibition of wheal volume over the complete 24 h observation period was  $69.4 \pm 2.8\%$  for levocetirizine and  $31.6 \pm 6.6\%$  for fexofenadine ( $p < 0.0001$ ). There were no significant differences between Japanese and Caucasian men in their responsiveness to either drug (Table I). Levocetirizine was significantly more effective than fexofenadine in both ethnic groups (Table I).