eComment: The first Latin-American risk stratification system. A timely report
Carlos A. Mestres
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*Author: Carlos A. Mestres, Department of Cardiovascular Surgery, Hos-
pital Clínico, University of Barcelona, Villarroel 170, 08036 Barcelona, Spain
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The institutional report by Carosella et al. [1] comes to us very timely. It
is, of course, agreed that accurate risk assessment is a critical part of our
current practice. Quality assurance has emerged in recent years as a
fundamental tool in the clinical arena and the pioneering example given by
cardiothoracic surgeons in developing different risk stratification models has
changed the perception of some areas of our practice. There are indeed a
number of differences among models due to the intrinsic differences among
patient populations, institutions and even healthcare systems. This is one of
the reasons why American and European models do differ. Subgroup analyses
have shown that cardiac surgical populations are different according to
epidemiology, geography, pathology and even to institution. In other words,
not all the populations are the same and, therefore, this may lead to
different categorization of risks.

The report by Carosella et al. seems to be appropriate as it is the
consequence of a deep analysis of a specific regional population in South
America. An important part of this model is the internal and external
validation of datasets. The consequence of such a model is that the authors
believe it has strong value in their regional practice based on practicality
and the bedside usage looks attractive. The authors have also used Euro-
SCORE and the Parsonnet score for comparison. The eventual conclusion is
that of a new regional model addressing a specific population that works
with acceptable precision [1]. This is of particular importance considering
all the above mentioned differences that were also apparent when Euro-
SCORE was developed through cooperative effort of a number of institutions
from different countries in Europe [2].

Very recently Zheng et al. have come with a study in a Chinese population
operated on for coronary bypass aiming at defining if EuroSCORE is a good
predictor of operative risk in such a population [3]. The authors, after
analyzing a population in excess of 9000 patients roughly close to 50% of
the initial EuroSCORE population, have concluded that this model does not
accurately predict the risk in a purely Chinese population. An appropriate
comment by Choong et al. [4] confirms that all available systems have
limitations and EuroSCORE is not an exception. Many other variables not
currently included in the risk stratification systems may also have an impact
on the final outcome. For all of us who embraced EuroSCORE as a very
useful tool in Europe, which I believe still works, a number of doubts
regarding accuracy have arisen. The paper by Carosella et al. is definitely
as timely as that by Zheng et al. and supports the fact that perhaps
geographical, ethnic, institutional, individual and case-mix have to be
considered too.
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