

to tackle them. We use the term epidemic because (in the absence of objective documentation of rates of SAEs in the past) our impression is that this is a growing phenomenon, related to the increased use of major surgery in the elderly. We also consider that only the absence of SAEs would offer no scope for improvement. A rate of SAEs of 16.9% should, logically, offer much scope for improvement. Whether such improvement can be realised remains a matter for future interventional investigations.

1. Bellomo R, Goldsmith D, Russell S, Uchino S. Postoperative serious adverse events in a teaching hospital: a prospective study. *Med J Aust* 2002; 176: 216-218. □

Acute community-acquired meningitis and encephalitis

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TO THE EDITOR: The article on acute community-acquired meningitis and encephalitis by Beaman and Wesselingh¹ provides a comprehensive and up-to-date review of diagnostic and management issues relevant to general clinicians. However, the section on vaccines for preventing meningococcal C and pneumococcal diseases is not as contemporary. Contrary to the authors' statements that "a conjugate vaccine covering serogroup C [meningococcus] will be available in Australia shortly", and "a conjugate vaccine [for pneumococcus] is currently under trial in Australia", conjugate vaccines for both diseases are available and registered for use in Australia. Conjugate vaccines have the advantage that they can be used in children from six weeks of age and are expected to provide long-term protection.

Meningitec is a meningococcal group C conjugate vaccine approved for use in children from six weeks of age, adolescents and adults. Meningitec has been available from Wyeth Australia since October 2001, but is not part of the National Childhood Immunisation Scheme and, as such, can only be obtained on private prescription at present.

Prevenar (pneumococcal septavalent conjugate vaccine) is also approved for use and has been available from Wyeth Australia since January 2001. Prevenar is indicated for active immunisation of infants and children from six weeks to nine years of age against invasive disease, pneumonia and otitis media caused by *Streptococcus pneumoniae*.

1. Beaman MH, Wesselingh SL. Acute community-acquired meningitis and encephalitis. *Med J Aust* 2002; 176: 389-396. □

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IN REPLY: We thank Saltman for up-to-date information on Wyeth vaccines. Readers will appreciate that our article¹ was commissioned in January 2001, and the manuscript delivered in August that year, before the licensing of Meningitec. As the article discussed, group C meningococcus is a minority strain in most regions of Australia. Hence, the vaccine will not prevent most cases of what is already an uncommon disease. Conjugate pneumococcal vaccines should have much wider application in the future, but currently are subsidised for use in only a minority of the at-risk population.

1. Beaman MH, Wesselingh SL. Acute community-acquired meningitis and encephalitis. *Med J Aust* 2002; 176: 389-396. □

Short-term effectiveness of bupropion for assisting smoking cessation in general practice

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TO THE EDITOR: As noted in the letter by Chapman and Jamrozik,¹ there was substantial prescribing of bupropion sustained release (Zyban SR; GlaxoSmithKline) following its Pharmaceutical Benefits Scheme (PBS) listing from 1 February 2001. The drug has been the subject of extensive publicity following reports of adverse drug reactions and deaths of patients while taking bupropion. Although bupropion has been shown to be effective in two key

clinical trials,^{2,3} there are no studies of effectiveness when prescribed in the context of Australian general practice.

We conducted a study of short-term effectiveness involving 11 general practice registrars working in eight practices in south-west and southern Sydney. Each registrar identified from practice prescribing records 10-15 patients prescribed bupropion after 1 February 2001. These patients were followed up via a telephone questionnaire 10 weeks after the date of prescription. The questionnaire elicited information on the use of bupropion, patient-reported abstinence rates, adverse effects and use of support services. Biochemical validation of smoking status was not conducted.

Interviews with 151 patients were conducted between April and August 2001 (see Box). Patients completing seven weeks or more of therapy were significantly more likely to report both continuous abstinence ($P = 0.01$) and point-prevalence abstinence ($P = 0.002$). Eighty-three patients reported adverse effects, the five most common being insomnia (14%), headaches (11%), nausea (8%), dry mouth (5%) and irritability (4%). No convulsions were reported. Patients who made use of one or more support services for cessation counselling were no more likely to report point-prevalence abstinence at follow-up than those who did not ($P = 0.8$).

Our study was not based on a random sample of GPs or patients, and we did not collect data on the total number of patients treated with bupropion in these practices over the study period. Bearing in mind these limitations, the study has a number of notable findings. Despite the wording of the PBS authority "for use within a comprehensive treatment program", fewer than half the patients reported using any support service. There was also a low rate of completion of the recommended course of treatment (less than 20% of patients).

Ten-week follow-up survey of patients prescribed bupropion sustained release (Zyban SR) for smoking cessation ($n = 151$)

Patients taking all or part of course of drug therapy	124 (82%)
Mean duration of therapy (weeks)	4.6 (range, 1-12)
Patients completing at least seven weeks of therapy	24 (19% of those who took all or part of course)
Patients reporting continuous abstinence at 10 weeks	47 (31%)
Patients reporting point-prevalence abstinence at 10 weeks	57 (38%)
Patients reporting adverse effects	83 (68% of those who took all or part of course)
Patients accessing one or more support services (general practitioner, Quitline, ZAP*)	69 (46%)

*ZAP = Zyban Action Plan (trademark of GlaxoSmithKline)

While the short-term abstinence rates among the patients followed up were encouraging, and not dissimilar to rates found in clinical trials,^{2,3} there is clearly a need to look at strategies to encourage patients to adhere to the prescribed course of treatment and to make use of cessation support services. We suggest patients be invited back for at least two follow-up GP visits following prescribing of bupropion, as well as being made aware of other support services.

Competing interests: NAZ and RLR have received funding from GlaxoSmithKline to conduct education programs in smoking cessation for health professionals.

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3. Hurt RD, Sachs DP, Glover ED, et al. A comparison of sustained-release bupropion and placebo for smoking cessation. *N Engl J Med* 1997; 1337: 1195-1202. □

Thalidomide and cancer

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TO THE EDITOR: Thalidomide (N- α -phthalimidoglutarimide) was first marketed as a sedative-hypnotic in 1957. It was withdrawn from the market in 1961 as it was found to cause congenital malformations.¹ Infant mortality statistics in Germany for the years 1959 to 1963 show that about 40% of thalidomide-affected babies died in the neonatal period.² The main causes of death were atresia of the bowel, renal dysgenesis and heart malformations.

As a result of extensive studies on the pathogenesis of the malformations, it was found that thalidomide is an immunosuppressant.³ The use of two different ¹⁴C-labelled thalidomide preparations showed that a portion or the whole of the glutarimide molecule binds to the DNA of rabbit embryos.⁴

In Britain and Ireland, 480 thalidomide-affected infants survived. Of these, 25 died before reaching the age of 40 years. The causes of death were cancer (4), heart disease (4), diabetes (3), hypertension and renal failure (3), motor accidents (3), and substance misuse or suicide (8) (M Johnson, Director, the Thalidomide Trust [United Kingdom], personal communication).

Four deaths from cancer before the age of 40 years in a cohort of 480 is an incidence of 0.83%. The death rate from cancer in England and Wales before the age of 40 is

9.4 per 100 000 population, or 0.0084%.⁵ Thus, the thalidomide-affected individuals had a 99-fold increase in the age-related cancer death rate. Another of the cohort died aged 41 years of round-cell sarcoma.

The high incidence of malignancy, together with the knowledge that a portion of the thalidomide molecule binds with the DNA of laboratory animals, suggest a possible mutational change in some of the cells of thalidomide-affected people.

Thalidomide is currently being used to treat a variety of diseases, some because of its immunosuppressant properties. These diseases include graft-versus-host disease, leprosy, AIDS, Behçet's syndrome, tuberculosis, multiple myeloma and many dermatoses. It is also being used for treating some cancers. Its chemotherapeutic value probably results from the ability of the glutarimide component of the thalidomide molecule to bind with the DNA of rapidly dividing cells. However, if the genetic injury is not accurately repaired, it may result in mutations or even cell death.

Although thalidomide is now proving to be a useful therapeutic agent, its ability to bind with DNA makes it dangerous, not only when taken by pregnant women, but also potentially when taken by men, whose sperm might be affected.⁶

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Surgeons' views about colorectal cancer screening before and after national guidelines

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TO THE EDITOR: In November 1999, the National Health and Medical Research Council (NHMRC) released *Guidelines for the prevention, early detection and management of colorectal cancer*.¹ One chapter addressed screening for colorectal cancer