The purpose of this study was to compare the relative efficacy and safety of different antibiotic drugs and recommend superior regimens in the treatment of bronchitis. Quinolones can be recommended as the superior treatment for bronchitis, in accordance with our cluster analysis with surface under the cumulative ranking curve. The secondary effects of macrolides, quinolones, and double ?-lactams were significantly more adverse than ?-lactams with odds ratios (ORs) of 1.5 (95% credible interval [CrI] =1.1-2.0), 1.7 (95% CrI =1.2-2.3), and 2.7 (95% CrI =1.8-4.1), respectively. Concerning treatment methods for clinically evaluable patients, quinolones demonstrated better performance than ?-lactams and sulfonamides.