

Which are the Ethical, Legal and Social Implications (ELSI) of Personalised Medicine (PM) research and implementation?

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Three questions to debate in this working group

- 1. The handling of incidental/ additional findings originating from molecular analysis.
- 2. Informing the patient adequately; the issue of the tension between data-provision and the protection of a person's privacy.
- 3. Tension between principles of evidence-based medicine and fast translation.



Level of Recommendation

I. Researchers / PI s in PM projects

II. Researchers on Implementation / Health Service Research

III. Health Sytems / Authorities / Funders



1. The handling of incidental/ additional findings originating from molecular analysis.

Consensus

- 1. Harmonize and clarify the definition of IF (Level I, II, III)
- 2. There should be a policy in place that speaks to incidental findings and included in IC documents with criteria to report (Level I and III)
- 3. The option not to receive IF should be guaranteed (Level I and II)
- 4. The policy should include a process of return (e.g. validation, communication via MD, pre-test and post-test counselling)
- 5. A blanket no return policy might interfere with the participants right to access their data (I, II)
- 6. Context specific policies are needed: Children, newborn, relatives affected by genetic results, impaired adults, vulnerable populations and persons
- 7. Returning results needs resources return of results should be integrated in cost calculations



1. The handling of incidental/ additional findings originating from molecular analysis.

Additional Research needed

- 1. Research on what kind of return categories are meaningful (Level II)
- 2. Research on the long term effects of returning IF of different categories (certain, uncertain significance) Level II
- 3. Implementation Research on positive gene lists (eg ACMG List) (Level II)
- 4. Conceptual research on context specific policies
- 5. Collect Experiences with the handling of incidental findings through
 - Additional requirements by ethics review boards and funding agencies
 - cases of incidental findings that were not reported and than a law cases filed
 - cases of incidental findings with benefit to the individual
- 2. Data on follow up costs (For informing patients / follow up diagnostics / benefits)



2. Informing the patient adequately; the issue of the tension between dataprovision and the protection of a person's privacy.

Consensus:

- 1. Information needs to include: benefits (individual or collective), privacy, risk (level I)
- 2. Information process should make research transparent, in a respectful manner to the needs of participants and should be offered on a continual basis (I and II)
- 3. Getting patients/ participants involved in designing consent forms and information
- 4. Organizing information at group and population level
- 5. Multistate research should account in advance for different information requirements in different countries (level I)
- 6. Social debate and deliberation about the legitimacy of massive data collection and processing for PM
- 7. Establish guidelines for participation of persons with impaired decision making capacity



2. Informing the patient adequately; the issue of the tension between dataprovision and the protection of a person's privacy.

More research needed:

- 1. Including participants in designing information and consents
- 2. Including participants with impaired decision making capacity
- 3. Collect Experiences with different consent models
- 4. Collective discussion and deliberation on massive data processing/collection
- 5. Influences on participant expectations on PM (direct to consumer, media)



3. Tension between principles of evidence-based medicine and fast translation.

Consensus

Since, in PM we treat patients without robust evidence for efficacy → risk for side effects/ costs

- Collect real world evidence about benefit/ risks and access (Level II,III)
 - Needs adequate data collection (in a way to be evaluated)
 - Data collection interoperable across countries and regions (FAIR principles)
- 2. Guidelines for validation and quality control of new diagnostic tools (eg IVD Regulation Requirements)
- 3. Guidelines on the declaration on conflicts of interest