Media Digest

Stem cells to be used to treat victims of heart attacks

People who have had a heart attack will receive an injection of their own stems cells to repair organ damage, in a study to be performed at University College Hospital and Bart's and the London. In this clinical trial, people will receive the treatment within hours of the heart attack occurring.

The stem cells will be taken from the patient's hip, with the aim of preventing the onset of heart failure. This will be the first double-blind clinical trial to test this intervention, following some clinical trials in Europe and animal studies.

Stem cells will be injected at the same time as balloon angioplasty is performed. The stem cells will be injected using the angioplasty catheter. Half of the people in the trial will receive stem cells and half will receive placebo.

The success of the procedure will be judged using a magnetic resonance imaging scan at 2 years and with a quality-of-life assessment.

John Martin, a cardiologist at the British Heart Foundation, said: 'There have been a couple of clinical trials in Germany to demonstrate that the technique is safe. In these trials, the bone marrow cells were given late, some time after the heart attack, in order to repair the muscle.' He added: 'We believe that if we give it immediately, it can prevent damage. We will show whether it works in acute heart attacks — and the treatment will involve no extra stay in hospital and virtually no extra cost.'

The Times, 8 November 2006

Deaths from heart disease in England are falling

Deaths from cardiovascular disease in England have fallen in the past decade, according to new figures from the Department of Health. Death rates have fallen by 35.9% since 1996.

An estimated 150 000 deaths due to cardiovascular disease have been prevented, based on data from the Office for National Statistics. The Department of Health claims to be on track to meet its own target of reducing death from cardiovascular causes (heart disease, stroke and related circulatory disorders) by 40% by the year 2010.

Steve Shaffelburg, of the British Heart Foundation, welcomed the statistics which, he said, maintained a trend of falling cardiovascular deaths which started in the late 1970s. 'Heart and circulatory disease remains the UK's biggest killer, accounting for over 216 000 deaths in 2004, and there's a danger that this death rate may start to rise again if our country's heart-friendly lifestyles do not improve.' He added, 'Our estimates show that the number of people living with it [heart disease] appears to be rising, with approximately 2.6 million people now living with coronary heart disease in the UK.'

BBC News, 27 September 2006

Berry juice may be good for heart

Berry juice extract may be effective in lowering cholesterol. Researchers, writing in the *Journal of the Science of Food and Agriculture*, report an new extraction method, which retains key anti-oxidant chemicals. The juice is used in health drinks in Tibet.

BBC News, 21 October 2006

Artery warning for people with advanced heart disease

Arteries of people with advanced heart diease are 40 years older than their biological age, according to a study published by the British Heart Foundation.

The study, published in *Circulation Research*, reported that this ageing process could not be reversed in severely damaged cells. Telomere damage, a biological sign of DNA ageing in the smooth muscle cells of diseased blood vessels, was identified.

Artery cells divide up to 13 times more rapidly in people with heart disease. Professor Martin Bennett, British Heart Foundation Professor of Cardiology, explained that in the early stages of heart disease the arteries are between five and 15 years older than the person's age. 'If you have mild heart disease and can limit your risk factors by stopping smoking, controlling hypertension and diabetes, and taking statins to lower cholesterol, you will see this ageing process slow,' he said.

BBC News, 28 August 2006

Trans fats to be outlawed in New York restaurants

Trans fats, in all but tiny quantites, are to be banned in restaurants in New York City. Plans approved by the city's mayor, Michael Bloomberg, will limit to half a gram the quantity of trans fats that can be included in any item on the menu.

Restaurants are set to have until next July to switch to oils or margarine that comply with the new regulations. Charles Hunt of the New York State Restaurant Association criticised the ban saying, 'You choose what you eat and that only affects you.'

The City of New York has attempted a year-long educational drive to persuade restaurants to restrict trans fats voluntarily. However, the board of health concluded that the campaign had minimal impact, and propsed a ban.

The Guardian, 28 September 2006

Social deprivation relevant in heart disease risk assessment

Social deprivation and family history are to be included in a new risk assessment for heart disease designed by researchers at Dundee University. The new method, which has been published in *Heart*, is being assessed for use in Scotland and possibly elsewhere.

Known as Assign, the risk assessment has been developed in association with the Scottish Intercollegiate Guidelines Network. Over 13 000 people were surveyed over 10 to 20 years to provide data for the research.

Project leader, Professor Hugh Tunstall-Pedoe said: 'Existing scores, such as that from Framingham in the USA, use levels of smoking, blood pressure and fats in the blood along with patient's age and sex to estimate risk. However, we know that socially deprived people and people from ethnic minorities such as British Asians are at increased risk, not explained by these factors.' He added, 'We showed that for this reason the Framingham score was unfair to those people in the population at greatest risk of heart disease.'

BBC News, 8 November 2006