**Literature search**

Our literature search was based on searching the following databases at the Prescrire library: Embase/Excerpta Medica Drugs and Pharmacology (1991-2nd quarter 2010), Medline (1950-2010 June, week 4), The Cochrane Library (CDSR, DARE, HTA: 2010 issue 2) and Reactions (1992-6 July 2010); and systematic consultation of clinical pharmacology textbooks (Martindale The Complete Drug Reference, and Meyler’s).

This article was prepared using the standard Prescrire methodology, which includes dual verification of the choice of documents, triple verification of their analysis, external review, and multiple quality controls.


**Benfluorex: how many deaths?**

In November 2009, benfluorex (ex Mediator) was withdrawn from the French market. It had been available for 33 years, despite a lack of proven clinical benefit. Benfluorex, an appetite suppressant, is related to dexfenfluramine (ex Isomeride), a drug carrying a known risk of pulmonary arterial hypertension and valve disease (1,2).

In November 2010 the French Health Products Safety Agency (Afssaps) reported the results of a second study based on the French national health insurance database and focusing on 303 000 patients exposed to benfluorex in 2006. Follow-up was 4 years (2006 to 2009) for hospitalisations for valve disease and 4.5 years for deaths (3). A total of 597 patients were hospitalised at least once for valve failure or multiple valve disease. Half of these patients had valve replacement surgery and 64 of them died, 33 following heart surgery. 46 deaths were attributed to valve disease. The risk of hospitalisation for valve disease fell markedly two years after benfluorex withdrawal.

For a total exposure of 7 million person-years between 1979 and 2009, the authors estimated that 500 deaths were attributable to benfluorex. The risk of hospitalisation was about 0.5 per 1000 patients exposed to benfluorex (4). Follow-up was limited to 5 years only. The real figures may be higher, owing to confusion in the hospital coding system and failure to take into account some cases of pulmonary arterial hypertension.

Patients who have taken benfluorex should be on the lookout for symptoms of pulmonary arterial hypertension and valve disease.

**Dextropropoxyphene and cardiac disorders: new data**

In late 2010 the FDA released new data on propoxyphene, the US name of dextropropoxyphene, which is sold in combination with paracetamol (1). In a randomised, double-blind, placebo-controlled study lasting 11 days, healthy volunteers received propoxyphene at increasing doses, up to a maximum of 900 mg (1). The QT interval increased by 29.8 ms seven hours after the last dose of 600 mg and by 38.2 ms two hours after the last dose of 900 mg. QT prolongation by more than 20 ms is generally considered to be associated with a substantial risk of arrhythmia. The study was halted when these effects were observed.

QT prolongation in healthy volunteers receiving about twice the maximal daily dose recommended in the French summary of product characteristics (SPC) for dextropropoxyphene combinations is in keeping with previous clinical cases, including reports of deaths in the UK (2,3). The pharmacokinetic behaviour of dextropropoxyphene creates a risk of accumulation in patients with renal failure and in elderly subjects (3).

This study provides a further reason for avoiding dextropropoxyphene before it is effectively removed from the French market (4).