

# Newsletter

ISSUE 29 SPRING 2012

This issue reports highlights from the British Society for Heart Failure 14th Annual Autumn Meeting, held in London on 24–25 November 2011. The meeting theme was “Care for the individual patient”. The programme director was Professor Andrew Clark (Hull).



Dr Suzanna Hardman, BSH Chair

## Forthcoming events

**European Heart Failure Awareness Day**  
11 May 2012

**Sessions at the BCS Annual Conference**  
28–30 May 2012  
Manchester Central,  
Manchester

**15th BSH Autumn Meeting**  
29–30 November 2012  
Queen Elizabeth II  
Conference Centre, London

**5th BSH Medical Training Meeting**  
7 February 2013  
Wellcome Trust, London

**3rd BSH Heart Failure Nurse Study Day**  
8 February 2013  
Wellcome Trust, London

For more details, please visit the new BSH website at [www.bsh.org.uk](http://www.bsh.org.uk)

## Individuals versus the bureaucracy

The first session of the meeting provided some messages for the commissioning of heart failure services in secondary and primary care.

One such message is the importance of optimising therapy as much as possible while patients with heart failure are in hospital, as highlighted in new data from the National Heart Failure Audit.

Reporting the 2010/11 audit data,<sup>1</sup> Theresa McDonagh (London) said that survival is much better in patients who are discharged on disease-modifying drugs, and the more of these drugs the patient is on, the better the survival (see Figure, page 2). New analysis shows that discharge dosage also seems to be important: for example, survival at one year is significantly better in patients with left ventricular systolic dysfunction who are discharged on over 5 mg ramipril or bisoprolol than in those discharged on 5 mg or less of these drugs.

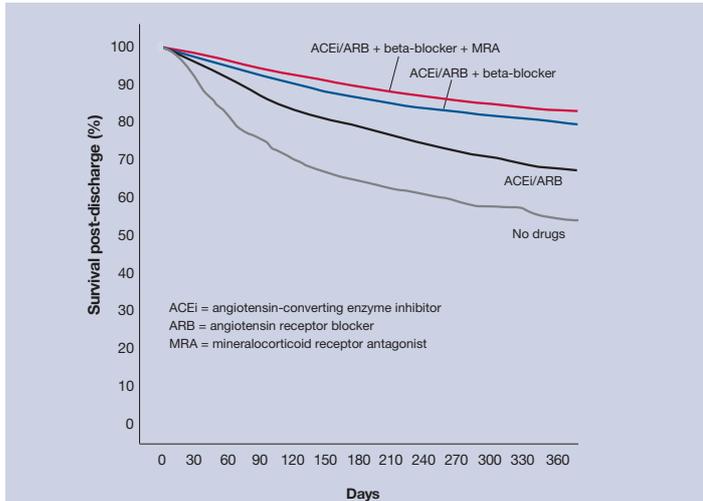
The audit data are robust, with the new data covering 36,000 admissions. In many respects, the findings are unchanged from previous years. Mortality has not fallen, but there is still clear benefit from specialist cardiology care, which is associated with better drug prescribing and specialist follow-up.

Noting that heart failure admissions are long (mean length of stay 11 days) and expensive, Professor McDonagh commented: “We should use that time well to get patients on to ACE [angiotensin-converting enzyme] inhibitors, beta-blockers and aldosterone antagonists, if they can tolerate them. Drugs can be uptitrated quickly when the patient is in hospital being monitored.”

Suzanna Hardman (London) said that the new audit data support her long-held view that when patients are admitted to hospital with heart failure it is essential to ensure these patients are prescribed the right drugs, and as far as possible leave hospital on the right dose. She argued that further support for this approach comes from published heart failure studies, with better survival reported at 3 and 12 months, where there has been a policy to optimise inpatient care, than is reported in studies without this emphasis.

Since 2002, the Whittington Hospital policy has been to optimise treatment as soon as the acute episode has been dealt with. The aim is to optimise care, including prescribing, and ensure that patients are stable before discharge, known to the multidisciplinary team and have planned follow-up.

This model means length of stay is one day longer than the national median, equating to a mean additional cost per patient of around £300. But Dr Hardman suggested that this is a small price to pay for the gains achieved. Inpatient mortality is around 50% of that expected nationally,<sup>1</sup> and there is a low early readmission rate, and reduced 3- and 12-month all-cause mortality. Inpatient optimisation also avoids numerous clinic/general practitioner (GP) appointments for uptitration.



**Audit data showing survival post-discharge by number of disease-modifying drugs in patients with left ventricular systolic dysfunction<sup>1</sup>**

Rather than being obsessed by length of stay, commissioners should be concerned about what happens during a hospital admission and demand improved quality of heart failure care. She urged delegates to drive changes locally: “Engage with commissioners and with members of the local heart failure team and make sure you describe the service you want.”

The new National Health Service landscape offers both opportunities and challenges. Nigel Rowell (Middlesbrough) suggested that there has never been a better time for the commissioning of heart failure services, in the light of the National Institute of Health and Clinical Excellence (NICE) partial update, NICE Quality Standard and the NICE heart failure commissioning guide. “I hope that Clinical Commissioning Groups [CCGs] will be told they must commission according to the Quality Standard. That would be a good day for patients,” he said. But there was a risk that the Quality Standard would slip through unnoticed in an area with no heart failure champion.

It would also be useful if some items in the Quality Standard could be included in the Quality and Outcomes Framework (QOF) and Commissioning for Quality and Innovation (CQUIN) payment systems. Heart failure commissioning should include incentives to find stable cases before patients present acutely, case finding in hospitals, a discharge plan for all patients, nurse follow-up and patient education.

On the negative side, Dr Rowell said that while GPs are the right people to commission services, most are not interested in this.

Jim Moore (Gloucestershire) agreed that most GPs do not want to be part of CCGs as they don’t want to be unpopular with their secondary and primary care colleagues, or to “lose” time out of the practice and be unpopular with patients. But there are certainly huge opportunities for influencing commissioning. Top of the list of what he would like for his patients would be access to natriuretic peptide testing, and timely access to diagnostic services and specialist teams.

Telehealth is another commissioning opportunity. However, Dr Moore suggested that this is probably best left in the hands

of specialists, such as heart failure nurses. He mentioned that GPs in Gloucestershire have recently been supplied with 2000 telehealth monitors for use in heart failure, chronic obstructive pulmonary disease (COPD) and coronary heart disease, but given only two hours training on their use.

From the specialist nurse point of view, organisational change is threatening the provision of seamless heart failure services, said Annie MacCallum (Gloucestershire). The boundaries that are being created are restricting access to cardiologists, whereas communication with key clinicians is critical to the care of individual patients.

She emphasised that specialist nurses need champions – such as a heart failure consultant or a GP with specialist interest – to preserve and develop services. And commissioners needed to be aware that the evidence for the value of specialist nurses was based on a multidisciplinary approach.

One of the current threats in primary care is that senior specialist nurse roles are being amalgamated with other roles. Heart failure nurses are not community matrons and their specialist role needs to be maintained.

Mrs MacCallum noted that elderly patients with heart failure and preserved ejection fraction are increasingly being referred to specialist nurses. Caring for these patients is important, because many of them do not see a cardiologist, but it raises huge capacity issues.

## Co-morbidities in patients with heart failure

*Lung disease, renal impairment, diabetes and great age were the topics discussed in a session on co-morbidities in patients with heart failure.*

### Lung disease

On lung disease, Nat Hawkins (Liverpool) said that COPD is the most powerful predictor of beta-blocker underutilisation in patients with heart failure. However, the slight reduction in pulmonary function that might be seen with the use of a beta-blocker is undoubtedly a price worth paying for the morbidity and mortality benefit. Current heart failure guidelines emphasise that COPD is not a contraindication to beta-blockade, with a cardioselective drug always preferred.

The other side of the conundrum is the question of giving beta-agonists to patients with heart failure. The evidence here is less robust, Dr Hawkins said. The key is to perform spirometry to check that the patient really needs a bronchodilator. If a long-acting bronchodilator is needed, his preference would be a long-acting antimuscarinic (i.e. tiotropium) over a long-acting beta-agonist, on both safety and efficacy grounds.

Asked about beta-blockade in patients with asthma, Dr Hawkins said he would be happy to use a cardioselective drug in mild-to-



**John Baxter: end-of-life care must be improved**

moderate asthma, while warning the patient that it might worsen symptoms. He would do this in the clinic, but it would not be unreasonable to admit patients in order to start the beta-blockade.

## Renal impairment

Paul Kalra (Portsmouth) noted that chronic kidney disease (CKD) is very common in patients with heart failure and is an independent predictor of adverse prognosis. There is an approximate doubling in the risk of cardiovascular death or hospitalisation when the estimated glomerular filtration rate is less than 45.

Deterioration in renal function (acute kidney injury) is also associated with adverse outcomes. This is particularly important when patients are admitted with decompensated heart failure, when even a relatively small decline in renal function is significant.

Pathophysiological mechanisms linking heart failure and renal failure are likely to include reduced renal arterial perfusion, renal venous congestion, abnormalities of neurohormonal activation and iron deficiency.

Dr Kalra emphasised that CKD should not prevent use of the established neurohormonal antagonists. This patient group exhibits the highest event rates and, as such, has much to gain from treatment. Intravenous iron improves symptoms in patients with iron deficiency. There are also some data suggesting an improvement in renal function, but this needs to be further evaluated.

## Diabetes

Talking about diabetes and heart failure, Chim Lang (Dundee) noted that diabetes predisposes to the development of heart failure and, in turn, heart failure can lead to the development of insulin resistance (IR) and diabetes. Survival is significantly reduced in diabetic patients who develop heart failure.

There is increasing recognition that chronic heart failure is an insulin resistant state. The mechanism for this is not fully defined but might involve sympathetic activation. One study found that 60% of non-diabetic patients with heart failure have IR. This is

reported to be associated with poorer survival, suggesting that IR might be a potential new target for treating heart failure.

For patients with heart failure and diabetes, Professor Lang said that standard heart failure drugs should be used. For treating diabetes, it seems sensible to use an insulin sensitiser. There are cautions about the use of thiazolidinediones in patients with heart failure, but metformin might be a good treatment. Recent observational data from Dundee suggest lower mortality with metformin than with sulphonylureas in patients with diabetes and heart failure, and a randomised trial is now needed. More data are also needed on the new incretin-based therapies.

## Great age

John Baxter (Sunderland) discussed heart failure in patients of great age. He said that it is essential that very elderly patients admitted to hospital have a comprehensive geriatric assessment (CGA). This is a multidisciplinary assessment, led by a geriatrician, to identify medical, physical, psychological and social problems, and to come up with a care plan. A recent Cochrane review showed that patients who have a CGA do better than those who have conventional care.<sup>2</sup>

Patients must also be assessed for cognitive impairment. This is common in very elderly heart failure patients and not always easy to spot without screening. His hospital screens using the Abbreviated Mental Test Score on clerking and, if this is reduced, the Mini-Mental State Examination is carried out.

There is also need to improve end-of-life care, taking account of the needs of individual patients. At present, many patients who want to die at home are not doing so. Dr Baxter highlighted three key steps here: better case identification, advanced care planning and use of palliative care registers. Locally, key points from the NHS Improvement End of Life Care in Heart Failure document have been incorporated into GP guidelines to help identify patients with very adverse prognosis.

## Individual patients: lifestyle issues

### Sex

Healthcare professionals should remember to ask their heart failure patients about erectile dysfunction (ED). "If you do not ask, they will not tell," said Michael Kirby (Hertfordshire). Erectile function declines with ejection fraction: 60–80% of heart failure patients may have erectile problems and can often be helped.

Professor Kirby emphasised that cardiovascular risk is not significantly increased during sexual activity in people with stable cardiac disease. When managing ED in cardiac patients the first steps are to optimise clinical status and look for co-morbidities (such as type 2 diabetes mellitus, hyperlipidaemia, hypotension or significant atherosclerosis) that might be contributing factors.

Drugs can affect erectile function, and it may be possible to adjust therapy, for example, replacing propranolol or atenolol with carvedilol, avoiding digoxin and thiazides, replacing spironolactone with eplerenone, and replacing ACE inhibitors with angiotensin receptor blockers (ARBs). Professor Kirby said that ARBs are the only antihypertensives that do not worsen erections, and there is even some evidence that they improve them.

For specific treatment, phosphodiesterase type-5 (PDE5) inhibitors are first choice, with sildenafil preferred because of its greater evidence base, both in ischaemic heart disease and in heart failure. PDE5 inhibitors should not have a negative impact on cardiovascular status. The essential thing is to avoid concomitant nitrates.

Professor Kirby commented that if clinicians are not certain whether sex is safe in their cardiac patients, it can be useful to carry out an exercise test before starting ED therapy. Patients worry that sex might lead to a repeat infarction, but if they can do four minutes of the Bruce protocol without a problem they are not at risk through normal sexual activity.

## Pregnancy

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Discussing pregnancy in women with heart failure, Lorna Swan (London) emphasised that pregnancy and contraception must be discussed with all female heart failure patients of child-bearing age, with referral to specialist services as required.

Cardiac disease is the commonest cause of maternal death in the UK and, within this, the commonest cause is heart failure syndromes. Pre-conception counselling in women with cardiac disease requires individual risk assessment, looking at both maternal and foetal risks.

The aetiology of the patient's heart failure is important: for example, stable heart failure from chemotherapy in childhood presents different risk to heart failure from previous pregnancy-associated cardiomyopathy. Women with previous peripartum cardiomyopathy who want another pregnancy are at particular risk if their ejection fraction does not return to greater than 50% after their previous pregnancy.

Beta-blockers and diuretics are the mainstay of heart failure treatment in pregnancy. Dr Swan said that spironolactone tends not to be used in the first trimester because of its anti-androgen properties but the drug may be restarted in a female foetus. There is little evidence on whether eplerenone is safer than spironolactone in pregnancy. ACE inhibitors seem not to be teratogenic in the first trimester, but they are avoided where possible in later pregnancy. Hydralazine/nitrate is a potential alternative.

For contraception, high-dose oestrogens should be avoided in cardiac patients but there are plenty of other options. These include progestogens (e.g. minipill or implants) and intrauterine contraceptive devices. Emergency contraception can be used safely in patients with heart failure.

## Individual patients: genetics

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In a session on genetics, Edward Blair (Oxford) encouraged cardiologists to make contact with their local clinical geneticists to help with case detection.

The genetic basis of the cardiomyopathies – which account for the vast majority of inherited cardiac conditions that lead to heart failure – is increasingly being recognised.

Clinical screening is complicated by incomplete penetrance and the sensitivity of the screening tests. Not everyone who inherits a mutation will show signs of disease and disease expression is highly variable. There is also the issue of age-related penetrance where the disease may not show up until late age. Dilated cardiomyopathy (DCM) penetrance is biphasic, peaking in children and in older adults.

As an example of how clinical geneticists might help cardiologists, Dr Blair said that for individuals at risk of hypertrophic cardiomyopathy, current guidelines suggest the clinical screening of adults every five years. Assuming a mutation is identified in a patient with an inherited condition, this specific mutation can be looked for in first-degree relatives. Most inherited cardiomyopathies have autosomal dominant inheritance, so 50% of individuals (without the mutation) can be discharged without a need for further follow-up, whereas those found to have the mutation can undergo clinical follow-up as normal.

Dr Blair noted that genetic testing is progressing rapidly. Conditions such as Fabry's disease, which are treatable, can be detected. On the horizon is the possibility that genetics might lead to targeted treatment strategies.

The cardiologist's view of the investigation of inherited disease in heart failure patients was given by Gerry Carr-White (London) who said that clinicians should do more to establish the underlying aetiology in patients with DCM.

Standard practice is to exclude coronary artery disease, valve disease and hypertension. But assessment should not stop there. A cause can be found in around 50% of cases, so it is worth looking in a bit more detail, he said.

For example, cardiologists should be aware of neuromuscular disease and disproportionate arrhythmias (disproportionate to the degree of left ventricular dysfunction). The two most important inflammatory causes of disproportionate arrhythmia are cardiac sarcoid and giant cell myocarditis.

Where no cause is found for a patient's DCM, Dr Carr-White suggested screening first-degree relatives with electrocardiography and echocardiography. One-third of asymptomatic relatives will have abnormal results and, of



Photo courtesy of Robert Masters

**John Burn receives his medal from Mrs Mary Poole-Wilson after delivering his lecture**

these, one-third will develop DCM. With a limited budget for genetic testing, his hospital tends mostly to use clinical screening.

Technological developments in genomics and genetic testing are raising challenges in processing – and making sense of – all the data that can now be produced, according to John Burn (Newcastle upon Tyne). The introduction of genome sequencers in the early 2000s had a huge effect. Hand-held machines for DNA testing will soon be available and the question will be how best to use them.

Giving the second Philip Poole-Wilson memorial lecture, entitled “10 things Mendel missed”, Professor Burn, who is Professor of Clinical Genetics at Newcastle University, said that discoveries since Mendel’s work range from X-linked disease to the potential for genetic therapies. The complexities of different diseases caused by the same gene and different genes causing the same disease are now apparent, as is the way in which certain genetic conditions worsen through the generations. It is also now known that females can manifest X-linked diseases: 10% of female carriers of Duchenne muscular dystrophy will develop heart failure.

With regard to the treatment of inherited diseases, Professor Burn pointed out that ACE inhibitors and beta-blockers have led to substantial improvements in cardiac function in Duchenne muscular dystrophy. He also outlined his recent work showing that aspirin can reduce the incidence of cancer in carriers of hereditary colorectal cancer (Lynch syndrome). Clearly, having a genetic disorder does not mean that disease is inevitable, he said.

## The individual experience

*A session on “The individual experience” shed some light on what patients want from the heart failure team.*

One of the issues that patients have in coming to terms with a diagnosis of heart failure is the fact that because they often look well they feel they may be seen as a “malingering”.

This point came out clearly in research reported by Jenny Welstand (Wrexham) on patients’ experiences of living with heart failure and was confirmed by two patients who addressed the conference. Richard Mindham (London) said that of great significance to him was a loss of sense of self-worth and dignity. “You look well” is not the compliment it seems, he said.

Caryl Roberts (Wrexham) added that it had taken her a long time to accept her heart failure diagnosis. She now concentrates on what she can do rather than what she can’t do. She welcomes the fact that she can pick up the phone and speak to heart failure nurses who know her.

Mr Mindham said that, ultimately, patients need to take control to allow them to move from being a patient to being a person with choices. Understanding your condition certainly helps a patient take control, he said. Clinicians have limited time to answer questions. For him, the Cardiomyopathy Association has been a great help, providing information and the opportunity to meet other patients.

In his experience, there seems to be an appreciation of the trade off between quality and quantity of life in secondary care. Many patients struggle with side effects and, he thought, would trade the risk of a shorter life for a higher quality of life.

Jenny Welstand said that her research had identified a need to better understand what sense patients make of their illness.



Photo courtesy of Robert Masters

**Richard Mindham: patients need to learn about their condition and to take control**

The success or failure of patients to come to terms with their new situation affects their ability or desire to participate in self care. Trying to see how things are from the perspective of the patient would enable practitioners to better appreciate how they might tailor the management and care they offer.

Andrew Clark (Hull) agreed that clinicians needed more input from patients on what matters to them and he suggested that patients need more honesty from health professionals on the implications of the diagnosis and limitations of therapy.

He said that while there has been tremendous success in managing chronic heart failure, there is a danger that clinicians are losing sight of the individual patient. Research has focused on prolonging life but has not done so well on symptom relief, which is extremely important to patients. Better ways of measuring symptoms are needed. For measuring quality of life, Professor Clark said he favours instruments such as the Kansas City Cardiomyopathy Questionnaire, which ask patients how much they care about specific symptoms, giving an insight into what is important to the individual.

## Advanced therapy

In a session on advanced therapy, Henry Dargie (Glasgow) set the scene by discussing the need for these therapies. He said that there are an estimated 16,000 patients aged under 65 years in the UK with severe heart failure (New York Heart Association [NYHA] class III or IV) that is not responsive to current medical treatment.

Fewer than 100 adults had a heart transplant in the UK last year, and the use of left ventricular assist devices (LVADs), while increasing, remains low. So these procedures do not begin to address the needs of patients with advanced heart failure.

The National Audit shows substantial one-year mortality after a heart failure admission in patients aged under 65 years. These patients could potentially benefit from advanced treatments, although undoubtedly there is still much that can be done medically to improve care.

Providing wider access of heart failure patients to cardiologists, as well as more advanced heart failure facilities in the UK, might go a long way to resolving the unmet need.

Discussing how patients are assessed for heart transplantation, Simon Williams (Manchester) emphasised that transplant centres need to see patients earlier than they are currently being referred.

It is better to refer too early than too late. If it turns out to be too early for transplantation, treatment can be optimised and the patient monitored. But if it is left too late, the patient will have to be turned down for assessment. It is important to refer before irreversible complications have occurred.

Dr Williams drew attention to new UK guidelines for the referral and assessment of adults for heart transplantation,<sup>3</sup> which highlight clinical indicators that should prompt consideration for referral.

Most heart transplant candidates have left ventricular systolic dysfunction and NYHA class III/IV symptoms despite optimal medical and device therapy. To assess suitability for transplantation, a prognostic assessment is carried out: this can involve cardiopulmonary exercise testing to measure peak oxygen consumption. B-type natriuretic peptide measurement is also a very good prognostic indicator and survival scores can be useful, said Dr Williams.

The other major treatment for advanced heart failure is LVADs. Nick Banner (London) said that recent technological developments are helping surgeons and also potentially helping to reduce long-term complications.

Devices have become smaller, easier to implant and more reliable. LVADs are highly effective treatments, although medium-term survival is lower than with transplantation.

The major problems include device-related infection (often related to the drive line), right ventricular failure and acquired aortic regurgitation. New approaches to minimise long-term complications, including a totally implantable device, are now being investigated.

Dr Banner said that with increasing use of LVADs, follow-up is raising logistical problems. However, technology for remote monitoring is becoming available and this may help to reduce clinic visits. Given the number of advanced heart failure patients, he suggested a need now to move from "boutique" models to the mass production of cheaper devices.



Steven Tsui: surgical approaches in heart failure still uncertain

There is still doubt about the value of surgical approaches in advanced heart failure.

Steven Tsui (Papworth) said that coronary artery bypass surgery and mitral valve repair were both uncertain areas. The recent STICH\* trial<sup>4</sup> essentially showed no benefit on all-cause mortality from coronary artery bypass grafting compared with optimal medical therapy in heart failure patients without angina. In part this was because of increased perioperative mortality, he said. If patients at high risk of perioperative death could be identified, it might be possible to select patients who could benefit from revascularisation.

Mitral valve surgery appears to improve symptoms in heart failure patients with severe functional mitral regurgitation, but the evidence is limited. European heart failure guidelines say that surgery “may be considered” in selected patients, whereas the more recent US guidelines state that it is not generally recommended. It is certainly important to optimise medical therapy, and cardiac resynchronisation therapy (CRT) if required, before considering surgery, Mr Tsui said.

Guy MacGowan (Newcastle upon Tyne) suggested that there needs to be a re-evaluation of the relative roles of transplantation and LVAD use in view of the declining heart transplant numbers and increased success of LVADs.

LVADs should be considered as an option for long-term support rather than, as now, just as “bridge to transplant”.

Dr MacGowan said that genuine effort is being made to increase the number of organ donors. But even at its height, transplantation only ever treated a small number of patients relative to the overall population with advanced heart failure. So he suggested that there should be a move to the use of long-term ventricular assist devices (VADs) as a treatment in itself – destination therapy – not necessarily leading to transplant. Transplantation could be reserved for stable patients who can wait for transplant or those not suitable for VAD (e.g. with adult congenital heart disease).

Professor Tom Treasure (London) had been invited to offer a commentary and in doing so reflected on many issues discussed throughout the meeting. Transplantation and LVADs are all well and good, but reach only a tiny proportion of patients. It was important, he suggested, that we continue to focus on the bigger picture, with the objective of using resources to get the best months and years, wherever possible, for all patients.

As well as the sessions reported here, the meeting included a series of case presentations on different aspects of heart failure and “meet the expert” sessions.

## Clinical trials update 2011

Introducing a presentation on some of the important new clinical trials reported in 2011, John Cleland (Hull) encouraged participation in research. “If we want to continue to advance care for our patients, there is an obligation on us all to get involved: research is not something other people do,” he said.

Among the 2011 trials, Professor Cleland highlighted the following:

**PALLAS**<sup>5</sup> assessed dronedarone in patients with permanent atrial fibrillation and one or more major cardiovascular problems. Many patients had heart failure. There was a doubling in the risks of cardiovascular death, stroke, myocardial infarction and heart failure hospitalisation. Dronedarone should be used very cautiously, if at all, in heart failure patients.

The results of the **STICH** trial<sup>4</sup> do not take us much further forward with regard to the benefit of revascularisation in heart failure. In STICH, surgery was associated with a definite short-term risk and a possible long-term gain. Overall benefit was, at best, small. So routine revascularisation (and therefore routine angiography) is unwarranted in patients with heart failure who do not have angina.

**SHIFT substudies** show that reducing the heart rate with ivabradine is associated with improved ventricular function and, importantly, improved quality of life. The **CARVIVA heart failure trial**<sup>6</sup> was a small study comparing ivabradine, carvedilol or the combination (at lower dose). The combination was superior to beta-blocker alone in effects on exercise capacity. More data are needed before changing practice, but this might turn out to be a way forward for patients who cannot tolerate full-dose beta-blocker.

Results of the **TARGET**<sup>7</sup> trial suggest that left ventricular lead placement guided by speckle tracking echocardiography may improve outcomes in CRT.

\*A list of study acronyms can be found on page 8.

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## Study acronyms

<b>CARVIVA</b>	Effect of carvedilol, ivabradine or their combination on exercise capacity in patients with heart failure
<b>PALLAS</b>	Permanent atrial fibrillation outcome study using dronedarone on top of standard therapy
<b>SHIFT</b>	Systolic heart failure treatment with the I <sub>f</sub> inhibitor ivabradine trial
<b>STICH</b>	Surgical treatment for ischaemic heart failure
<b>TARGET</b>	Targeted left ventricular lead placement to guide cardiac resynchronisation therapy: a randomised controlled trial

## 14th BSH Annual Autumn Meeting: acknowledgements

### Gold exhibitors

GE Healthcare, Pfizer and Vifor Pharma

### Silver exhibitors

Edwards Lifesciences, Novartis and Servier

### Bronze exhibitors

Alere, Boston Scientific, Gambro Lundia, HeartWare, NHS Improvement, ResMed UK, Roche Diagnostics, Takeda and Thoratec

### Other contributors

National Institute for Cardiovascular Outcomes Research (NICOR) and Wisepress

We also welcome support from the British Heart Foundation

## BSH AGM

At the Annual General Meeting of the BSH on 25 November 2011, the chair (Dr Suzanna Hardman) reported that this year's meeting was the largest ever, with over 450 registered delegates. BSH membership was also increasing.

Dr Hardman noted that the BSH had been involved in four sessions at the British Cardiovascular Society (BCS) Annual Conference in June 2011. There had also been a successful Medical Training Meeting and a first Heart Failure Nurse Study Day. In 2012, the Medical Training Meeting would take place on 9 February and the Heart Failure Nurse Study Day on 10 February. European Heart Failure Awareness Day would be 11 May 2012. The BSH would be launching its new website in Spring 2012.

The Heart Failure Clinical Studies Group is now coming under the wing of the BCS and BSH, after initially being set up with support from the British Heart Foundation.

The BSH accounts for the year to 31 May 2011 were presented by the Treasurer (Dr Paul Kalra) who reported that the finances were in a healthy position. He also noted that, for the first time, the BSH was offering travel grants for the 2012 Medical Training Meeting and Heart Failure Nurse Study Day.

## Friends of the BSH

The Society is grateful to the Friends of the BSH for their continuing support:

**Alere, Edwards Lifesciences, GE Healthcare, HeartWare, Medtronic, Pfizer, Servier Laboratories, St. Jude Medical, Takeda, Thoratec and Vifor Pharma.**

## Becoming a Member or a Friend of the BSH

Membership is open to anyone involved in the diagnosis, management or science of heart failure. If you are interested in becoming a Member or Friend of the BSH, please contact:

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