



<b>Title</b>	<b>Heart Surgery With or Without Extracorporeal Circulation: Role of the Second Surgeon</b>
<b>Agency</b>	HAS, Haute Autorité de Santé/French National Authority for Health 2, avenue du Stade de France, FR-93218 Saint-Denis La Plaine Cedex, France; Tel: +33 1 55 93 71 12, Fax: +33 1 55 93 74 35; contact.seap@has-sante.fr, www.has-sante.fr
<b>Reference</b>	<a href="http://www.has-sante.fr/portail/display.jsp?id=c_597156">www.has-sante.fr/portail/display.jsp?id=c_597156</a>

## Aim

To assess the need for a second surgeon during cardiac surgery, ie, extracorporeal circulation (EC) surgery or beating-heart surgery (241 listed procedures).

## Conclusions and results

HAS defined the role, conditions for participation, and qualifications of the second surgeon and assessed the safety, clinical, organizational, and economic issues relating to the presence of a second surgeon.

- A second surgeon is usually present in French practice. The formal consensus panel confirmed that their presence is necessary for most cardiac surgery (all EC procedures and 50 beating heart procedures) to enhance safety, to help with technical maneuvers, and to shorten operative time.
- The presence of a second surgeon is customary in 8 of 10 countries (qualification in cardiac surgery in 6 of 10 countries), but is mandatory in California only.
- The second surgeon in France may be a registered qualified surgeon or a surgeon undergoing training under the supervision of the head of department.
- The second surgeon must be present in the operating block throughout EC surgery and throughout the construction of vascular anastomoses during bypass surgery. He/she should not be required to perform any other types of intervention or examination.
- The economic impact should consider the risks and benefits of the absence or presence of a second surgeon (impact on length of stay in resuscitation and/or intensive care, peri- and/or postoperative complications), but could not be assessed.
- The organizational impact of a second surgeon could not be evaluated.

## Methods

Databases for English and French publications (MEDLINE, Pascal, HTA database, National guideline clearinghouse, Cochrane Library) were searched for

1996 to 2006, but provided insufficient information. A study of current French practice was therefore undertaken using 3 methods: a) a postal survey of all cardiac or vascular surgery teams with access to EC facilities; b) an analysis of hospital record databases; c) a formal consensus method. To perform comparisons, a questionnaire was mailed to professional societies, experts, and health technology agencies in 10 countries – Australia, Belgium, Germany, Italy, Netherlands, Spain, Switzerland, UK, USA (California), and Canada (Quebec) to obtain information on their practices and views regarding the presence of a second surgeon. The final report was validated by a working group of 20 health professionals and by 2 peer reviewers in health economics.

## Further research/reviews required

HAS stressed the need for French surgeons to contribute activity data and morbidity and mortality data relating to heart surgery to the national Epicard registry.