A look back at 2009: one step forward, two steps back

In 2009, we examined 104 new brand name products or new indications for existing products in the French edition of Prescrire. Only 3 of these 104 “innovations” provided some therapeutic advantage, while 19 had clearly unfavourable risk-benefit balances. Marketing authorisations are failing to adequately protect patients.

A number of cheaper generic versions of useful drugs were introduced to the market, while Big Pharma’s anti-competitive practices were aimed at slowing the growth of generics manufacturers.

The quality of over-the-counter drugs marketed for self-medication, especially “umbrella” brands, left much to be desired.

Consumer protection is clearly not the primary concern of the European (EMA) and French (Afssaps) drug regulatory agencies. They remain too financially dependent on drug companies; hesitate to withdraw dangerous drugs from the market; and withhold drug safety data.

Other signs of drug companies’ excessive influence, at patients’ expense, include drug pricing that bears little relation to therapeutic advantage (in oncology, for example); the financial dependence of many patient groups on drug companies; the European Commission’s attempts to authorise direct-to-consumer advertising and to allow the pharmaceutical sector to tighten its grip on health information, including pharmacovigilance data.

Governments must assume their responsibilities, and patients and the healthcare profession must resist Big Pharma’s increasing involvement in all spheres of patient care.

In 2009, Prescrire published independent assessments of 325 drugs, 91 of which were new products. The latter included 46 products with new brand names, 25 line extensions, and 20 generic drugs with invented brand names (a).

The following article reviews the major trends observed in 2009.

Therapeutic advance: the cupboard is bare

Among the 325 products and indications examined in our French edition in 2009, 104 were rated based on the advantage they provided over existing treatments: 46 were new products (including one authorised for two different indications), 31 were new indications, 25 were line extensions, and one product was examined after longer follow-up, with “A second look”. We rated 62 of these 104 products as representing “nothing new”, including 17 of the 25 line extensions.

Fixed-dose combinations: simple novelties. Among the 46 new brand name products, 7 were fixed-dose combinations of existing drugs. Three were mainly intended for the lucrative market in arterial hypertension: amlodipine + perindopril (Rev Prescrire 311), amiodipine + olmesartan (Rev Prescrire 309), and enalapril + lercanidipine (Rev Prescrire 309). Other fixed-dose combinations included: calcipotriol + betamethasone (Rev Prescrire 314) for psoriasis; sitagliptin + metformin (Prescrire Int 101) for diabetes; timolol + brinzolamide (Rev Prescrire 308) for ocular hypertension; and follitropin alfa + lutropin alfa (Rev Prescrire 303) for ovarian stimulation.

Unacceptable drugs: still too many on the market. The drugs we rate as “Not acceptable” are those with an unfavourable risk-benefit balance in one or more indications. In 2008, 23 (19%) out of 120 new drugs or indications were rated “Not acceptable”, as was the case for 19 (18%) out of the 104 new drugs or indications in 2009 (see note d of the table on page 92). Marketing authorisation procedures are still failing to guarantee patients the protection they are entitled to expect from the licensing agencies (Rev Prescrire 304).

Therapeutic advance: rare and modest. As in the previous year, we identified no major advances in 2009: none of the new drugs or indications were rated “Bravo” or even “A real advance” based on our at-a-glance rating system (see note c of the table on page 92, and page 67), while only 3 “Offered an advantage”.

We were unable to reach conclusions (“Judgement reserved”) on the possible clinical value of 6 new drugs or indications, due to the lack of available evidence.

Gene therapy failed to live up to expectations in 2009, and no gene-based drugs were authorised in the European Union in 2009 (Prescrire Int 104).

- In addition, new indications, and reviews of old indications with a longer follow-up in “A second look”, generic, labelling changes, miscellaneous changes, brand name changes, and market withdrawals.
A look back at 2009

Drugs with unfavourable risk-benefit balances: market withdrawals are needed

- In 2009, Prescrire rated about 20 new drugs (or new indications for drugs already on the market) as “Not acceptable”, because they exposed patients to unjustified or disproportionate risks.

- It generally takes several years for regulators to launch a market withdrawal procedure. In the meantime they take ineffective half-measures, such as restricting the indications or reducing the reimbursement rates.

The high proportion of new drugs and indications with unfavourable risk-benefit balances (“Not acceptable”, based on Prescrire’s rating system, see in this issue page 67) is worrisome. Since the mid-2000s, this proportion has consistently been about 20% (see the table on page 92). There are many other unacceptable drugs, some of which have been around for decades.

Drugs that should be withdrawn: a long list. When a drug is shown to have an unfavourable risk-benefit balance, the only effective way of protecting patients is to take it off the market. But such withdrawals are far too infrequent, and some of these drugs, including high-volume prescription drugs, represent a real danger. We continued to warn our readers about these drugs in 2009, and to demand their market withdrawal:

- cox-2 inhibitors: celecoxib, etoricoxib (not yet marketed in France) and parecoxib, because they have no proven advantages over other nonsteroidal anti-inflammatory drugs (NSAIDs) in terms of efficacy or gastrointestinal adverse effects but carry an increased risk of cardiovascular and cutaneous disorders (Rev Prescrire 311 and 314);
- nimesulide, because of the unjustified risk of fatal hepatitis (Rev Prescrire 313); piroxicam, because of an increased risk of potentially severe gastrointestinal and cutaneous effects (Rev Prescrire 312), while neither of these drugs has any advantages over other NSAIDs;
- glitazones: pioglitazone and especially rosiglitazone, because of their lack of proven advantages in type 2 diabetes, and their poor safety profile (Rev Prescrire 306);
- vasoconstrictor decongestant drugs marketed for the common cold, because of their potentially life-threatening cardiovascular adverse effects (Rev Prescrire 312); duloxetine, a psychotropic serotonin and noradrenaline reuptake inhibitor, which has similar efficacy to serotonin reuptake inhibitors (SSRIs) but provokes more serious adverse effects (including a dose-dependent increase in blood pressure and liver damage) (Prescrire Int 100);
- trimetazidine, a drug licensed for angina, visual disorders, dizziness and tinnitus, because it has serious adverse effects (parkinsonian syndrome, tremor, gait disorders) but no proven efficacy (Prescrire Int 100);
- quinine (sometimes combined with hawthorn), because of its unfavourable risk-benefit balance in the treatment of muscle cramps (Rev Prescrire 309).

Dextropropoxyphene: welcome withdrawal planned for 2010. European market withdrawal of dextropropoxyphene (sometimes combined with paracetamol), a weak opioid analgesic with an unfavourable risk-benefit balance that causes hundreds of deaths each year, is expected in mid-2010 at the latest (Prescrire Int 102).

The adverse effects of this drug, marketed for more than 40 years in France, have long been known. However, pending effective action by regulatory agencies, sales continue unabated and patients remain at risk.

Half-measures. When a drug is shown to have an unfavourable risk-benefit balance, the health agencies have a tendency to procrastinate by taking hypocritical half-measures that fail to protect patients:

- lowering their rating for products based on piroxicam (Rev Prescrire 312, 314) and rosiglitazone (Rev Prescrire 306, 308) in terms of their medical benefit to patients and reimbursement rate;
- lowering their rating for products based on celecoxib (Rev Prescrire 314) in France in terms of their therapeutic benefit and reimbursement.
- In the case of benfluorex (before its marketing authorisation was suspended in late 2009) and nimesulide, the French drug regulatory agency authorised generic versions of these drugs instead of simply withdrawing the originator drugs from the market (Rev Prescrire 313, 314, 315).

Action needed. Given these serious failings on the part of the health authorities, it is up to healthcare professionals to stop prescribing these drugs and to systematically report all adverse effects, even those that are already well known.
Multiple new indications: HIV/AIDS, psychotropics and cytotoxic agents. In 2009, “slicing up” of indications, a strategy used to increase product visibility, generally without representing a therapeutic benefit for patients, mostly concerned the following products:

- first-line antiretroviral drugs: atazanavir (Prescrire Int 101) and darunavir (Rev Prescrire 309);
- psychotropics: aripiprazole for schizophrenic adolescents over 15 years of age, and for acute agitation (Prescrire Int 104 and Rev Prescrire 312); duloxetine for generalised anxiety disorder (Prescrire Int 100); oral risperidone for aggression in Alzheimer’s patients (Prescrire Int 104), and injectable risperidone, following oral neuroleptic therapy (Rev Prescrire 307);
- cytotoxic drugs (this issue page 76).

Children: only one significant advance. We examined 11 new paediatric products, new indications or line extensions in 2009. Despite the financial incentives provided for in the European Paediatric Regulation, clinical evaluation of drugs used in paediatrics is still limited.

The only therapeutic advance observed in 2009 concerned an antifungal drug, caspofungin, used as a last resort in children with a rare condition, invasive aspergillosis (Prescrire Int 102). The atovaquone + proguanil combination can be helpful in treatment of malaria attacks in children weighing at least 5 kg (Rev Prescrire 304).

However, most drugs approved for paediatric indications in 2009 do not improve the quality of care. Examples include: adalimumab in idiopathic juvenile arthritis (Rev Prescrire 306); atomoxetine in attention-deficit hyperactivity disorder (Prescrire Int 109); insulin glulisine in type 1 diabetes in children 6 years of age and older (Rev Prescrire 304); and lamotrigine for absence seizures (Prescrire Int 104). There were too few data to determine the role of etanercept in plaque psoriasis (Rev Prescrire 309).

Generics: some useful drugs despite anticompetitive practices. A study conducted in 2008 by the European Commission’s Directorate-General for Competition showed that companies developing originator drugs engaged in anticompetitive practices towards generics manufacturers (Rev Prescrire 307). Such practices carry a high cost, for both patients and society as a whole.

Thirty-four new generic drugs (marketed or soon to be marketed in France) were examined in 2009. About half of them provided some benefits, including clopidogrel (Rev Prescrire 313), losartan (Rev Prescrire 311), topiramate (Rev Prescrire 311) and valaciclovir (Rev Prescrire 314). In contrast, for two generics the risk-benefit balance is unfavourable: nimesulide (Rev Prescrire 313), a nonsteroidal anti-inflammatory drug; and benfluorex (Prescrire Int 105), an amphetamine that was finally withdrawn from the French market in late 2009.

Few biosimilars. Copies of originator biologicals are said to be “biosimilar”. In 2009, we examined only 2 such products, based on filgrastim, a granulocyte growth factor (Rev Prescrire 306) and epoetin zeta (Rev Prescrire 304).

A copy of interferon beta was not granted biosimilar status, because it was manufactured in exactly the same way as the originator drug (Rev Prescrire 309).

Whether or not copies of biologicals are considered biosimilar, their risk-benefit balances are comparable to those of the corresponding originator drugs.

High-quality care requires access to data
Since the adoption of European Directive 2004/27/EC on human medicines, EU health authorities have become somewhat more transparent. But bad habits die hard. Citizens, patients and healthcare professionals must maintain pressure on the authorities to ensure their new rights to greater transparency are respected.

Drug evaluation: veil of secrecy. Clinical trials with disappointing results often remain unpublished, unlike those with more favourable results. This publication bias leads to an unrealistic perception of the evidence (Prescrire Int 104).

According to a retrospective study, only 17% of phase I trials in healthy volunteers are published, versus none of those with negative results (Prescrire Int 105 page 46). Serious adverse effects are not systematically reported in publications of clinical trials (Rev Prescrire 305). Some unfavourable data are not submitted to the drug licensing agencies, as in the case of rofecoxib, for example (Rev Prescrire 303).

Similarly, the discovery in 2009 that 21 trials published in specialised journals had been totally fabricated is hardly reassuring (Rev Prescrire 311; 313).

To lift the veil of secrecy on drug evaluation, it is important to cross-check different sources of information, including published trials, regulatory agencies, clinical trial registries, and drug companies.

Access to EMA data: serious failings. A 4-year review of how the European Medicines Agency (EMA) meets its obligations for transparency turned up a series of failures and opacity, including reluctance to provide complete information, delays in responding to requests for information, and refusals to provide national agencies’ clinical data and pharmacovigilance reports (Prescrire Int 103). Some clinical evaluation and pharmacovigilance data that we requested from EMA were in large part censored. For example, 18 pages out of 28 pages of scientific discussion on risperidone were totally or partly blacked out (Rev Prescrire 309). In addition, only 3 pages of a 68-page assessment report on rimonabant were legible, as the rest had been systematically blacked out, line by line, even including the date of the report (Prescrire Int 103).

Afssaps: more thorough publication of assessment data needed. The French drug regulatory agency (Afssaps) is hardly better. The agendas of marketing authorisation and pharmacovigilance committees are not made public, and the minutes of the meetings are only published after a delay of several months. Those of the marketing licensing committee are extremely brief.

Conflicts of interest: regulatory agencies need to improve. Conflicts of interest among members of some EMA committees and task forces are not available online but solely on request from the EMA (Prescrire Int 103). The French National Authority for Health (HAS) allows specialists and decision-makers to participate in task forces and steering committees without having to first declare their conflicts of interest, or despite links to companies specifically concerned (Rev Prescrire 309).

Self-medication: what about quality of care?
In 2009, the self-medication market, coveted by certain drug companies, saw the introduction of very few truly useful products.

“Over the counter”: not the best choices. In 2009, more drugs were added to the list of products available over the counter for the treatment of mild disorders, but few represented the best...
A look back at 2009

Proliferation of umbrella brands: danger. So-called umbrella brands gather various products with different compositions, and sometimes, different licensing status, under the same brand name. This is essentially a marketing ploy, based on the choice of easily recognised names. However, umbrella brands can be dangerous, especially when the same drug is available under different brand names (Prescrire Int 2007).

Some umbrella brands were expanded in 2009, including: Humex® for sore throat, colds and allergies (Rev Prescrire 308, Rev Prescrire 312, Rev Prescrire 313, Rev Prescrire 314); Imo® and Imodium® for diarrhoea (Rev Prescrire 307, Rev Prescrire 312); and Vicks® for colds and sore throat (Rev Prescrire 306, Rev Prescrire 311).

Self-medication: we need high-quality products only! Self-medication is useful for treating some mild disorders, provided a pharmacist is on hand to rule out a more serious ailment. And provided patients have access to high-quality products, with more benefits than harms; proper packaging, including a fully informative patient leaflet; labelling highlighting the international proprietary name (INN, “a drug’s true name”); precise, practical measuring devices for multidose oral solutions; etc. (see the June issue).

A survey conducted by the Toulouse Pharmacovigilance Centre identified a number of errors parents made when treating their children with non-prescription drugs, including administration of the same drug under two fancy names, and use of a measuring device intended for another product (Prescrire Int page 28).

The regulatory agencies must carefully select the drugs they authorise for self-medication, and ensure that drug companies market only high-quality products.

### Inadequate patient protection

Drug regulatory agencies are mandated to protect patients’ health. Unfortunately, they will be unable to fulfil this role as long as they, and many of the experts who sit on their committees, are financially dependent on drug companies (Rev Prescrire 306, Rev Prescrire 100). Many examples of agencies’ failure to protect patients were again observed in 2009.

### Market withdrawals of harmful drugs: too few, too slow.

In 2009, 3 drugs were withdrawn from the European market because of their adverse effects: benfluorex (an amphetamine marketed for more than 30 years in France), because of neuropsychological and car-
diovascular disorders (including pulmonary hypertension and valve disease) (Prescrire Int 101 and 105); efalizumab, a drug authorised 5 years previously for psoriasis, despite its clearly negative risk-benefit balance (Rev Prescrire 306 and Prescrire Int 103); and injectable paracetamol, because of the increased risk of cutaneous disorders compared with injectable paracetamol (Rev Prescrire 313).

Many more drugs with unfavourable risk-benefit balances remain on the market, some of which have been around for decades (see inset page 90).

Information about adverse effects: withheld or barely visible. Adverse effects identified after a product has been marketed are added to the summary of product characteristics (SPC), but these so-called variations are generally difficult to find, given the large volume of other information in the SPC.

Since 2004, the European Medicines Agency (EMA) has listed “major” variations in a document called “Steps taken after authorisation” on its website. This makes it easier for patients and healthcare professionals to find variations, but the information is often very brief and posted late. We regularly ask the EMA for access to specific data (see inset page 93). The French Health Products Safety Agency (Afssaps) does not publish a similar list of variations.

Thus, when the French agency does not disseminate information about a specific risk, it can only be identified through detailed comparison of successive versions of the SPC.

Important variations identified in 2009 illustrate the crucial need for transparency and public access to safety data: for example, cardiac disorders with domperidone (Rev Prescrire 313); increased risk of thrombosis with transdermal patches containing ethinylestradiol + norethisterone (Rev Prescrire 311); cardiac and visual disorders with oseltamivir (Prescrire Int 102); a risk of suicide with varenicline (Rev Prescrire 311); and cardiac and hearing disorders with sildenafil, taladafil and vardenafl (Rev Prescrire 306).

Refusal of marketing authorisation: an effective means of protection. In 2009, we welcomed decisions by the European Committee for Medicinal Products for Human Use (CHMP) to reject a number of marketing applications. Other applications were withdrawn by the companies concerned, after the CHMP issued an unfavourable opinion. These measures protected the public from exposure to unjustified risks.

Examples include: desvenlafaxine in depression, because of more cardiac adverse effects than with other antidepressants (Prescrire Int 103); ramelteon, a melatonin receptor agonist for insomnia, because its adverse effects far outweigh its efficacy (Prescrire Int 101).

Pharmacovigilance, “information” and “patient education”: not safe in company hands

Several projects envisaged in early 2010 would remove power from the health authorities, healthcare professionals and patients, and place it in the hands of drug companies.

Pharmacovigilance: an unacceptable project for Europe. In late 2008, the European Commission published draft changes to legislation governing the organisation of pharmacovigilance in Europe.

However, several of those proposals would undermine the safety of European citizens, such as more widespread use of the premature marketing authorisation procedure; subcontracting of pharmacovigilance to drug companies (ranging from data collection to interpretation); and an end to mandatory public funding of pharmacovigilance activities.

Experience has shown that drug companies tend to minimise or even conceal information concerning adverse effects. According to the European Commission, adverse drug effects are responsible for at least 5% of hospitalisations and are the fifth cause of in-hospital deaths.

Major amendments to the Commission’s harmful proposals are needed to serve the interests of patients (Prescrire Int 104 and www.english.prescrire.org under Medicines in Europe).

“Patient information” concocted by drug companies: the return of an unwelcome project. For several years, drug companies and the European Commission’s Enterprise Directorate-General have been single-mindedly seeking to obtain authorisation for direct-to-consumer advertising of prescription drugs, which has proven to be highly profitable elsewhere.

To attain this objective, the European Commission has renamed this type of advertising “patient information” (see www.prescrire.org).

Despite strong opposition to this project from other health sector stakeholders in 2007 and 2008, the European Commission is digging in its heels (Rev Prescrire 315).

“Therapeutic education”: left to drug companies in France. In France, in 2009, “therapeutic education” of patients was enshrined in law (articles L.1611-1 to L.1161-6 of the Public Health Act), with the aim of “making patients more autonomous, by facilitating their adherence to prescribed treatments and by improving their quality of life”.

This idea of “therapeutic education” includes programmes of “education”, and “training”.

The law allows drug companies to contribute to the funding of some of these programmes.

Precisely how the law is implemented must be closely watched; there are too many potential conflicts of interest to leave patient “education” in the hands of the pharmaceutical industry.

Different roles in healthcare. Pharmacovigilance, patient information and patient education are the responsibility of the healthcare authorities, with no interference from the private sector.

Pricing and reimbursement: no relation to therapeutic advantage

Prices granted by governments too often bear no relation to the products’ concrete therapeutic advantages over existing treatments.

This is especially true for cancer treatments, where patients have high expectations. In 2009, the price granted for gefitinib was equivalent to about 70€ per day of treatment, despite an unfavourable risk-benefit balance in non small-cell lung cancer (Prescrire Int 102). A course of temoporfin for upper respiratory tract and gastrointestinal tract cancers costs about €5 727, despite this drug’s uncertain risk-benefit balance (Rev Prescrire 308). And a dose ofibratumomab costs €10 900, to which must be added the cost of rituximab and yttrium 90, for a total of about €15 700, even though the benefit of this treatment in patients with follicular lymphoma has not been convincingly demonstrated (Rev Prescrire 308).

In 2009, in France, exceptional reimbursement was granted in certain chronic or rare diseases; this included thalidomide in some off-license indications, }
and products such as sunscreens and sunglasses for patients with xeroderma pigmentosum (Rev Prescrire 316).

Advertising and “patient information”: still on the rise

After a survey of physician satisfaction with sales reps, a marketing agency revealingly concluded that: “there is a direct relationship between the number of contacts established by a drug company and the number of subsequent prescriptions” (Rev Prescrire 306).

At the same time, drug companies continued to drive home their advertising messages to patient groups and the general public in 2009.

Companies and patient associations: dangerous liaisons. Drug companies are increasingly focusing their marketing strategies on patient groups (Prescrire Int 102). They infiltrate these groups in order to place pressure on regulatory agencies, through the patients, with a view to obtaining more rapid market access and higher prices for their products. Some groups accept drug company funding or participation in “therapeutic education” (Prescrire Int 105 page 43). Yet patient groups that accept funding from drug companies risk losing their credibility in the eyes of the authorities, healthcare professionals, patients, and the public.

For example, a bulletin published by one such group contained a drug company proposal to provide information on multiple sclerosis; the company in question markets only two drugs in France, both for multiple sclerosis (Rev Prescrire 307).

TV programme sponsorship by drug companies: another propaganda tool. On 1 January 2009, sponsorship of television programmes by drug companies marketing prescription drugs was authorised in France (Rev Prescrire 312).

Although it is limited to the promotion of a company’s name and image (and does not include its drugs) TV sponsorship is a yet another means of getting the public’s attention.

Misleading advertisements: still too numerous. In 2009, we examined 10 drug advertisements aimed at healthcare professionals that were banned by the French drug regulatory agency, mainly because they promoted off-licence use or minimised adverse effects (Rev Prescrire 308, Rev Prescrire 314).

Many ads placed in professional journals hide or do not mention serious adverse effects.

Thus, publicity for the reimbursement of a so-called third-generation combined oral contraceptive failed to mention an increase in thromboembolic adverse effects (Rev Prescrire 313). Similarly, ads for tramadol + paracetamol (Rev Prescrire 311) and a nasal vasoconstrictor (Rev Prescrire 314) listed serious adverse effects in barely visible, small print while claimed benefits were highlighted. Another advertisement, for fondaparinux, refers readers to the French datasheet compendium for details of adverse effects (Rev Prescrire 303).

Getting back on track

Drug companies are simply filling the void left by the health agencies, which are putting the financial health of the pharmaceutical industry before patients’ interests; by patients who are sometimes too naive or inadequately organised; and by healthcare professionals who are sometimes too credulous or “under the influence”.

Patients and healthcare professionals must act together to ensure that governments assume their responsibilities, especially when it comes to protecting public health.