

### Example Pharmacology Scenario

Q. A 57 year old man comes to your clinic complaining of wheezing, the first time he has ever had it. You have seen him quite often before because he attends regularly for blood pressure checks, but last time he saw his GP to review his medication. He is currently taking bendroflumethiazide 2.5mg and atenolol 25mg daily.

A. If atenolol was recently added to his medication, then the most important step is to advise him not to take any more. Although it is selective for beta 1 adrenoceptors in the heart, it can also block adrenoceptors in the lungs sufficiently to cause bronchospasm in susceptible individuals. The risk of stopping the atenolol is simply to return the patient to how he was before his medication review, but to continue risks exacerbating his bronchospasm further. If he requires treatment, an inhaled beta agonist, such as salbutamol, might give some relief by competing for the adrenoceptors, but a useful alternative in this case would be the antimuscarinic bronchodilator, ipratropium bromide, which operates on a different set of receptors. He will need to arrange a review of his hypertension after stopping the atenolol to see if an alternative is needed.