References

- 1. Habib G, Hoen B, Tornos P et al.; Task Force on the Prevention, Diagnosis, and Treatment of Infective Endocarditis of the European Society of Cardiology (ESC). Guidelines on the prevention, diagnosis, and treatment of infective endocarditis. Eur Heart J 2009;30:2369–413. http://dx.doi.org/10.1093/eurheartj/ehp285
- **2.** Habib G, Badano L, Tribouilloy C *et al.* Recommendations for the practice of echocardiography in endocarditis. *Eur J Cardiol* 2010;**11**:202–09.
- **3.** Konen E, Goitein O, Fienberg M *et al.* The role of ECG-gated MDCT in the evaluation of aortic and mitral mechanical valves: initial experience. *AJR Am J Roentgenol* 2008**:191**:

- 26-31. http://dx.doi.org/10.2214/ AJR.07.2951
- **4.** Feuchtner GM, Stolzman P, Dichtl W *et al.* Multislice computed tomography in infective endocarditis: comparison with transesophageal echocardiography and intraoperative findings. *J Am Coll Cardiol* 2009;**53**:436–44. http://dx.doi.org/10.1016/j.jacc.2008.01.077
- 5. Lentini S, Monaco F, Tancredi F et al. Aortic valve infective endocarditis: could multi-detector CT scan be proposed for routine screening of concomitant coronary artery disease before surgery? Ann Thorac Surg 2009;87:1585–7. http://dx.doi.org/10.1016/j.athoracsur.2008.09.015
- 6. De Winter F, Vogelaers D, Gemmel

- F, Dierckx RA. Promising role of 18-F-Flouro-D-deoxyglucose positron emission tomography in clinical infectious diseases. *Eur J Clin Microbiol Infect Dis* 2002;**21**:247–57. http://dx.doi.org/10.1007/s10096-002-0708-2
- **7.** Vind S, Hess S. Possible role of PET/CT in endocarditis. *J Nuclear Cardiol* 2009;**17**:516–19. http://dx.doi. org/10.1007/s12350-009-9174-x
- 8. Yavari A, Ayoub T, Lefteris L et al. Diagnosis of prosthetic aortic valve endocarditis with gallium-67 citrate single-photon emission computed tomography/computed tomography hybrid imaging using software registration. Circ Cardiovasc Imaging 2009;2:e41–e43. http://dx.doi.org/10.1161/CIRCIMAGING.109.854661
- **9.** Fellah L, Waignein F, Wittebole X, Coche E. Combined assessment of tricuspid valve endocarditis and pulmonary septic embolism with ECG-gated 40-MDCT of the whole chest. *AJR Am J Roentgenol* 2007;**189**.W228–W230. http://dx.doi.org/10.2214/AJR.05.1021
- **10.** Royden Jones H, Siekert R. Neurological manifestations of infective endocarditis: review of clinical and therapeutic challenges. *Brain* 1989;**112**:1295–315. http://dx.doi.org/10.1093/brain/112.5.1295
- 11. Bertorini TE, Laster RE, Thompson BF et al. Magnetic resonance imaging of the brain in bacterial endocarditis. Arch Intern Med 1989;149:815–17. http://dx.doi.org/10.1001/archinte.149.4.815



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NFWS

News



Primary Care Cardiovascular Society announces closure

The *British Journal of Cardiology* is sorry to report the closure of the Primary Care Cardiovascular Society (PCCS), which ceased operating at on the 31st of January 2012. The BJC has been the society's official journal.

The Society was closed following an Extraordinary General Meeting of the PCCS where there was a unanimous vote in favour of the motion 'To approve the proposed voluntary winding up of the PCCS, its dissolution and removal from the Central Register of Charities'.

A statement released by the PCCS says "Since the PCCS was established 15 years ago, it has relied heavily on the pharmaceutical industry to support its educational activities. The recession and patent expiries have had a significant impact on the pharmaceutical industry and the availability of funds for all activities, including the PCCS. This situation is likely to deteriorate rather than improve for the foreseeable future. As the funding model for the PCCS is largely based on income from the industry, its future could not be guaranteed. Although the PCCS is currently solvent, looking forward, with the changes within the major funding sources, remaining solvent would be a challenge.

"The PCCS has been well managed and all financial matters are in order with a small surplus of funds. Once the winding up procedure is completed, the remaining balance will be gifted to a likeminded national Cardiovascular Charity".

Chief Executive and Founder Member of the PCCS Dr Fran Sivers said: "This is a very sad time for all who have been involved with the Society and the closure of the PCCS will leave a major gap in primary care cardiology".

BJC Editor Dr Henry Purcell said: "We have enjoyed a good working relationship with the PCCS through the years and we are sorry to see the Society close. We will miss the enormous contribution it has made to primary care cardiology. The BJC continues to support primare care cardiology – since the journal's inception, we have recognised the contribution made to cardiovascular medicine by primary care in the UK and we will continue to fully cover and report on its important developments and achievements."

NEWS

MI deaths continue to fall sharply in England

The death rate from heart attacks in England halved in the eight years between 2002 and 2010, new data show.

Overall, just over half of the decline is attributed to a fall in event rate and just less than half to a decline in case fatality, so advances in both primary prevention and secondary prevention appear to have contributed.

The latest data come from a study conducted by researchers led by Kate Smolina (Unit of Health-Care Epidemiology, Oxford), who used national hospital and mortality data to identify 840,175 patients who had suffered a myocardial infarction (MI) during the eight year period.

The standardised mortality rate from MI decreased in men from 78.7 to 39.2 (38.6 to 39.9) per 100,000 population and in women from 37.3 to 17.7. A declining mortality rate was seen in all age groups and for both sexes. The greatest rates of decline occurred in men and women aged 65-74 and the lowest in those aged 30-54 and 85 and older.

The authors suggest that the rising rates of obesity and diabetes may be potential contributing factors to a levelling of event rate in younger people. "These findings support previous reports of a flattening and a possible reversal in coronary heart disease mortality



rates in young adults... and reinforce the importance of monitoring and managing risk factors in this population," they write (*BMJ* 2012;**344**:d8059).

Aspirin in primary prevention: new meta-analysis

A new meta-analysis has shown that cardiovascular benefits of aspirin in the primary prevention population are balanced by the risk of bleeding.

The authors, led by Professor Kausik Ray (St George's University of London) conclude that the modest benefits and the significant increase in risk of bleeding do not justify routine use of aspirin in primary prevention, but that aspirin may be considered in certain higher-risk groups.

The recently published meta-analysis (*Arch Intern Med* 2012;**172**:209–16), included nine randomised placebo-controlled trials with a total of 100,000 participants. Results (**table 1**) showed that during a mean follow-up of six years, aspirin treatment reduced total cardiovascular events by 10%, driven primarily by a reduction in nonfatal myocardial infarction (MI), but there was a 30% increased risk of non-trivial bleeding events. The number needed to treat to prevent one cardiovascular event was 120, compared with 73 for causing a non-trivial bleed.

The current study did not find a significant reduction in cancer mortality, but others have pointed out that a longer study period would

be necessary to show an effect on this end point. And a previous meta-analysis has shown a reduction in cancer mortality with aspirin.

But Professor Ray says the cancer data are still very preliminary, and at present the decision whether to take aspirin as a healthy person is governed by cardiovascular risk, and for most people the risks probably outweigh the benefits.

Table 1. Effect of aspirin on vascular and non-vascular outcomes or death

Event	Odds ratio (95% CI)
Cardiovascular events	0.90 (0.85-0.96)
Non-fatal myocardial infarction	0.80 (0.67-0.96)
Cardiovascular death	0.99 (0.85-1.15)
Cancer mortality	0.93 (0.84-1.03)
Nontrivial bleed	1.31 (1.14-1.50)

TRA-2P: new antiplatelet drug reduces CV events but ups bleeding

Top-line results of the TRA-2P study have shown that Merck's novel antiplatelet agent, vorapaxar, reduced the primary ischaemic end point of the study, but increased bleeding, including intracranial haemorrhage in a secondary prevention population.

Vorapaxar is a protease-activated receptor 1 (PAR-1) antagonist that blocks thrombin-induced platelet activation and therefore inhibits platelets by a different mechanism to other available antiplatelet drugs.

The TRA-2P study involved 26,449 patients with myocardial infarction (MI), ischaemic stroke, or peripheral vascular disease. Addition of vorapaxar to standard of care is reported to have significantly

reduced the risk of cardiovascular death/MI/stroke/urgent coronary revascularisation (composite primary end point), but at the cost of increased bleeding. However, there was a lower risk of intracranial haemorrhage in patients without a history of stroke. The full results of TRA-2P will be presented at the American College of Cardiology meeting in March.

This is the second large-scale trial of vorapaxar. The first, TRACER, reported at last year's American Heart Association meeting, showed just a trend towards a reduction in ischaemic events but a large increase in bleeding in acute coronary syndrome patients.

Statins associated with increased risk of diabetes

More concern about the risk of diabetes with statins has been voiced after new data from the Women's Health Initiative (WHI) has shown a 48% increased risk of diabetes in post-menopausal women taking these agents in the study. This adds to results of two meta-analyses of statin studies published recently, which also suggested a significant increase in risk of diabetes with statins.

In the present study, researchers analysed data from the WHI on 153,840 postmenopausal women, of whom 7% were

taking statins at baseline. During the study period, 10,242 incident cases of diabetes were reported.

In an unadjusted risk model, statin use at baseline was associated with a 71% increased risk of diabetes, but after adjusting for other risk factors, this was reduced to a 48% increased risk. The association appeared to be a class effect.

Risk was increased particularly in white, Hispanic, and Asian women, but not in African American women. The association was also observed at all levels of body mass index (BMI) but women with the lowest BMI appeared to be at higher risk of diabetes compared with obese women.

The authors note that statins clearly address the cardiovascular consequences of diabetes and current guidelines for primary and secondary prevention should not change. But they add that more studies on statin-induced diabetes are needed to clarify the risk and to optimise therapy. (Arch Intern Med 2012;172:144-52).

MHRA issues advice on dabigatran

As adverse event reports of bleeding with the new oral anticoagulant, dabigatran, are being publicised, many regulatory authorities are issuing alerts reminding that caution is needed with this drug in the elderly and patients with renal impairment.

This topic was also included in the UK MHRA's December Drug Safety Update. which gave the following new advice:

- Do not start dabigatran in any patient with severe renal impairment (creatinine clearance <30 mL/min)
- Assess renal function: in all patients before starting dabigatran; when a decline in renal function is suspected during treatment (e.g. hypovolaemia, dehydration, or with some co-medications); at least annually in

patients older than 75 years; and at least annually in patients with renal impairment.

· Check for signs of bleeding or anaemia and stop treatment if severe bleeding occurs.

In the US, the Food and Drug Administration (FDA) has initiated a safety review of dabigatran in which it is working to determine whether the reports of bleeding with the drug are occurring more commonly than would be expected, based on observations in clinical trials.

Latest adverse reaction reports from the US show that there were more reports of bleeding with dabigatran than for warfarin in the first quarter of 2011, and many of the bleeding events with dabigatran involved intracranial haemorrhage in elderly patients. The report from the Institute of Safe Medication Practices, which documents serious adverse reactions reported to the FDA, suggests that this raises a question regarding safe dosing and monitoring in older patients.

However, the US FDA did not approve the lower dose of dabigatran used in the RELY trial (110 mg), which is available in most other markets including the UK, and is seen by many as the preferred option for older patients and those with mild or moderate renal impairment.

Further information is available at: MHRA Drug Safety Update Vol 5 Issue 5, Dec 2011:A2 and Institute of Safe Medication Practices. ISMP Medication Safety Alert, January 12, 2012.

Telehealth rollout to accelerate

Prime Minister, David Cameron, has announced that telecare and telehealth systems will be rolled out to the homes of three million people over the next five years as part of the "3 Million Lives" campaign, aiming to improve patient care and reduce costs.

In support of the campaign, the Department of Health has published findings from Whole Systems Demonstrator, a trial of telecare and telehealth services delivered to 6,000 people. It showed a 45% reduction in mortality rates, 20% reduction in emergency admissions, 15% reduction in A&E visits, 14% reduction in elective admissions and 14% reduction in bed days.

Speaking at the launch of the Strategy for UK Life Sciences in London, Mr Cameron said the aim of the new campaign is to improve three million lives over the next five years. "This is going to make an extraordinary difference to people," he said.

"This is not just a good healthcare story. It's going to put us miles ahead of other countries commercially too as part of

our plan to make our NHS the driver of innovation in UK life sciences."

 A home monitoring service for patients with chronic obstructive pulmonary disease (COPD), diabetes and chronic heart failure has been launched. The new service by Telehealth Solutions can be customised to the individual patient and deploys a specialist nurse triage service, working in partnership with other clinicians, to support more informed clinical decision making, while empowering the patient to take greater control of their care.