Goal: To determine efficacy and safety of delayed approach to acute, uncomplicated respiratory infections.

Background: Respiratory diseases are one of the most common complaints amongst primary care visits. Many of those infections are self-limited and require symptomatic control. There is a component of uncertainty in many of these diagnoses which can drive physicians to prescribe antibiotics to give the illusion as though treatment is offered. Although, this is causing a large burden to antibiotic resistance.

Design: 405 adults were included with uncomplicated respiratory tract infections from 23 different primary care settings in Spain. Patients were randomized to one of four groups. Either a delayed patient-led prescription, a delayed prescription needing to be picked up by the patient at the primary care center, immediate prescription, or no antibiotic. Antibiotics in the first two groups were to be used by patients only in the symptoms worsened or if there were no improvement in symptoms several days after the initial visit. Outcomes were measured as duration of symptoms and severity of symptoms. Secondary outcomes were antibiotic use, patient satisfaction, and patient satisfaction.

Results: 398 of the 405 patients were able to be included in the analysis. Majority of the patients (80%) were non-smokers, 94% had no underlying respiratory comorbidity, 34% were men, mean age 45. Mean duration of severe symptoms was 3 days for the prescription group, 4.7 days for the no prescription group. Patients in the prescription strategies versus the delayed prescription strategies used few antibiotics. Satisfaction was similar across all 4 groups.

Conclusion: There was not any significant change in symptoms between the delayed prescriptions versus immediate prescription, but there was a decreased antibiotic use between the groups.