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# Gefapixant in two randomised dose-escalation studies in chronic cough

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**Patients with refractory chronic cough had significant reductions in coughing with lower doses of gefapixant than previously evaluated demonstrating efficacy and improved tolerability** http://bit.ly/2Rg3q2t

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ABSTRACT

**Background and objectives:** Gefapixant has previously demonstrated efficacy in the treatment of refractory chronic cough at a high daily dose. The current investigations explore efficacy and tolerability of gefapixant, a P2X3 receptor antagonist, for the treatment of chronic cough using a dose-escalation approach.

**Materials and methods:** Two randomised, double-blind, placebo-controlled, crossover, dose-escalation studies recruited participants with refractory chronic cough. Patients were assigned to receive ascending doses of gefapixant (study 1: 50–200 mg, study 2: 7.5–50 mg) or placebo for 16 days, then crossed-over after washout. The primary end-point was awake cough frequency assessed using a 24-h ambulatory cough monitor at baseline and on day 4 of each dose. Patient-reported outcomes included a cough severity visual analogue scale and the cough severity diary.

**Results:** In clinical studies, gefapixant doses ⩾30 mg produced maximal improvements in cough frequency compared with placebo ($p<0.05$); reported cough severity measures improved at similar doses. Taste disturbance exhibited a different relationship with dose, apparently maximal at doses ⩾150 mg.

**Conclusions:** P2X3 antagonism with gefapixant demonstrates anti-tussive efficacy and improved tolerability at lower doses than previously investigated. Studies of longer duration are warranted.