All factors contributing to the poor use of drugs or influencing the risk-benefit ratio of a given treatment must be examined, and this includes packaging components such as bottles, blister packs, stoppers, information leaflets, and delivery accessories (1-5).

La revue Prescrire has always paid special attention to the quality of drug packaging, and for several years a specialised team has examined in detail the packaging of all pharmaceuticals appraised in the New Products column (1). The team examined the packaging of more than 400 different products in 2003, and a number of trends emerged.

Tablets and capsules: inadequate blister labelling. 90% of the tablets and capsules we examined in 2003 were sold in blister packs. The unit-doses [each separate blister] were not individually labelled in 96% of packs, creating the risk of confusion when the tablets or capsules are removed (a,b). Just a few tablets and capsules were printed with identifiers that could be recognised by the patient (c,d), and half of blisters that did were barely legible (e).

10% of the tablets and capsules examined in 2003 were sold in bulk bottles, usually without a safety stopper. This increases the risk of massive overdose, both accidental and deliberate, especially by children.

Oral formulations: risky dosing dispensers. Oral formulations represented 8% of new products released in 2003. Most bottles contained multiple doses, yet virtually none had safety caps, including products with attractive aromas for use in children (e.g. Toplexil°, oxomemazine, see French edition n° 245 p. 829).

Some dosing dispensers did not carry the INN or trade name, exposing patients further to the risk of drug errors if two medicines with dispensers are inadvertently exchanged. Other dispensers were graduated imprecisely or illegibly, such as the graduated spoons provided with amoxicillin bottles in France. Simple dosing cups were still being provided with products released in 2003, once again increasing the risk of overdose (f).

Unit-dose sachets, which allow clear labelling, were used for only 3.4% of new oral formulations released in 2003.

Rare improvements for injectable preparations. Improvements noted in 2003 included ready-to-use infusion bags and prefilled syringes (g). Yet 63% of products were sold in simple bottles or vials, with no devices for preparation or injection. Some vials contained multiple doses, increasing the risk of infection when several patients are treated from the same bottle (h).

The packaging of some injectable preparations, such as Copaxone° (glatiramer, see Prescrire International n° 69 on page 10), is well designed, but patients have to be taught by nurses how to use the delivery devices. This may be acceptable for useful drugs, but certainly not for medicines providing no tangible benefits. And is the extra workload for nurses taken into account when deciding the price of such preparations?

It’s time for health professionals to react. Comparative evaluation of all packaging for old and new drugs in 2003 identified other problems: the potential for drug errors due to the poor choice of colour and graphics on boxes, the international non proprietary name (INN) printed in tiny lettering while the trade name stands out clearly, and patient information leaflets that are user-unfriendly, too technical or inconsistent.
Prescrire International translation procedures

The situation is as worrying for originator drugs as for generics. And our long-term monitoring shows that no progress has been made over the years.

Given the apparent lack of reaction of the French medicines agencies, and the lack of precise packaging quality standards in Europe, health professionals should report all packaging problems to the authorities and the companies concerned (with copy to la revue Prescrire).

Prescribers, pharmacists and nursing staff should also create quality groups, in order to share their experiences and to choose the drugs best adapted to each category of patients (6).

The translation process

Prescrire International is a bimonthly English-language journal containing translations of selected articles from the monthly French edition, la revue Prescrire. The international edition was created with two principal aims: first, to offer non French speakers access to Prescrire’s systematic assessments of health technologies, and especially medicines; and second, to provide a platform for texts dealing with European and other international medicines policies.

The articles to be translated and the content of each issue of Prescrire International are chosen jointly by the editor-in-chief of Prescrire International and members of the editorial team of la revue Prescrire.

The texts are first prepared by a professional translation team, and are then thoroughly verified by a painstaking quality control procedure.

The translation team. The initial translations are prepared jointly by a British translator and the bilingual editor-in-chief of Prescrire International, who have both held their positions since the journal was created in 1992.

The translation team also includes a bilingual editorial assistant responsible for the overall translation process; a British medical editor dealing with style matters; a French editor of la revue Prescrire who checks all the translations; the relevant authors and section editors, who approve the translations of their texts; and a British proofreader who checks the translations for typographical errors prior to publication.