



Beyond Animal Testing
INDEX

Supplementary Material 1

BATI Methodology- Domains and Themes

A. Management and Stakeholders

This domain examines the governance system and management structures of the organisation as well as the objectives and strategies set by the organisation for augmenting conscientiousness of animal testing and stimulating innovation in research. It captures the board of directors, different levels of management and various committees. Additionally, this domain will capture whether the organisation has selected stakeholders relevant to the BATI and whether it actively engages with these stakeholders. The domain Management and Stakeholders is the foundation upon which the principles of the index can be further implemented throughout the whole organisation.

Themes

The index has divided the domain Management and Stakeholders into 5 main themes: governance, strategy, ethical committees, and animal welfare body, managing for Index-related outcomes and stakeholder engagement.

Governance (indicators: A.I.1)

The Index regards governance as the structures and people that form the governing body of the organisation, including higher levels of management and the board of directors. It strongly believes that the transition to animal free innovation should be discussed and considered throughout the entire organisation, including at the highest levels of the organisation, to encourage lower levels to adopt the same mind-set and principles. The board of directors is the highest level of authority in the organisation and therefore the very first level at which the TPI and 3Rs principles should be implemented. The organisation should thus assign board-level responsibility and accountability for animal testing and innovative research as well as lower-level responsibility and accountability on various high levels of management.

Strategy (indicators: A.I.2)

The Index regards strategy as the implementation of the TPI and 3Rs principles within the organisation's main policy and strategy. Aligning the principles with the core of the organisation theoretically secures an animal-friendly and innovation-stimulating workspace. Making a policy does not however ensure that the policy is implemented. Therefore, the organisation should set objectives that contribute to the aim of the Index in their main policy and strategy, justify them with a strong rationale and align them with processes and strategies to ensure implementation.

Ethical committee and animal welfare body (indicators: A.I.3, A.I.4)

Each organisation doing animal testing is required by law to have their own internal animal welfare body in place, as well as either their own internal ethical evaluation committee or access to an external ethical evaluation committee. These committees are known in The Netherlands as the 'Instantie voor Dierenwelzijn (IvD)' (Animal Welfare Body) and the 'DierExperimentenCommissie (DEC)' respectively. The Index investigates how organisations are supporting these two committees and whether these committees do more than they are legally required. For optimal use, the organisation should not only recruit the best (people for the) DEC and IvD, but also create a working environment in which both committees can perform to the best of their ability.

Managing for Index-related outcomes (indicators: A.II.1, A.III.1, A.III.2)

The Index regards managing for Index-related outcomes as the monitoring and regulation of newly implemented processes and strategies to ensure these are translated into positive outcomes. Ideas for implementing the TPI and 3Rs -principles within or outside of the organisation can after all look good on paper but may not work in practice. Hence, the organisation should have a performance management system to manage for Index-related outcomes and address undesirable outcomes adequately.

Stakeholder engagement (indicators: A.III.3)

Stakeholders can be a valuable addition to the organisation if they are included in the decision-making process. They will represent different areas of expertise, making them expert advisors on various subject matters including the transition to animal-free innovation. When stakeholders are engaged in a strategic way, it will allow for dialogue and knowledge sharing, creating the ability to incorporate stakeholders' perspectives and needs in the organisation's objectives, policies, and strategies. This will ultimately lead to improvement within and outside of the organisation. Organisations should therefore actively engage with stakeholders and incorporate stakeholder perspectives into Index-related strategies and decision making.

B. Research and Development

This domain examines the Research and Development department of the organisation. Research and development, often abbreviated as R&D, is the process of developing and inventing new knowledge, products or procedures through conducting studies. The R&D department is an important branch of an academic medical centre. Academic medical centres usually organise R&D into specific research areas, also called research profiles, such as 'cancer' and 'immunity and infection'. Research projects are conducted within one or more of these research areas to assure the highest level of cross-border expertise. The cooperation between different areas of expertise will allow new insights to be formed and better ways of conducting research to be found.

Themes

The index has divided Research & Development into 4 main themes, which are quality standards, research innovation, research practice and collaborative R&D and data sharing.

Quality standards (indicators: B.I.1, B.III.1)

The Index regards quality standards as the standards by which the animals are treated throughout their lives. The formulation of and adherence to quality standards is of great importance for assuring proper handling of the animals and limiting discomfort. The quality standards, as composed by the organisation, should be in line with '*The Netherlands Code of Conduct for Scientific Practice*', '*The European Code of Conduct for Research Integrity*', and quality standards and best practices common to laboratory animal science. Organisations will be rewarded for having better formulated or expanded quality practice in comparison with the aforementioned standards and guidance.

Development and Use of Animal Free Research Models (indicators: B.I.2, B.III.2, B.III.3)

The Index regards research innovation as R&D that leads to the development or adaption of Index-related inventions within specific research areas. Most animal free research models are not set up to replace animal testing, but rather to find a model better suited to answer the scientific question. Thus, it is beneficial for both animal welfare and science to develop and implement new approach methodologies. The organisation should therefore stimulate research innovations in any way possible with the goal to accelerate the transition to animal-free innovation. The organisation should stimulate this research practice and ensure that it is facilitated. In addition, the organisation should take away barriers such as costs.

Collaborative R&D and data sharing (indicators: B.I.3, B.II.1)

The Index regards as the standard 'open science' and essentially the publication of all results of credible experiments irrespective of the outcome. At the present time, studies with so called negative results are often not published, with the possibility that studies are repeated where it could have been avoided. This leads to more animals being used on research projects that will not yield positive results. Organisation should attempt to publish all results, regardless of whether the outcome is positive or negative.

C. Education and Training

Education and Training, or Capacity Building, are a vital part of any research institute. Capacity is defined by the United Nations as “*the ability of individuals, institutions and societies to perform functions, solve problems and set and achieve objectives in a sustainable manner*”. Capacity building, also called capacity development, is the process by which an organisation obtains, improves, and retains this capacity.

Themes

The Index has divided Capacity Building into 5 main themes: initial education, continuing professional development, training need assessment, awareness, and external education.

Initial education (indicators: C.I.1, C.III.1)

The Index defines initial education as the education needed for the development of (basic) qualifications relevant or specific for the role. During this phase, the knowledge and skills levels of the student or employee increases from 0% to 100%. Specifically, the Index will assess if the learning outcomes and the curriculum sufficiently cover the transition to animal-free innovations and new approach methodologies.

Continuing professional development (indicators: C.III.2)

Continuing professional development (CPD) is defined by the Index as the education needed for both the retaining of existing knowledge and skills and the acquisition of newly emerged knowledge and skills. CPD intends to keep the knowledge and skill level of the employee at 100%, even when new techniques are implemented as new standards. Specifically, the Index will assess if the CPD education provided is sufficient for maintaining and improving Index-related skills and knowledge.

Training need assessment (indicators: C.I.2)

In addition to CPD, the organisation should actively assess if specific employees or departments have a lack of knowledge or skill, better defined as a knowledge or skill gap or a training need. This assures a fully competent staff and optimal performance of this staff. Specifically, the Index will look at training needs regarding the transition to animal-free innovations.

Awareness (indicators: C.I.3, C.II.1, C.III.3)

The awareness of internal and external staff and personnel, stakeholders and the public at large, as well as political and global awareness are important. Making people aware of new developments in animal testing and the transition to animal-free innovations will fuel discussion and will therefore lead to acceleration of the transition.

External education (indicators: C.III.4)

With respect to increasing awareness outside of the organisation, an effort should be made towards building the capacity of other organisations through the provision of TPI education. The organisation could share its TPI acquired knowledge with third parties. In this process, the organisation should have an active approach, actively trying to find organisations that want to receive or exchange TPI-related knowledge.

D. Investments & Grants

Through investments and grants a medical academic centre can promote or support research of their choosing. In the same way, the organisation can allocate resources to to 3R research. This area of the index will analyse the institute's policy and expenditures by comparing general investment and grant efforts with investments and grants relevant to the transition to animal free innovations and development and implementation of new approach methodologies.

Themes

The Index has divided investments and grants into 2 main themes: investments and grants.

Investments (indicators: D.II.1, D.III.1)

This theme is focused on the financial support for R&D, as well as the financial expenses related to facilities and facilities relevant to the focus areas of the index. In addition, the Index assesses how the organisation monitors and regulates the deliverables of these investments. The Index regards investments as a means to supporting and implementing transition to animal-free innovation. Investments can be divided into two subtypes: financial support for '3Rs' research projects, and the capital expenditure in utilities and facilities. The Index believes that investments are a way of ensuring continuous innovation in research.

Grants (indicators: D.III.2)

This theme focusses on the acquired grants for (research) projects relevant to the focus areas of the index. The Index believes that grants are a way for the institute to promote and support research relevant to the focus areas of the Index. Granting money or resources to innovative initiatives shows commitment to the transition to animal-free innovation.

E. IP management

Intellectual property, often abbreviated as IP, is a term used to define all property that includes creations of the human intelligence. IP includes trademarks, copyrights, patents, and various other types of rights. The main purpose of IP law is to encourage creation of a large diversity of intellectual goods. For this Index, we will focus on patents, licensing, and open access.

Themes

The Index has divided IP management into 3 main themes, which are patents, licensing, and partnerships.

Patents (indicators: E.II.1)

A patent is a type of exclusive right to use an invention for a set period which is granted to an inventor. Related to the Index, this means that an invention is disclosed to the public, but no other parties can use the invention for further development or research related to this invention without the consent of the inventor. Even though patents provide substantial transparency, it can inhibit the flow of knowledge exchange. However, patents can provide the opportunity for reimbursement of research and developmental costs and ensures that an individual company/private organization does not make large profit from research funded by the government and public organisations. The index will assess the number of patents owned by the institute relevant to the focus areas of the Index, and evaluate whether it contributes and stimulates, or inhibits knowledge exchange.

Licensing (indicators: E.II.2)

A licence is a permit to do, use or own a patented invention that is not freely available. It may be granted under IP laws to authorise the use of a patented invention. Licensing allows other parties to participate in further research, development or selling a product. This makes information about the invention more widely available. The Index will assess how the institute organises their licensing practices, including selecting partners.

Partnerships (indicators: E.III.3)

While managing IP rights, an institute often collaborates with third parties. The Index will assess the selection of these partnerships.

BATI Methodology- explanation of the Indicators

A. General Management and Stakeholder Engagement

1. Governance

I.1 Governance: Management structures

The organisation has a management structure which covers the tasks and responsibilities concerning animal testing and the transition to animal-free innovation within the organisation.

2. Strategy

I.2 Strategy

The organisation has a strategic plan and sets both long- and short-term objectives to accelerate the transition to animal-free innovation and aligns its transition to animal-free innovation strategy with its core business.

3. Ethical Committees and Welfare Bodies

I.3 Ethical Committees and Welfare Bodies: Arrangement

The organisation commits to the optimal arrangement of the Ethical Evaluation Committee and the Animal Welfare Body to ensure optimal interaction and cooperation between all committees.

I.4 Ethical Committees and Welfare Bodies: Structure

The organisation sets index-related objectives for the ethical committees and welfare bodies to accelerate the transition to animal-free innovation within the organisation.

4. Managing for Index-related Outcomes

II.1 Managing for Index-related outcomes: Public reporting

The organisation publicly reports on its commitments, objectives, targets, and performance information related to the transition to animal-free innovation.

III.1 Managing for Index-related outcomes: Performance management system

The organisation has a performance management system to monitor and measure the outcomes and impact of its transition to animal-free innovation activities across the full scope of their operations.

III.2 Managing for Index-related outcomes: Incentives

The organisation has internal incentive structures to reward people and organisational units that effectively deliver transition to animal-free innovation initiatives.

5. Stakeholder Engagement

III.3 Stakeholder Engagement: Activities

The organisation engages with relevant stakeholders, including universities, industry peers, patient groups, local governments, employees, and local and international non-governmental organisations, with the aim of accelerating the transition to animal free innovation. The organisation has a system in place to incorporate local and other external perspectives on the transition to animal-free innovation in the development and implementation of its transition to animal-free innovation strategies.

B. Research and Development

1. Quality standards

I.1 Quality standards: Commitment to standards

The organisation commits to complying with standards of quality assurance and control and ethics when conducting animal experiments. These standards are at least consistent with the Dutch laws.

III.1 Quality standards: Compliance with standards

The organisation provides evidence of ensuring compliance with the standards it sets for quality assurance, quality control and ethics regarding animal research.

2. Development and Use of Animal Free Research Models

I.2 Development and Use of Animal Free Research Models: Innovative and adaptive R&D

The organisation commits to carrying out research focussed on the development of both innovative research models and adaptive formulations of its existing research models with the goal of accelerating the transition to animal-free innovation.

III.2 Development of Animal Free Research Models: Innovation

The amount of ongoing research reflecting the research on and development of innovative research models, including innovative and adaptive R&D, and in-house and collaborative R&D.

III.3 Use of Animal Free Research Models: Implementation

The amount of ongoing research using existing animal free research models in research that does not have the aim of developing new animal free innovations, compared to the size of the (animal) research facility of the organisation.

3. Collaborative R&D and Data Sharing

I.3 Collaborative R&D: Ensuring equitable access

The organisation commits to ensuring equitable access to animal-free research models successfully developed through R&D partnerships, in addition to equal access for the research departments to research facilities needed for the use and development of animal free research models.

II.1 Data sharing: Negative data

The organisation discloses information regarding the results of all its research conducted, regardless of the outcome, with the aim of reducing unnecessary duplication of animal experimentation and to avoid reporting bias.

C. Education and Training

1. Initial Education

I.1 Initial Education: Student curriculum

The organisation commits to the inclusion of subjects regarding animal experimentation, innovative (animal-free) research and the transition to animal-free innovation in the student curriculum of relevant educational programs, including biomedical and biopharmaceutical sciences and medicine.

III.1 Initial Education: Activities

The organisation undertakes educational activities for their students with the aim of informing students of the transition to animal-free innovation, animal experimentation and innovative (animal-free) research.

2. Continuing Professional Development

III.2 Continuing professional development: R&D capacity building activities

The organisation undertakes R&D capacity building activities for their researchers with the aim of accelerating the transition to animal-free innovation and maintaining the highest quality standards for the execution of animal experimentation.

3. Training Need Assessment

I.2 Training need assessment: Assessing training needs

The organisation commits to the assessment and provision of training needs aimed at reaching or maintaining the highest quality standards both for in-house and third-party researchers.

4. Awareness

I.3 Awareness: Internal knowledge exchange

The organisation commits to the arrangement of interaction and cooperation between different research departments with the aim of knowledge and skill exchange regarding innovative research models.

II.1 Awareness: Public reporting

The organisation publicly reports on its capacity building activities and awareness activities related to animal experimentation, innovative research, and the transition to animal-free innovation, including performance information and key outcomes.

III.3 Awareness: Activities

The organisation organises awareness activities with the aim of raising awareness on animal experimentation and the transition to animal-free innovation on the internal, external, and public level.

5. External Education

III.4 External Education: R&D capacity building activities

The organisation undertakes R&D capacity building activities in partnership with local universities and public and private sector research organisations that meet good practice standards with the aim of accelerating the transition to animal-free and maintaining the highest quality standards for the execution of animal experimentation.

D. Investments and Grants

1. Investments

II.1 Investments: Disclosure of resources dedicated to R&D

The organisation publicly discloses the resources dedicated to research on and development of innovative research models, including innovative and adaptive R&D, and in-house and collaborative R&D.

III.1 Investments: Resources dedicated to R&D

The financial R&D investment dedicated to research on and development of innovative research models, including innovative and adaptive R&D, and in-house and collaborative R&D.

2. Subsidies

III.2 Grants: Grants for R&D

The number and amount of acquired grants dedicated to animal-free research and research on and development of innovative research models, including innovative and adaptive R&D, acquired from Horizon 2020, ZonMW, NWO, Proefdienvrij and SGF.

E. Intellectual Property

1. Patents

II.1 Patent disclosure

The organisation publicly discloses the patent status of its patents related to the transition to animal-free innovation.

2. Licensing

II.2 Disclosure of licensing practice

The organisation publicly discloses detailed information about the voluntary licences and non-assert agreements it is engaged in for intellectual property related to the transition to animal-free innovation.

3. Partnerships

III.3 Partnerships: IP sharing

The organisation provides evidence of sharing its intellectual property with local universities and public and private research institutions that develop animal-free research models either through open access or through fair and reasonable licensing.



Beyond Animal Testing INDEX

Domain A: Management and Stakeholders

Domain A: Management and Stakeholders	Governance <i>A.I.1 Governance: Management structure</i>
	Strategy <i>A.I.2 Strategy</i>
	Ethical Committees and Welfare Bodies <i>A.I.3 Ethical Committees and Welfare Bodies: Arrangement and structure</i> <i>A.I.4 Ethical Committees and Welfare Bodies: Responsibilities, tasks, and goals</i>
	Managing for Index-related Outcomes <i>A.II.1 Managing for Index-related Outcomes: Public Reporting</i> <i>A.III.1 Managing for Index-related Outcomes: Performance management system</i> <i>A.III.2 Managing for Index-related Outcomes: Incentives</i>
	Stakeholder engagement <i>A.III.3 Stakeholder Engagement: Activities</i>

A.I.1	Governance: Management structure <i>The organization has a management structure which includes the tasks and responsibilities concerning animal testing and the transition to animal-free innovation within the organization.</i>
+ 0.50	The organization describes that the institutional license is vested within the organization.
+ 0.25	...describes in which specific body the...
+ 0.25	...describes at which specific person the...
+ 0.50	The organization describes the tasks and responsibilities on the organizational level, i.e., the level of the license holder.
+ 0.50	...organization extensively describes...
+ 0.50	The organization describes the tasks and responsibilities on multiple levels within the organization.
+ 0.10	...organization extensively describes...
+ 0.10	...on the strategic level, i.e., management of the animal testing facility , within...
+ 0.10	...on the tactical level, i.e., IVD and DEC , within...
+ 0.10	...on the operational level, i.e., the researchers, animal caretakers, technicians, research analysts and animal testing coordinators , within...
+ 0.10	...on the external level, i.e., students, interns, and external researchers , within...
+ 1.00	The organization describes in which body or bodies the responsibility for the animal testing policy is vested within the organization.
+ 1.00	The organization states that they have appointed one or more bodies and/or teams for promoting the TPI-policy and the 3R-policy.
5.00	

A.I.2	Strategy
	<i>The organization has a strategic plan and sets both long- and short-term objectives to accelerate the transition to animal-free innovation and aligns its transition to animal-free innovation strategy with its core business.</i>
+ 1.00	The organization describes a clear ambition regarding the transition to animal free innovation and the 3Rs.
+ 1.00	The organization describes a clear strategy regarding the transition to animal free innovation and the 3Rs.
+ 0.50	The organization describes some goals regarding the transition to animal free innovation and the 3Rs.
+ 0.50	...describes multiple goals...
3.00	

A.I.3	Animal welfare and ethical review body: Arrangement and Structure
	<i>The organization commits to the optimal arrangement of the Ethical Evaluation Committee (DEC) and the Animal Welfare Body (IvD) to ensure optimal interaction and cooperation between all committees.</i>
+ 1.00	The organization describes the various functions within the IvD, as determined by law.
+ 1.00	The organization states that the IvD has an independent and autonomous position within the organization.
+ 1.00	The organization describes the various functions within the DEC, as determined by law.
+ 1.00	The organization describes the cooperation between the DEC and the IvD.
4.00	

A.I.4	Animal welfare and ethical review body: Responsibilities, tasks and goals
	<i>The organization sets Index-related objectives for the Ethical Evaluation Committee (DEC) and Animal Welfare Body (IvD) to accelerate the transition to animal-free innovation within the organization.</i>
+ 0.50	The organization describes the tasks of the IvD, as determined by law.
+ 0.50	...organization extensively describes...
+ 0.50	The organization describes additional tasks for the IvD that are not determined by law.
+ 0.50	...organization extensively describes...
+ 0.50	The organization describes the methods and processes of the DEC.
+ 0.50	...organization extensively describes...
+ 1.00	The organization reports about the number of applications and studies processed by the IvD.

A.II.1 Managing for Index-related Outcomes: Public reporting

The organization publicly reports on its commitments, objectives, targets, and performance information related to the transition to animal-free innovation.

+ 1.00 The organization states that they commit to a transparent animal testing policy.

+ 1.00 The organization endorses the Code for Transparency in Animal Testing.

+ 1.00 The organization publishes an annual report on animal testing.

+ 0.60 The organization reports numbers on conducted animal experiments on its website or in an annual report.

+ 0.10 ...reports **extensive** numbers...

+ 0.10 ...reports **topical** numbers...

+ 0.10 ...experiments **and which animals were used** on...

+ 0.10 ...experiments **and for which purposes the animals were used** on...

+ 0.50 The organization publishes all issued project licenses by the Central Ethics Committee (CCD) in their annual report on animal testing, on their public facing website, or on the website of the IvD.

+ 0.50 ...publishes **an extensive description of** all...

5.00

A.III.1 Managing for Index-related Outcomes: Performance management system

The organization has a performance management system to monitor and measure the outcomes and impact of its transition to animal-free innovation activities.

+ 0.50 The organization has a review cycle regarding their animal testing policy, in which their policy is being evaluated and revised.

+ 0.25 ...policy **with regular intervals** is...

+ 0.25 ...which **extensively is described how** their...

+ 1.00 The organization states that they have a process and incident management system.

2.00

A.III.2 Managing for Index-related Outcomes: Incentives

The organization has internal incentive structures to reward and facilitate people and organizational units that effectively deliver transition to animal-free innovation initiatives.

The Index could not find any relevant information on this indicator. The indicator has still been included in the overall ranking.

A.III.3	Stakeholder Engagement: Activities
	<i>The organization engages with relevant stakeholders, including universities, industry peers, patient groups, local governments, employees, and local and international non-governmental organizations, with the aim of accelerating the transition to animal free innovation. The organization has a system in place to incorporate local and other external perspectives on the transition to animal-free innovation in the development and implementation of its transition to animal-free innovation strategies.</i>
+ 0.50	The organization states that they are open to dialogue with animal protection organizations.
+ 0.50	...are proactive in starting a dialogue...
+ 1.00	The organization states that their policy is aimed at maintaining and initiating relevant collaborations and partnerships.
2.00	_____

Domain B: Research and Development

Domain B: Research and Development	Quality Standards
	<i>B.I.1 Quality Standards: Commitment to standards</i>
	<i>B.III.1 Quality Standards: Compliance with standards</i>
	Development and Use of Animal Free Research Models
	<i>B.I.2 Development and Use of Animal Free Research Models: Innovative and adaptive R&D</i> <i>B.III.2 Development of Animal Free Research Models: Innovation</i> <i>B.III.3 Use of Animal Free Research Models: Implementation</i>
	Collaborative R&D and Data Sharing
	<i>B.I.3 Collaborative R&D: Equitable access</i>
	<i>B.II.1 Data Sharing: Negative data and open access</i>

B.I.1	Quality Standards: Commitment to standards
	<i>The organization commits to complying with standards of quality assurance and control and ethics when conducting animal experiments. These standards are at least consistent with the Dutch laws.</i>
+ 1.00	The organization has a separate policy document regarding the quality of animal research.
+ 1.00	The organization states that their policy is focused on animal welfare, quality of animal research, and the 3Rs.
+ 1.00	The organization states that their quality standards are at least equal to the Dutch laws and describes which specific laws they adhere to.
+ 0.50	The organization states that the quality of animal research is monitored internally through audits and laboratory animal experts.
+ 0.50	...monitored both internally and externally through...
+ 0.50	The organization states that they commit to acquiring external accreditations and certificates that are not required by law.
+ 0.50	...they have acquired external...
5.00	

B.III.1	Quality Standards: Compliance with standards
	<i>The organization provides evidence of ensuring compliance with the standards it sets for quality assurance, quality control and ethics regarding animal research.</i>
+ 1.00	The organization states that their primary animal testing facility is ISO9001 accredited.
+ 1.00	The organization states that their primary animal testing facility is AAALAC accredited.
+ 1.00	The organization states that their primary animal testing facility is OLAW accredited.
+ 1.00	The organization states that their primary animal testing facility uses relevant 'best practices' and describes these 'codes of practice'.
+ 1.00	The organization states they collaborated on initiatives to improve the quality of animal research.
5.00	

B.I.2	Development and Use of Animal Free Research Models: Innovative and adaptive R&D
	<i>The organization commits to carrying out research focusing on the development of both innovative research models and adaptive formulations of its existing research models with the goal of accelerating the transition to animal-free innovation.</i>
+ 1.00	The organization states that they have the ambition to introduce research programs that develop innovative alternatives to animal research.
+ 1.00	The organization states they organize workshops with the goal of developing animal free research models for specific research questions.
2.00	

B.III.2	Development of Animal Free Research Models: Innovation
	<i>The amount of ongoing and conducted research reflecting the research on and development of innovative research models, including innovative and adaptive R&D, and in-house and collaborative R&D.</i>
	The Index could not find any relevant information on this indicator, because it proved difficult to define 'animal free research'. The indicator has still been included in the overall ranking but will be revised in the next version of the Index.

B.III.3	Use of Animal Free Research Models: Implementation
	<i>The amount of ongoing and conducted research using existing animal free research models in research that do not have the aim of developing new animal free innovations, compared to the size of the (animal) research facility of the organization.</i>
	The Index could not find any relevant information on this indicator, because it proved difficult to define 'animal free research'. The indicator has still been included in the overall ranking, but will be revised in the next version of the Index.

B.I.3	Collaborative R&D: Equitable access
	<i>The organization commits to ensuring equitable access to animal-free research models successfully developed through R&D partnerships, in addition to equal access for the research departments to research facilities needed for use and development of animal free research models.</i>
+ 1.00	The organization states that at some of the core facilities requests can be made and granted for the use of these facilities by other research groups.
1.00	

B.II.1	Data Sharing: Negative data and open access
	<i>The organization discloses information regarding the results of all its research conducted, regardless of the outcome, with the aim of reducing unnecessary duplication of animal experimentation and to avoid reporting bias.</i>
+ 1.00	The organization states the goal to publish 100% of their research open access.
+ 1.00	The organization states that they stimulate the registration of animal research studies prior to the start of these studies.
2.00	

Domain C: Education and Training

Domain C: Education and Training

Initial education

C.I.1 Initial Education: Student curriculum

C.III.1 Initial Education: Activities

Continuing Professional Development

C.III.2 Continuing Professional Development: R&D capacity building activities

Training Need Assessment

C.I.2 Training Need Assessment: Assessing training needs

Awareness

C.I.3 Awareness: Internal knowledge exchange

C.II.1 Awareness: Public reporting

C.III.3 Awareness: Activities

External education

C.III.4 External Education: R&D capacity building activities

C.I.1 Initial Education: Student curriculum

The organization commits to the inclusion of subjects regarding animal experimentation, innovative (animal-free) research and the transition to animal-free innovation in the student curriculum of relevant educational programs, including biomedical sciences and medicine.

+ 0.50 The organization states that they organize the Course on Laboratory Animal Science for students.
+ 0.50 ...students, **and that this includes education about TPI and/or the 3Rs.**

+ 1.00 The organization states that students that do not want to participate in animal research, can get an exemption for the practical part of the Course on Laboratory Animal Science.

+ 1.00 The organization states that they apply the 3Rs as much as possible when using laboratory animals for education.

3.00

C.III.1 Initial Education: Activities

The organization undertakes educational activities for their students with the aim of informing students of the transition to animal-free innovation, animal experimentation and innovative (animal-free) research.

+ 1.00 The organization organizes a Summer School on Advanced in Vitro Models.

+ 1.00 The organization organizes a post-graduate course on the transition to animal free innovation.

+ 1.00 The organization organizes a master course focused on better research with less animal testing.

3.00

C.III.2	Continuing Professional Development: R&D capacity building activities
	<i>The organization undertakes R&D capacity building activities for their researchers with the aim of accelerating the transition to animal-free innovation and maintaining the highest quality standards for the execution of animal experimentation.</i>
+ 1.00	The organization states that they have a separate policy document on continuous professional development.
+ 1.00	The organization states that their primary animal testing facility is responsible for the organization of the Course on Laboratory Animal Science.
+ 0.50	The organization states that they organize the Course on Laboratory Animal Science for employees.
+ 0.50	...employees, and that this includes education about TPI and/or the 3Rs.
+ 1.00	The organization states that they organize internal courses in the context of continuous professional development.
4.00	

C.I.2	Training Need Assessment: Assessing training needs
	<i>The organization commits to the assessment and provision of training needs aimed at reaching or maintaining the highest quality standards both for in-house and third-party researchers.</i>
+ 1.00	The organization states that they have appointed a competence officer to assess the training requirements of the employees.
+ 1.00	The organization states that their primary animal testing facility maintains competence files
+ 1.00	The organization states that they organize competence trainings.
+ 1.00	The organization states that they organize refresher courses for specific actions to laboratory animals.
4.00	

C.I.3	Awareness: Internal knowledge exchange
	<i>The organization commits to the arrangement of interaction and cooperation between different research departments with the aim of knowledge and skill exchange regarding innovative research models.</i>
+ 1.00	The organization states that the AWB/ IvD takes care of all internal communication, thus permanently building on a culture of care.
+ 1.00	The organization states that they stimulate the registration of animal research studies prior to the start of these studies
+ 1.00	The organization reports numbers on internal communication.
3.00	

C.II.1	Awareness: Public reporting
	<i>The organization publicly reports on its capacity building activities and awareness activities related to animal experimentation, innovative research, and the transition to animal-free innovation, including performance information and key outcomes.</i>
+ 0.50	The organization publishes newsletters on both the developments in the field of animal testing, as well as the developments in the field of the 3Rs and the transition to animal free innovation.
+ 0.25	...publishes frequent newsletters...
+ 0.25	...publishes extensive newsletters...
+ 1.00	The organization has a website with general information about animal testing and the 3Rs and/or the transition to animal free innovation.
+ 1.00	The organization had multiple appearances in media about animal testing and innovative research.
+ 1.00	The organization uses social media to share information about animal testing.
+ 1.00	The organization takes part in some public events, at which they share information about the 3Rs and the transition to animal free innovation.
+ 1.00	The organization publishes an online magazine which makes scientific research available.
6.00	

C.III.3	Awareness: Activities
	<i>The organization organizes awareness activities with the aim of raising awareness on animal experimentation and the transition to animal-free innovation on the internal, external, and public level.</i>
+ 1.00	The organization states that they organize a debate on laboratory animals, which is free and accessible, and during which the transition to animal free innovation is discussed.
+ 1.00	The organization states that they participate in at least one external event during which they promote the transition to animal free innovation.
+ 1.00	The organization states that they have an annual goal to organize an informative meeting concerning laboratory animals for students at their university.
3.00	

C.III.4	External Education: R&D capacity building activities
	<i>The organization undertakes R&D capacity building activities in partnership with local universities and public and private sector research organizations that meet good practice standards with the aim of accelerating the transition to animal-free and maintaining the highest quality standards for the execution of animal experimentation.</i>
+ 1.00	The organization states that they are open to incorporate initiatives of other institutes and that their employees are willing to share their initiatives with colleagues of other research institutes.
+ 1.00	The organization states that the primary animal testing facility organizes trainings for external researchers and animal care takers.
+ 1.00	The organization states that they organize education about animal testing in collaboration with other research institutes / universities.
3.00	

Domain D: Investments and Grants

Domain D: Investments and Grants

Investments

D.II.1 Investments: Disclosure of resources dedicated to R&D

D.III.1 Investments: Resources dedicated to R&D

Grants

D.III.2 Grants: Grants for R&D

D.II.1 Investments: Disclosure of resources dedicated to R&D

The organization publicly discloses the resources dedicated to research on and development of innovative research models, including innovative and adaptive R&D, and in-house and collaborative R&D.

+ 1.00 The organization states that they have a fund specifically for stimulating research on the 3Rs and the transition to animal free innovation.

+ 1.00 The organization describes the financial resources (total amount/ number itemized) available for research on the 3Rs and the transition to animal free innovation.

2.00 —

D.III.1 Investments: Resources dedicated to R&D

The financial R&D investment dedicated to research on and development of innovative research models, including innovative and adaptive R&D, and in-house and collaborative R&D.

The Index could not find any relevant information on this indicator. The indicator has still been included in the overall ranking.

—

D.III.2	Grants: Grants for R&D
	<i>The number and amount of acquired grants dedicated to animal-free research and research on and development of innovative research models, including innovative and adaptive R&D, acquired from Horizon 2020, ZonMW, NWO, Proefdienvrij and SGF.</i>
+ 5.00	The organization participates in X projects of the Horizon 2020, through which they were granted a total amount of X .
+ 0.00	The organization was granted X grants from the program MKMD from ZonMW relevant to the Index.
+ 0.00	The organization was granted X grants from the program TTW from NWO relevant to the Index.
+ 0.00	The organization was granted X grants from the program 3Rs from IMI relevant to the Index.
+ 0.00	The organization was granted X grants from Health Holland relevant to the Index.
+ 0.00	The organization won the Hugo van Poelgeest price X times in the past 5 years.
+ 0.00	The organization won the Lush price X times in the past 5 years.
+ 0.00	The organization won the Lef in het lab price X times in the past 5 years.
5.00	

A different system has been used to calculate the score for this indicator. In the pilot, we only used grants form Horizon 2020 to test this system. A more extensive explanation is found in the 'BATI Pilot Rapportage' (only available in Dutch).

Domain E: Intellectual Property

Domain E: Intellectual Property

Patents

E.II.1 Patent disclosure

Licensing

E.II.2 Disclosure of licensing practice

Partnerships

E.III.1 Partnerships: IP sharing

E.II.1 Patent disclosure

The organization publicly discloses the patent status of its patents related to the transition to animal-free innovation.

+ 1.00 The organization has a department/ office that is responsible for its patents and licensing.

+ 1.00 The organization reports about the number of patent applications in 2019.

+ 1.00 The organization reports about their IP policy and the included principles.

2.00 —

E.II.2 Disclosure of licensing practice

The organization publicly discloses detailed information about the voluntary licences and non-assert agreements it is engaged in for intellectual property related to the transition to animal-free innovation.

+ 1.00 The organization reports that they have IP-licensing contracts with companies.

1.00 —

E.III.1 Partnerships: IP sharing

The company provides evidence of sharing its intellectual property with local universities and public and private research institutions that develop animal-free research models either through open access or through fair and reasonable licensing.

The Index could not find any relevant information on this indicator. The indicator has still been included in the overall ranking.

—

Absolute scores (domains)																																					
	Domain A								Domain B							Domain C							Domain D			Domain E											
Alpha Bravo Charlie	Governance		Strategy		IVD and DEC		Management		Stakeholder engagement		Quality		Development and Use			Collaborations		Initial education		CPD		TNA		Awareness		External education		Investments		Grants		Patents		Licensing		Partnerships	
	A.I.1	A.I.2	A.I.3	A.I.4	A.II.1	A.III.1	A.III.2	A.III.3	B.I.1	B.III.1	B.I.2	B.III.2	B.III.3	B.I.3	B.II.1	C.I.1	C.III.1	C.III.2	C.I.2	C.I.3	C.II.1	C.III.3	C.III.4	D.II.1	D.III.1	D.III.2	E.II.1	E.II.2	E.III.1	E.II.1	E.II.2	E.III.1					
	1.75	0.50	2.00	0.50	1.70	0.00	0.00	0.00	2.50	2.00	0.00	0.00	0.00	1.00	0.00	1.50	0.00	2.50	4.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	3.75	1.00	0.00	0.00					
	2.00	1.00	2.00	3.50	4.00	1.00	0.00	1.50	2.00	1.00	1.00	0.00	0.00	0.00	0.00	1.50	0.00	1.50	0.00	0.00	2.00	0.00	2.00	0.00	0.00	0.82	3.00	1.00	0.00	0.00							
	4.50	2.50	4.00	3.00	5.00	1.75	0.00	1.00	4.00	4.00	1.00	0.00	0.00	0.00	0.00	2.00	3.00	2.00	3.00	3.00	5.00	2.00	0.00	2.00	0.00	4.08	1.00	0.00	0.00	0.00							
Min	1.75	0.50	2.00	0.50	1.70	0.00	0.00	0.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.50	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.82	1.00	0.00	0.00	0.00							
Max	4.50	2.50	4.00	3.50	5.00	1.75	0.00	1.50	4.00	4.00	1.00	0.00	0.00	1.00	2.00	1.50	3.00	2.50	4.00	3.00	5.00	2.00	2.00	2.00	0.00	4.08	3.00	1.00	0.00	0.00							
Mean	2.75	1.33	2.67	2.33	3.57	0.92	0.00	0.83	2.83	2.33	0.67	0.00	0.00	0.33	0.67	1.33	1.00	2.00	2.33	1.00	2.67	1.00	1.00	0.67	0.00	2.88	1.67	0.33	0.00	0.00							

Relative scores (domains)																																					
	Domein A								Domain B							Domain C							Domain D			Domain E											
Alpha Bravo Charlie	Governance		Strategy		IvD and DEC		Management		Stakeholder engagement		Quality		Development and Use			Collaborations		Initial education		CPD		TNA		Awareness		External education		Investments		Grants		Patents		Licensing		Partnerships	
	A.I.1	A.I.2	A.I.3	A.I.4	A.II.1	A.III.1	A.III.2	A.III.3	B.I.1	B.III.1	B.I.2	B.III.2	B.III.3	B.I.3	B.II.1	C.I.1	C.III.1	C.III.2	C.I.2	C.I.3	C.II.1	C.III.3	C.III.4	D.II.1	D.III.1	D.III.2	E.II.1	E.II.2	E.III.1	E.II.1	E.II.2	E.III.1					
	39	20	50	14	34	0	0	0	63	50	0	0	0	100	0	100	0	100	100	0	20	50	50	0	0	92	33	0	0	0	0	0	0				
	44	40	50	100	80	57	0	100	50	25	100	0	0	0	0	100	0	60	0	0	40	0	100	0	0	20	100	100	0	0	0	0					
	100	100	100	86	100	100	0	67	100	100	100	0	0	0	100	67	100	80	75	100	100	100	0	100	0	100	33	0	0	0	0	0					
Min	39	20	50	14	34	0	0	0	50	25	0	0	0	0	0	67	0	60	0	0	20	0	0	0	0	20	33	0	0	0	0	0	0				
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100				
Mean	61	53	67	67	71	52	0	56	71	58	67	0	0	33	33	89	33	80	58	33	53	50	50	33	0	71	56	33	0	0	0	0	0				

Relative scores (pillars)																													
	Pillar I										Pillar II						Pillar III												
	A.I.1	A.I.2	A.I.3	A.I.4	B.I.1	B.I.2	B.I.3	C.I.1	C.I.2	C.I.3	A.II.1	B.II.1	C.II.1	D.II.1	E.II.1	E.II.2	A.III.1	A.III.2	A.III.3	B.III.1	B.III.2	B.III.3	C.III.1	C.III.2	C.III.3	C.III.4	D.III.1	D.III.2	E.III.1
Alpha	39	20	50	14	63	0	100	100	100	0	34	0	20	0	33	0	0	0	0	50	0	0	0	100	50	50	0	92	0
Bravo	44	40	50	100	50	100	0	100	0	0	80	0	40	0	100	100	57	0	100	25	0	0	0	60	0	100	0	20	0
Charlie	100	100	100	86	100	100	0	67	75	100	100	100	100	100	33	0	100	0	67	100	0	0	100	80	100	0	0	100	0
Min	39	20	50	14	50	0	0	67	0	0	34	0	20	0	33	0	0	0	0	25	0	0	0	60	0	0	0	20	0
Max	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mean	61	53	67	67	71	67	33	89	58	33	71	33	53	33	56	33	52	0	56	58	0	0	33	80	50	50	0	71	0

The top panel contains the absolute scores for themes within domains for the three organizations anonymized. The middle panel contains the relative scores. These are calculated by transforming the highest maximum absolute score per indicator to hundred. The other two scores are then converted as well using the same multiplication factor as the one used to converted the maximum absolute score to hundred. The bottom panel contains the relative scores per pillar.

The maximum total score per Domain is:

A	28
B	24
C	28
D	10
E	10

The maximum total score per Pillar is:

I	34
II	21
III	45

To calculate an organization's score per domain or pillar, the sum of all indicator scores per domain or pillar is divided by 29, the overall number of indicators. The scores are as the two tables below and figure 3 and 4 of the main text.

Organisation	Domain A	Domain B	Domain C	Domain D	Domain E	Overall Score
Alpha	5	7	14	3	1	31
Bravo	16	6	10	1	7	40
Charlie	22	14	21	6	1	65

Organisation	Pillar I	Pillar II	Pillar III	Overall Score
Alpha	17	3	11	31
Bravo	17	11	12	40
Charlie	28	15	22	65



Beyond Animal Testing INDEX

Supplementary Material 3 *Questionnaire*

The Survey was conducted in Dutch. The English translation was prepared for the publication. The formatting may not be exactly the same as the Dutch version of the survey.

Beyond Animal Testing Index

About this survey

This survey is part of the Beyond Animal Testing Index (BATI) pilot study (www.beyondanimaltesting.org). With this questionnaire, we wish to gain insight into how certain themes in relation to animal experiments, animal welfare, the 3Rs and animal-free innovations are experienced in practice.

This questionnaire has been drawn up in collaboration with the participating pilot organisations. Your answers to this questionnaire will be processed anonymously. The Animal Welfare Bodies (IvDs) of the participating organisations receive an (anonymised) report of this survey, so that any points for attention can be placed on the organisation's agenda. Personal information such as individual answers, names and contact details will not be shared.

Completing this survey will take approximately 10 minutes.

Thank you for your cooperation!

Beyond Animal Testing Index

About you

The following questions are about you, where you work (organisation) and in which role.

* 1. What organisation do you work for?

- Leiden: LUMC
- Utrecht: UMCU, UU
- Groningen: UMCG, RUG
- Don't know / Don't want to say / not applicable
- Other, namely...

* 2. What is your highest level of education?

* 3. What is your current position/ role?

- Animal caretaker
- Animal technician
- Research technician
- Don't know / Don't want to say / not applicable
- Other, namely...

Beyond Animal Testing Index

Organisation and department

* 4. Please indicate on a scale of 1 to 5 to what extent you agree or disagree with the following statements. There is space to explain your answers, but this is not mandatory. If a statement does not apply to your work situation, tick N/A.

In my work I get enough time to pay attention to:

1 (Agree) 2 3 (Neutral) 4 5 (Disagree) N/A

Working in a team with respect for each other and the animals.

☐ ☐ ☐ ☐ ☐ ☐

Space for explanation (optional)

Animal welfare

☐ ☐ ☐ ☐ ☐ ☐

Space for explanation (optional)

Reduction and Refinement

☐ ☐ ☐ ☐ ☐ ☐

Space for explanation (optional)

Replacement / Animal free innovations / new approach methodologies.

☐ ☐ ☐ ☐ ☐ ☐

Space for explanation (optional)

Research quality

☐ ☐ ☐ ☐ ☐ ☐

1 (Agree)

2

3 (Neutral)

4

5 (Disagree)

N/A

Space for explanation (optional)

Insight into decisions of my management.

☐
☐
☐
☐
☐
☐

Space for explanation (optional)

Open and fair communication about animal experimentation.

☐
☐
☐
☐
☐
☐

Space for explanation (optional)

* 5. Please indicate on a scale of 1 to 5 to what extent you agree or disagree with the following statements. There is space to explain your answers, but this is not mandatory. If a statement does not apply to your work situation, tick N/A.

1 (Agree)

2

3 (Neutral)

4

5 (Disagree)

N/A

At work I feel free to talk about my work and share my opinion.

☐
☐
☐
☐
☐
☐

Space for explanation (optional)

Outside of work I feel free to talk about my work with experimental animals with acquaintances such as family and friends.

☐
☐
☐
☐
☐
☐

Space for explanation (optional)

1 (Agree)

2

3 (Neutral)

4

5 (Disagree)

N/A

At work I experience a pleasant working atmosphere and I feel safe.

☐☐☐☐☐☐

Space for explanation (optional)

I feel valued by my colleagues.

☐☐☐☐☐☐

Space for explanation (optional)

I feel valued by my manager.

☐☐☐☐☐☐

Space for explanation (optional)

At work, I feel free to share concerns and/ or ideas about my tasks and responsibilities.

☐☐☐☐☐☐

Space for explanation (optional)

* 6. Do you share your opinion, concerns or ideas about your work? For example, about work that is not going well or ideas for improvement? If so, when? (Multiple answers possible)

- ☐ Never / not applicable
- ☐ In one to ones with for example a colleague, researcher, manager, NVS or AWB member
- ☐ By email to for example researcher, manager, named veterinary surgeon or AWB member
- ☐ In team meetings with colleagues and researchers
- ☐ during annual appraisal meeting with my manager
- ☐ In my organisation during for example education, research or departmental meetings
- ☐ Outside of my organisation at conferences or during courses
- ☐ Other, namely ...

Space for explanation (optional)

* 7. Do you (sometimes) feel inhibited to share your opinion, concerns, or ideas about your work? If so, why is that? (multiple answers possible)

- ☐ Never / not applicable, I always speak out.
- ☐ I don't know who to address
- ☐ I don't dare to speak out
- ☐ I don't feel like it or don't think it's important
- ☐ It is no use, I don't feel heard/ listened to
- ☐ Other, namely ...

Space for explanation (optional)

Beyond Animal Testing Index

Research and quality

The following questions are about research quality and your role.

* 8. Please indicate on a scale of 1 to 5 to what extent you agree or disagree with the following statements. There is space to explain your answers, but this is not mandatory. If a statement does not apply to your work situation, tick N/A.

1 (Agree) 2 3 (Neutral) 4 5 (Disagree) N/A

The animal experiments I am involved in are well designed

☐ ☐ ☐ ☐ ☐ ☐

Space for explanation (optional)

The collaboration with (most) researchers is good

☐ ☐ ☐ ☐ ☐ ☐

Space for explanation (optional)

Most of the researchers I work with appreciate my knowledge and experience in the field of animal testing and animal welfare.

☐ ☐ ☐ ☐ ☐ ☐

Space for explanation (optional)

1 (Agree)

2

3 (Neutral)

4

5 (Disagree)

N/A

Most of the researchers I work with think about animal-free research methods and apply them where possible

☐☐☐☐☐☐

Space for explanation (optional)

I am being involved in decision making regarding animal welfare, animal studies or laboratory animal science

☐☐☐☐☐☐

Space for explanation (optional)

I feel (co-) responsibility for the quality of animal experiments.

☐☐☐☐☐☐

Space for explanation (optional)

I actively contribute to animal welfare and the 3Rs (Replacement, Reduction and Refinement) in the animal research at our establishment

☐☐☐☐☐☐

Space for explanation (optional)

The work and administration I do to ensure the quality of research are useful and are also seen and used by others.

☐☐☐☐☐☐

Space for explanation (optional)

1 (Agree)

2

3 (Neutral)

4

5 (Disagree)

N/A

Where there are concerns about animal welfare, I think that the right actions are being taken to resolve the welfare issue.



Space for explanation (optional)

Where there are ideas to improve animal welfare or the 3Rs, I think they are picked up adequately and applied where possible.



Space for explanation (optional)

Beyond Animal Testing Index

Education and knowledge transfer

The following questions are about acquiring and sharing knowledge and to what extent you feel that you are given the opportunities for this within your organisation.

* 9. Please indicate on a scale of 1 to 5 to what extent you agree or disagree with the following statements. There is space to explain your answers, but this is not mandatory. If a statement does not apply to your work situation, tick N/A.

1 (Agree) 2 3 (Neutral) 4 5 (Disagree) N/A

I have the right knowledge and experience to do my job well.

☐ ☐ ☐ ☐ ☐ ☐

Space for explanation (optional)

I think it is important for my work and personal development to keep learning, for example by following training courses.

☐ ☐ ☐ ☐ ☐ ☐

Space for explanation (optional)

I have access to sufficient information about laboratory animal science through e-learning, meetings or discussions.

☐ ☐ ☐ ☐ ☐ ☐

Space for explanation (optional)

If I think that I lack certain knowledge or experience myself, I will make that known, for example to my manager.

☐ ☐ ☐ ☐ ☐ ☐

1 (Agree)

2

3 (Neutral)

4

5 (Disagree)

N/A

Space for explanation (optional)

If my manager sees that I lack certain knowledge or experience, I will be offered training opportunities.



Space for explanation (optional)

I am offered sufficient time and space for continuing professional development as needed



Space for explanation (optional)

*** 10. Are you involved in educational and training activities? (multiple answers possible)**

- ☐ No, don't know, don't want to say, not applicable
- ☐ Yes, to colleagues within my organisation
- ☐ Yes, to colleagues outside of my organisation
- ☐ Yes, to students like students animal care studies or interns
- ☐ Yes, during the Lab. Animal Science course
- ☐ Other, namely ...

Space for explanation (optional)

* 11. Do you share your professional knowledge and experiences in other ways with colleagues inside and outside your organisation? (multiple answers possible)

- ☐ No, don't know, don't want to say, not applicable
- ☐ Yes, written (media, magazine or journal articles)
- ☐ Yes, poster at conference
- ☐ Yes, oral presentation at conference
- ☐ Yes, contribution to public relation/ communication activities
- ☐ Other, namely ...

Space for explanation (optional)

* 12. When you share your professional knowledge and experiences, are you supported in this by the organisation you work for? And if so, in what way(s)? (multiple answers possible)

- ☐ Not applicable
- ☐ No, I am not supported by my organisation
- ☐ Yes, I am given time to share my knowledge and experiences
- ☐ Yes, I am offered advice and help from persons within my organisation
- ☐ Yes, my expenses are (partly) covered
- ☐ Other, namely ...

Space for explanation (operational)

Beyond Animal Testing Index

Knowing more?

May we know more about you?

The Beyond Animal Testing Index (BATI) team is looking for great stories and practical examples in the field of animal welfare, the 3Rs and animal-free innovation. This can be anything from small improvements in animal housing to major projects aimed at developing animal-free research models. These examples can inspire colleagues in your own and other organizations, so that together we improve research and animal welfare.

May we contact you for more information or if you want to stay informed about this project, please fill in your contact details below.

Your contact details will be disconnected from your responses in this survey.

Contact: Dr. J*** v** L*** (A.***@L***.n*)

13. May we contact you for more information or do you want to stay informed? (multiple answers possible)

- ☐ Yes, I don't mind to be approached for example for an interview
- ☐ Yes, I would like to receive the results of this survey
- ☐ No, I am not interested
- ☐ Others, namely ...

Space for explanation (optional)

14. * If you responded 'Yes', fill out your contact details.

Name

Email address

15. Thank you for filling out our survey!

If you have questions, ideas or would like to make a remark you are invited to leave these in the box below.

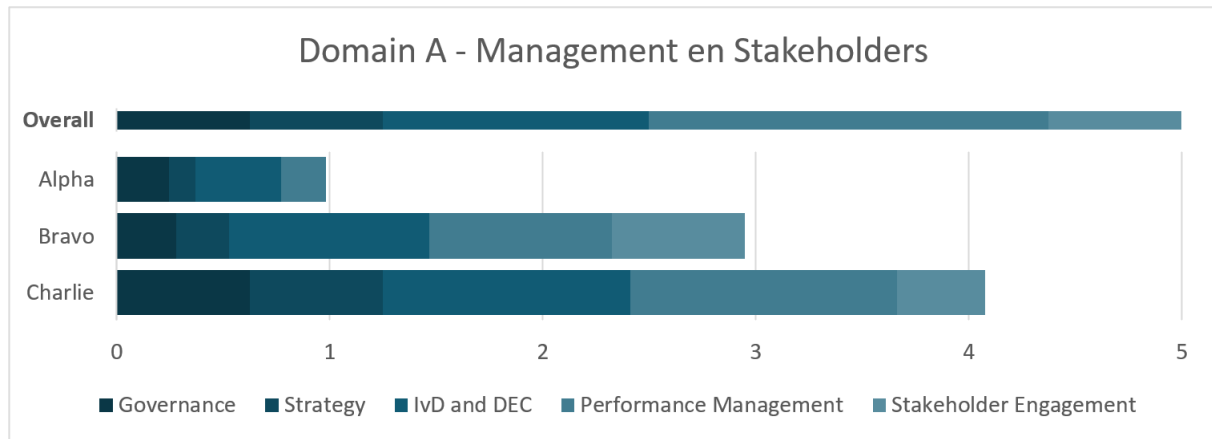


Beyond Animal Testing INDEX

*Supplementary Material 4
Ranking by Theme*

DOMAIN A: MANAGEMENT AND STAKEHOLDERS

The first domain of the Beyond Animal Testing Index covers management and stakeholder engagement. It consists of eight indicators divided into five themes; 1) Governance, 2) Strategy, 3) Ethical committee and animal welfare body, 4) Managing for Index-related outcomes and 5) Stakeholder engagement.



The graph displays the ranking per organisation in domain A split into the different themes. During the data collection of this domain, our team found that much of the needed information can be found in existing documentation. Especially the annual report on animal research and internal management documents can create a comprehensive picture of the status within the organisation. This domain is therefore the domain of which the most information could be collected.

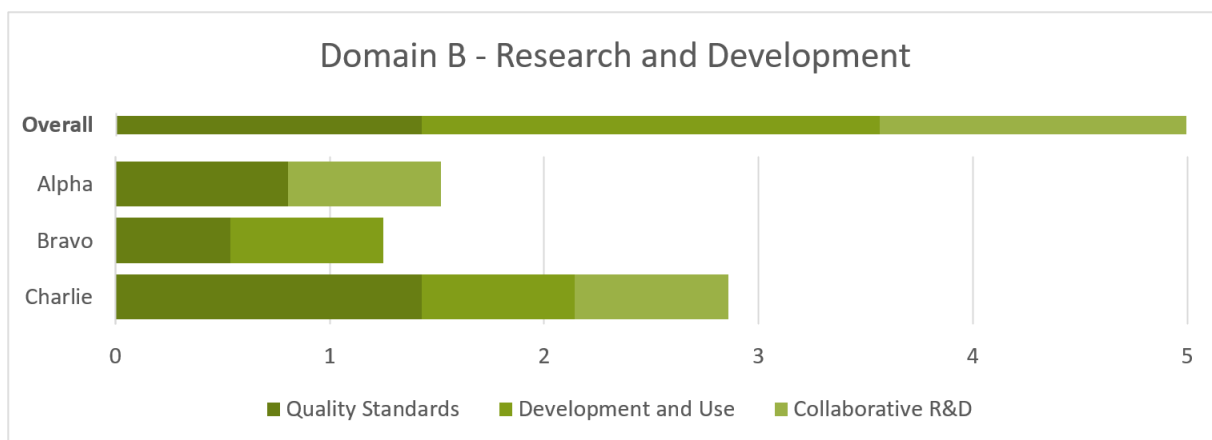
All organisations gained points for all themes within domain A. The differences between the organisations can be explained by the difference in the availability and comprehensiveness of the documentation and annual reports, like the annual reports on animal research and a management document regarding the assignment of responsibilities concerning animal testing and the transition to animal free innovation. Interviews with organisations Alfa and Bravo showed that there is much attention for these themes within the organisations. Draft updated versions of already existing documentation included descriptions of governance issues concerning the transition to animal free innovation and innovation in research.

Noticeably, all three organisations rarely mentioned the transition to animal free innovations instead focused on the 3R's. This may be explained by the fact that the government run programme Transition to Animal Free Innovation is a relatively young programme, while the 3R's have been around for many years.

Indicator A.III.2 – Managing for Index-related outcomes: Incentives, did not yield any information for any of the organisations. All three participants state they have no system in place to actively reward employees or research teams who contribute to the 3R's, transition to animal free innovation, animal welfare, or to the successful development and application of innovative (animal free) research models. During the interviews, this indicator encouraged interviewees to develop a tool to incentivise and reward employees.

DOMAIN B: RESEARCH AND DEVELOPMENT

The second domain covers research and development. This domain consists of seven indicators divided into three themes; 1) Quality standards, 2) Development and Use of Animal Free Research Models, 3) Collaborative R&D and Data Sharing.

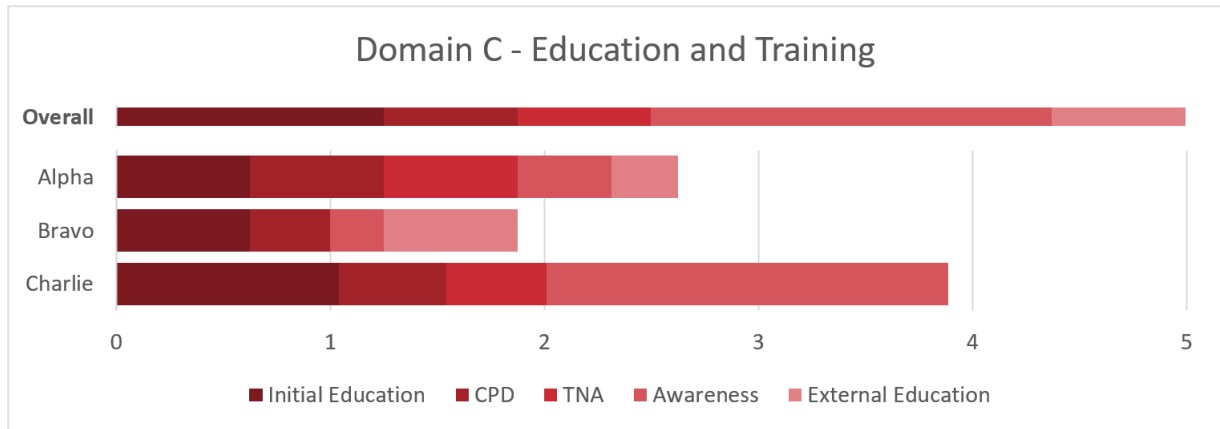


The graph displays the ranking within Domain B by organisation divided by themes. The indicators address the development and the practical application of animal free models and innovative research in a quantitative way. The score obtained in this domain was relatively low, which can be attributed to indicator B.III.2 and B.III.3, where no information was found at the level of the organisation as a whole. However, reports, i.e., summaries may be found at the departmental level. In the current version of the BATI the focus was on the higher organisational level. A next version could include the next level down and include the departmental and even the research group level.

This domain showed that the quality standards and type and kind of accreditations differ per organisation. This information was easily recovered in the governance documents and annual report on animal testing.

DOMAIN C: EDUCATION AND TRAINING

The third domain covers education and training. This domain consists of eight indicators divided into five themes: 1) Initial education, 2) Continuing Professional Development, 3) Training Need Assessment, 4) Awareness and 5) External Education.



The graph displays the ranking within domain C by organisation divided by themes. After domain A, the next most information was found in domain C. Compared to the other domains, organisation Alfa received a relatively high score.

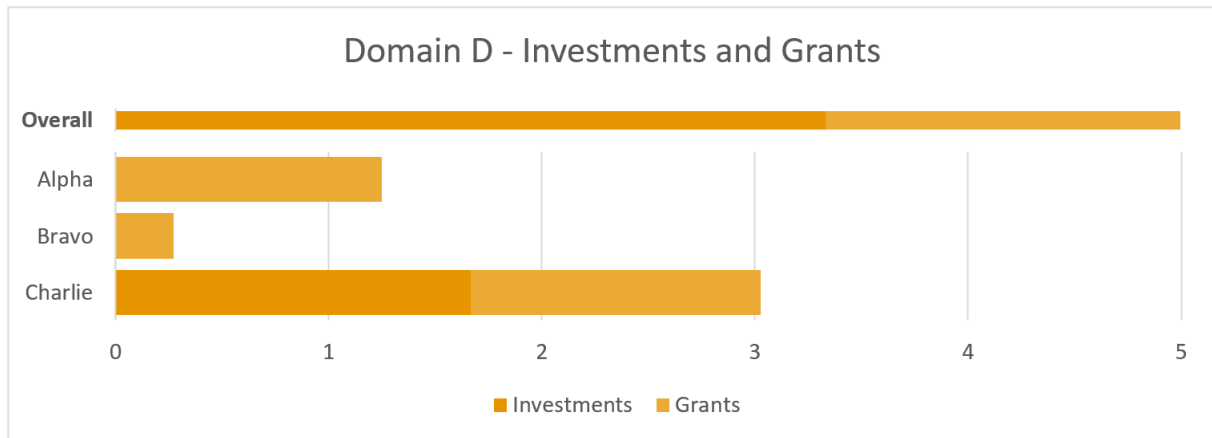
Organisations include the transition to animal free innovation into the curriculum and the professional development of their employees. One of the organisations had a separate governance document concerning the professional development of employees within the primary animal testing facility.

Additionally, a broad range of tools to create awareness within and outside of the organisations was noted, for example newsletters, websites, media performances and public events. Organisations reported about these activities on their website.

The next version of the Index could include an interview with the directorate of education.

DOMAIN D: INVESTMENTS AND GRANTS

The fourth domain regards Investments and Grants. The domain consists of three indicators divided into two themes: 1) Investments and 2) Grants.

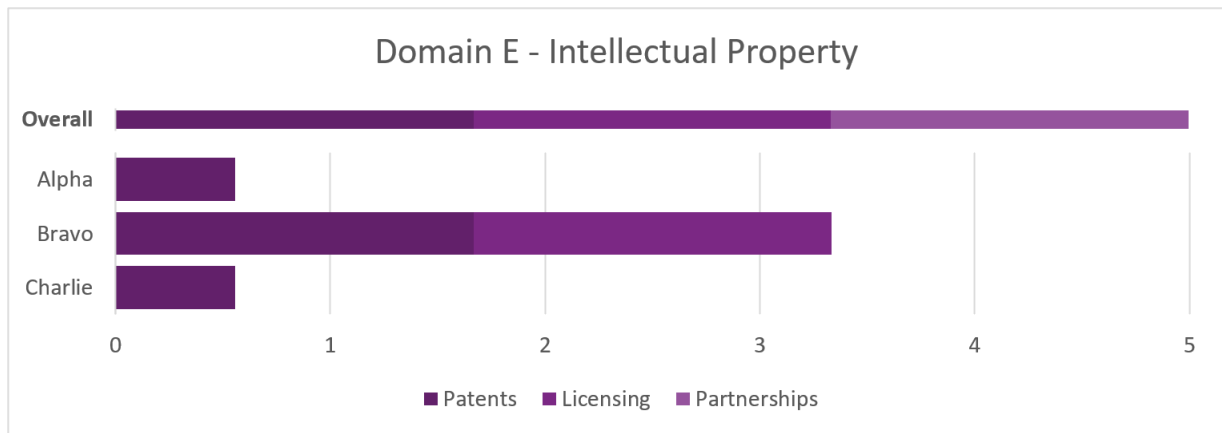


The graph displays the ranking of domain D by organisation divided by themes. The BATI research team tried to obtain the information about investments and grants at the level of the organisation. However, grant information was not recorded centrally rather per department or research group. Therefore, the BATI team decided to use databases from funders (national and international) to retrieve information on grants and the type of grants awarded per organisation.

For the theme 'grants' in this version of the BATI, the grant program 'Horizon 2020' of the 'European Commission' was included. Data from ZonMW was unfortunately received too late to include in into the ranking. The following search terms were used: 'animal-free', 'non-animal', 'reduce', 'replace', 'refine', '3Rs' en 'alternatives'. 65 projects were found and linked to each of the participating institutes. In the next version of the BATI, the team will include national grant providers.

DOMAIN E: INTELLECTUAL PROPERTY MANAGEMENT

The fifth and last domain concerns Intellectual Property Management. This domain consists of six indicators divided into three themes; 1) Patents, 2) Licensing and 3) Partnerships.



The graph displays the ranking of domain E by organisation by theme. In theme 1 (patents), all organisations were awarded points. In theme 3 however, none of the organisation obtained any points. From Interviews it became clear that often Intellectual Property Management is at the level of the research group and therefore difficult to retrieve. The next version of the BATI should consider including the departmental and research group management levels of the organisation.