



# Human Tissue and Medical Research: Code of conduct for responsible use (2011)

English translation of the *Gedragcode 2011*:

*Verantwoord omgaan met lichaamsmateriaal ten behoeve van wetenschappelijk onderzoek*

# Colophon

## Initiative

The standing committee of the Stichting Federatie Medisch Wetenschappelijke Verenigingen (FEDERA, Chamber of Commerce, Rotterdam, 41055219) and the Commissie Regelgeving in Onderzoek (COREON) in close cooperation with BBMRI-NL and patient organisations

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Code of Conduct for dealing responsibly with  
human tissue in the context of health research

## **Human Tissue and Medical Research: Code of conduct for responsible use (2011)**

Drawn up by the FEDERA

in cooperation with:

NPCF (Dutch Patient Consumer Federation),

VSOP (Federation of Parent and Patient Organisations)

& BBMRI-NL (Biobanking and Biomolecular Resources  
Research Infrastructure)



## About the Federa

[www.federa.org](http://www.federa.org)

*Federa stands for the Federation of Dutch Medical Scientific Societies (FDMSS).  
The FDMSS aims to represent the various professional and scientific biomedical societies by promoting interdisciplinary communication and self-regulation.  
Self-regulation has become a major activity e.g. by means of Codes of Conduct.  
The FDMSS bundles more than 35 scientific biomedical societies with all together 13,000 members.*



## Foreword

This second version of the Dutch Federa developed self-regulatory code of professional biomedical conduct regarding secondary use of tissue and cells now also covers 'de novo' biobanking. It follows the footsteps of the first code developed during 1999-2001. [www.federa.org](http://www.federa.org)

The Federa is a 50+ year old voluntary association of about 35 biomedical scientific societies of which about one third clinical including a.o. paediatricians, geriatricians, medical microbiologists, rheumatologists, pathologists, immunologists, hematologists and medical oncologists. From almost all of these societies there were representatives who had input in this code, in addition to the valuable contribution of geneticists and especially epidemiologists who are very active in large cohort studies and collaborative studies. Patient representatives also had their input especially on difficult issues such as tracing back patients with unexpected research findings. Please read appendix 3 on page 115. for the elaborate argumentation by Mr Evert-Ben van Veen, LLD, of MedLawconsult who drafted the texts largely.

This English translation, also replacing the previous one from 2001, not only allows for high integrity participation in international studies or show editors of scientific journals how Dutch biomedical scientists managed their human tissue & cellular research activities covered by the code (the 2001 version only gradually being replaced by the 2011 version )

This domain of increasingly translational medicine thus enjoyed a strict but light regulatory touch during the first decade of the 21st century within the Netherlands, certainly in those hospitals which implemented the 2001 version by amongst others informing newly diagnosed patients that letting their material being used for research is to be the default option. Patients can always opt out from this default situation. Quite much of that scientific or evidence seeking activity has a quality of care purpose which all patients subscribe to anyway, i.e. consisting of validity checks of their disease definition .

We consider this Code of Conduct also as good practice to be included in any European collaborative translational research activity and thank all the participants and the research institutes which contributed financially through the COREON, a FEDERA subcommittee which discusses regulatory aspects of medical research.

Prof. dr. J.W.W. Coebergh  
President  
May 2012

# Contents

<b>Reading guide</b>		<b>17</b>
<b>List of abbreviations</b>		<b>18</b>
<b>PART 1</b>	<b>CODE OF CONDUCT IN OUTLINE</b>	<b>22</b>
<b>PART 2</b>	<b>ELABORATION</b>	<b>39</b>
<b>Chapter 1</b>	<b>The aim of this Code of Conduct?</b>	<b>41</b>
1.	Introduction	41
2.	Scope of the Code of Conduct	42
3.	Structure of the Code of Conduct	42
4.	The legal character of this Code of Conduct	42
5.	Securing the norms in this Code of Conduct	43
6.	Planned introduction	44
<b>Chapter 2</b>	<b>The themes in the Code of Conduct</b>	<b>49</b>
1.	The chain of tissue in healthcare	49
2.	A number of basic assumptions	51
3.	Biobanks and the chain	52
<b>Chapter 3</b>	<b>The first step in the chain of events: consent to research</b>	<b>55</b>
1.	Foreword	55
2.	In the context of 'further use'	55
3.	The taking of samples for scientific research	56
4.	More on the information provided to donors	56
5.	Raising objections or withdrawing permission	57
<b>Chapter 4</b>	<b>Norms for minors and those unable to give informed consent</b>	<b>61</b>
1.	Foreword	61
2.	General assumption	61
3.	Representation	61
4.	Renewed permission or opportunity for objection upon reaching the age of competence	62

<b>Chapter 5</b>	<b>The responsibility of the health care professionals in obtaining the specimen</b>	<b>65</b>	<b>Chapter 9</b>	<b>The (ethical) review of research with human tissue</b>	<b>87</b>
<b>Chapter 6</b>	<b>Responsible custody of a collection of human tissue (Biobank)</b>	<b>67</b>	1.	Introduction: the review criteria	<b>87</b>
1.	Foreword	<b>67</b>	2.	Distinction in review moments	<b>88</b>
2.	The 'further use' biobank	<b>68</b>	3.	The criteria examined further	<b>89</b>
2.1	In general	<b>68</b>	3.1	For the taking of human tissue samples as such	<b>89</b>
2.2	The procedure for the release of human tissue for scientific research	<b>70</b>	3.2	Review of the consent modalities	<b>90</b>
2.3	The privacy guarantees	<b>71</b>	3.3	Privacy protection	<b>90</b>
2.4	Cost	<b>72</b>	4.	The practical consequences	<b>91</b>
2.5	Should a 'further use' biobank also publish what human tissue is available for scientific research?	<b>73</b>	4.1	Balanced approach to review moments	<b>91</b>
3.	The 'de novo' bank	<b>73</b>	4.2	Constitution of the ECHT when reviewing scientific research with human tissue	<b>91</b>
4.	The involvement of donors and patients	<b>74</b>			
<b>Chapter 7</b>	<b>The responsibilities of the health care institutions where procedures to obtain specimens of human tissue for health research take place</b>	<b>77</b>	<b>PART 3</b>		
<b>Chapter 8</b>	<b>Responsibilities of the researchers</b>	<b>81</b>	<b>Appendix 1</b>	<b>ON THE DISADVANTAGES AND POSSIBLE RISKS OF SCIENTIFIC RESEARCH WITH HUMAN TISSUE</b>	<b>97</b>
1.	Introduction	<b>81</b>	1.	Introduction	<b>97</b>
2.	The research protocol	<b>82</b>	2.	Biobanking and privacy	<b>98</b>
2.1	Aims of the research protocol	<b>82</b>	2.1	The "leakage" of data outside the research domain	<b>98</b>
2.2	Hypothesis driven versus broad searches	<b>82</b>	2.2	Privacy within the research domain	<b>99</b>
2.3	Security	<b>83</b>	2.3	Explaining choices made in ethical dilemmas	<b>101</b>
2.4	The further processing of the human tissue and data	<b>84</b>	2.4	Conclusion	<b>104</b>
2.5	Transparency	<b>84</b>	3.	Feed-back of results	<b>105</b>
3	'Data sharing'	<b>85</b>	4.	Group privacy	<b>105</b>
			5.	The risk of discrimination following the results of research	<b>107</b>
			<b>Appendix 2</b>	<b>Consent system in the chain</b>	<b>109</b>
			1.	Introduction: no micromanagement	<b>109</b>
			2.	Consent for 'further use'	<b>110</b>
			3.	Consent for extraction specifically for Scientific research	<b>112</b>

<b>Appendix 3</b>	<b>Feed-back of 'findings'</b>	<b>115</b>
<b>Appendix 4</b>	<b>Dutch Legal grounds</b>	<b>121</b>
<b>Appendix 5</b>	<b>The background to the conception of the Code of Conduct</b>	<b>123</b>
<b>Appendix 6</b>	<b>Composition of readers'committee and COREON</b>	<b>127</b>
<b>Appendix 7</b>	<b>Literature list</b>	<b>129</b>
<b>Appendix 8</b>	<b>Glossary</b>	<b>141</b>

## Reading guide

This Code of Conduct for the responsible use of human tissue for medical research is an extensive document. The content is set out in three stages:

1. The Code of Conduct in outline
2. Elaboration
3. Basis for the choices made in this Code of Conduct and further explanations

At the back there is a glossary of the terms employed.

To become acquainted with the standardisation of the chain of handling human tissue for scientific research as intended in this Code of Conduct, the section 'The Code of Conduct in outline' is sufficient, together with the glossary.

Actual implementation also requires a study of part 2, Elaboration.

The background to the norms is described in the appendices. For an in-depth discussion about the Code of Conduct, these appendices need to be read. Those wishing to study the Code of Conduct from a policy or legal perspective could start the other way around, first with the appendices and then the Code of Conduct itself.

Appendix 7 describes the materialisation of the Code of Conduct. It shows that the Code of Conduct is based on a broad consensus of patients, researchers and others in the chain.

## List of abbreviations

<b>BBMRI-NL</b>	Biobanking & Biomolecular Resources Research Infrastructure Nederland	<b>UMC</b>	University (College) Hospital (Universitair Medisch Centrum)
<b>BSN</b>	National identity number (Burgerservicenummer)	<b>VVE</b>	Association for Epidemiology (Vereniging voor Epidemiologie)
<b>BW</b>	Civil code (Burgelijk Wetboek)	<b>VWS</b>	Ministry of Health, Welfare and Sport (Ministerie van Volksgezondheid, Welzijn en Sport)
<b>CBP</b>	Data protection agency (College Bescherming Persoonsgegevens)	<b>WBO</b>	Public screening Act (Wet op het Bevolkingsonderzoek)
<b>CCMO</b>	Central Committee on Research involving Human Subjects (Centrale Commissie Mensgebonden Onderzoek)	<b>WBP</b>	Data protection Act (Wet bescherming persoonsgegevens)
<b>COREON</b>	Committee on Research Regulation (Commissie Regelgeving Onderzoek) (from the FEDERA and the VVE)	<b>WCZ</b>	Client rights in health care Act (Wet cliëntenrechten zorg)
<b>DNA</b>	Desoxyribonucleic acid	<b>WGBO</b>	Medical treatment agreements Act (Wet op de geneeskundige behandelingsovereenkomst)
<b>ECHT</b>	Ethics committee on human tissue	<b>WMO</b>	Medical scientific research with human subjects Act ()
<b>EHCR</b>	Electronic health care record		
<b>FMWV</b>	Federation of Medical Scientific Associations (Federatie van Medisch Wetenschappelijke Verenigingen)		
<b>GLP</b>	Good laboratory practices		
<b>GWA</b>	Genome wide association		
<b>ICT</b>	Information and communication technology		
<b>IGZ</b>	Health Inspectorate (Inspectie voor de Gezondheidszorg)		
<b>KNMG</b>	Royal Dutch Society for the Advancement of Medicine (Koninklijke Nederlandsche Maatschappij tot Bevordering der Geneeskunde)		
<b>KWZi</b>	Law on the Quality of Health Care Institutions (Kwaliteitswet zorginstellingen)		
<b>LIMS</b>	Laboratory information management system		
<b>METC</b>	Medical ethics committee (Medisch ethische toetsingscommissie)		
<b>MTA</b>	Materials transfer agreement		
<b>NVVP</b>	Dutch Association for Pathology (Nederlandse Vereniging voor Pathologie)		
<b>OECD</b>	Organisation for Economic Co-operation and Development		
<b>PET</b>	Privacy enhancing technology		
<b>RCT</b>	Randomised clinical trial		
<b>TTP</b>	Trusted third party		



# Part 1

Code of Conduct in outline

# Part 1

## Code of Conduct in outline

### 1. The scope of application of the Code of Conduct

- The Code of Conduct applies to the use of human tissue for scientific research.
- This Code of Conduct does not apply to foetal tissue, embryos and germ cells, or to tissue from deceased persons, even if scientific research is done with it. In the Netherlands there is already specific legislation applying to the use of such material.
- The term 'for scientific research' implies that this Code of Conduct does not apply to forensic use of human tissue, use in the context of Public Health regulations or use of human tissue in another human being.<sup>1</sup>
- The norms formulated here can also be applied to the use of human tissue for calibrating instruments or the use of tissue samples for educational purposes.

### 2. The character of the Code of Conduct

- The Code of Conduct reflects the consensus of all those in the Dutch health care system already involved with the chain of human tissue for scientific research: patients and donors, treating physicians, (controllers) of biobanks and scientific researchers.
- Norms are set out for the whole of this chain. The Code of Conduct is not solely directed at scientific researchers.
- The Code of Conduct not only deals with the handling of human tissue expressly taken for the purpose of scientific research, but also 'further use' of human tissue, that is to say human tissue that is removed from a patient during the normal course of treatment and is later made available for scientific research.
- The Code of Conduct indicates in the first place what needs to be achieved. In the elaboration, suggestions are made as to how this can be achieved.
- The Code of Conduct needs to be worked into the policies of health care institutions, biobanks and researchers. These groups can be held to the norms formulated here by relevant internal regulations, accreditation schemes, review procedures for research with human tissue
- For some of the norms, the principle of 'apply or explain' is assumed. It will not always be possible to comply with all the norms at once. In that case, a timeline needs to be drawn up together with an explanation of how (near) compliance will be achieved.

- More consideration is necessary on how the norms can be translated into 'best practices'. There is an open invitation to share these with the research community. The FEDERA aims to play a coordinating role here.
- In that sense, the Code of Conduct is a 'living instrument' whereby feedback from practical experience will prompt further fine-tuning. This is in line with the aim: based on the broad consensus of the immediate stakeholders.
- The Code of Conduct is based on a number of assumptions and deals extensively with normalising the chain within that scope. Pure 'commercial use' of human tissue for scientific research falls outside that scope. In the light of the definition of 'commercial use' for the Dutch chain of human tissue for scientific research, this subject is less relevant.<sup>2</sup> See norm 14 which explains why the valorisation of academic knowledge does not fall under 'commercial use'.

### 3. Basic assumptions for establishing the norms

- Scientific research with human tissue encompasses very important promises for health care, from the prevention of mild conditions to the treatment of serious illnesses and everything in-between.
- This research needs to be carried out responsibly. When that is the case, there are, contrary to clinical medicine research, no inherent risks for the donor.<sup>3</sup>
- The interests of the donors need to be safeguarded with this kind of research. Optimal privacy protection applies here, as does dealing responsibly with the 'findings' (see point 4) and a balanced system of consent, that is to say a system that gives donors adequate influence without unnecessarily burdening the availability of human tissue for scientific research and the consequent scientific research with that tissue.
- The consent modality needs to be embedded in a system of norms that encompass the whole chain of scientific research. That is to say: from the taking of the tissue from a donor to its ultimate use for scientific research (look in the glossary for these terms and a description of the chain). In this way, utmost care is guaranteed and possible risks are avoided.
- There should be optimal transparency regarding scientific research with human tissue. The public in general and certainly patients and potential donors should be easily able to find information about this kind of research and the chain involved.

<sup>1</sup> As dealt with in the Dutch Law on the Safety and Quality of Human Tissue, for example.

<sup>2</sup> It is possible that a future update will also cover pure commercial use.

<sup>3</sup> Apart from the minimal risk that is sometimes attached to the extraction of tissue for scientific research. See Appendix 1 for a discussion of the risks.

The latter two groups should have information provided to them directly.

- Donors and/or patient organisations should be involved as far as possible with the governance over and the research with human tissue.
- The use of human tissue for scientific research primarily boils down to dealing responsibly with data, namely dealing with the already available data which can be linked to the tissue and with the new data which is derived from the analysis of the tissue – often in conjunction with the pre-existing data.
- This scientific research with human tissue and data should preferably take place with coded-anonymous tissue and data. The chain should be set up to work with such coded-anonymous use for scientific research.
- There is only room for research with non-anonymous material if circumstances dictate as such. For example, the treating physician is also the researcher.
- Research with material which is totally anonymous throughout the chain (thus not coded-anonymous) is, for scientific reasons, largely less meaningful and sometimes even pointless.
- The aim of scientific research is that it eventually benefits health care through improved possibilities for prevention or treatment. Hereby is the Dutch (or West European) system of health care taken as a reference point. It guarantees in large part solidarity between the sick and the healthy and those with and without resources. Validated results which offer cost-efficient added-value above the existing opportunities become, on principle, available to everyone who requires them on the basis of medical criteria. Furthermore, results of scientific research may not be used outside health care to deny access to important societal services.
- Thus it is acceptable in the system of consent to work on the basis of a certain measure of solidarity between those being treated with the current possibilities and those who, in the future, could profit from the results of scientific research.

#### 4. 'findings'

- 'Findings' are the results of scientific research with human tissue which are considered to be of immediate importance for the future health of the individual donor.
- Such findings are rare. The results of scientific research with human tissue generally lead to new hypotheses for which the clinical implications are unclear or which need to be validated by clinical research.

- The use of human tissue for scientific research is not medical screening and should not be represented as such. There is from several angles a fundamental distinction between the world of treatment and the world of research.
- The feedback of 'findings' to individual donors, together with the results relevant to that donor, can only occur when, due to a specific duty of care by the researcher, the donor should reasonably be informed.
- Such feedback should fundamentally only be considered if the following conditions are met:
  - It concerns a serious medical condition.
  - Actual information, recognised by professional standards, can be offered to the donor, primarily in the form of a treatment option or further follow-up.
  - It is uncertain if the findings are conclusively included in the current treatment of the donor; for example, whether the condition is manifested. If, for example, the findings are visible through a test normally applied as standard for certain complaints and is still in time, there is no point in warning the donor earlier.
- The researcher alone will not be able to determine if such circumstances occur. This needs to be discussed in a commission. The research protocol should contain a procedure regarding possible 'findings'.
- The following also needs to be considered. Scientific research is aimed at discovering statistical connections and does not generally take place under GLP or comparable conditions. Should findings come to light fulfilling the conditions mentioned above, the analysis needs to be repeated under GLP conditions with special attention to ensuring that no mixing of samples or cross-contamination has occurred.
- Since such mixing or contamination would most likely have occurred since the release of the samples for research, this repeat analysis should not be carried out by the researcher himself.
- The possible feedback should not be done by the researcher but by the treating physician or specialist.<sup>4</sup> They will then consider if this should be communicated to their patient or not.
- The basis described here applies, as with the majority of the norms, to research with coded-anonymous human tissue whereby the researcher is remote from the treating physician. In the event that the researcher and the treating physician are one and the same, his role as 'good caregiver' must predominate. The research will

<sup>4</sup> In any case, the researcher is fundamentally unable to do the feedback since the researcher does not know the identity of the patient.

be running parallel to the treatment and not coded-anonymous. In that case, other considerations play a role, partly depending on what has been agreed with the patient.

##### 5. Consent to 'further use'

- For 'further use' in scientific research of coded-anonymous human tissue, an augmented system of 'opt-out' is deemed acceptable unless there are special circumstances.
- To that end, general information should be provided in various locations in the facility where the tissue is extracted, on:
  - How coded-anonymous human tissue is used for scientific research.
  - That health care benefits are the ultimate aim of this research but that it is a question of small steps.
  - That this research is often a question of collaboration with others, also abroad, and that the human tissue might possibly be analysed there, still (coded) anonymously.
  - That the research can sometimes lead to new discoveries and commercial applications.
  - That the results of scientific research are often exploratory and in the first instance do not involve feedback to the donor but, if they prove of value for health care, they are incorporated in the care of all patients.
- Alongside sufficient information, such a system of 'opt-out' should have:
  - If requested, a consultation should be available. There should be one or more points of contact with sufficient knowledge to be able to answer supplementary questions;
  - There is an easily accessible opportunity for objecting to 'further use', also at a later date;
  - The possible objection naturally follows the chain of tissue and data up to the custodian;
  - The complaints procedure of the facility also applies to the 'further use' chain.
- The special circumstances referred to above whereby even with coded-anonymous human tissue it cannot be assumed that a patient did not opt-out are:
  - The guarantee of optimal privacy protection ('your data is anonymous

in the research) cannot be fulfilled. Such situations must be discussed with the patients involved and the donor will need to have given consent for such use.

- Due to the nature of the research, 'findings' are certainly expected and feedback deemed desirable. This needs to be discussed with potential donors along with the nature of the feedback desired by the donor and how it should take place.
  - For a certain group of patients there is an on-going or proposed project with human tissue specially reserved for it. This group needs to be specifically informed. However, following this specific information a system of 'no objection' can be used. The information must, however, be more specific.
  - It concerns a medicine trial according to the applicable national legislation and there is an investigation into clinical markers using human tissue from the research subjects to explain the reaction to the medicine. The patient here is not a donor but a research subject and participates on the basis of detailed informed consent. The consequent 'biomarker' research needs to be included in this consent. This can even lead to a possible adjustment to the treatment protocol during the research.
  - It does not concern research into the origin of illnesses, or their treatment, for which a public consensus can be assumed. The basis is that the patient participates for the benefit of other patients. That basis does not apply when matters are investigated which have nothing to do with the improvement of prevention of illness or with its treatment after onset of the illness. For example, research into biomarkers which could explain delinquent behaviour cannot take place on the basis of a 'no objection' system.
  - It is a project specifically aimed at finding a commercial application or the human tissue is turned over to a commercial undertaking where by the 'controller' loses custody. The potential donor is required to give consent for this.
- For 'further use' in scientific research of anonymous human tissue, the above applies accordingly.

- For 'further use' in scientific research of human tissue where the donor is identifiable by the researcher (even if this has been coded internally, see the definitions), the donor is first required to give consent.

#### **6. Consent to tissue specifically extracted for scientific research**

- This concerns both where human tissue is extracted exclusively for scientific research and situations where procedures are being carried out for diagnostic purposes anyway and extra tissue for scientific research is taken.
- It should be clear to the potential donor what the extra minimal risks are (other risks are not acceptable, see below) and what the extra burden is associated with the procedure.
- It should be clear to the potential donor what the purpose is for the tissue extraction. In other words, what the ultimate benefits are to health care. The project can be described in general terms.
- It should be clear to the donor in general what the chain of human tissue entails; from the extraction and storage, to the making available for research and the partners involved. The privacy guarantees should be described.
- It should be clear to the donor what he or she can expect or be offered further in the context of the project in addition to the provision of human tissue, such as a medical exam at the start of the project or the filling in of possibly regular questionnaires.
- It should be clear to the donor how he or she will be informed about the progress of the project and that in principle no feedback about 'findings' will take place. A general explanation of the 'governance' of the biobank (see point 10) should be given and the way in which donors or patient organisations are represented.
- It should be clear to the donor how he or she can withdraw from the project and what the consequences would be for the tissue already taken and the already available data.
- Within this context, broad consent is acceptable.
- However, if the special circumstances arise as dealt with by 'further use' above, the further conditions mentioned there will apply accordingly. In those cases, specific consent is required for any or all of the aspects concerned.
- The tissue is made available by the donor without remuneration. The donor can

receive expenses for attending the clinic for the extraction procedure and the like.

- Should additional personal data about the donor be integrated from other sources than simply the questionnaires the donor fills in in the context of the project, specific consent is required.
- The project should provide for a complaints procedure. It should be clear to the donor to whom he or she can direct questions or complaints.

#### **7. Supplementary information**

- It should not remain with the actively offered, more global information referred to above. If required, the (potential) donor should be able to find additional information on all the above points. This can be in the form of supplementary brochures, links to websites and the like.

#### **8. Minors and those unable to give informed consent**

- Human tissue from minors (age depending on national legislation) and those unable to give informed consent may only be used for scientific research if there are scientific reasons for specifically requiring human tissue from this group and the scientific research could not be done with human tissue from adults able to give consent. This applies as much to 'further use' as specially extracted material.
- For the purposes of consent and objecting, respectively, these groups are represented by their legal guardians. The exact ages applicable will be determined by national legislation on the subject.
- It may be that minors are also required to give consent, from an age laid down by national legislation, for the removal of human tissue for scientific research. Any resistance by young children or those unable to give informed consent must be taken into account.
- Where human tissue from children is used for scientific research which has been taken at an early age and the children are monitored in their development over a long period, they will need to give consent themselves when they reach the age of competence laid down by national legislation.
- When, for the purposes of a one-off (coded-anonymous) scientific research project, material from a certain group of children needs to be fallen back on, this

group does not need to be approached with the question of whether they object to research now they have reached the age of majority (as defined by national legislation).

### 9. The management of the 'further use' biobank

- A 'further use' biobank has two aims:
  - Careful custody for the purposes of the original and, normally the follow-up diagnostics for the patient;
  - The storage and possible release of material for scientific research.
- The second aim must not occlude the first. As long as the material is still required for the treatment of the patient, this aim is paramount.
- The function of 'controller' of the biobank must be created. In short, the 'controller' is the intermediary between the patient and the treating physicians that extracted the tissue on the one side, and the researchers on the other. This 'controller' does not need to be a natural person, it can also be a commission, collaboration, etc. It is, however, a distinct function which can, of course, be combined with other functions. Specifically, the following functions need to be catered for:
  - Agreeing with treating physicians about their making human tissue available for research;
  - Storing human tissue in such a way that it can indeed be of use for scientific research;
  - Storing and making available for scientific research in such a way that comply with the donors' consent.
  - Drawing up fair and transparent procedures for making human tissue available to researchers;
  - The release of human tissue to researchers according to the decisions already taken.
- By larger 'further use' banks or collaboration projects, it can happen that these functions are divided between different responsible people. For example, the storage by one functionary, the decision-taking on the release by a commission, and the procedures laid down in regulations or the collaboration agreement.
- The release of human tissue for scientific research should take place on the basis of an MTA. This MTA should guarantee that further down the chain the human

tissue will be used for the proposed purpose, that the consent modalities will be complied with and the anonymity of the donors will be safeguarded.

- The tissue and the related data fall under the confidentiality of the treating physician that extracted the material or had it extracted.<sup>5</sup> The tissue and data cannot – in principle<sup>6</sup> – be used for forensic purposes unless directed by a court order.
- Furthermore, the following are recommendations for 'further use' biobanks which regularly make human tissue available for scientific research:
  - Regulations for the biobank in which the above points are applied;
  - An LIMS enabling human tissue to be issued coded-anonymous for scientific research;
  - A general annual report covering the availability, storage and release;
  - Discussion of this report in the appropriate representative advisory board or patient council (depending on national legislation);
  - If the biobank also releases human tissue for researchers outside the institution, this should be published on a suitable website, indicating what human tissue is available for scientific research and under which conditions.
  - Charges can be levied for the release of material to cover the whole of the preceding process. A differentiated regime is possible whereby internal researchers are not charged.

### 10. The 'de novo' biobank

- This bank is part of a broader plan to make human tissue available for scientific research. The comments here also partly apply to that plan as a whole.
- The scientific and societal aims of the plan have to be determined. The methods to reach these goals need to be scientifically underpinned, but also sufficiently flexible should new insights lead to reaching these aims better using different methods.
- A procedure needs to be drawn up for the recruitment of donors, the informed consent procedure and subsequent contact with them. These donors are participants and stakeholders in the plan.
- A procedure must be drawn up to allow donors to withdraw and indicating what will happen to the material and data already gathered.
- There needs to be a clear separation of functions between collection, control and

<sup>5</sup> Even if the tissue is solely intended for scientific research, the Law on Medical Treatment Agreements (Dutch situation) applies. There is always an appraisal of the health of the potential donor.

<sup>6</sup> Sometimes an exception can be made on the grounds of a 'conflict of duties'.

the actual scientific research. For control, the norms mentioned above for 'further use' apply accordingly. In the context of the plan, agreements will already have been made.

- A procedure must be drawn up for the release of material for research in the context of the plan.
- Correspondingly, a procedure for 'tissuesharing' and 'datasharing' needs to be drawn up.
- If human tissue is to be made available to third parties, this needs to be done on the basis of an MTA. The MTA should guarantee the chain of human tissue in accordance with the norms in this Code of Conduct and the intentions of the parties involved in the research project. The MTA could contain elements of the collaboration agreement in respect of the intended research, or form an appendix of it. The chain of data also needs to be guaranteed.
- The duration of the plan should be determined and the term for keeping the human tissue made available.
- A long-term perspective should be drawn up for the financing and arrangements about what to do with the collection should financing become precarious.
- All of this should be bedded in a 'governance structure' which offers room for the review of the ethical and societal aspects of the project and any possible course corrections (in addition to changing societal opinions) and whereby donors and/or patient organisations are involved.

#### **11. The health care facility where procedures for the extraction of human tissue take place**

The facility needs to create the pre-conditions to enable the Code of Conduct to be complied with. That implies the following, amongst other things:

- Providing a good no-objection system at entry, both for scientific research with human tissue (anonymous or coded-anonymous) and for non-anonymous scientific research with data (as may be allowed for by national legislation)
- Providing staff who can respond adequately to possible questions from patients on scientific research.
- Providing a low-threshold opportunity to register objection.
- Include processing personal data for scientific research as one of the aims of

processing personal data in the care facility.

- Provide for a hospital information system, electronic patient file or the like capable of registering both forms of objection referred to in the first point above, and follow this through the progress of data and human tissue through the facility.
- In addition, especially for University Hospitals and top clinical hospitals, the following is recommended:
  - Design the electronic patient file system in such a way that pseudonisation processes can easily take place with the personal data contained in it.
  - Ground the functions of the 'controller' of the biobank(s) in the facility as intermediary between the donors and treating physicians on the one side and the researchers on the other. For the distinct 'further use' biobanks, several 'controllers' could function within the facility's defined boundaries.
  - Provide sufficient means for the biobank to be able to comply with the norms and recommendations described here.

#### **12. The carers involved in the tissue extraction**

1. Where extraction is exclusively carried out in the context of the treatment of the patient, the normal informed consent naturally applies. In the context of possible 'further use', the following will additionally apply:
  - The carer has an advisory role for additional questions from the patient about 'further use' for scientific research.
  - Any possible objection should be noted in the files. The carer is confident that this objection remains noted in future logistics.
  - The carer has an advisory role for the 'controller' of the biobank, and conversely the 'controller' can advise the carer on the optimal transmission of material of material so that it can be conserved for scientific research. The carer takes this into account as long as it is consistent with the interests of the patient, which always come first.
2. Where the extraction is exclusively carried out for scientific research or where, during the treatment, further tissue is extracted for this, the following applies:
  - The carer assures himself that informed consent has been given for this (extra) extraction;

- The risks involved in extraction are minimal and the burden, acceptable. This has already been reviewed in abstracto in the protocol. Each and every donor should be asked if they can and want this procedure to be done.

### 13. The researchers

- The research should be carried out in accordance with a research protocol.

This research protocol should explicitly state:

- What insights are hoped for.
  - What material is necessary.
  - What data is necessary.
  - A methodological foundation for this combination.
  - Whether ‘findings’ are expected and how they will be dealt with.
  - How the chain of human tissue and data is set up (what analyses will be done and where, how and where the results will be pooled, etc.).
  - For how long the data and human tissue will be used.
  - What will happen to the material at the conclusion of the research and how notification from the ‘controller’ will be dealt with that a donor has withdrawn from the research.
  - How the privacy of the donor is guaranteed and how possible indirect reidentification in the chain can be prevented, such as the use of PET and further anonymisation procedures in the chain where collaboration with other researchers is involved.
- The research should be carried out according to the protocol.
  - (Relevant) Patient organisations are recommended to be involved as far as possible in the research agenda.
  - Agreements need to be made with the ‘controller’ about how to deal with possible patentable or other possible commercial discoveries resulting from the research.
  - The research should be carried out according to the relevant MTA and other possible agreements with suppliers of data.
  - It should be reasonably possible to audit that the chain is working as described.
  - The research should be aimed to result in one or more openly accessible publications. Even if the MTA does not provide for this, the ‘controller’ should receive a copy of same.
  - ‘Datasharing’ should be promoted within reasonable conditions.

### 14. ‘Commercial use’

- Knowledge valorisation is one of the subsidiary aims of academic or ‘investigator initiated’ scientific research. Even more so since the proceeds partly return to the institution, thus strengthening the position of academic research. Should it result in such knowledge valorisation, this is not in itself commercial use of human tissue.
- Collaboration with commercial enterprises equally does not imply commercial use, for example when certain analyses on human tissue are carried out or a collaborated research. For the latter, the same is implied for the commercial partner as in the previous point on researchers, up to and including ‘datasharing’. In other words, research in collaboration with a commercial partner doesn’t make it ‘commercial’ if the results are made public. In the MTA agreements are made on the intended use of the material. Ownership of the human tissue does not transfer to the commercial partner.
- Should the conditions mentioned in the previous point not apply with collaboration with a commercial enterprise, then that would constitute commercial use. Commercial use does not need to be discouraged. For the development of new medicines or the refinement of indications on existing ones, commercial enterprises are necessary. However, it does have consequences for the system of consent. If it is a question of commercial use, ‘further use’ cannot be based on a no-objection system. Also in the case of the ‘de novo’ bank, the donor will need to give explicit consent.

### 15. Review

- Both the process of obtaining human tissue for a ‘de novo’ bank and the scientific research with human tissue should be reviewed and approved by a specialised Medical Ethics Committee (ECHT).
- The review focuses on two points: the risks and burden of the extraction if the tissue is extracted specially for scientific research and the safeguards for the storage of the tissue and its release for scientific research in the light of the consent modalities and the privacy protection of the donors.
- The composition of such a Committee should reflect the task of reviewing this kind of research. The expertise required is not entirely the same as for reviewing clinical research.

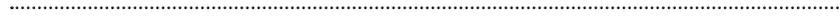
- The review should focus on the adherence to the norms in this Code of Conduct.
- The Committee reviews proposed 'further use' on the basis of 'no objection' or whether the special circumstances referred to above would apply.
- Seeing whether the protocol justifies the use of the – in principle scarce – human tissue is not one of the grounds for review. The 'controller' of the biobank decides this, possibly after consultation of a scientific advice commission.

Agreement can be reached with the Ethics Committee so that not each individual protocol needs to be reviewed. If the chain in which it takes place remains the same and the privacy guarantees within it have been reviewed, further related investigations and analyses can fall under one general approval.

#### **16. Introduction of the Code**

This Code of Conduct follows closely the 'best practices' in the field, especially those of University Hospitals. It will not be possible to comply everywhere in 2011 with the norms of the Code of Conduct. The intention is that the norms from the Code of Conduct are implemented and can be shown as such.

A large number of the other norms in the Code of Conduct are already directly applicable. These encompass the consent modalities for donation and the applicable conditions. If, for example, it cannot be reasonably guaranteed that material reaches the researchers (coded)anonymous, the research cannot take place on the basis of no-objection. This applies also when the no-objection system within the institution hasn't been properly organised.



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