

Reducing and replacing animal experiments: Europe needs an action plan

Dr Sam Saunders

Sam.Saunders@crueltyfreeinternational.org

UK Science Programme Manager

Cruelty Free International

(On behalf of Cruelty Free Europe)



Cruelty Free Europe

A Brussels-based network of animal protection groups working to bring animal testing to an end across Europe

Educating, challenging and inspiring others across Europe to respect and protect animals, we expose the reality of life for animals in laboratories, challenge decision-makers to make a positive difference for animals, and champion better science and cruelty free living

Vision: A Europe where nobody wants or believes we need to experiment on animals

Made up of Associate Members that are campaigning groups leading on animal protection in their respective European countries



Cruelty Free
INTERNATIONAL

Reducing and replacing animal experiments: Europe needs an action plan

Without pro-active targets,
more animals will suffer in
laboratories in Europe

Reducing and replacing animal experiments: Europe needs an action plan

The current animal testing landscape

The problems with animal testing

Factors preventing progress

The solutions

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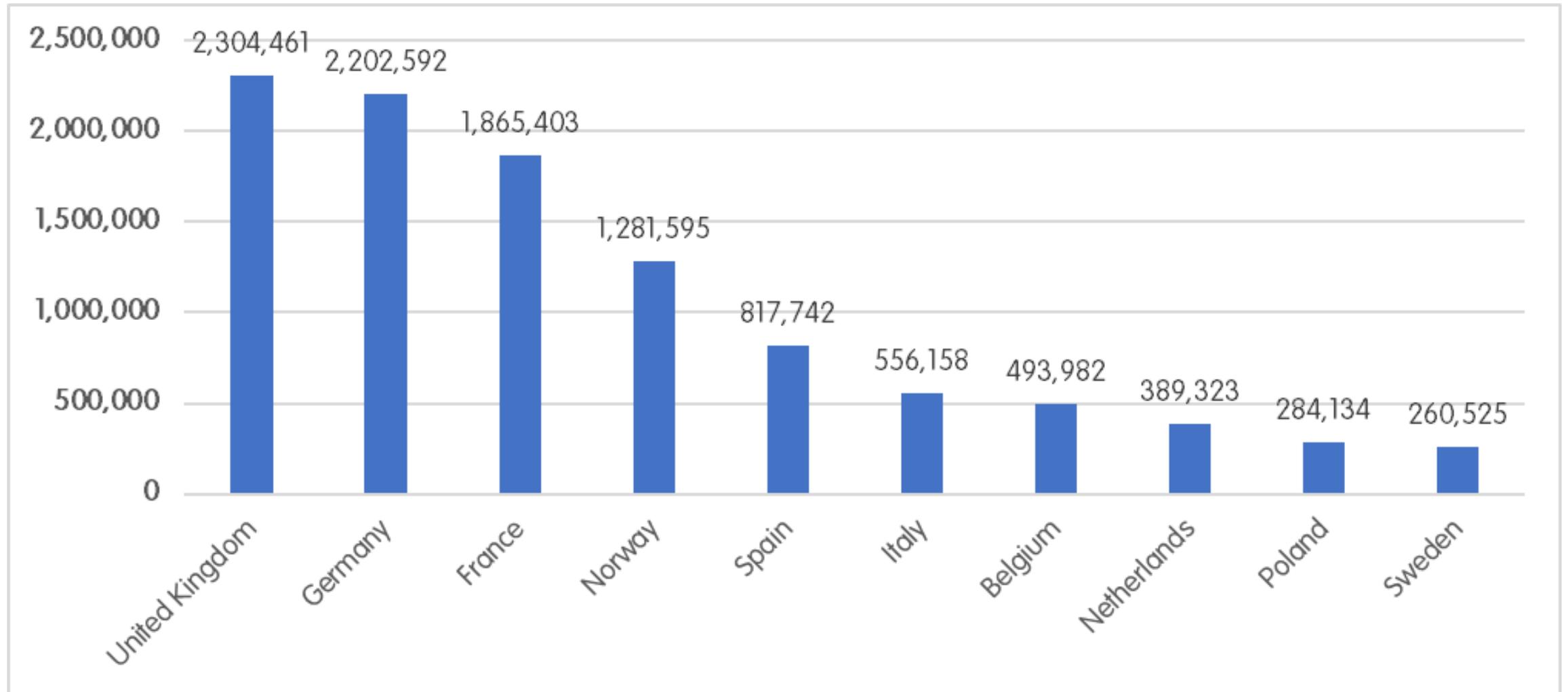
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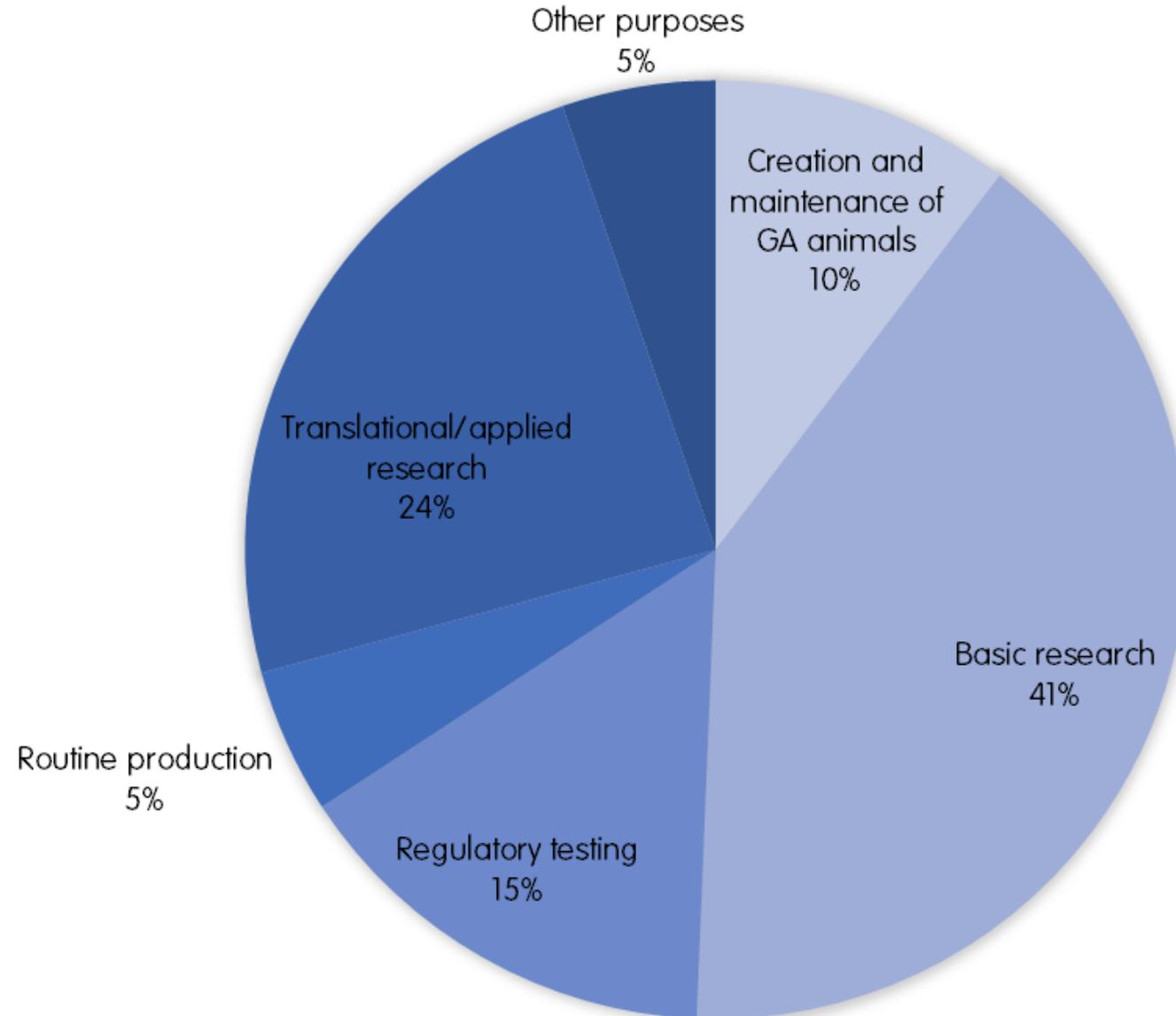
Use of animals across the EU member states and Norway, 1996-2019



Total uses of animals by EU member states and Norway in 2019 (top 10 only)



Total uses of animals by purpose in EU and Norway, 2019





Note: these figures do not include the ~12 million animals bred and killed each year in EU laboratories without being used in procedures

Public and political will

79% of EU citizens agree that Directive 2010/63/EU should prohibit all experiments on animals which do not relate to serious or life-threatening human conditions (BUAV and YouGov, 2009)

70% of EU citizens agree replacing animal tests with non-animal methods should be an EU priority (Savanta: ComRes and Cruelty Free Europe, 2020)

84% of EU citizens agree that Directive 2010/63/EU should prohibit all experiments causing severe pain or suffering to any animal (BUAV and YouGov, 2009)

66% of EU citizens agree that the EU should immediately end all animal tests (Savanta: ComRes and Cruelty Free Europe, 2020)

In September 2021, the European Parliament adopted a resolution which called on the Commission to draw up an EU-wide action plan for phasing out animal testing

72% of EU citizens agree that Europe should set targets and deadlines to phase out animal testing (Savanta: ComRes and Cruelty Free Europe, 2020)



European Union

European Citizens' Initiative

EN

EUROPEAN CITIZENS' INITIATIVE - Central online collection system

SAVE CRUELTY FREE COSMETICS - COMMIT TO A EUROPE WITHOUT ANIMAL TESTING

⊗ The collection of statements of support for this initiative has been disabled
We are currently not collecting statements of support for this initiative

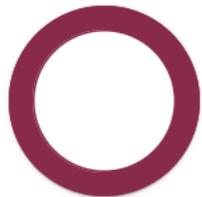
👤 Signatures collected online

1,413,383 / 1,000,000

🕒 End of the collection period: 31/08/2022



Czechia



699.05% of threshold for this country (103,495 / 14,805)

[View all countries](#)



Save Cruelty Free Cosmetics

Objectives

With the EU ban on cosmetics tests on animals came the promise of a Europe in which animals no longer suffer and die for the sake of cosmetics. That promise has been broken. Authorities still demand animal tests on ingredients used in cosmetics, which goes against the expectations and wishes of the public and the intention of legislators.

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Animal testing is fraught with ethical issues

Over ten million sentient animals suffer in tests each year in the EU that, by their nature, cause harm

Almost a million animal uses resulted in severe suffering in the EU in 2019, e.g. surgery expected to result in severe post-operative pain, inescapable electric shock, inducing toxicity to the point of death

Citizens have only limited, conditional support for animal testing, are opposed to much of the testing takes place and wish to see a proactive phase out strategy in place



Examples of severe experiments with approval in EU Member States, 2021

20 cats will undergo surgery to implant electrodes and other devices for recording their eye movements. They will then be subjected to recording sessions lasting two hours every other day for up to three months before being killed.

70 rats and 105 guinea pigs will be poisoned with highly toxic substances used as chemical weapons, causing agitation, salivation, breathlessness, seizures and/or unconsciousness.

1,426 mice will be injected into their abdomens with *Staphylococcus aureus* bacteria and left, without treatment, to become severely ill and die.

300 rats will have surgery to tie off branches of their sciatic nerve to mimic nerve damage. This will induce chronic pain. The rats will undergo daily behavioural tests to check the sensitivity of the foot of the affected leg.

80 mice will be made to undergo a simulated dry dive in a hyperbaric chamber to induce decompression sickness, signs of which include gasping, convulsions, weakness, cardio-respiratory arrest and death.

240 rabbits will undergo surgical mutilation and infection of their thigh bone, which, according to the researchers, will cause "severe pain".

Animal testing is fraught with scientific issues

92% of drugs fail in human clinical trials even though they passed preclinical tests, including animal tests (Biotechnology Innovation Organisation, 2021)

The failure rate for potential Alzheimer's drugs is estimated to be higher than 99% (Alteri and Guizzaro, 2018)

The discovery and development of new drugs typically takes an average of ten to 15 years to complete at a cost of \$2.6 billion per drug (Marchetti and Schellens, 2007; DiMasi et al., 2016)

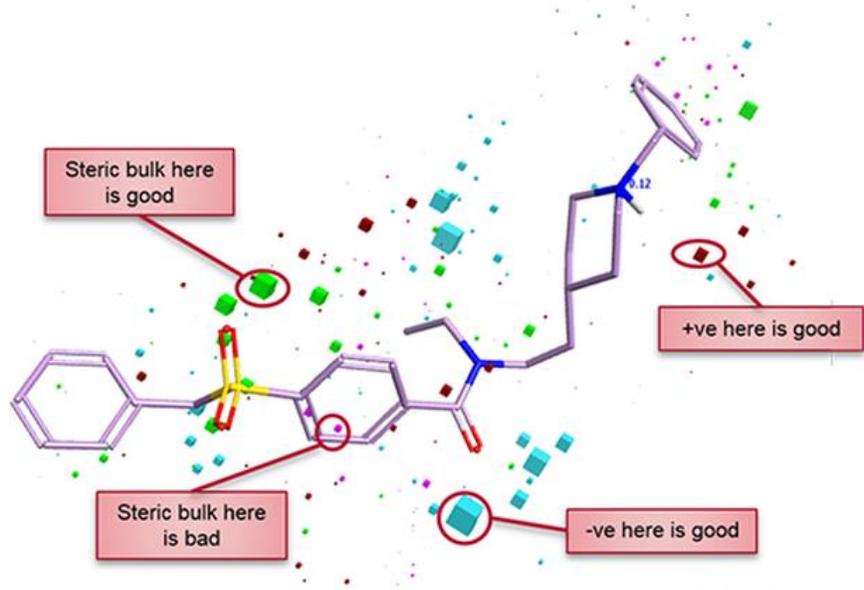
A review of 101 high impact basic science discoveries based on animal experiments found that only 5% resulted in approved treatments within 20 years (Contopoulos-Ioannidis et al., 2003)

A systematic review of highly cited animal studies from the top seven science journals found that only eight of 76 qualifying animal studies led to therapies approved for clinical use (Hackam, 2007)

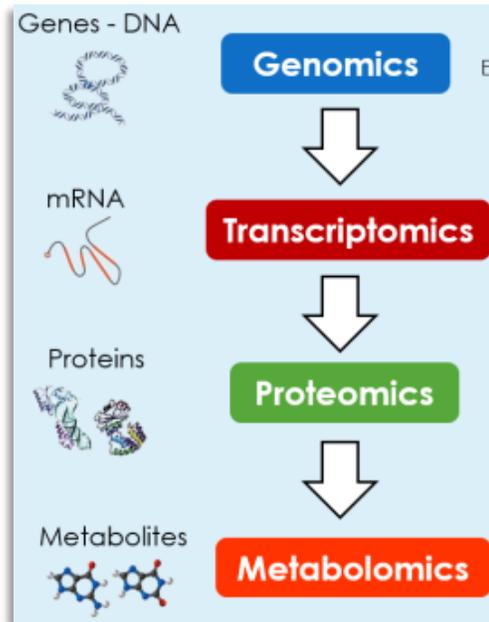
Of 27 claimed "medical breakthroughs" reported in the mainstream British media in 1995, only one had resulted in clinical use and, even then, with significant caveats (Bailey and Balls, 2020)

Human relevant, non-animal methods have the potential to transform drug development by being more reliable and predictive than animal tests, reducing the attrition rate between preclinical testing and market and therefore going some way to mitigating the drug development crisis

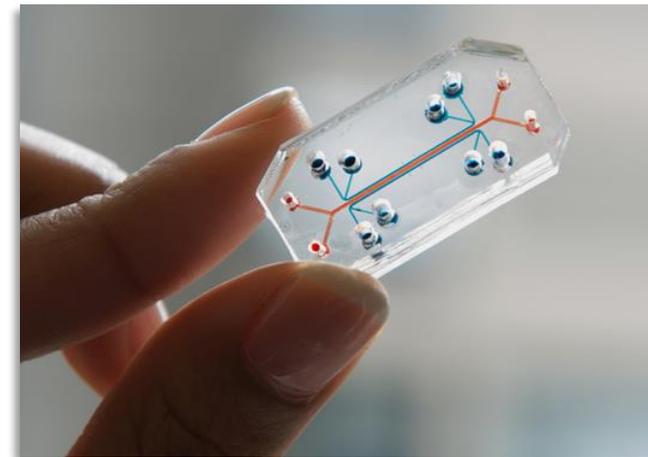




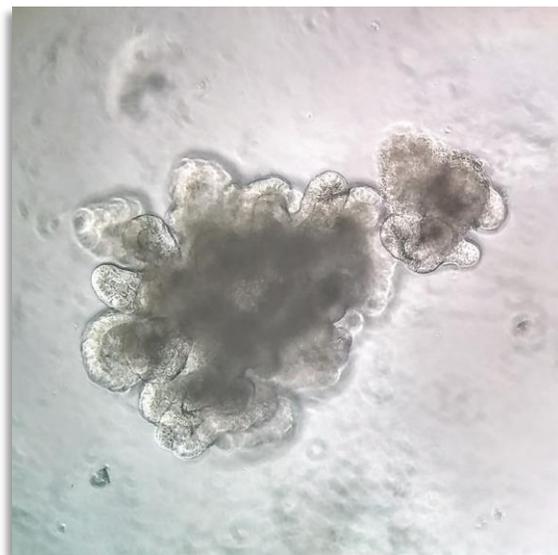
QSAR



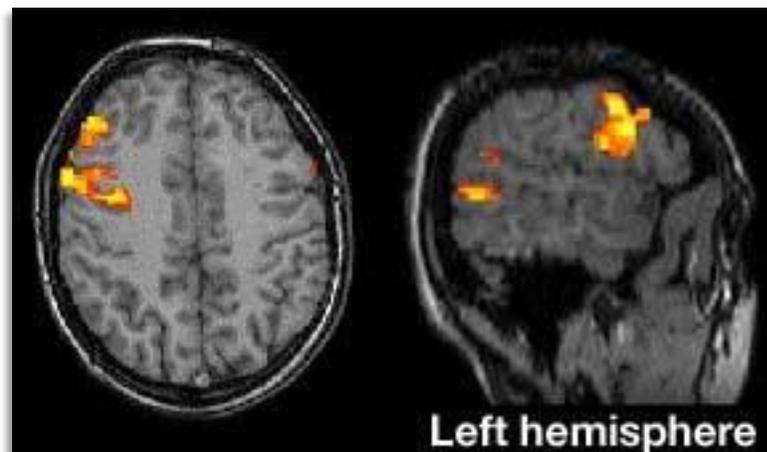
'Omics'



Organs-on-chips

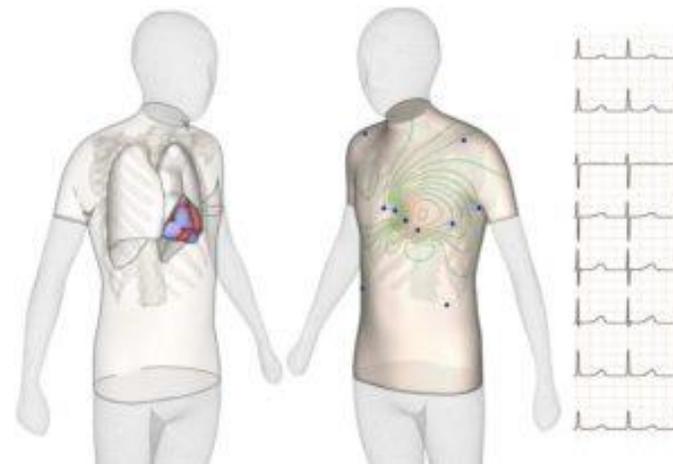


Organoids



Brain imaging

Virtual organs and organisms



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Factors preventing progress:



The fallacy of one-for-one replacement



Improper application of the harm-benefit assessment



Lack of funding for non-animal method development and use



Limited acceptance of animal-free regulatory tests



Psychological and social factors preventing progress

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Psychological and social factors preventing progress

Article 4

Principle of replacement, reduction and refinement

1. Member States shall ensure that, wherever possible, a scientifically satisfactory method or testing strategy, not entailing the use of live animals, shall be used instead of a procedure.

The problems with relying on one-for-one replacement:

1. It will take a long time
2. It mistakenly assumes all animal testing needs to be replaced
3. It doesn't account for the fact that new animal-based test methods are also being developed

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Article 38

Project evaluation

1. The project evaluation shall be performed with a degree of detail appropriate for the type of project and shall verify that the project meets the following criteria:

(d) a harm-benefit analysis of the project, to assess whether the harm to the animals in terms of suffering, pain and distress is justified by the expected outcome taking into account ethical considerations, and may ultimately benefit human beings, animals or the environment;

Tests of limited benefit and/or causing unacceptable harm:

1. Those using heavily criticised animal "models"
2. Those answering trivial questions
3. Duplicated tests
4. Those without support of the public (severe, certain species)

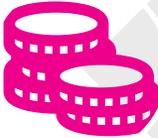
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Article 47

Alternative approaches

1. The Commission and the Member States shall contribute to the development and validation of alternative approaches which could provide the same or higher levels of information as those obtained in procedures using animals, but which do not involve the use of animals or use fewer animals or which entail less painful procedures, and they shall take such other steps as they consider appropriate to encourage research in this field.



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Psychological and social factors preventing progress

RAT list = **R**eplace **A**nimal **T**ests list

1 Skin irritation <small>#TheRatList Replace Animal Tests</small>		2 Eye irritation <small>#TheRatList Replace Animal Tests</small>		3 Skin sensitisation <small>#TheRatList Replace Animal Tests</small>		4 Pyrogenicity <small>#TheRatList Replace Animal Tests</small>		5 Botulinum toxin test <small>#TheRatList Replace Animal Tests</small>	
6 Antibody production <small>#TheRatList Replace Animal Tests</small>		7 Leptospira vaccine potency test <small>#TheRatList Replace Animal Tests</small>		8 Veterinary vaccines batch test <small>#TheRatList Replace Animal Tests</small>		9 Abnormal toxicity <small>#TheRatList Replace Animal Tests</small>		10 Shellfish toxins <small>#TheRatList Replace Animal Tests</small>	

crueltyfreeeurope.org/RATlist

Factors preventing progress:



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Europe needs an action plan!

European Parliament

2019-2024



TEXTS ADOPTED

P9_TA(2021)0387

Plans and actions to accelerate a transition to innovation without the use of animals in research, regulatory testing and education

European Parliament resolution of 16 September 2021 on plans and actions to accelerate the transition to innovation without the use of animals in research, regulatory testing and education (2021/2784(RSP))



Where could reductions come from?

Voluntary (i.e. non-regulatory) procedures – 7.7. million animals



Tests of limited benefit from the outset

Animal tests that have been replaced (RAT list) – 1.5 million animals

Animal tests that are redundant – up to 200,000 animals

“Surplus” animal breeding – 6.5 million conventional and 7.4 million genetically altered animals

How could a commitment to a phase out be made?

An EU-wide action plan for phasing out animal testing, including targets and timelines



Revision of Directive 2010/63/EU and sectoral legislation

A Commissioner for Animals

Commitment within Horizon Europe to increase funding for animal-free research

Better funding and support for relevant bodies and agencies

Who can help and how?

European Commission –
review Directive 2010/63/EU
and sectoral legislation,
conduct thematic reviews

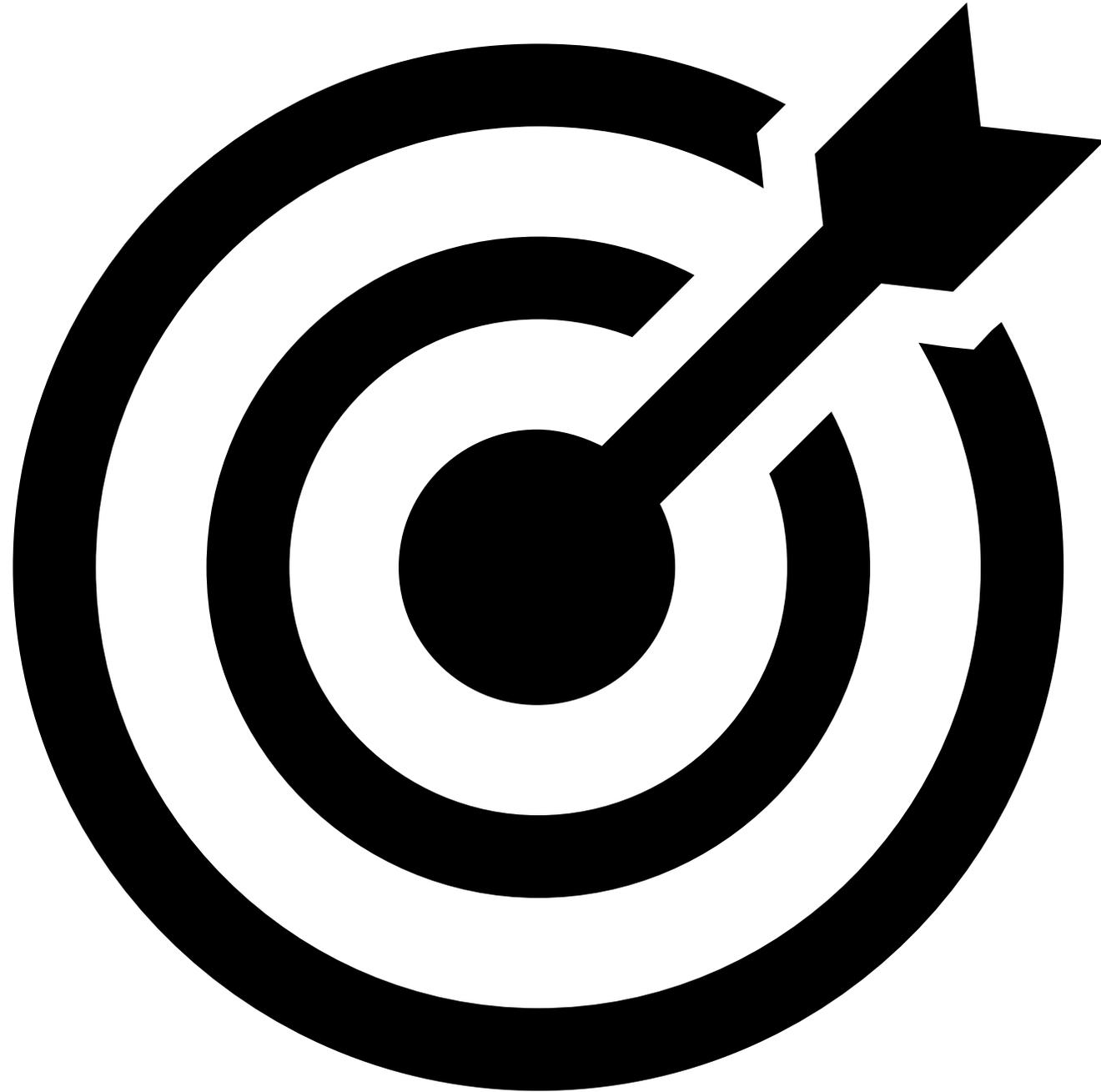


European Commission –
establish high level
interservice task force

Member States – set
national targets, increase
enforcement activities

Academic institutions,
funding bodies, companies
– set targets

EMA, EFSA, ECHA –
proactively support use of
non-animal methods and
share best practice



Summary

- Over 10 million animals are used each year in research and testing in the EU (plus an additional ~12 million bred but not used in procedures)
- Though animal use is declining, the pace of change is too slow
- Public and political support for animal testing is extremely conditional and limited
- Animal testing is fraught with scientific issues that undermine its reliability and relevance, limiting the benefits it produces for society
- A range of factors preventing progress towards phasing out animal testing include lack of a robust mechanism for change
- Europe urgently needs a coordinated action plan, incorporating targets and timelines, for ending animal use in research and testing





Thank you for your attention



Sam.Saunders@crueltyfreeinternational.org



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[Link to the report](#)