

# Lives can be saved by investing in clinical pharmacy services

Patients who receive a high level of care from clinical pharmacy staff during a hospital stay are less likely to die. This is according to research presented by David Webb, London, Eastern and South East Specialist Pharmacy Services, at the United Kingdom Clinical Pharmacy Association symposium held in Leicestershire last month.

Mr Webb and colleagues reached this conclusion by correlating hospital standardised mortality ratings (HSMRs) with the scores that trusts received for various clinical pharmacy-related key performance indicators (KPIs). Data from almost 50 trusts were analysed. The results showed that HSMRs were lower in trusts where a higher percentage of patients:

- Had their medication history taken by a member of pharmacy staff within 24h of admission
- Had any changes to their medication regimen reviewed by a clinical pharmacist within 24h of the change being made



Having patients' medication regimens reviewed by clinical pharmacists is linked with lower mortality ratings

- Had a clinical pharmacist's review recorded in their notes
- Received medication counselling by pharmacy staff before discharge

HSMRs were negatively correlated with the number of pharmacy staff employed (expressed as whole time equivalents). There was also a positive correlation between the number of pharmacy staff employed and the trusts KPI

score, particularly for those trusts who had high scores. Mr Webb explained that, although other factors in addition to the level of clinical pharmacy services clearly have an impact on HSMRs, the findings should prove useful in promoting the work of pharmacy staff at times when budget constraints are affecting the NHS.

Mr Webb was presented with the Hameln award for the best oral presentation.

## Pharmacists assessed for Po-210 risk

Pharmacists at University College Hospital, London who were concerned about possible exposure to Polonium-210, following the death last month of Alexander Litvinenko, a former Russian spy, at the hospital, were invited to fill out a Health Protection Agency questionnaire to assess any risk to them.

Robert Urquart, head of pharmacy at University College London Hospitals NHS Foundation Trust, said that no pharmacists had gone on to be further assessed.

## UKCPA to consult on new mission statement

The United Kingdom Clinical Pharmacy Association is to consult its members about changing its mission statement. The proposed new statement reads: "To promote expert practice in medicines management for the benefit of patients and the public by establishing standards, developing the workforce and advancing innovation in all health care settings".

Duncan McRobbie, principal clinical pharmacist at Guy's and St Thomas' NHS Foundation Trust and chairman of the UKCPA, explained the reasoning behind the changes at

the organisation's autumn symposium, which was held last month. He said that the new wording has been proposed to reflect the use by Government and other bodies of the term "medicines management" rather than "pharmaceutical care" and to emphasise the need for standard setting.

Celebrations and presentations to mark the UKCPA's 25th anniversary also took place at the symposium. Further news stories from the event appear above and on p388. A report of the conference is set to be included in the January 2007 issue of *Hospital Pharmacist*.

## brief

■ A draft "Guide to good practices for preparation of medicinal products in pharmacies" has been published for consultation by the Pharmaceutical Inspection Convention and Pharmaceutical Inspection Co-operation Scheme. It can be accessed via *PJ Online* ([www.pjonline.com/links/hp](http://www.pjonline.com/links/hp)). Closing date 30 March 2007.

■ New advice for safer blood transfusions has been issued by the National Patient Safety Agency. The advice includes using electronic tracking systems for blood samples. The NPSA has also published its national reporting and learning system data for autumn (accessible at [www.npsa.nhs.uk](http://www.npsa.nhs.uk))

■ The consultation on the revised code of ethics for pharmacists and pharmacy technicians is open until 26 January 2007. It can be accessed via *PJ Online* ([www.pjonline.com/links/hp](http://www.pjonline.com/links/hp)).

■ Guidance on managing patients with mental illness in hospital has been published by the Department of Health. It can be accessed via *PJ Online* ([www.pjonline.com/links/hp](http://www.pjonline.com/links/hp)).

■ Blind and visually impaired patients can now listen to recordings of patient information leaflets on the telephone and on audio CDs or view them in large print, as part of a service launched last month by the Royal National Institute for the Blind and Datapharm Communications. Details at <http://xpil.medicines.org.uk>

■ Directing cancer patients to relevant information about their condition and the support available is the aim of an electronic information pathway launched recently by the NHS Cancer Services Collaborative Improvement Partnership.

# Self-administration scheme wins award . . .

Calderdale and Huddersfield NHS Foundation Trust — rated as excellent in the Healthcare Commission's medicines management health check — was further recognised last month. It won the "Patient involvement" category at the Gala Awards ceremony held in Birmingham for the National Prescribing Centre's medicines management collaborative programmes that have been running for the past five years.

The award recognised the trust's efforts to increase patient safety and reduce risk through the self-administration of medicines.

Karen Guy, one of only a handful of nurses who are based in pharmacy departments in the UK, described the benefits to staff, as well as patients, through the introduction of self-administration. The time spent, for example, administering

medicines on the medicine round dropped from just over four hours in every 24 hours to less than two hours. Patients' knowledge about their medicines, why they had been prescribed them, the dose, course and possible side effects improved. She explained that the system enables patients to "practise" taking their medicines before they are discharged and so enable hospital staff to assist patients and their carers to cope with more complicated medication regimens.

In other categories Oxford Radcliffe Hospitals NHS Trust, South Staffordshire Healthcare NHS Foundation Trust, University Hospitals of Leicester NHS Trust and Hinchingbrooke Healthcare NHS Trust were runners-up. University Hospitals of Leicester NHS Trust also produced the best "story board" presented at the Gala Awards.

## . . . But others report no real evidence for SAPs

There is no conclusive evidence that patients who self-administer their drugs during a hospital stay have improved compliance according to Julia Wright, head of clinical pharmacy at Southampton University Hospitals NHS Trust.

Presenting the research to delegates at the United Kingdom Clinical Pharmacy Association's autumn symposium held last month in Leicestershire, Mrs Wright explained that she and her colleagues retrospectively reviewed 51 research papers, chosen on the basis that they described the self-administration programme (SAP) involved and evaluated it objectively. Patient compliance was assessed in 12 papers, with statistical evaluation being carried out in seven. Only four of these found improved

compliance scores in the patient group participating in SAPs, compared with a control group. Just two papers statistically evaluated the effect of SAPs on medication errors after discharge, with only one of these showing a beneficial effect. Both papers that statistically evaluated patient satisfaction found that patients would chose to participate in a SAP again.

Mrs Wright commented that it is difficult to know whether the benefits attributed to SAPs would have been realised just from educating patients about their drugs. Moreover, none of the papers statistically evaluated the effect of SAPs on nursing and pharmacy staff's time, so it is unclear whether the benefits of SAPs are greater than the resources required to implement and maintain them.

Prescribing Information For Avandamet Use in Dual Therapy Only  
Refer to full Summary of Product Characteristics before prescribing

### AVANDAMET ▼ Rosiglitazone/metformin HCl

**Presentations** AVANDAMET 2mg/500mg film-coated tablets containing 2mg rosiglitazone with 500mg metformin HCl. AVANDAMET 2mg/1000mg & 4mg/1000mg film-coated tablets containing 2mg or 4mg rosiglitazone respectively with 1000mg metformin HCl. **Indications** Treatment of Type 2 diabetes mellitus patients, particularly overweight patients: who are unable to achieve sufficient glycaemic control at their maximally tolerated dose of metformin alone. **Posology & administration** 4mg rosiglitazone/2000mg metformin with food. Can be increased to 8mg rosiglitazone/2000mg metformin if greater glycaemic control is required. **Elderly** Renal function should be monitored regularly. **Children & adolescents** Not recommended. **Contraindications** Hypersensitivity; history of cardiac failure (NYHA stages I to IV); disease which may cause tissue hypoxia; hepatic impairment, acute alcohol intoxication/alcoholism, diabetic ketoacidosis/pre-coma; renal impairment; acute conditions that may alter renal function; lactation; concomitant insulin. **Special warnings & precautions** **Renal function** serum creatinine concentrations should be determined regularly (see SPC). **Fluid retention & cardiac failure** Rosiglitazone can cause dose-related fluid retention that may very rarely be associated with rapid & excessive weight gain, & may exacerbate or precipitate heart failure. Monitor signs & symptoms of fluid retention. Discontinue if deterioration in cardiac status. Heart failure reported more frequently when history of heart failure, elderly, or mild or moderate renal failure, or when used in combination with a sulphonylurea or insulin. Concomitant administration with NSAIDs may increase risk of oedema. **Monitoring of liver function** Rare reports of hepatocellular dysfunction. Therapy should not be initiated when increased baseline ALT levels (>2.5xULN), or other evidence of liver disease. Liver enzymes should be checked prior to therapy initiation periodically thereafter based on clinical judgement. Discontinue if jaundice is observed. **Eye disorders** Reports of new or worsening diabetic macular oedema with rosiglitazone. Commonly occurs with concurrent peripheral oedema. Ophthalmologic referral should be considered where reported. **Surgery** AVANDAMET should be discontinued 48 hrs before elective surgery with general anaesthesia & not be resumed earlier than 48 hrs after. **Iodinated contrast agents** Discontinue prior to/at time of tests & do not reinstitute until 48 hrs after & only after renal function has been found to be normal. **Interactions** Caution when administering CYP2C8 inhibitors (e.g. gemfibrozil) or inducers (e.g. rifampicin), concomitantly. Caution when administering cationic drugs eliminated by renal tubular secretion (e.g. cimetidine). Increased risk of lactic acidosis in acute alcohol intoxication. Avoid consumption of alcohol and medicinal products containing alcohol. If needed adjust dosage when used with agents that effect blood glucose levels e.g. glucocorticoids, beta-2 agonists, diuretics & ACE-inhibitors. **Pregnancy & lactation** Do not use. Risk unknown. **Ability to drive & use machines** No effects observed. **Undesirable effects** Adverse reactions identified from clinical trial data (frequencies: very common, ≥1/10; common, ≥1/100 to <1/10; uncommon, ≥1/1000 to <1/100; rare, ≥1/10,000 to <1/1000; very rare, <1/10,000): **Rosiglitazone+metformin** (AVANDAMET or as separate components): Common: anaemia, hypercholesterolaemia, hyperlipaemia, weight increase, hypoglycaemia, dizziness, constipation, oedema. **Additional information on individual active substances** **Rosiglitazone** Hypercholesterolemia reported in up to 5.3% of all patients treated with rosiglitazone. Increases were generally mild to moderate and usually did not require discontinuation. Elevations of ALT >3xULN were equal to placebo in double-blind clinical trials. **Adverse events reported post-marketing with rosiglitazone treatment:** Rare: macular oedema, congestive heart failure & pulmonary oedema, elevated liver enzymes & hepatocellular dysfunction (in very rare cases fatal outcome reported). Very rare: rapid & excessive weight gain, angioedema & urticaria. **Adverse events reported in clinical trials and post-marketing with metformin treatment:** Very common: GI symptoms (most frequent at initiation of therapy, resolving spontaneously in most cases). Common: Metallic taste. Very rare: Lactic acidosis, vitamin B12 deficiency, liver function disorders, hepatitis, urticaria, erythema, pruritis. **Overdose** No data for AVANDAMET. Doses of up to 20mg rosiglitazone well tolerated. A large overdose of metformin may lead to lactic acidosis. Supportive treatment should be initiated, dictated by patient's clinical status. Rosiglitazone not cleared by haemodialysis. **Basic NHS cost:** AVANDAMET: 2mg/500mg – 112 film-coated tablets £52.45 (EU/1/03/258/006); 2mg/1000mg – 56 film-coated tablets £27.71 (EU/1/03/258/009); 4mg/1000mg – 56 film-coated tablets £52.45 (EU/1/03/258/012). **Marketing Authorisation holder:** SmithKline Beecham plc, 980 Great West Road, Brentford, Middlesex TW8 9GS. **Legal category:** POM. **Date of preparation:** August 2006. **Further information is available from:** Customer Contact Centre, GlaxoSmithKline, Stockley Park West, Uxbridge, Middlesex UB11 1BT; customercontactuk@gsk.com; Freephone 0800 221 441. AVANDAMET is a registered trademark of the GlaxoSmithKline Group of Companies © **Reference:** 1. Bailey CJ *et al. Clin Ther* 2005 Oct; 27(10): 1548-61.

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In order to continually monitor and evaluate the safety of AVANDAMET, we encourage healthcare professionals to report adverse events, pregnancy, overdose and unexpected benefits to GlaxoSmithKline on 0800 221 441. Please consult the Summary of Product Characteristics for full details on the safety profile of AVANDAMET. Information about adverse event reporting can also be found at [www.yellowcard.gov.uk](http://www.yellowcard.gov.uk)