RESTRICTED TITLE

What a prospect!

From Mr W. T. Brookes, FRPharmS

The Leading article (P), 14 M arch 2009, p268) on the title “pharmacist” hit the nail right on the head when it suggested that regulation seems to have won when the Royal Pharmaceutical Society reaches its decision as both a regulator and a professional body — but should we be surprised? It was ever so, and unless members are careful, this “regulation first” mentality may well spill over into the new professional body, with public protection as the smoke screen to justify it.

Retired and non-practising pharmacists would appear to be faced with three options when the General Pharmaceutical Council comes into being if they wish to (legally) continue to use the title “pharmacist”:

■ Register as a practising pharmacist with all that entails a large fee, continuing professional development, revalidation, etc.
■ Register as a non-practising pharmacist in the highly unlikely event that the Council’s proposal is accepted. There is still a fee to pay.
■ Do not register and lose the right to use a title they have earned and, in many cases, held for decades.

To many colleagues, option three will be coupled with not joining the new body if this is how its precursor, the Society, supports its members. Why not a prospect?

W. T. Brookes
Stoke-on-Trent, Staffordshire

Decision based on evidence?

From Professor H. N. E. Stevens, FRPharmS

In the Council meeting report that considered the issue of the restricted title (P), 14 M arch 2009, p293), we learn that the Chief Executive and Registrar explained to the Council of the Royal Pharmaceutical Society that “the introduction of further title, such as ‘registered pharmacist’ and unrestricted use of the title ‘pharmacist’ would potentially lead to public confusion, and thereby compromise public safety”. As a result of this advice, the Council came to its view, which is now the subject of challenge in a special general meeting (P), 14 M arch 2009, p269).

However, as we teach our students, pharmacy is an evidence-based profession. To date, we have not been offered one shred of evidence in support of the Chief Executive and Registrar’s advice. I would urge the Council to publish in full the details of the evidence it considered in reaching the conclusion that the public would be confused and public safety compromised. Surely, the Council reached such a momentous decision based on evidence and not whim, did it not?

Howard N. E. Stevens
Scottish Pharmacy Board Election C andidate

Incandescent with anger

From Professor J. D. Phillipson, FRPharmS

Trevor Jones writes more in sorrow than in anger about the decision of the Council of the Royal Pharmaceutical Society not to support the use of the title “pharmacist” for those with a degree in pharmacy (P), 14 M arch 2009, p278). As an ex-luminary in pharmacy, I write more in anger than sorrow. I am incandescent with anger. Having honoured me with fellowship, it is now proposed to take it away. Does it also want me to return my Harriss Memorial Medals? It is obvious that being a former chairman of a local branch and Conference Science chairman means nothing to our current Council.

My career in pharmacy included visits to many countries worldwide, where I gave lectures, led research discussions and promoted UK pharmacy. I did this in the belief that I was educating pharmacists and others, relating my scientific area with healthcare. During this time, I always stressed that I was a pharmacist, and scientists in other disciplines appreciated that this gave a further dimension to the underlying chemistry and biochemistry involved in our collaborations.

Of course, for many years I have known that I would need to be retrained to work as a pharmacist in hospital or community pharmacy. However, I was able to do other things for pharmacy that many of them could not do. How many could act, as I did, as chairman of the board of studies in pharmacy at the University of London or be successful in obtaining research grants from the Medical Research Council, Wellcome Trust and European Community, or represent the profession in committees for the Medicines and Healthcare products Regulatory Agency, British and European Pharmacopoeias?

Now in my 70s, I feel as though my professional body has kicked me in the teeth.

It is ironic that I read the letter of Professor Jones shortly after reading that our book on Herbal Medicines, published by the Pharmaceutical Press, had resulted in a substantial sum earned for Lambeth. Why did I do this in my retirement? Perhaps I should have made better use of my life by sitting back and relaxing.

David Phillipson
N on-practising Pharmacist
New Milton, Hampshire

Future restricted title should be “Registered pharmacist”

From Mr D. A. Hancox, MRPharmS

These are truly exciting and, increasingly, worrying times. It is exciting because we have the unique opportunity to create a new professional body that embraces both pharmacists and pharmaceutical scientists in its membership; a new body that promotes pharmacy in all its areas of practice, including community, hospital, industry and academia; a new body that supports all its members in the enhancement of the knowledge, skills and competencies that are necessary to meet their individual roles and responsibilities; and a new body that unites all these people both nationally and locally.

However, it is worrying because we continue to argue over restricted titles and post-nominals. For years we were known as “chemists”; we then became recognised as “pharmacists”. It is patently obvious that the future restricted title, for those directly associated with the provision of pharmacy services to patients and the general public, should be “registered pharmacist”. Patients and the general public will soon get used to that title and be further reassured that the pharmacy services they seek are being delivered by suitably qualified and competent practitioners called “registered pharmacists”.

Furthermore, such “registered pharmacists” should be encouraged to use “RegPharm” as a post-nominal in addition to post-nominals such as BPharm, and, assuming the new body retains the title of the Royal Pharmaceutical Society, MR PharmS. Such a decision would allow all current and former members (or fellows) of the Society and all future pharmacy graduates to use the title “pharmacist” freely.

We created a broad definition of “practising” and the Society’s Council has supported a further broadening of that definition to the extent that it covers roles that do not have to be undertaken by pharmacists. The whole purpose of
Letters

Excluding some of us

From Mr E. P. Crabtree, MRPharmS

Graham Phillips proposes in his letter (PJ, 21 Mar 2009, p306) to introduce the use of the restricted title "pharmacist" reserved only for those who are members of the new professional body, and that such membership would be restricted to those who have, as a minimum, graduated in pharmacy and passed the registration examination. Does he realise that this would exclude those of us who joined the Royal Pharmaceutical Society by passing the Society's own examinations some years ago from not only using the title "pharmacist" (which some of us have used for over 50 years), but also from joining the new professional body?

I hope Mr Phillips's narrow definition of pharmacist did not have that intention and propose to him (and possibly others) an alternative definition. A pharmacist should be any person who is, or has been, a member of the Royal Pharmaceutical Society or equivalent body in another country, and has not been expelled for misconduct. The adjective "retired" could be added where appropriate.

If his ideas (or similar ones) are accepted, I will be spared the dilemma of whether or not to join the new body, because it will not want me. I hope I will have the courage to follow the lead of past president David Sharpe (PJ, 21 Mar 2009, p306) and continue to describe myself — even if, by then, it is technically illegal — as a retired pharmacist.

Philip Crabtree
Huddersfield, West Yorkshire

Lack of openness

From Mr S. M. Canning, MRPharmS

Steve Churton and Jeremy Holmes (PJ, 14 Mar 2009, p277) stated that the decision about the use of the title "pharmacist" was reached in open (ie, public) session but in an Interview (ibid, p275), Mr Churton mentions that no members of the public were in fact present. In view of the level of interest about this topic, how is it possible that nobody came to hear this decision being debated? Either everyone was completely satisfied in the way the Council has performed to date and fully confident that it would make the decision based on what all members want, or members were not aware or informed of the time and date in order to attend.

This lack of openness reminds me of the comments made by the Council after the opinions of members was requested about the new Charter. We were told that they had checked the replies and an overwhelming number were in favour of the Council's proposals — hardly a scientific way of presenting the data. This was then followed by a number of letters to the PJ by people and groups expressing surprise at the overwhelming number since they had been in contact with the Society, and were against the proposed Charter.

The time has come for the Council to be more open in their actions when dealing with members. I am not sure what the reasons are for its way of working, but it is not typical of the way of most pharmacists operate, who are proud to call themselves pharmacists no matter what section of the profession they work in.

Stanley Canning
Industrial Pharmacist
Kibbutz Kfar Hamaccabi, Israel
**RESTRICTED TITLE**

**Doctors still use their title after retirement**

From Mrs L. M. Ferrow, MRPharmS

In the ongoing discussion over the use of the title “pharmacist”, has anyone questioned the situation of doctors who, so far as I am aware, still use their title after retirement?

In my opinion, referring to oneself as a pharmacist will be a recognition that one has completed an approved course of study, leading to a recognised academic qualification, such as BPharm or MPharm, so I do not see how that implies that random members of the public could call themselves by the title.

Responsibility for ensuring that an individual maintains his or her standard of knowledge to a level commensurate with carrying out a professional job is a different matter completely, and should surely be the responsibility of the potential employer. Proving that one has undertaken appropriate continuing professional development should be seen as part of maintaining a professional curriculum vitae.

Lesley Ferrow

Oakham, L Leicestershire

**Bring it on!**

From Reverend Professor P. J. Houghton, FRPharmS

I want to express my solidarity with those who, like me, are feeling the chilly wind of human ingratitudinous blowing from Lambeth High Street. Several have already written to The Journal concerning their being stripped of the ability to call themselves a pharmacist when they retire, in spite of having given many years of service to the profession.

Some are luminaries, such as Trevor Jones (PJ, 14 March 2009, p278), David Sharpe (PJ, 21 March 2009, p306) and Gordon Appelbe (ibid), but there must be many others who have given time and effort in serving on local branch committees, speaking at meetings, taking part in organisation of events at the annual British Pharmaceutical Conference but, most of all, being ordinary people doing the extraordinary job of providing a vital part of healthcare in the community.

Perhaps we should not be surprised at the thought of pharmacists getting from our professional body, regarding their being stripped of the ability to call themselves a pharmacist when they retire, in spite of having given many years of service to the profession.

Themselves a pharmacist when they qualify, such as BPharm or MPharm, so I do not see how that implies that random members of the public could call themselves by the title.

Responsibility for ensuring that an individual maintains his or her standard of knowledge to a level commensurate with carrying out a professional job is a different matter completely, and should surely be the responsibility of the potential employer. Proving that one has undertaken appropriate continuing professional development should be seen as part of maintaining a professional curriculum vitae.

Peter Houghton
Professor Emeritus in Pharmacognosy
Department of Pharmacy
King’s College London

**Manifestly unjust proposals**

From Mr R. B. Christie, MRPharmS

I view with increasing concern the new regulatory system to be introduced next year, particularly with regard to the retention of a professional title.

It appears that this could mean that, after some 50 years of practice as a pharmacist, with every effort to keep apace of modern medicine, on the day of one’s retirement the title of “pharmacist” is lost.

The proposals are manifestly unjust and need to be addressed during the ongoing consultation.

R. B. Christie
Eastbourne, East Sussex

**Pharmaceutical chemist**

From Mr K. J. Knight, FRPharmS

I refer to the current restricted title correspondence in the Letters pages. In 1946, I opted to take the Royal Pharmaceutical Society’s two-year pharmaceutical chemist diploma, instead of its one-year chemist and druggist course, qualifying in 1948.

Except when working in community pharmacy, I have styled myself as a pharmaceutical chemist (PhC), a practice I have continued in retirement. I keep in reserve “pharmacist”.

Jack Knight
Crawke, Somerset

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**Army of the seriously bewildered**

From Mr B. I. Stroh, MRPharmS

I look into the future and I see an army of grey-haired pharmacists, wearing neat white starched lab coats and shiny leather shoes. They are all wandering in the wilderness, scratching their heads (à la Stan Laurel), muttering to themselves: “What was I?” “What am I?” “Once the new Register is in play, I shall call myself ‘Brian Stroh, chemist and druggist (retired)’”. Hopefully the title will keep me from joining the army of the seriously bewildered.

Brian Stroh
London

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**MEMBERSHIP**

**Reasonable charge for membership**

From Mr A. P. Gledhill, MRPharmS

I would like to set the ball rolling by suggesting what I consider to be a reasonable charge for membership of the General Pharmaceutical Council and the new professional body.

For the GPhC, I would suggest all pharmacists and pharmacy technicians are charged £100 per year. If 60,000 pharmacists and technicians make this payment, then the annual budget would be £6 million. For the new professional body, I suggest £200 per pharmacist per year. If 50,000 pharmacists and technicians join this voluntary body, then the annual budget would be £4 million.

I am sure other pharmacists and technicians have their views and this may be a good time to start the discussion.

Andrew Gledhill
Burnley, Lancashire

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**TECHNICIAN REGULATION**

**Wider significance than extending regulation**

From Miss J. L. Flint, MRPharmS

I am writing to outline the significance for pharmacy technicians of the laying of the Health Care and Associated Professions (Miscellaneous Amendments and Practitioner Psychologists) Order 2009 as outlined in the News item “Pharmacy technician regulation in Scotland moves a step closer after Order is laid” (PJ, 14 March 2009, p269).

The new Order proposes that the regulation of pharmacy technicians is extended to the whole of Britain rather than just England and Wales. The Order has a wider significance than extending regulatory to pharmacy technicians in Scotland, since it will enable the Royal Pharmaceutical Society to implement the regulatory standards for pharmacy technicians (the Society currently regulates pharmacy technicians across Britain on a voluntary basis). This could happen as early as 1 July 2009, assuming that the relevant provisions of the Order are brought into force. From that point, pharmacy technicians who wish to register but do not have the Pharmacy Services Scottish/National Vocational Qualifications level 3 qualification plus an approved knowledge qualification will have just two years in which to register without taking additional qualifications.

Further information can be found from the following link to the Society’s website www.rpsgb.org.uk/acreerinpharmacy/pharmacy-supportstaff/pharmacytechnicians.html or by telephoning the Society’s support staff regulation division on 020 7572 2610.

Janet Flint
Head of Support Staff Regulation Royal Pharmaceutical Society

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**RESponsible pharmacist**

**Locum’s responsibilities**

From Mr H. S. Badwal, MRPharmS

Under the new Department of Health guidance on the Medicines (Pharmacies) (Responsible Pharmacist) Regulations, a locum pharmacist would be responsible for ensuring the “safe and effective running of a business”. I can see why this stance benefits multiple chains. A ready, pharmacists do not require rest breaks, time to eat and the support of adequately trained staff.

Some supermarket pharmacists might be reading this thinking that they should not have to take the flack if a locum or employed pharmacist is non-compliant, but in a profession where increasingly big companies are the owners, it looks like they are abandoning their duty to make sure their pharmacies are complying with the rules. It is not
fair that someone who has no say in the running of a business can take the blame if things go bad without it being the responsible pharmacist’s (RP) fault. I cannot see the justification of having superintendent pharmacists if the RP is accountable. It is contradictory and this lack of clarity will be dangerous. If locums started shutting pharmacies that did not live up to their high expectations, they would find themselves out of favour with managers who might not understand professional requirements since only those responsible tend to care about such matters.

Perhaps if we learn one thing from the bankers it is that we need the people at the top to be accountable and that regulation is the key to ensuring things do not go wrong in the first place. Hopefully, the new regulatory body will inspect more pharmacies and ensure they are suitable and compliant before it starts removing locum pharmacists from the Register for not bringing a qualified dispenser with them to work.

I would urge all employed pharmacists, especially those working for supermarkets, to invest in their own private insurance because it seems the next time a pharmacist gets to work and has someone from “home and leisure” as his or her healthcare assistant, he or she is the responsible pharmacist and is ultimately responsible for the safe and effective running of the business. It certainly will not be the duty manager, who just wants to see that the name badge on your uniform is straight.

Hardeep Badwal
Derby

COMMUNITY PHARMACY

Bring on the debate

From Mr A. H. Screen, MRPharmS

U nusually, I find myself in complete agreement with Mark Koziol on the subject of standard operating procedures (PJ, 14 March 2009, p282). He suggests that the profession is becoming over-reliant on protocols and SOPs and pharmacists are unable to make professional judgements.

When I qualified in 1967, it was customary to make medicines for all the family, including babies (Benylin mixed with Tussi Rub was a favourite). Imagine my horror when performing a locum duty recently to be told by the counter assistant that we could no longer sell cough products for children under the age of six except the baby syrup presentations, such as Tussix Baby Syrup (glycolol).

Pharmacists are now able to prescribe, perform medicines reviews and supply emergency hormonal contraception but, apparently, can no longer supply a medicine to allow a child (and its parents) to get a coughless night’s sleep.

BraVo, Pharmacists’ Defence Association — bring on the debate.

Alan Screen
N ewtown,
Powys

Bring an end to the 400 MURs target

From Dr R. J. Schmidt, MRPharmS

I am disturbed by A. R. Barber’s assertion (PJ, 7 March 2009, p248) that “locum pharmacists…certainly cannot consider themselves immune from the effects of the economic downturn” and that “the completion of 400 [medicines use reviews per year] is so important that [community] pharmacists should be prepared to accept that other areas of service might suffer”.

This may well be economic reality, but it is also potentially a breach of Principle 2.2 of the code of ethics, which states that we pharmacists should “make sure that [our] professional judgement is not impaired by…commercial interests, incentives, targets, or similar measures”. An employer may reward a pharmacist for MURs carried out however, setting a target of 400 per year and then applying unwelcome pressure, bullying, and even threatening disciplinary action in an attempt to force that pharmacist to reach that target (either explicitly or implicitly to meet a financial objective) should be viewed as professional misconduct on the part of the superintendent pharmacist (who will be vicariously, if not directly, responsible for applying this pressure). Indeed, I would propose that a complaint in the form of a “class action” against these superintendent pharmacists should be heard by our Disciplinary Committee, if such a thing is possible.

The Royal Pharmaceutical Society is now addressing the issue of stress in the workplace (PJ, 31 January 2009, p97). In my own experience, stress is being generated largely by MUR targets. Locum pharmacists are insulated from this pressure to reach MUR targets, so the switch from employee to locum pharmacist might be seen by many as an escape from the stress of working to reach professionally unacceptable targets.

Of course, some patients appreciate an MUR. But, a patient marched into the consultation room to having an unwelcome MUR (I have seen this happen) is likely to ignore any advice offered. This, and the selection of one-item prescriptions for MUR in stable patients taking no other medicines (I have also seen this happen), is a little too close to professional misconduct under Principle 2.2 of the code of ethics.

Those who need MURs the most are probably those patients whose medicines are delivered and who never visit the pharmacy. Perhaps the Society should now lay down patient selection guidelines for MURs. Perhaps it is time to make yearly MURs under the NHS mandatory for certain categories of patients, to be carried out in the patient’s home if necessary so that the contents of the medicines cupboard can also be inspected. Perhaps it is time for the Society, in its contemplation of stress in the workplace, to work with the Pharmaceutical Services Negotiating Committee to bring to an end to the 400 MURs per year target culture.

Richard Schmidt
Penarth,
South G lamorgan

Blogs on PJ Online

You can read regular contributions from a number of bloggers on PJ Online.

In addition to The Journal’s regular contributors — Accola, Didapper, Footer, Glow-worm, Merlin and Prospector — we have contributions from Kevin Frost (a specialist antibiotics pharmacist from Yorkshire) and systems analyst Darrin Baines.

Advertisement

Letters

Telephone number

All correspondents should supply a daytime telephone number, in case we need to contact them urgently.
**Letters**

**Ensure enough staff for support**

From Mr U. Shabbibi, MRPharmS

Now and then, I come across letters about locum pharmacists, such as that from A. R. Barber (PJ, 7 March 2009, p248). These letters do not only reflect the general dissatisfaction with the workload but, more crucially, they seem to criticise professional colleagues, especially the locum “bogeyman” of pharmacy.

I agree that locums should be proactive in doing medicines use reviews as well as other services, and most of them do. However, pharmacy managers should also make sure that enough staff are available for support. In my experience as a locum pharmacist, there is always a tendency to reduce staff hours, although more workload is demanded. This is particularly the case with multiples.

Four years ago, employee pharmacists were initially asked to complete a maximum of 120 MURs per year. Now, the number has gone up to 400.

Nowadays, pharmacy consultation rooms are getting busier because pharmacists are asked to do more. MURs, health checks, influenza vaccinations, smoking cessation, methadone consumption supervision, and emergency hormonal contraception, in addition to routine patient counselling. This is on top of the demand to increase prescription volumes.

Before talking about locum pharmacists, we must look at the core problem of our profession, where profit-making is in continuous conflict with professional activity.

Employee pharmacists have always suffered from pressure to achieve targets annually established by business owners. We are always required to give more and more, and to satisfy every single customer’s needs, as well as the needs and demands of the proprietor.

Employees, on the one hand, ask for increased delegation while, on the other hand, continuously hassle managers with the issue of staffing costs and business targets. Why should employee pharmacists and their staff have to worry about the sales of perfumes in a supermarket? Obviously, there is a problem with understanding the professional roles and responsibilities of pharmacists.

The Royal Pharmaceutical Society’s recent attempts to tackle these issues are welcomed (PJ, 31 January 2009, p97).

Usama Shabbibi

**Focus on delivering quality MURs**

From Mrs N. J. Nackvi, MRPharmS

I agree with A. R. Barber (PJ, 7 March 2009, p248) on the importance of and the need to conduct medicines use reviews. However, he neglects to connect this to the direct benefit of the patient and focuses, instead, on the importance of maximising profitability. This is not to appear to understand or appreciate the role and importance of locum pharmacists in community pharmacy.

Contrary to his view, MURs are not new and pharmacists have been routinely reviewing patients’ use of medicines as a part of their role. The MUR training requirement merely places this role on a more formal platform, however, the achievement of targets now dominates debate and reduces both the value and quality of service provided.

Diverting attention to MURs in a pharmacy managed by a single pharmacist will increase waiting times, as acknowledged, but will also result in increased pressure and could potentially compromise patient safety. In offering any new services, it is important to understand safety implications because that is an important element of running a business and is also required by law.

It is clear that the income generated from prescriptions will reduce, leading to increased pressure to seek alternative means to increase revenue. The economic downturn is fuelling this thinking, and conducting more MURs will clearly generate more revenue. We should not, however, be doing MURs to achieve economic benefit solely. We must, instead, focus on delivering quality MURs thus adding value to the well-being of patients.

Pharmacists, especially locums, do not get any additional remuneration for doing MURs, and, until this changes, I seriously doubt that the investment in the time required is worthwhile. Doctors need to play their part and patients must recognise the value and benefit of MURs. However, many do not appear to see any benefit or value in their delivery.

In a busy pharmacy, being proactive means concentrating on providing a quality service to customers and solving their day-to-day problems, rather than spending time on recruiting an MUR. A good locum will always get returns regardless of whether or not he or she completes two MURs a day.

N. Nackvi

**OTC medicines**

From Mrs A. H. Sutcliffe, MRPharmS

Further to the letters from A. M. Adala (PJ, 31 January 2009, p108) and M. Chelle M. Ayes (PJ, 14 February 2009, p160) regarding pack size of paracetamol tablets, I would like to add the following comments.

I am a trustee of the charity PAPYRUS (prevention of young suicides) and, in response to concerns expressed by a bereaved parent, I have exchanged several e-mails with the Medicines and Healthcare products Regulatory Agency, from which I quote.

“A registered but retired pharmacist, I am aware of the current regulations regarding over-the-counter sales of analgesics and I acknowledge the need for a balance between effectiveness of restrictions and public convenience. However, I note that the M H R A is currently reviewing these regulations and my role as a PAPYRUS trustee leads me to request that serious consideration be given to strengthening the law regarding restriction of sales in non-pharmacy outlets to a quantity well below the legal limit of 100 tablets [because] the M H R A advice regarding voluntary restriction to 16 tablets appears to be ignored by irresponsible discount retailers.”

“The latest annual report on progress of the National Suicide prevention Strategy states: Among women, drug related poisoning is still the most common method of suicide (accounting for 38 per cent of all female suicide deaths). Research has indicated that the likelihood of committing suicide will depend, to some extent, on ease of access, and knowledge of effective means. One reason is that suicidal behaviour is sometimes impulsive, so that if a lethal method is not immediately available a suicidal act can be prevented.”

The PJ printed a reminder (PJ, 18 October 2008, p456) to pharmacists about the restrictions on pack sizes introduced in 1998 following changes to legislation designed to improve the safety of OTC painkillers because of concerns over the number of deaths and serious morbidity connected with overdosing, and evidence that many people who overuse these products are not readily available in the home.

The latest information I have received from the M H R A (January 2009) states that the need for further measures is still under consideration.

Anita Sutcliffe

**Drug interactions**

Rabeprazole might be a better alternative

From Dr M. T. Ledwidge, MRPharmS, and Professor P. Weedle, MRPharmS

The News story (PJ, 7 March 2009, p238) on the effect of proton pump inhibitors (PPIs) on clopidogrel suggests that PPIs reduce conversion of clopidogrel, a prodrug, to its active form by competitively inhibiting the CYP450 isoenzyme 2C19. This proposed cause of “clopidogrel resistance” is linked to increased morbidity-mortality following discharge for acute coronary syndrome.

The story includes a statement that both pantoprazole and histamine H2-antagonists (ranitidine or famotidine) do not inhibit CYP450 2C19 and, unlike omeprazole and lansoprazole, were not associated with an increase in the risk of refractoriness in the study, offering an option for patients who need it.

We have two concerns with this report. First, these important clinical data must be viewed with caution given their retrospective nature. Secondly, the available data suggest that all the currently marketed PPIs are metabolised to a degree by the CYP450 2C19 enzyme system and that pantoprazole is predominantly metabolised at this enzyme.1 Furthermore, there are reports that rabeprazole has the least dependence of all the PPIs on 2C19 metabolism. Therefore, if the interaction between PPIs and clopidogrel relates to an interaction due to proton pump 2C19

Broad spectrum

The Broad Spectrum feature is open to any reader. Contributions of around 1,100 words commenting on topical issues should be sent to grace.smith@pharm.co.uk for consideration

metabolism, it may be inappropriate to recommend pantoprazole at this stage. There is a widely promoted view that pantoprazole has less effect on the kinetcs of other drugs that are metabolised by the liver, but it is noteworthy that these reports concern other drugs that have multiple hepatic metabolic pathways and not solely 2C19 on which clopidogrel activity appears to be dependent.

In this light, rabeprazole might be a better alternative than pantoprazole because of relatively less dependence on 2C19 metabolism and a consequent reduced effect of 2C19 polymorphisms on its kinetics. However, this conclusion may be premature without further data. In practice, the safest option of all would be to avoid unnecessary PPI use, particularly in suspected cases of clopidogrel resistance. H2- antagonists such as ranitidine would appear to be a good alternative (with antagonists, such as ranitidine, would appear to be a good alternative to omeprazole treatment will result in a comparatively reduced anti-acid effect. This appears to be a good alternative (with antagonists, such as ranitidine, would appear to be a good alternative to omeprazole treatment will result in a comparatively reduced anti-acid effect. This appears to be a good alternative (with antagonists, such as ranitidine, would appear to be a good alternative to omeprazole treatment will result in a comparatively reduced anti-acid effect. This appears to be a good alternative (with antagonists, such as ranitidine, would appear to be a good alternative to omeprazole treatment will result in a comparatively reduced anti-acid effect. This appears to be a good alternative (with antagonists, such as ranitidine, would appear to be a good alternative to omeprazole treatment will result in a comparatively reduced anti-acid effect. This appears to be a good alternative (with antagonists, such as ranitidine, would appear to be a good alternative to omeprazole treatment will result in a comparatively reduced anti-acid effect. This appears to be a good alternative (with antagonists, such as ranitidine, would appear to be a good alternative (with antagonists, such as ranitidine, would appear to be a good alternative to omeprazole treatment will result in a comparatively reduced anti-acid effect. This appears to be a good alternative (with antagonists, such as ranitidine, would appear to be a good alternative to omeprazole treatment will result in a comparatively reduced anti-acid effect.