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## Supplementary Materials for

## Intangible benefits of clinical trials: a survey on a hospital research community

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## Perception questionnaire's description

The perception questionnaire was structured into two blocks. The first part is on personal information and allows to segment respondents based on their research experience. The second part addresses the main effects of participating in experimental activity.

On the basis of the literature on the analysis of research impact, with special reference to biomedical research, and of studies on the organization of clinical research on its economic impact it was decided to focus on the following four "blocks of variables":

- 1. Research capacity
- 2. Career improvement
- 3. Healthcare benefits
- 4. Knowledge production

The "Research capacity" block aims to explore the impact on 4 different variables, in order to allow the widest possible assessment of the impact on research capacity of researchers and their team:

- Economic benefit, i.e. funding or savings obtained for the research activity;
- Scientific benefit, *i.e.* increase in the level of knowledge about a specific condition, also in terms of methodological know-how and available clinical data;
- Infrastructural benefit: conducting a trial is supposed to give access to new machinery, devices or equipment;
- · Relational benefit: trials entail establishing connections with new research groups and participation in research networks;
- Organizational benefit: participation in a trial is supposed to allow a better integration in the processes, information and organizational flows of the Hospital where researchers belong.
- The "Career improvement" block aims to explore the career and reputational benefits for the researcher in terms of:
- · Career development: professional or economic recognition, career progression, long-term work contracts;
- Internal reputation: participation in a trial is expected to improve the reputation, prestige and visibility of researchers within their hospital;
- External reputation: participation in a trial is expected to increase external visibility for research teams and institutions, and to increase attractiveness for external investors or industry.

The "Healthcare benefits" block aims to explore the impact on the ability to care and generate health:

- · Treatment capacity: trials entail the use and administration of innovative devices and drugs;
- Ability to diagnose and make clinical decisions: trials allow researchers and their teams to acquire a higher level of knowledge on a specific condition;
- · Ability to recruit patients: conducting a trial should attract patients affected with the condition dealt with in the trial itself.

Finally, the "Knowledge production" block aims to explore the impact on the ability to generate scientific knowledge in terms of:

- Scientific production capacity: publication of scientific papers or other documentation for the scientific community (guidelines, clinical practices, etc.), participation in scientific conferences to present the trials' results;
- Ability to innovate: the results of the trial will presumably allow the researcher to contribute to the development of new drugs or devices;
- Patenting capacity: the results of the trial may lead to patent registration;
- Entrepreneurial capacity: the trial results may open entrepreneurial opportunities, such as spin-offs or start-ups;
- Policy capacity: trials may lead to the production of documents with an impact on public health policy making (green papers, health plans, participation in study commissions or public conferences at an institutional level, etc.).

Among the intangible impact factors emerging from the survey, there is that of improving organisational processes. This could be the starting point for a further research, with the focus on ethics committees, directorates-general and other clinical centres.