

## The New Environment II

# The regulatory response in Europe

**Since the US flexed its regulatory muscles, European countries have been quick to respond. The UK brought the Bribery Act into being in 2010, after almost a decade of debate and speculation. Its broad aim was to curb commercial corruption across a range of industry sectors. France swiftly introduced its own Réforme du Médicament in late 2011 to restore public confidence in the health industry. And in late 2012, the German Department of Health came under pressure to act.**



Dr Sarah C. Clarke is vice president of Education and Research at the British Cardiovascular Society (BCS). British Cardiovascular Society has over 2500 members working in cardiovascular health, science and disease management in the UK. It is also an umbrella organization for many affiliated specialist groups.



Dr Clarke says that the new UK law has improved transparency, but has also affected educational opportunities which were previously, and in many cases, linked to marketing opportunities. An emphasis on marketing, rather than education has not helped engage the audience and this has been counterproductive both for the medical profession and for industry.

'This is very much an issue for the medical profession in the UK, right across the board. Industry has a lot to bring to the table in terms of education, but marketing of individual products can sometimes get in the way. Of course specialists need to understand for example, how certain devices work, but education needs to be more generic. All involved in the patient pathway need to be educated, especially those considering referring patients onwards for specialist care. The focus should not just be on the end user- the specialist'.

Dr Clarke suggests that, for generic education, industry should work with national societies. While it is perceived that this is of

little benefit to industry, it will improve education of all on the patient pathway and hence improve patient care. Indirectly, industry will benefit by 'feeding the whole food chain' without just focusing on the specialist in a particular area.

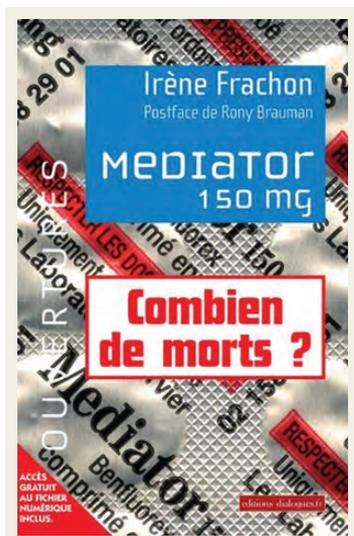
Working with national societies and channelling funds more generically requires industry to adopt a different mind-set and to see the broader picture rather than targeting the end user as has happened in the past.

The consequences of not filling the emerging funding gap will have huge implications not just for cardiologists in the UK, but for associated professionals such as cardiac nurses, and radiologists, who will lose out on continuing education. Coupled with this, the team approach to healthcare in the UK means that to function effectively, every member of a specialist team needs to be up to speed with developments in skills and knowledge.

The German and French governments were also forced to act in the face of their own health scandals and irregularities. The German government's hand was forced over a case in 2012 which was initially settled by a regional court, but overruled by the German Federal Court of Justice (Bundesgerichtshof, BGH), which decreed that doctors, who received benefits from a pharmaceutical company in exchange for the prescription of drugs, were not liable for criminal prosecution. In January 2013, Deutsche Welle reported how pressure was mounting on the government to step in to close the legislative gap (<http://www.dw.de/demands-to-punish-corrupt-doctors/a-16493639>).

The German Medical Association is monitoring the situation and keeping an eye on the introduction of the European Federation of Pharmaceutical Industries & Associations (EFPIA) code, and also a recent motion in the German Parliament by the Green Party (<http://dip21.bundestag.de/dip21/btd/17/126/1712693.pdf>), which deals with the introduction of regulation along the lines of US laws. Related hearings and committees are expected to review matters throughout 2013.

President of the German Medical Association, Prof. Frank Ulrich Montgomery, has gone on record to say 'those who have nothing to hide, need not fear transparency'. He has however, also expressed concerns that the pharmaceutical industry appears to be playing for time.



Mediator 150 mg: 'How many deaths?'

In France, the government is also trying to win back public confidence prompted by a drug scandal outlined in Irène Frachon's book 'Mediator 150 mg', published in June 2010. The investigation which followed the withdrawal of the drug in question precipitated a spate of reforms to the French healthcare system. These reforms go further than the US equivalent, requiring companies to make a full and comprehensive disclosure of all their relevant expenditure.

Dr Clarke is optimistic that there is room for manoeuvre within the new legislative framework and believes it is up to national societies to lead the way. 'The BCS is trying to work with industry in a supportive and transparent way to help fund educational opportunities for the cardiology profession in general. This is important as doctors face revalidation in all areas of cardiology and we work increasingly in multi-disciplinary teams. Sitting round the table to discuss the best way forward for both parties and working together on this can only be to the benefit of all, not forgetting the patient.'

All European health systems face uncertain and challenging years ahead. Economic uncertainties and risk aversion together with the need to restore public confidence in medicines and healthcare are crying out for legislative reform which will have ongoing implications for physicians and their healthcare colleagues for many years to come.



## The Italian Association of Hospital Cardiologists celebrates its 50th anniversary



The Italian Federation of Cardiology (IFC) was established in 1998 in Italy as a member of the European Society of Cardiology (ESC). IFC

consists of two societies, Italian Society of Cardiology (SIC), and Italian Association of Hospital Cardiologists (ANMCO).

Italian Association of Hospital Cardiologists is a non-profit scientific association established in Venice in 1963. Vittorio Puddu MD was appointed the first president and chaired 42 members. Italian Association of Hospital Cardiologists recognized in-hospital management of cardiac patients as a distinct entity. The main objective of ANMCO was to advance cardiac science through education, improve management, and research.

On 14 April 2013 ANMCO, presently chaired by Francesco Maria Bovenzi MD, celebrated its golden jubilee with a meeting in Venice. Over 250 members attended this historical meeting. The accomplishments of the society were acknowledged and its mission was renewed.



Italian Association of Hospital Cardiologists headquarters is located at 35 Lamarmora Street, Florence, Italy, and has over 5000 active members. The official journals of ANMCO and SIC are *Giornale Italiano di Cardiologia (Italian Journal of Cardiology)* and *Journal of Cardiovascular Disease* both printed in Italian and English, respectively.

Italian Association of Hospital Cardiologists focuses on 10 important areas; acute cardiac care, heart failure, arrhythmias, cardiac surgery, cardiac imaging, pulmonary circulation, management and quality of care, prevention and rehabilitation, e-cardio, and nursing.

The network created by ANMCO represents a unique strength for its members. Through policy development of educational and scientific programmes, the ANMCO promotes and assures implementation of European Guidelines and strives to reduce the burden of cardiovascular diseases in Italy. It organizes continuing educational courses for cardiologists, cardiac nurses and scientific researchers. Italian Association of Hospital Cardiologists also collaborates with Italian Health.

Italian Association of Hospital Cardiologists works closely with cardiac surgeons, cardiac paediatricians and primary care physicians and organizes an annual spring convention in Florence and cardiology meetings throughout Italy. In 1984, ANMCO in co-operation with

of i.v. thrombolytic therapy for acute myocardial infarction (GISSI study in *Lancet* 1986, **327**, 397–402) which paved the way to a large number of collaborative national researches on good clinical practice. In 1992 ANMCO created the ANMCO Research Center, responsible for planning and conducting the scientific and cultural projects of the Association. In 1998 ANMCO founded the Heart Care Foundation (HCF), recognized by the Ministry of Health in September 2000. The aim of the foundation was to provide citizens with correct information on cardiovascular diseases and to support scientific research in the cardiovascular field. Currently chaired by Attilio Maseri MD, HCF is educational and the leading centre for cardiovascular research in Europe. Since 2009 chairs the GISSI Outliers Programme.

Since its establishment in 1963, ANMCO has made tremendous progress in promoting and advancing cardiology during the last 50 years. Italian Association of Hospital Cardiologists is strongly committed to improve cardiovascular care through education and research and always places the patient first.



## The Czech Society of Cardiology

**Father and son discuss the third oldest cardiology society in the world, 'home' to several pioneers in cardiology**



**Jiri Widimsky Sen. (L) and Petr Widimsky (R)**

## History of the Czech Society of Cardiology



Václav Libenský founded the Czech Society of Cardiology on 13 December 1929 in Prague and was its first president. The oldest society of cardiology in the world is the American Heart Association (1924). The first society of cardiology in Europe was the German Society of Cardiology founded in the year 1927.

Between 1934 and 1937 national societies of cardiology had been established in several other countries: Argentina, Italy, The Netherlands, UK, and France. Interestingly, the first board of the Czech Society of Cardiology was truly interdisciplinary: in addition to internists it included a surgeon, pharmacologist, pathologist, physiologist, and a gynaecologist-obstetrician.

The year 1929 is also important for cardiology in Prague for in that year Dr Otto Klein at Prague University Hospital performed the world first diagnostic cardiac catheterization in patients ( $n = 11$ ) and published his observations in the German language journal *Münchener Medizinische Wochenschrift*.<sup>1</sup> Unfortunately, Dr Klein was not allowed to continue his pathophysiology studies and left Prague. Klein should be given credit for being the first to measure cardiac output in man using the Fick principle.

It is also interesting that the world's first International Cardiology Congress in Europe was organized in 1933 by the Czech Society of Cardiology and held in Prague. Honorary presidents of this congress were Thomas Lewis (UK) and Henri Vacquez (FR). The congress was attended by >200 participants from Argentina, Belgium, France, Italy, the Netherlands, Poland, Spain, Switzerland, the UK, and other countries. That this was the first International Cardiology Congress was recognized during the World Congress of Cardiology in Buenos Aires (1974): the Congress Bulletin issue No. 1 presented a picture of Prague and an article commemorating the first International Congress of Cardiology in 1933.



Josef Brumlik was the first general secretary of the Czech Society of Cardiology and also of the first International Congress of Cardiology. His idea, to create the world first clinical research institute for cardiology in Prague, could not be realized because he had to leave

Prague before the Second World War. However, his next destination was Mexico, where he met Ignazio Chavez and together they founded such an institute in Mexico City (1944). Brumlik's dream became true in Prague just 7 years later (1951) when the Institute for Cardiovascular Diseases was founded by K. Weber and J. Brod.

The Fourth European Congress of Cardiology (and the first one in Central East Europe) was organized in 1964 in Prague, with >2000 participants from 31 countries. Pavel Lukl was president of the

### Historical achievements of Czech physicians in cardiology

<b>Jan Evangelista Purkinje</b>	<b>First description of conductive tissue in the heart (Purkinje fibres)</b>
Josef Skoda	Cardiac auscultation
Karel Rokitsansky	Pathological description of intracardiac shunts
Otto Klein	First diagnostic cardiac catheterization
Vaclav Libensky	Founder of the Czech Society of Cardiology and President of the world's first International Cardiology Congress
Josef Brumlik	Co-founder of the world's first research institute of cardiology
Pavel Lukl	President of the European Society of Cardiology 1968–72
William Ganz (Prague until 1966, later Los Angeles)	Swan-Ganz catheter



### Czech Society of Cardiology presidents

Václav Libenský	1929–38
Klement Weber	1938–42 and 1951–55
Stanislav Mentl	1942–46
František Herles	1946–51
Vladimír Haviar	1955–59
Pavel Lukl	1959–71
Zdeněk Reiniš	1971–81
Vladimír Dufek	1981–90
Vladimír Staněk	1990–95
Roman Čerbák	1995–99
Jaromír Hradec	1999–2004
Michael Aschermann	2004–08
Václav Chaloupka	2008–11
Petr Widimský	2011–15

Congress, who then went on to be president of the ESC (1968–72). Interestingly, Otto Klein also participated in the Congress.

The Czech Society of Cardiology through J. Widimsky Sen, A. Ourednik, and J. Herget organized seven international symposia on pulmonary circulation and pulmonary hypertension between 1969 and 1999 under the auspices of European Society of Cardiology. Proceedings of the first five symposia were published by S. Karger (Basel) in a series 'Progress in Respiratory Research'.

## Czech Society of Cardiology in 2013

Today, the Czech Society of Cardiology has 2270 members and 16 working groups and organizes two major cardiology meetings every year: the Annual Congress of the Czech Society of Cardiology (May, in Brno, with almost 4000 participants) and the Czech Cardiology Days (November, in Prague, ~500 participants). Leading Czech cardiologists have been involved in different roles within the European Society of Cardiology (J. Hradec, M. Aschermann,

J. Kautzner, A. Linhart, P. Kala, J. Widimsky Sen., P. Widimsky, the last two being vice-presidents of the ESC).

Czech clinical research contributes to the progress of our specialty—most visibly in interventional cardiology, acute coronary syndromes, arrhythmias and cardiac electrophysiology, hypertension, and imaging of myocardial diseases.

The Czech Society of Cardiology from the European perspective has recently been summarized in an article by T.F. Lüscher<sup>2</sup> (*Cor et Vasa*, the official journal of the Czech Society of Cardiology).

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# Options for pre-emptive aortic root surgery for people with Marfan syndrome

## Dr Tom Treasure calls for expressions of interest to join in a comparative study

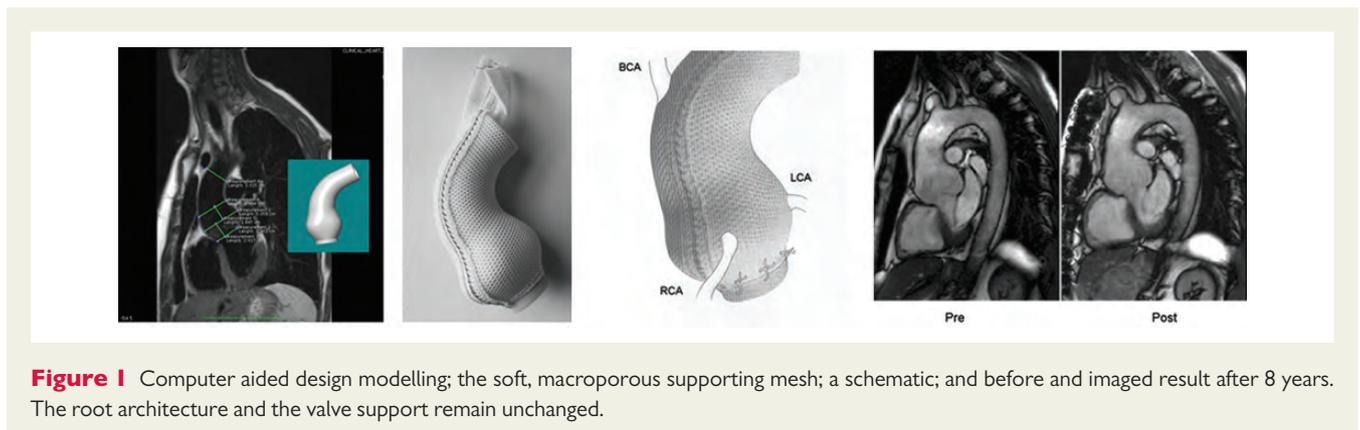
More than 30 patients have now had personalized external aortic root support at Royal Brompton Hospital, London, Leuven University Hospitals, Belgium, and the John Radcliffe Hospital, Oxford UK. The evidence is that this strengthens and indefinitely stabilizes the aortic root in people with Marfan syndrome (*Figure 1*).

- (1) The technique has successfully undergone NICE technology appraisal.<sup>1</sup>
- (2) It now requires appropriate comparative evaluation alongside the alternatives which are composite root replacement and valve sparing root replacement.
- (3) The British Heart Foundation (BHF) has expressed interest in funding such an evaluation.

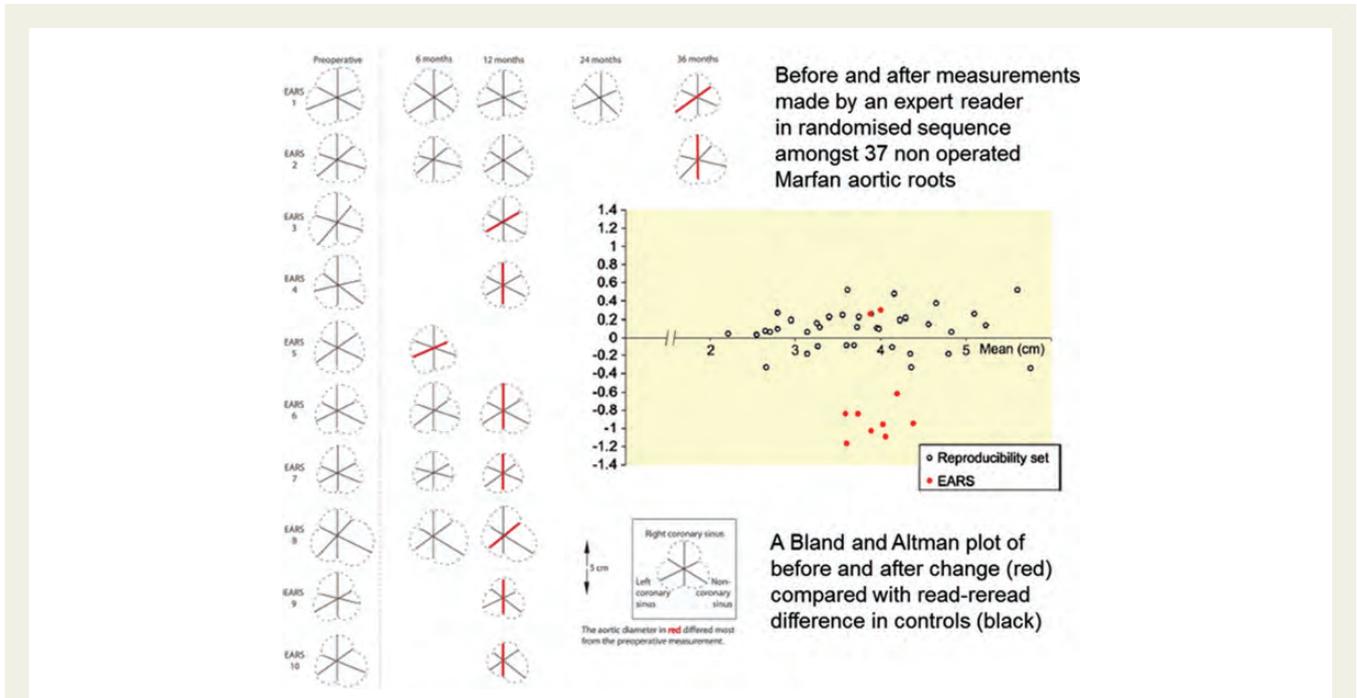
- (4) A requirement is that we assemble a group willing to join in the development of a suitable study design.

## What we know so far

- Efficacy and reproducibility of the technique has been demonstrated in a rigorous masked study of repeated MRI images (*Figure 2*).<sup>2</sup>
- Perioperative and procedural advantages over root replacement have been quantified in a comparative study.<sup>3</sup>
- The macroporous mesh becomes incorporated in the vascular adventitia creating a stable composite vascular structure.<sup>4–6</sup> Dissection within the support appears unlikely as evidence accrues; this is not just an external 'wrap' (*Figure 3*).



**Figure 1** Computer aided design modelling; the soft, macroporous supporting mesh; a schematic; and before and imaged result after 8 years. The root architecture and the valve support remain unchanged.



**Figure 2** Preoperative and all postoperative MRI measurements made 'blind' in the random sequence among duplicate images of 37 non-operated patients.



**Figure 3** Left above, the sheep carotid artery ensheathed in macroporous mesh and below after 5 months. The mesh is incorporated to form an integral part of the vessel wall without thinning or other change in the architecture or in the intima. The histological sections are stained with haematoxylin & eosin and elastic.

- We are submitting for publication 1–9 year results in the first 30 patients (average 4.4 years). No aortic, neurological, or valve-related events have been seen in 140 patient years of follow-up.
- The results to date compare favourably with valve sparing root replacement.<sup>7,8</sup> (Table 1).

## The proposal to the British Heart Foundation

We are proposing an inclusive Big Aortic Root Study (BARS).

The proposed design will include documenting the assessment and information given to patients being monitored with a view to aortic root surgery. It is important to us that those joining the study help contribute to the development of the study design and 'own it', so at this stage we are not publishing a firm proposal, but what is envisaged is an inclusive overarching observational study. Within it will be two or more decision-making nodes related to the timing of an intervention and the type of surgery. When clinicians and patients recognize that there is uncertainty, there will be an option of random allocation at these points in the decision-making algorithm.

We have experience with forms of study design aimed at facilitating recruitment.<sup>9,10</sup>

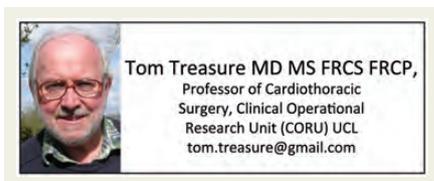
**Table 1** Comparison of PEARS with total root replacement and valve sparing root replacement

	PEARS	TRR Benedetto <sup>7</sup>	VSRR Benedetto <sup>7</sup>
Preoperative patient characteristics			
Mean patient age [years (SD)]	31 (12)	35 (0.5)	33 (0.64)
Mean preop AR diameter [mm (SD)]	46.2 (3.4)	61 (0.7)	52 (0.3)
Proportion of patients with dissection	—	0.30 (0.01)	0.18 (0.02)
Postoperative and late outcomes [% or %/year (95% CI)]			
Early mortality	—	4.1% (1.9–7.7)	3.2% (0.5–17.9)
Reintervention on AV	—	0.3%/year (0.1–0.5)	1.3%/year (0.3–2.2)
Thrombo-embolic event	—	0.7%/year (0.5–0.9)	0.3%/year (0.1–0.6)
Endocarditis	—	0.3%/year (0.2–0.5)	0.2%/year (0–0.3)
Composite valve-related event	—	1.3%/year (0.6–2.0)	1.9%/year (0.8–2.9)

PEARS, personalized external aortic root support; <sup>b</sup>TRR, total root replacement; VSR, valve sparing root replacement.

## What we now need

- (1) Expressions of support for this study from persons involved in the care of people with Marfan syndrome.
- (2) Among them a smaller core group who would be interested in developing the study with an appropriate and workable design.



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