

Academic member of Society's Council appointed

Stephen Denyer, head of the school of pharmacy at Cardiff University, has been appointed as the academic member of the Royal Pharmaceutical Society's Council.

Commenting on the importance of representation across the profession, Professor Denyer said: "Pharmacy is being influenced by change in all its areas of practice. Only by recognising the combined effect of these changes can good responses and good policy evolve." He added that, as an academic, he will be able to bring to the Council an understanding of the current experience of the student body, their aspirations and expectations and an appreciation of the future scientific and clinical developments which will impinge on the practice of pharmacy.

The lay members of the Council have also been appointed and include equal numbers of men and women. Three current Privy Council nominee members, Phillida Entwistle, Bob Michell and Michael Schofield, have been reappointed, alongside



Stephen Denyer: pharmacy is being influenced by change in all areas

seven new members, increasing the number of lay members to 10. The lay positions were advertised and then the Privy Council approved successful applicants, nominated by the NHS Appointments Commission, to the Society's Council (see p595).

Commenting on the appointment of lay members, Michael Schofield, who is also an independent assessor for the Commissioner for Public Appointments, said: "The lay membership of the Council has always made an important contribution and will do so even more in the future. It provides an external perspective on the profession in a rapidly changing world."

New lay member Marcia Saunders, who is chairman of the North Central London Strategic Health Authority, commented: "I think that what I will bring to the Council is an understanding of the role that pharmacists can play, and an enthusiasm for the part they already play, in the modernisation of the health service. Also, as patients, lay members are particularly conscious of the support that both community and hospital pharmacists can provide and the improvements they make to patients' health. All of us new members come from different backgrounds and I'm sure we'll all want to give our best to the Council to help it develop its strategy."

CHRE recommends audit of Society's Infringements Committee

External auditing of decision-making by the Royal Pharmaceutical Society's Infringements Committee has been suggested by the Council for Healthcare Regulatory Excellence.

The 2005 annual performance review report compiled from a questionnaire completed by the Society at the request of the CHRE was discussed at the council's meeting last week. It also suggests that the Society should consider collecting statistical information on complaints against pharmacists as they progress through the fitness to practise procedures. This could help the Society identify learning points to help prevent similar incidents recurring through feedback in preregistration education, training or guidance.

Overall, the review identifies many areas of good practice within the Society's systems, including its consultation on the Code of Ethics

for pharmacy technicians, modification of the preregistration training handbook in the light of a recent Statutory Committee case and its plan to link work on competencies to the preregistration programme, and the CPD scheme and its postgraduate programme.

Weaknesses identified include the current fitness to practise procedures, which are less modern than those of many other regulators.

The report says that the Society is aware of this deficiency and that it has been seeking changes to the underpinning legislation through an Order under Section 60 of the Health Act 1999. Major deficiencies identified by the Society include the lack of a health committee to deal with cases of impaired fitness to practise due to illness, a limited range of disciplinary sanctions and the absence of any power of interim suspension.

Mandie Lavin, the Society's director of fitness to practise and legal affairs, said: "We will be incorporating auditing of decisions into the business plan for 2006 and will explore ways of ensuring consistency, proportionality and fairness. This will be supplemented by ongoing training of Council and committee members, refinement of referral criteria and engagement with stakeholders and the public to ensure public and professional confidence in complaints handling."

She said that the complaints procedure would be made more transparent with more information posted on the Society's website and statistical data in its annual review.

The performance review report was to be considered by the CHRE on 12 May. It is accessible via *PJ Online* (www.pjonline.com/links/pj).

CHRE concerned about representation on regulatory review

Concern over the absence of representatives of many regulatory bodies from a Department of Health review group has been expressed within the Council for Healthcare Regulatory Excellence. But the council left it to individual regulators to take up the matter with the DoH.

Only two of the six health regulators responsible for 19 professions under review — the Nursing and Midwifery Council and the Health Professions Council — are represented on the group. Instead, most, including the Royal Pharmaceutical Society, are restricted to participation in a reference group conference, which will meet for the first time in July. No details of any other reference group activities are available.

The review, chaired by the DoH's workforce director Andrew Foster (*PJ*, 19 March, p323 and 26 March, p349), was discussed at a closed session of the CHRE's April meeting.

The CHRE chairwoman, Jane Wesson, and director, Sandy Forrest, are members of the review group, as is the chief pharmaceutical officer for England, Jim Smith. It met for the first time on 1 April and will meet monthly until it reports in December.

The review group is concerned with CPD systems and the appraisal of non-medical health professionals and possible progress towards systems of revalidation. It is also to consider the role, structure, functions and number of non-medical health regulators.

The Society

Council complete

The Privy Council has appointed 10 lay members to the Society's Council and, with the additional appointment of an academic pharmacist, the Council make up is now confirmed (p595).

Birdsgrove House

The current situation regarding Birdsgrove House is explained in an article (p596).

Accounts

The Society's accounts are now published at www.rpsgb.org (p596).

New team moves into the Department of Health

A new team of ministers has been appointed to the Department of Health following the general election last week in which junior health minister, Melanie Johnson, lost her seat.

Former Secretary of State for Trade and Industry, Patricia Hewitt, has taken over from John Reid as Secretary of State for Health. Dr Reid has been made defence secretary.

Rosie Winterton has kept her job as Minister of State but, with portfolios still to be allocated, it remains to be seen whether she will retain responsibility for pharmacy.

Lord Warner has also kept a DoH post, but has been promoted from Parliamentary Under-Secretary of State to Minister of State. As junior minister in the House of Lords, Lord Warner's portfolio included responsibility for the pharmaceutical industry and the Medicines and Healthcare products Regulatory Agency.

As well as Ms Hewitt, there are three other new appointments at the Department.

Jane Kennedy, Minister of State at the Department for Work and Pensions since April last year has moved sideways to the DoH as a Minister of State.

Caroline Flint, a Parliamentary Under-Secretary of State at the Home Office since



Patricia Hewitt: committed to listen to professionals and patients

2003, has become a Parliamentary Under-Secretary of State at the DoH, as has Liam Byrne. This is the first Government appointment for Mr Byrne, who was elected to Parliament at a by-election in 2004.

Following her appointment, Ms Hewitt said: "I am determined to drive forward our plans to create a patient-led NHS in the direction set by the Prime Minister, while keeping up the pace of change set by my predecessors.

"Over the next three months I will be doing a lot of listening and learning from the real experts — patients and staff. I intend to get around all parts of the NHS, finding out for myself what patients feel about the care they are receiving and shadowing staff as they carry out their duties. I will listen to everyone, whether medics or midwives, cleaners, porters or physiotherapists, stop-smoking teams or our new breed of personal health advisers.

"As patients and consumers, we are better informed today about our health care than any previous generation. A modern health and social care system has to be completely focused on the needs of its users. The two million people who work in the NHS and social care are also themselves patients and users. I know they all want to treat patients and users the way they and their families would want to be treated, and that is the purpose of our reforms."

Sandra Gidley clings to her seat in Romsey

Sandra Gidley, the only pharmacist in Parliament and the sitting Liberal Democrat MP for Romsey, almost lost her seat in the general election.

Mrs Gidley's majority was slashed from 2,370 to just 125. Her share of the vote fell by

2.3 per cent, with the second-placed Conservative candidate gaining 2.3 per cent.

Donald Wood, a locum pharmacist in Barnsley, South Yorkshire, stood as an independent candidate in the Barnsley Central constituency. Mr Wood lost his deposit.

Call for WHO to co-ordinate disaster response

The world needs a network of experts and clear procedures to deal with mass fatalities and psychological trauma caused by disasters, health care professionals attending a World Health Organization conference in Phuket, Thailand, have recommended.

They conclude that unco-ordinated needs assessments are counterproductive and that there should be clear roles, responsibilities and operating procedures so that military and

civilian organisations can work together on their responses. They also suggest that the WHO plays a more central role in disasters — directing volunteer doctors and nurses, distributing donated equipment and medicines and monitoring the health of affected communities.

The recommendations will be presented to the World Health Assembly in Geneva, next week.

OTC market shrinks slightly after three years of slow growth

The real-terms value of the market in over-the-counter medicines fell during 2004.

Figures released by the Proprietary Association of Great Britain show that sales growth was below inflation at just 0.9 per cent, compared with a 4.1 per cent increase during 2003.

Volume growth during 2004 was marginally ahead of sales at 1 per cent.

PAGB communications and commercial affairs director Mike Owen said: "The OTC market is not an easy one to be in at the moment. But there are clearly opportunities out there, with strong Government support for self care; new contracts for pharmacists and doctors that emphasise self care; and growing health awareness among consumers as three obvious helpful factors."

News in brief

Fluoridation report

A report about water fluoridation intended to help strategic health authorities and primary care trusts consider whether to implement fluoridation schemes has been published by the British Fluoridation Society, UK Public Health Association, British Dental Association and Faculty of Public Health. The report is accessible via *PJ Online* (www.pjonline.com/links.pj).

NICE consults on social values

The National Institute for Health and Clinical Excellence is calling for views on making social value judgements when developing guidance. NICE acknowledges that age and lifestyle can influence how effective a treatment is. The consultation ends on 30 June and can be accessed via *PJ Online* (www.pjonline.com/links.pj).

Failure to monitor bird flu

Countries affected by bird flu are not sharing samples from infected people and poultry with the World Health Organization, according to *Nature*. Of 89 human cases 52 have been fatal. Only six samples have been obtained by the WHO, which is warning that it cannot judge how serious the situation is (2005;435:131).

“Personal control” could extend to 10 pharmacies

One pharmacist could have “personal control” over up to 10 pharmacies, provided that there is still one supervising or duty pharmacist for every individual pharmacy, the Scottish Pharmaceutical Federation has said in its response to the Scottish Executive Health Department’s consultation on the pharmacy workforce.

This would require a reinterpretation of the term “personal control” and the SPF proposes that it should mean taking responsibility for:

- Ensuring safe systems of work
- Allocating tasks to staff
- Ensuring staff are aware of personal responsibilities
- Clinical governance and audit

The SPF believes that the presence of a pharmacist in the pharmacy is crucial to en-



Tasks would be allocated to other staff

sure patient safety but concedes that remote supervision is now a possibility. “There is no substitute for face-to-face contact between pharmacists and patients but with modern technology [the SPF] accepts that it is possi-

ble for a pharmacist to make an intervention on a P medicine sale or a prescription being dispensed without being ‘bodily’ present in the pharmacy,” the SPF states. It warns that the conditions for remote supervision must be clearly defined but says that it will be difficult to set a limit for the time a supervising pharmacist may be absent from the pharmacy.

The SPF does not support the suggestion that supervision can be delegated to a non-pharmacist member of the pharmacy team but says that if remote supervision becomes a reality then there will be a need for pharmacy technicians to have an enhanced role within the dispensing process.

The SEHD consultation “Making the best use of the pharmacy workforce” was published earlier this year (*PJ*, 12 February, p165) and followed a similar consultation in England (*PJ*, 19 March, p323 and 18/25 December 2004, p873).

PCTs need clear point of contact at multiples

Primary care trusts need a clear point of contact at multiple pharmacies, Digby Emson, chairman of the Company Chemists’ Association, said at the Primary Care conference in Birmingham last week.

It is incumbent on multiples to make it as easy as possible for PCTs to engage with them, he argued, but PCTs also need to recognise that each multiple is different, and so be flexible and fair in their approach. “PCTs need to ensure that their commissioning arrangements are transparent and that they create a level playing field. This is crucial to every pharmacy contractor — both big and small,” he said.

Mr Emson also warned that community pharmacists need to recognise that, with regard to enhanced services, they are competing for the same funds as GPs and other primary care providers.

“We are going to have to make a strong case to attract funding and that will be a key

role for local pharmaceutical committees,” he said.

CCA members should, therefore, support their LPC representatives, he said, so that they are able to do the best possible job of representing contractors’ interests with PCTs. “LPCs need to monitor local arrangements and ensure that pharmacy gets to hear about all the opportunities — whether they have a pharmacy label attached to them or not,” he added.

Independent and multiple pharmacies face many of the same problems and it is in the interests of both to present a united front to Government and commissioners of health services, he said. “Now that we have the contract and a model for fair funding for the future, community pharmacy not only has to deliver, but has also to be seen by the public to deliver,” he argued. “This obligation to deliver places an enormous pressure on us all — whether we are independent, single owner proprietors or the largest multiple.”

Nucare launches new pharmacist training programme

Nucare has launched a new pharmacist development programme that aims to provide independent pharmacists with the skills and understanding needed for implementation of the new community pharmacy contract.

The programme, developed with Evolve People Solutions, is based on a training scheme that has been running in the Midlands over the past year. It will consist of a series of workshops, such as “dispensing, repeat dispensing and promoting healthy lifestyles” and “understanding stakeholders and improving outcomes”, covering aspects of the new contract.

Outlining the new programme to participants at the Nucare annual convention in

Bristol this week, Narinder Gogna, director of Evolve People Solutions, explained that the workshops would create a learning network in which pharmacists can share best practice and proactively plan for change. He said that successful management of change will be important for independents. “It is critical that independents stay one step ahead of the multiples,” he said. “That is where we have always been. We don’t want to [have to] catch them up.”

Nucare has also designed workshops for counter assistants that are due to start in September.

Meeting p593

Numark bone screening

Bone density screening could soon be available in some Numark pharmacies following the launch of a new osteoporosis programme. Numark, together with BioCalth, is encouraging its members to rent bone-scanning equipment to screen patients. The screening will involve performing an ultrasound of the patients’ ankle bone and entering patient details into a computer programme to assess their osteoporosis risk. Pharmacists will then offer advice or refer patients to their GP as appropriate.

■ Pneumococcal vaccine

Pharmacists in Scotland will be reimbursed £9.02 plus VAT for each pneumococcal vaccine they supply this year. In addition, they will be paid the usual dispensing fee for each vaccine ordered on a prescription or a £1.26 handling fee per vaccine on stock orders. If vaccines cannot be obtained at the £9.02 price, pharmacists should inform the Scottish Pharmaceutical General Council.

■ Influenza season summary

A summary of influenza and other major respiratory virus activity for the 2004–05 season has been published by the Health Protection Agency. It reports that flu activity in the UK remained low with illness rates in England, Scotland and Wales staying close to or below baseline levels. The summary can be accessed via *PJ Online* (www.pjonline.com/links/pj).

News in brief

US warning on eczema drugs “lacks evidence base”

Prescribing advisers in the UK should be guided by their own evidence-based risk/benefit assessment of topical calcineurin inhibitors (TCIs) rather than the US Food and Drug Administration's theoretical concerns about the drugs' cancer risks, dermatology leaders recommended this week.

Speaking at the 8th Congress of the European Society for Pediatric Dermatology held in Budapest last week, Johannes Ring, president of the European Academy of Dermatology and Venereology, and Ramon Grimalt, general secretary of the ESPD, criticised the FDA's recent announcement that it was to put black box warnings on the labels

for pimecrolimus cream (Elidel) and tacrolimus ointment (Protopic) used as alternatives to topical corticosteroids to treat atopic dermatitis.

“There is no clinical evidence whatsoever to support this warning. We think it is disproportionate and unjustified,” said Professor Ring. “We are upset because we don't want this to limit access to TCIs or cause unnecessary anxiety to patients and caregivers.” The move has prompted the European Medicines Agency to start conducting its own comprehensive review of the drugs.

The FDA's concerns stem from the drugs' immune-suppressing action. Oral immuno-

suppressant drugs such as oral steroids and oral calcineurin inhibitors used in transplant patients have been associated with an increased risk of lymphoma.

Susan Lewis-Jones, consultant paediatric dermatologist at Ninewells Hospital, Dundee, defended the safety record of topical TCIs. Pimecrolimus cream has been used by over five million patients, half of them children aged under 10 years, and tacrolimus ointment by 2.5 million. Clinical trial data are available on tens of thousands of patients. “The few cancers observed, including lymphomas, had been evaluated by independent experts and found unrelated to drug treatment,” she noted.

FDA to put PILs for all approved drugs on web

Web-based patient information leaflets are to be provided for all approved drugs, the US Food and Drug Administration announced last week.

The move is part of the FDA's wider drug safety initiative, which involves the formation of an independent “drug safety oversight board” to oversee management of safety issues and to provide information on emerging safety issues to health care providers and patients.

One of the board's responsibilities will be to produce consumer-friendly information sheets for patients and health care professionals available in an easily accessible format. The aim is to allow patients and health care professionals to make better-informed decisions about treatment options.

The initiative will also include a Drug Watch web page that will communicate the most up-to-date safety information to the public, even before the FDA determines whether regulatory action is appropriate. This page will contain links to the consumer and health care professional information sheets, and issues highlighted on Drug Watch will also appear on the information sheets.

Theo Raynor, head of the pharmacy prac-



The internet is becoming an essential source of information about medicines

... and medicines management group at the University of Leeds, told *The Journal* that this is a change of direction for the FDA. “The US approach has been to allow third parties to provide drug information . . . but the increasing focus on safety for medicines has led the FDA to change tack and to take control.” He adds that this development is a sign that despite there being a significant proportion of the population who cannot access the internet, it is becoming an essential part of providing information about medicines.

Three drugs better than one for ischaemic heart disease

Patients with cardiovascular disease have a better chance of survival if they take a combination of three drug classes — statins, aspirin and beta blockers — than if they take just one, a new prospective study reveals.

Researchers tracked the progress of over 13,000 patients diagnosed with ischaemic heart disease. They found that those treated with all three drug classes had an improved survival rate than those treated with beta-blockers or angiotensin-converting enzyme inhibitors alone (83 per cent reduction in all cause mortality compared with 19 per cent and 20 per cent, respectively). Adding an ACE inhibitor to the treatment regimen did not appear to confer additional benefit (*BMJ* 2005;330:1059).

Herbal ingredient guidance

New guidance has been produced by the Medicines and Healthcare products Regulatory Agency to help manufacturers and suppliers of products containing herbal ingredients determine whether a product has a medicinal use and is therefore subject to government regulation. The guide lists known recorded medicinal, food, aromatherapy and cosmetic uses for over 600 plants, specifying which part of the plant is used medicinally. It is available via the MHRA website (www.mhra.gov.uk).

GI drugs and antipsychotics can triple risk of cardiac death

Use of non-cardiac drugs that prolong the QTc interval is associated with an almost three-fold increased risk of sudden cardiac death, according to Dutch researchers.

The researchers identified 775 cases of sudden death and 6,297 matched controls and determined whether each patient had been exposed to non-cardiac QTc-prolonging drugs.

The researchers suggest that 320 cases of sudden cardiac death per year in the Netherlands can be attributed to the use of these drugs. They note that the risk is higher in those who have started taking the drug within the previous 90 days and in those on higher daily doses of antipsychotics or

gastrointestinal drugs. Their results also show that domperidone and haloperidol in particular are associated with a higher risk of sudden cardiac death.

Bruno Stricker, from the Erasmus Medical Centre in Rotterdam and one of the study authors, commented that it is important to keep the increased risk in perspective. He said that the normal annual incidence of sudden cardiac death is one to two deaths a year per 1,000 of the population in the western world and that this risk rises to around three per 1,000 per year in those taking drugs that prolong the QTc interval (published online on 11 May in the *European Heart Journal* www.eurheartj.org).

In brief

Amiodarone vs sotalol in AF

Amiodarone and sotalol convert atrial fibrillation to sinus rhythm equally effectively, say researchers. Amiodarone is superior in terms of maintaining sinus rhythm overall, but both drugs have similar efficacy in patients with ischaemic heart disease (*New England Journal of Medicine* 2005;352:1861).

Industry spends more on R&D than on marketing

The supposition that the pharmaceutical industry spends more on marketing than it does on research and development is not true, according to Andrew Curl, deputy director general at the Association of the British Pharmaceutical Industry.

Mr Curl told journalists at a media lunch in London last week that the balance of the pharmaceutical industry's activity is in R&D, rather than promotion. "Only 8,200 people are engaged in the dissemination of information to medical practitioners, whereas in R&D, formulation and manufacturing the figure is in excess of 50,000 people," he said. He added that the amount the industry can spend on promotion and marketing is capped at 4 per cent by the Prescription Pricing Regulation Scheme.

Ben Hayes, director of public affairs at the ABPI, said that the latest available figures



Amount of money industry can spend on marketing is capped at 4 per cent

(2002) show that the industry spends around £750m on sales promotion and about £3.3bn on R&D.

The lack of innovation from the UK pharmaceutical industry over the past few years was also a topic of discussion. Richard Barker, director general of the ABPI, said that he believes there has been some innovation, for example, in the area of HIV treatment. However, he commented: "I would be very disappointed if we don't see an upturn in the next five years."

On the subject of the Health Select Committee's report into the influence of the pharmaceutical industry (*PJ*, 30 April, p514) he said that the ABPI does not agree with some of the committee's recommendations, which it believes may make access to new products more difficult, for example through limitations on prescribing. "Hopefully the incoming Government will recognise that the committee was advised by many people who have been lifetime critics of the industry," he said.

Six medicines given go ahead this month for use within NHS Scotland without restriction

Of the 16 medicines assessed by the Scottish Medicines Consortium this month, six have been endorsed for use within NHS Scotland without restriction. Conditions have been placed on the use of four of the medicines and the SMC advises that the remaining six are not to be used.

The medicines given the go ahead are:

- Abacavir/lamivudine combination (Kivexa) used with other antiretrovirals for treatment of HIV-1
- Abacavir (Ziagen) 300mg as a once-daily treatment used in combination with other antiretrovirals for treatment of HIV-1
- Candesartan cilexetil (Amias) as add-on therapy to angiotensin-converting enzyme inhibitors, or when ACE inhibitors are not tolerated, in patients with heart failure and left ventricular systolic dysfunction
- Eplerenone (Inspira) in combination with standard therapy to reduce risk of cardiovascular mortality and morbidity after myocardial infarction
- Paracetamol intravenous infusion (Perfalgan) for short-term treatment of moderate pain following surgery or short-term management of fever in children
- Triptorelin (Gonapeptyl depot) for central precocious puberty in girls under nine years of age and boys under 10 years

The medicines that are deemed suitable for use but with restrictions applied are: adefovir dipivoxil (Hepsera) for use in patients with chronic hepatitis B who show resistance to lamivudine; imiquimod (Aldara) for topical treatment of small superficial basal cell carcinoma in adult patients for whom surgery or cryotherapy is contraindicated; methylphenidate modified release (Equasym XL) for attention deficit/hyperactivity disorder when giving a midday dose of methylphenidate is problematic or inappropriate; and valsartan (Diovan) to improve survival following myocardial infarction but only in patients who do not tolerate angiotensin-converting enzyme inhibitors.

The medicines that are not recommended for use by the SMC are: anagrelide (Xagrid) for reduction of elevated platelet counts in patients with essential thrombocythaemia; cinacalcet (Mimpara) for secondary hyperparathyroidism; cytarabine liposomal suspension (Depocyte) for intrathecal treatment of lymphomatous meningitis; eflornithine cream (Vaniqa) for facial hirsutism in women; ibritumomab tiuxetan (Zevalin) for rituximab-relapsed or refractory CD20+ follicular B-cell non-Hodgkin's lymphoma; and pegvisomant (Somavert) for acromegaly.

Evidence lacking on value of *H pylori* eradication

There is a lack of clear evidence on the value of eradicating *Helicobacter pylori* infection in patients with, or at high risk of developing, gastric or duodenal ulcers, the latest issue of the *Drug and Therapeutics Bulletin* concludes.

DTB suggests that testing for and eradicating *H pylori* is reasonable in patients with dyspepsia or a previous history of ulceration when they start non-steroidal anti-inflammatory drugs for the first time. But it recommends that patients who go on to develop an ulcer should stop taking the NSAID and have ulcer-healing treatment. In such cases, and in patients who continue to take NSAID therapy in combination with a proton pump inhibitor, *DTB* states that *H pylori* eradication therapy appears to provide no ulcer-healing benefit (2005;43:37).

□ **Bipolar disorder** The May issue of *DTB* also reviews the role of drug therapy for prevention of bipolar disorder. In addition, it considers maintenance treatment and discusses special situations with regard to bipolar disorder and drug therapy (*ibid*, p33).

Benzodiazepine prescribing

Action that can be taken to reduce inappropriate prescribing of benzodiazepines and Z drugs (zopiclone, zolpidem and zaleplon) is described in the latest issue of the *MeReC Bulletin* (2005;15:17).

MeReC points out that large numbers of prescriptions are still being issued for hypnotic drugs despite advice issued by the Committee on Safety of Medicines in 1988. The bulletin recommends that audits are used to review and monitor prescribing rates of benzodiazepines. It also says that interventions such as writing letters to patients and medicines reviews can help reduce benzodiazepine use in long-term users.

Anagrelide approved for use within NHS Wales

The Welsh minister for health and social services has endorsed the use of anagrelide (Xagrid) within NHS Wales following the All Wales Medicines Strategy Group's recommendations. This will be subject to the for-

mation of a standard protocol for the management of patients with thrombocythaemia in Wales.

Anagrelide failed to gain approval for use in NHS Scotland this month (see above).

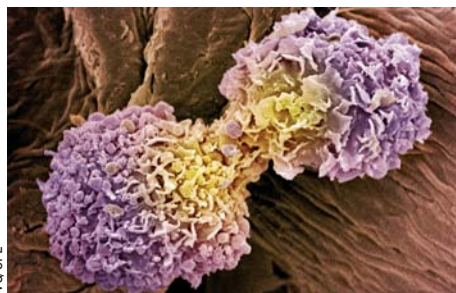
New class of drugs for hereditary breast cancer enters clinical trials

A potential new class of drugs, poly(ADP-ribose) polymerase (PARP) inhibitors, to treat women with hereditary breast cancer has shown promising results in animal studies and is about to enter phase I clinical trials.

Two research groups in the UK, one at the Institute of Cancer Research, London, and one at Sheffield University, have discovered this novel, targeted approach to the treatment of breast cancers caused by mutations in BRCA1 and BRCA2 genes. Both groups published their work in *Nature* last month (2005;434:913 and 917).

Before cell replication, DNA damage is repaired by an enzyme called PARP. If this enzyme is absent then cells use an alternative mechanism, called homologous recombination, to repair the damage and continue to replicate. BRCA1 and BRCA2 are necessary for homologous recombination and so PARP becomes essential in cells that have BRCA1 and BRCA2 mutations.

The research groups propose that if PARP is blocked, DNA lesions — that would normally be repaired by homologous recombination — will persist and that this leads to cell death. They argue that PARP inhibitors are highly effective at killing BRCA-deficient tumour cells leaving normal cells largely un-



Breast cancer cells with mutations in BRCA genes would be target

affected, thereby potentially reducing side effects such as hair loss and nausea.

The groups have validated this therapeutic approach by showing that PARP inhibitors slow the growth of BRCA2 deficient tumours in mice. Andrew Tutt, a clinical scientist at the Breakthrough Research Centre at the Institute of Cancer Research, commented: "Targeted treatment holds considerable clinical promise. If our laboratory findings are confirmed in the clinic, we could dramatically improve the treatment of patients with BRCA1 or BRCA2 associated cancers. This is a completely new approach in our fight against this type of cancer."

Encouraging data for methylphenidate patch

Positive clinical trial data for methylphenidate transdermal system (MTS) to treat attention deficit/hyperactivity disorder in children were released by Shire Pharmaceuticals this week.

The results from two randomised controlled trials were reported — a phase II study involving 80 children and a phase III study involving 268 children.

The first trial involved a five-week open-label dose optimisation period followed by a two-week crossover period with placebo. The results showed that measurements of performance and behaviour were significantly better in the MTS group than the placebo group

($P < 0.0001$). This difference was apparent two hours after application of the patch and was maintained for 12 hours. The safety profile for the patches was similar to that reported for approved methylphenidate products.

The second study was of a similar design but, in addition, it compared MTS with oral methylphenidate (Concerta XL). Children in the MTS and Concerta groups showed significant improvements in performance and behaviour compared with those in the placebo groups after two weeks of optimal dosing ($P < 0.0001$). Again, the safety profile of MTS was similar to that of oral methylphenidate.

Alzheimer's vaccine shows promise despite safety concern

Immunotherapy may be useful in Alzheimer's disease, two studies suggest (*Neurology* 2005;64:1553 and 1563). The studies tracked the progress of patients who took part in a 2002 trial of a vaccine targeting amyloid plaques. The trial was terminated because 18 patients (6 per cent) developed brain inflammation.

Following up the patients nine months later, researchers found that the patients who showed an immune response to the vaccine

had improved scores on some neurological tests, compared with placebo, and that the greater improvements in scores were associated with higher antibody levels.

However, these antibody-responders also showed a greater loss of brain volume and an increase in the volume of brain ventricles than the placebo group. Although the reasons for this are unclear, the authors are hopeful that removal of amyloid plaques may have played a part.

Vaccines prevent persistent infection with HPV

A vaccine targeting the human papillomavirus (HPV) types that are associated with 70 per cent of cervical cancers and 90 per cent of genital warts is effective in preventing persistent infection and clinical disease, according to data presented at the International Papillomavirus Conference held in Vancouver last week. Results from the study were published online last month by *Lancet Oncology* (7 April, <http://oncology.thelancet.com>).

Luisa Villa, Ludwig Institute for Cancer Research, Brazil, and colleagues conducted a randomised controlled trial involving 552 women aged 16 to 23 years in Brazil, Europe and the US. The women received a quadrivalent (types 6, 11, 16, 18) HPV vaccine or placebo at day 1, month 2 and month 6. Follow up was for 36 months.

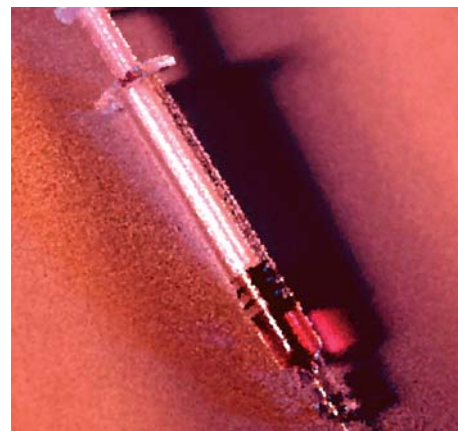
The primary endpoint was combined incidence of infection with HPV types 6, 11, 16 or 18, or cervical or external genital disease. Study results showed that the incidence of

persistent infection or associated disease fell by 90 per cent in the vaccine group compared with the placebo group (four events versus 36 events; $P < 0.0001$).

The vaccine, called Gardasil and produced by Merck & Co, was generally well tolerated and induced high titres of serum antibodies to HPV types. Large scale studies are currently under way with over 25,000 participants enrolled worldwide.

GlaxoSmithKline is also conducting trials on its HPV vaccine, Cervarix. Results from a randomised controlled trial involving 1,113 women were reported last year (*Lancet* 2004;364:1731) and showed that the vaccine is 100 per cent effective against persistent HPV-16/HPV-18 infection.

At last week's conference GSK presented further data, which provided preliminary evidence to show that the vaccine induces cross protection against HPV infection associated with HPV-16 and HPV-18.



Vaccines produced by Merck and GSK are currently undergoing phase III trials

Phase III trials in over 30,000 women are currently under way and GSK expects to file for a product licence in 2006.

Role for minocycline in HIV infection of brain

Minocycline might have a role in the treatment of patients infected with HIV, a new study suggests. The antibiotic has potent anti-inflammatory and neuroprotective properties and researchers have shown that it has the potential to protect against the negative effects of HIV on the brain and central nervous system (CNS).

Christine Zink, professor of comparative medicine at Johns Hopkins University school of medicine, Baltimore, Maryland, and colleagues explain that few antiretroviral drugs are able to cross the blood-brain barrier and so do not alter the inflammatory responses that occur during CNS viral infection. They therefore used minocycline, which is able to cross the barrier, to treat macaque monkeys infected with SIV (simian immunodeficiency virus, which is used as a model of HIV and shares key features of HIV CNS infection).

The researchers found that after 84 days of SIV infection two of the five monkeys treated

with the antibiotic showed signs of mild encephalitis. Of the six untreated monkeys, five had evidence of moderate or severe encephalitis.

"Given that the prevalence of HIV CNS disease has not declined in the era of highly active antiretroviral treatment, this finding may have important implications for future studies on the prevention and treatment of HIV," the researchers say.

In another experiment, involving cultures of macrophages and lymphocytes, the researchers found that minocycline inhibited the replication of SIV and HIV. They say that the antibiotic is unlikely to have classic antiviral activity and propose that it modifies the intracellular or extracellular environment making the cells less conducive to viral replication (*JAMA* 2005;293:2003).

A multicentre clinical trial is planned to test whether minocycline has the same effects in HIV-infected people.

Antibodies work against HIV

Neutralising antibodies may have a role in HIV prophylaxis in humans, say researchers. They administered a combination of three monoclonal antibodies to six patients acutely infected with HIV-1 and to eight patients chronically infected with HIV-1. All the patients had stopped taking antiretroviral treatment.

During antibody treatment, re-emergence of the virus was delayed in four of the acutely infected patients and two of the chronically infected patients. The researchers found that this delay in rebound of the virus was attributable to one particular antibody, called 2G12, and that it must be used in high doses. However, the virus eventually mutated to escape this antibody.

The researchers say that this study provides evidence that antibodies may be useful in controlling HIV infection, but they must be potent and used in high doses to be effective.

The study appeared in an early online publication of *Nature Medicine* on 8 May (www.nature.com/nm).

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Strategy may overcome antiretroviral drug resistance

A theoretical strategy for blocking HIV growth and tackling drug resistance is published in *Nature Cell Biology* this month.

Alan Lau, of KuDOS Pharmaceuticals, and colleagues show that HIV-1 integrase activates a protein called ATM produced by the ataxia-telangiectasia-mutated gene. This protein is a key mediator in the cellular response to DNA damage.

The researchers found that ATM is essential to the survival of infected HIV-1 cells since it helps to repair DNA damage caused by viral integration into the host cell genome.

They demonstrate that a recently identified specific small molecule inhibitor of ATM kinase — KU-55933 — leads to increased cell death and has the potential to suppress replication of both wild-type and drug-resistant HIV-1. ATM is not essential for the survival of non-infected cells.

Most treatments for HIV target virally encoded proteins that are rapidly mutating, which often leads to the development of drug resistance during therapy. This strategy addresses the problem by targeting non-essential host cell proteins that are required for viral replication (2005;7:493).