Drugs in 2019: a brief review

Eleven of the 108 new drugs, combinations, dose strengths, pharmaceutical forms or indications analysed and rated in our French edition in 2019 constituted a notable therapeutic advance, improving patient care in a variety of fields (haemophilia, various cancers, HIV infection, hepatitis C and rare diseases).

Every month, Prescrire publishes independent, comparative, systematic reviews of the latest developments in the pharmaceutical market, be they new active substances, new combinations, new dose strengths, new pharmaceutical forms or new indications. We also closely monitor news of drugs’ adverse effects, market withdrawals (instigated by pharmaceutical companies or regulatory authorities), shortages, and the regulatory environment for health products, particularly at EU level. Our aim is to help subscribers distinguish between true advances in health care and new products or uses that are no better than existing treatments or should never have been authorised, due to uncertainty over their harms or benefits or because they are clearly dangerous.

11 notable advances among 108 new authorisations. In 2019, 108 new products or new indications were analysed and rated by Prescrire (see the table on p. 111). As in previous years, a high proportion did not advance patient care, with 61 rated as “Nothing new”. Of the 24 that did, 13 represented a minimal advance (rated “Possibly helpful”).

Only 11 constituted a notable advance (rated “A real advance” or “Offers an advantage”), 6 of which earned a 2019 Prescrire Drug Award. Nine had been too poorly evaluated to determine their harm-benefit balance (rated “Judgement reserved”). Finally, the data available on 14 of them showed that they are more dangerous than useful (rated “Not acceptable”).

Few new drugs among the notable advances. Only two of the 11 notable advances in 2019, emicizumab and durvalumab, are new drugs. Two drugs, trastuzumab emtansine in certain types of breast cancer and ruxolitinib in myelofibrosis, were shown to be advances several years after their market introduction, in light of new data. Marketing authorisation is too often granted on the basis of grossly inadequate evaluation. Although the new data proved favourable to the drug in these two cases, the reverse can be true, with new data showing that patients have been unnecessarily exposed to a risk of serious adverse effects.

Chenodeoxycholic acid and trientine are old drugs that have only recently been granted marketing authorisation, a welcome development that facilitates access to these useful drugs and ensures they meet quality standards and are subject to surveillance.

Two products were authorised for a new age group: the glecaprevir + pibrentasvir combination for adolescents with chronic hepatitis C; and raltegravir for neonates with HIV infection, which was also marketed in new packaging to facilitate administration of the small doses required by babies.

In the field of oncology, two immunostimulants antibodies that act on the PD-1 receptor pathway advanced patient care: pembrolizumab in a new indication, and durvalumab, a new drug.

After cytotoxic drugs, endocrine therapy, targeted therapies and immunostimulants, 2019 saw the emergence of a new approach to the treatment of certain cancers in the form of CAR T-cell therapy, which is more akin to an autologous lymphocyte infusion than a drug. Although the results appear promising, the two CAR T-cell therapies now available, axicabtagene ciloleucel and tisagenlecleucel, have undergone only limited evaluation.

Positive action from the Transparency Committee of the French National Authority for Health. Two new drugs authorised in the EU were not examined in detail in Prescrire or rated in comparison with existing treatments for the same disease. The first is olaratumab (Lartruvo®), an antineoplastic authorised for the treatment of soft tissue sarcoma on the basis of woefully inadequate preliminary results, and its marketing authorisation was quite rightly withdrawn by the European Commission in mid-2019. The second is padeliporfin (Tookad®), a photosensitiser authorised for use in certain patients with localised prostate cancer, which has an uncertain harm-benefit balance (Prescrire Int n° 213). The Transparency Committee is safeguarding patients by issuing a negative opinion on funding of these two drugs by the national health insurance system, thus hindering their market introduction in France.
**Prescrire**'s ratings of new products and indications over the past 10 years

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**A REAL ADVANCE**
- *emicizumab* in patients with haemophilia A and factor VIII inhibitors (*Prescrire* Int n° 210).

**OFFERS AN ADVANTAGE**
- *chenodeoxycholic acid* in cerebrotendinous xanthomatosus (*Prescrire* Int n° 207);
- *glecaprevir + pibrentasvir* for adolescents with chronic hepatitis C (*Rev Prescrire* n° 434);
- *axicabtagene ciloleucel* in certain types of lymphoma when other treatment options have been exhausted (*Prescrire* Int n° 212);
- *durvalumab* as “maintenance” treatment in lung cancer (*Prescrire* Int n° 212);
- *pembrolizumab* in combination with cytotoxic drugs in lung cancers when a small proportion of tumour cells express the PD-L1 protein (*Prescrire* Int n° 212);
- *raltegravir granules* for neonates with HIV infection (*Rev Prescrire* n° 431);
- *ruxolitinib* in myelofibrosis (*Prescrire* Int n° 205);
- *lisagenlecleucel* for children and young adults with certain types of acute lymphoblastic leukaemia (*Prescrire* Int n° 208);
- *trastuzumab emtansine* in breast cancer (*Prescrire* Int n° 207);

**POSSIBLY HELPFUL**
- *emtricitabine + tenofovir disoproxil* for prevention of HIV infection in adolescents (*Prescrire* Int n° 206);
- *atazanavir* oral powder for patients from 3 months of age with HIV infection (*Prescrire* Int n° 207);
- *baclofen* in alcohol dependence (*Prescrire* Int n° 212);
- *cenegermin* eye drops in neurotrophic keratitis (*Prescrire* Int n° 204);
- *colchicine* in acute pericarditis (*Prescrire* Int n° 211);
- *dupilumab* in adults with atopic eczema (*Prescrire* Int n° 204);
- *erenumab* for prevention of migraine attacks (*Prescrire* Int n° 207);
- *glycopyronium* for sialorrhea due to neurological disorders (*Rev Prescrire* n° 430);
- *metreleptin* in lipodystrophy with leptin deficiency (*Rev Prescrire* n° 434);
- *pasireotide* for intramuscular use in Cushing’s disease (*Rev Prescrire* n° 425);
- *peginterferon alfa-2a* for patients from 3 years of age with chronic hepatitis B (*Rev Prescrire* n° 423);
- *glycerol phenylbutyrate* in urea cycle disorders (*Rev Prescrire* n° 428);
- *tocilizumab* for subcutaneous use in giant cell arteritis (*Prescrire* Int n° 205).

**JUDGEMENT RESERVED**
- *adalimumab* in children with chronic anterior uveitis (*Rev Prescrire* n° 429);
- *brentuximab vedotin* in cutaneous T-cell lymphoma (*Rev Prescrire* n° 426);
- *burosumab* in X-linked hypophosphatemia (*Prescrire* Int n° 206);
- *cerliponase alfa* in neuronal ceroid lipofuscinosis type 2 (*Prescrire* Int n° 213);
- *darvadstrocel* for complex perianal fistulae in Crohn’s disease (*Prescrire* Int n° 213);
- *mogamulizumab* in mycosis fungoides and Sézary syndrome (*Rev Prescrire* n° 434);
- *oxycodeone + naloxone* in restless legs syndrome (*Prescrire* Int n° 205);
- *sirolimus* in sporadic lymphangioleiomyomatosis (*Prescrire* Int n° 212);
- *tocilizumab* in cytokine release syndrome due to CAR T-cell therapy (*Rev Prescrire* n° 428).

**NOT ACCEPTABLE**
- *abemaciclib* in certain types of breast cancer (*Rev Prescrire* n° 431);
- *colchicine + opioid + tiemionium* in acute pericarditis (*Prescrire* Int n° 211);
- *atauren* for children aged 2 to 4 years with Duchenne muscular dystrophy (*Prescrire* Int n° 213);
- *chondroitin* 1200 mg oral gel in sachets (*Rev Prescrire* n° 424);
- *ertugliflozin* in type 2 diabetes (*Prescrire* Int n° 213);
- *ethinylestradiol + dienogest* for contraception or acne (*Rev Prescrire* n° 426);
- *recombinant human parathyroid hormone* in chronic hypoparathyroidism (*Prescrire* Int n° 210);
- *mepolizumab* for patients from 6 years of age with severe asthma (*Prescrire* Int n° 211);
- *olaparib* in ovarian cancer without a BRCA mutation (*Prescrire* Int n° 209);
- *pentosan polysulfate* in bladder pain syndrome (*Prescrire* Int n° 204);
- *pertuzumab* as adjuvant treatment for certain types of breast cancer at high risk of recurrence (*Prescrire* Int n° 210);
- *solifenacin* oral solution in neurogenic detrusor overactivity in children (*Rev Prescrire* n° 429);
- *tenofovir alafenamide + emtricitabine* + *elvitegravir* + *cobicistat* for children with HIV infection (*Prescrire* Int n° 206);
- *tolvaptan* in polycystic kidney disease with severe renal failure (*Rev Prescrire* n° 431).

**Therapeutic advances in 2019 compared with the previous 9 years**

- **2010-2018**
  - Notable advance
  - Minimal advance
  - More dangerous than useful

- **2019**
  - No proven advantages