

Early Day Motion 1627

REPLACEMENT, REFINEMENT AND REDUCTION TESTING METHODS

That this house congratulates the nine EU and US companies that recently developed five alternative testing methods based on the 3Rs (Replacement, Refinement and Reduction) and which were validated on 27 April 2007 by the European Centre for the Validation of Alternative Methods (ECVAM); notes that the tests reduce time and costs and have the potential to provide more accurate results and a more reliable indication of chemical safety than animal tests; highlights that Great Britain is one of the largest users of laboratory animals in the EU, with numbers of scientific procedures using live animals increasing since 1997; is concerned that whilst in 2005 there were 528 licenses for animal testing projects granted, the National Centre for the Replacement, Refinement and Reduction of Animals in Research only received enough funding to back nine 3R projects; and calls on the Government to increase its funding to NC3R to help Great Britain contribute more towards the development of the 3Rs.

Facts & figures expose the truth

1. Confirmation that 3R research holds little priority

- Last year the NC3Rs allocated £1.4 million in support of 9 projects that could save millions of lives.
This figure is equivalent to the amount of expenses 9 MPs received last financial year.¹
- The Department of Health spends £6 billion on medicine alone, yet the Home Office only gave £125,000 to the NC3Rs for the financial year 2005-06, and only £250,000 for 2006-07².

2. Small number of 3R research projects in comparison to research projects using animals

Last year the NC3Rs promised to fund **9** projects (for 3R research)³

versus

Last year the Home Office granted **528** project licences (for research using animals)⁴

On 31st December 2005, the maximum number of 3R projects that could have been active was **11** *

versus

On 31st December 2005, **2886** project licences were active⁵

* Three projects were granted funding in 2004 and eight projects were granted funding in 2005. Each project can last up to 3 years.

¹ <http://www.parliament.uk/documents/upload/HoAllowances0506current.pdf>

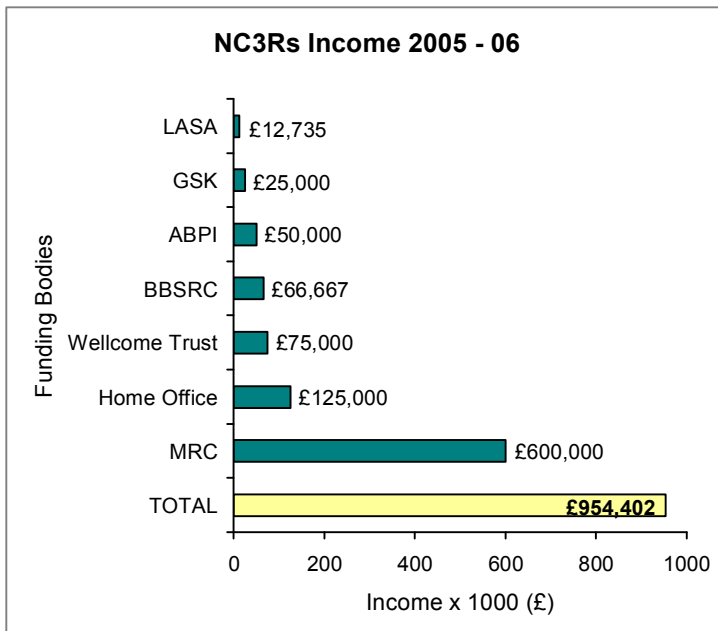
² <http://www.publications.parliament.uk> – Commons written answers, 16th April 07

³ <http://www.nc3rs.org.uk/downloaddoc.asp?id=500&page=201&skin=0>

⁴ Statistics of Scientific Procedures on Living Animals, Great Britain, 2005

⁵ Statistics of Scientific Procedures on Living Animals, Great Britain, 2005

3. NC3R's Income⁶



- MRC** - Medical Research Council
- BBSRC** - Biotechnology and Biological Sciences Research
- ABPI** - Association of the British Pharmaceutical Industry
- GSK** - GlaxoSmithKline
- LASA** - Laboratory Animal Science Association

- **Note:** the Home Office gave £125,000 last financial year – only 0.000008% of their total departmental expenditure during that period.⁷

Figure 1

4. Comparison of income and expenditure of 3R research and research using animals^{8 9}

- **Note:** The BBSRC's and MRC's income and expenditure far exceeds that of the NC3Rs, so much so that the NC3Rs figures do not display on the graph.
- Although the BBSRC donates money to the NC3Rs (figure 1), this only amounts to 0.0002% of the funds it receives from the Government. (figure 2)
- The MRC also donates money to the NC3Rs (figure 1), but this only amounts to 0.001% of the funds it receives from the Government. (figure 2)
- The *actual* figure that the NC3Rs spent on research (figure 2) is less than the £1.4m that was allocated to fund 9 projects last year. This is because each project can last up to 3 years and the grants are awarded intermittently throughout this period.

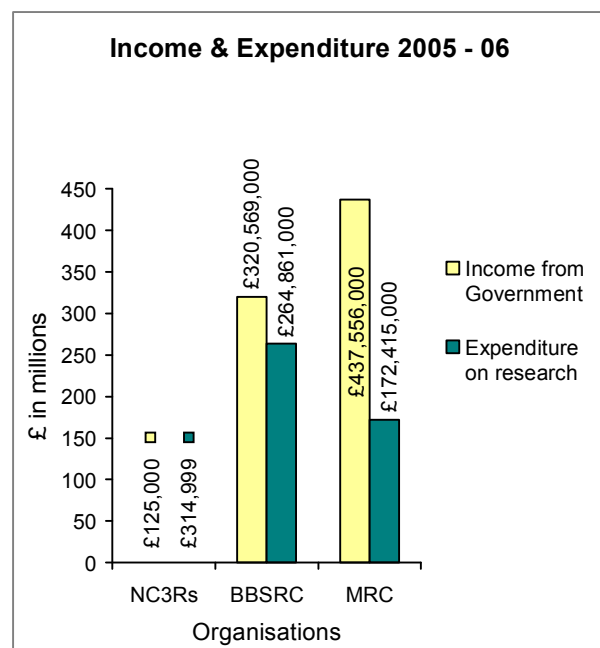


Figure 2

⁶ <http://www.nc3rs.org.uk/downloaddoc.asp?id=500&page=201&skin=0>

⁷ http://www.publications.parliament.uk/pa/cm200607/cmhansrd/cm070220/wmstext/70220m0006.htm#column_29WS

⁸ <http://www.mrc.ac.uk/Utilities/Documentrecord/index.htm?d=MRC003338>

⁹ http://www.bbsrc.ac.uk/about/pub/policy/bbsrc_annual_05_06.pdf

5. Non-animal research is more accurate. Animal experiments cannot offer such precision.

- “In addition to animal welfare benefits, alternative methods also have the potential to provide robust information through quality-controlled, state-of-the-art-tests which are faster and less cost-intensive than classical animal-based tests.”¹⁰
- In vitro (non-animal) procedures “generate better data on the potential risks humans face from environmental agents, building a stronger scientific foundation that can improve regulatory decisions to mitigate those risks, and reducing the time, money, and animals needed for testing.”¹¹
- Of the drugs that successfully pass the animal testing phase, over 90% fail at the clinical trial stage.¹²
- In a 2004 survey, 82% of UK GPs expressed their concern “that animal data can be misleading when applied to humans”.¹³
- Ironically, our 4th biggest killer (after cancer, heart disease and stroke) is caused by adverse reactions to prescription drugs.¹⁴

REZULIN ✓ Succeeded in animal tests & went on US market.
 ✗ Withdrawn following 63 fatalities.

VIOXX ✓ Succeeded in animal tests & went on the market.
 ✗ Withdrawn after extended clinical trials revealed heart attack & stroke risks.

TGN1412 ✓ Succeeded in animal tests.
 ✗ Caused multiple organ failure in clinical trials.

SEREVENT ✗ Unsuccessful in animal tests, yet researchers decided to proceed with clinical tests.
 ✓ Highly successful in clinical tests.
 • How many quality drugs have been dismissed for not passing the animal research stage?

Systematic review¹⁵ • Experts examined 228 animal-based drug analyses, focusing on 6 representative areas of research, comparing animal research results against human trial results, to assess whether they matched or not.
 ✗ Only 1/2 of them matched, suggesting that the results from animal experiments are not a reliable source of research.

With additional funding, the NC3Rs could lead Britain to the forefront of innovative science and research.

This is now a matter of urgency as an estimated 10 million animals will be used to test over 30,000 chemicals under the EU REACH regulation that came into force on 1st June '07.

Your decision of whether to sign this EDM will determine Great Britain’s future contribution towards the development of the 3Rs.

¹⁰ European Commission Working Document - http://ec.europa.eu/environment/chemicals/lab_animals/pdf/com_2006_14.pdf

¹¹ National Research Council – <http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=11970>

¹² Dr. Jarrod Bailey; Safer Medicines video - <http://www.veoh.com/videos/v404499SJxbPccm>

¹³ http://www.mrmcmed.org/Critical_Look.pdf

¹⁴ Kathy Archibald; Safer Medicines video - <http://www.veoh.com/videos/v404499SJxbPccm>

¹⁵ <http://www.bmj.com/cgi/rapidpdf/bmj.39048.407928.BEv1>