

Pharmacist checklist for verifying chemotherapy

The British Oncology Pharmacy Association published its standards for checking chemotherapy prescriptions. The standards have been drawn up after consultation and represent a consensus that will guide members and encourage a common response. In 2008 the National Confidential Enquiry into Patient Outcome and Death report 'For better, for worse?' noted that there was only evidence of systemic anticancer therapy (SACT) prescriptions being checked by a pharmacist in 53% of cases.

The standards describe key steps that pharmacists should follow when checking parenteral and oral SACTs, including chemotherapy and non-cytotoxic medicines such as targeted therapies, antibody treatments and novel therapies.

[www.bopawebsite.org/tiki-page.php?pageName= Position+Statements](http://www.bopawebsite.org/tiki-page.php?pageName=Position+Statements)

Safety of 'inert' additives or excipients in paediatric medicines

A study documents exposure to over 20 excipients including ethanol, propylene glycol and sorbitol in 36 preterm infants. Further, some infants were exposed to amounts higher than those recommended for adults per kilogramme of body weight. A discussion aims to raise awareness of the role excipients play in making medicines, describe potential adverse effects associated with these excipients, and discuss what needs to be done to minimise adverse health outcomes from the use of excipients in medicines for use in infants.

Arch Dis Child Fetal Neonatal Ed. 2009;94:F392-F393
doi: 10.1136/adc.2009.160192

Multiple Sclerosis

The European Medicines Agency has concluded its review of natalizumab (Tysabri) and the risk of progressive multifocal leukoencephalopathy (PML), a rare brain infection caused by the JC virus. The Committee for Medicinal Products for Human Use has concluded that the risk of developing PML increases after two years of use of natalizumab but remains low. So the benefits of the medicine continue to outweigh its risks for patients with highly active relapsing-remitting multiple sclerosis (MS).

As it is important that PML is detected early, the Committee has recommended a number of measures to ensure that patients and prescribers are fully aware of the risks of PML [1]. These include an update of the product information and forms to be signed by patients at the beginning of treatment and again after two years of treatment.

Meanwhile, three studies published early online in NEJM [2] show that an effective oral treatment of MS may be on the way. Oral cladribine from Merck Serono is expected to launch in 2010 while fingolimod from Novartis Pharma is on track to launch in early 2011. The once-daily treatments are for the most common relapsing-remitting form of the disease. However, as these agents also affect the immune system, patients are at risk of infections and cancer when taking the new drugs as well. Overall, serious problems affected 8–9% of people taking cladribine and about 5–10% of people taking fingolimod.

1. www.ema.europa.eu/humandocs/PDFs/EPAR/tysabri/3760710en.pdf
2. [10.1056/NEJMoa0909494](https://doi.org/10.1056/NEJMoa0909494), [10.1056/NEJMoa0907839](https://doi.org/10.1056/NEJMoa0907839), [10.1056/NEJMoa0902533](https://doi.org/10.1056/NEJMoa0902533)

Early anticoagulation after acute pulmonary embolism associated with reduced mortality

Acute pulmonary embolism (PE) is a common cause of death, and many patients die before treatment. Intravenous heparin reduces mortality and recurrence of PE, but the relationship between survival and timing of anticoagulation has not been extensively studied. In a large series, patients with confirmed acute PE were classified according to whether they first received heparin in the emergency department or after admission.

In-hospital and 30-day mortality rates were 3.0% and 7.7%, respectively. Patients who received heparin in the emergency department had lower in-hospital (1.4% vs. 6.7%, $p = 0.009$) and 30-day (4.4% vs. 15.3%, $p < 0.001$) mortality rates as compared to patients given heparin after admission. Therefore the authors concluded that early anticoagulation for patients with acute pulmonary PE was associated with better survival, both in-hospital and at 30 days.

Chest. doi:10.1378/chest.09-0959.

Should antibiotic dosing vary according to patient weight?

Antibiotic regimens should be varied according to the patient's bodyweight, suggests a 'View point' published 16 January 2010. Body size and composition characteristics affect drug distribution and metabolism and the authors argue that obese patients can no longer be considered a small group.

However, the authors admit that, for most antimicrobials, the interaction between drug pharmacokinetics and body size indices is complex and the most accurate size descriptor, for example, total, adjusted, ideal or lean bodyweight, has not been firmly established.

The Lancet. 2010;375(9710):248.