Tiotropium: what role in asthma?

Question 1
Approximately how many people in the UK are receiving treatment for asthma?

- a. 0.25 million
- b. 1 million
- c. 2.5 million
- d. 5 million
- e. 10 million

Answer: d. It is thought that the proportion of people affected by asthma in the UK is amongst the highest in the world with over five million people receiving treatment for asthma.

Question 2
A recent investigation into deaths caused by asthma identified issues relating to prescribing and the use of medicines. In England and Wales, approximately how many registered deaths had a primary cause of asthma in 2013?

- a. 150
- b. 350
- c. 500
- d. 800
- e. 1,100

Answer: e. There were more than 1,100 registered deaths with a primary cause of asthma in England and Wales in 2013.

Question 3
Forced expiratory volume in 1 second (FEV1) is used to assess lung function in clinical trials of treatments for asthma. What is thought to be the minimum patient perceivable improvement in FEV1?

- a. 75mL
- b. 180mL
- c. 230mL
- d. 350mL
- e. 500mL

Answer: c. The minimum patient perceivable improvement in FEV1 is 230mL.

Complete this module online
This CME/CPD module is available for completion online via BMJ Learning (learning.bmj.com) by subscribers to the online version of DTB. If you would like to add online access to your current subscription, please contact our Customer Services team on +44 (0)20 7383 6270 or email support@bmjgroup.com. As well as allowing you to complete CME/CPD modules online, an online subscription also gives you unlimited access to the entire DTB archive back to volume 1, issue 1.

For further information, please visit www.dtb.bmj.com
Tiotropium: what role in asthma?

**Question 4**

Two replicate 48 week, randomised controlled studies compared the effect of tiotropium 5μg daily with placebo as add-on therapy to maintenance asthma therapy of high-dose inhaled corticosteroid (median daily dose 800μg budesonide equivalent) and long-acting beta<sub>2</sub> agonist. Which one of the following statements regarding these studies is correct?

a. Patients enrolled in the studies had a ≥5-year history of asthma and ≥1 exacerbation treated with systemic corticosteroids in the previous 24 months

b. The primary end point included admission to hospital for worsening asthma

c. At 24 weeks, the difference from placebo in mean change in trough FEV<sub>1</sub> from baseline was 88mL and 111mL

d. There was no difference in time to first severe exacerbation between tiotropium and placebo

e. No drug-related cardiac events were reported in the group taking tiotropium

**Answer:**

- **c.** Compared with placebo the differences in trough FEV<sub>1</sub> in each trial were 88mL (95% CI 27 to 149, p<0.01) and 111mL (95% CI 53 to 169, p<0.001).

**Question 5**

Which one of the following is the most common adverse effect associated with tiotropium solution for inhalation?

a. Flushing

b. Nausea

c. Headache

d. Cough

e. Dry mouth

**Answer:**

- **e.** The most common adverse effect (≥1/10) is dry mouth.