

The Research Index is a combination of medical centers and clinical studies, which might be able to catch the national competitiveness on the market. This index represents a good proxy of pharmaceutical investments in Europe and, therefore, countries' competitiveness on the European market of human experimentation.

The *deviance goodness-of-fit* test is acceptable and, considering the resulting χ^2 p-value, the models are considered well fitting. Moreover, even if only 1 country is considered for 8 years, the result is statistically consistent with both the number of medical centers and the number of clinical studies, as well as with the Research Index.

The table supports the common policy followed by all regions in this specific field, i.e. the higher the number of trials, the higher the number of IRBs internalized in the medical facilities where the trials are performed. At the same time, the table shows the impact of the law (i.e. *Ministerial Decree of 12/05/2006*) on the number of IRBs. According to the reform, a specific setup of the IRBs is required (i.e. minimum requirements about the boards' composition). This means that, between 2006 and 2007, 37 IRBs did not pass the validation process linked to these requirements and this is why Table 2 presents a negative coefficient in all three regressions (i.e. law reform). However, the reduction of local IRBs has not been the target of that law, but only an indirect consequence of that measure.

The issue is the following: is the

internalization of the review process efficient? In other words, is a high or a low number of reviewers more efficient? Which might be the best regional policy in the shaping of local networks of IRBs?

The next sub-sections try to provide an answer to this efficiency question performing an OR. Obviously, in order to suggest a consistent explanation, a study of the local situation instead of an international one is necessary. Hence, a national data-set is used.

The analysis of health care systems' performance through an OR study is not new. The current bibliography suggests several innovative applications of OR in Health, at both a regional and a national level, focusing on quality and quantity of supplied medical goods (Pulina *et al.*, 2010; Piacenza *et al.*, 2010; Zuckerman *et al.*, 1994; Garavaglia *et al.*, 2011). Considering pharmaceutical clinical research, an OR study is proposed by Ippoliti and Falavigna (2011). The authors support the thesis that there is a positive relation between patients' perception of expected quality of medical treatments and regional supply of pharmaceutical innovation (i.e. experimental drugs). The nature of the Italian regional system makes it possible to develop an OR to estimate the efficiency relationship between the local network of protection systems (i.e. number of IRBs) and the regional supply of innovative medical treatments. Further analysis can increase the current knowledge of OR studies in health care and enhance the positive perspective of this work.