

A recent report has exposed a controversial test being used on animals to gauge the toxicity of botulinum toxin. **Laura McCreddie** learns the truth about LD50

Botox rival in testing scandal

Celebrities such as Ricky Gervais and Chrissie Hynde have spoken out after the British Union for the Abolition of Vivisection (BUAV) uncovered evidence that animals at Wickham Laboratories in Hampshire were subjected to extreme cruelty during the testing of the botulinum toxin, and rival to industry leader Botox, Dysport.

The condemnations came after the BUAV also revealed in November that around 74,000 mice have been subjected to the controversial LD50 test. LD50 refers to the average lethal dose of a toxic substance that is required to kill half the members of the tested population. The result is used as an indicator of the substance's acute toxicity (high doses over a 24-hour period).

The test is controversial because its results vary greatly depending on factors such as environment, mode of administration of the substance and animal species used. It also only measures acute as opposed to chronic toxicity (lower dosages over a longer period of time) and also does not take into account toxic effects that do not result in death – for example, brain damage.

Vivisection has been allowed to be carried out on this anti-wrinkle injectable because it is licensed by the MHRA for use in the UK for medical purposes, but is also used off-label for cosmetic reasons.

The report was the result of eight months of undercover investigation by the BUAV. Director of Special Projects Sarah Kite explained why they decided to infiltrate. She said: "Despite a UK and EU ban on the use of animals for cosmetic testing, there is a loophole in the law, which allows animals to continue to suffer dreadfully in tests for botulinum toxin, a product that, although licensed for medical use, is ending up being used – quite legally – for cosmetic purposes."

BUAV is calling on consumers to put pressure on the manufacturers of anti-wrinkle injectables to



BUAV is campaigning for the LD50 test to be replaced by the SNAP-25 assay

stop testing on mice and to use the SNAP-25 assay instead. This test measures the effects of the toxin in a test tube and, according to the BUAV, is a suitable replacement for the LD50 test.

A spokeswoman for Ipsen, the manufacturer of Dysport, defended its use of the LD50 test, saying: "At the moment it is the only test recognised by regulatory bodies to ascertain the safety of botulinum toxin. However, research is under way to find a non-animal method."

She also added that although

Ipsen is still using Wickham Laboratory as a testing facility, it is conducting its own inquiry into the allegations of cruelty.

Allergan, the company behind Botox, was quick to distance itself from the investigation. A spokesperson for the brand said: "The undercover investigation was carried out at Wickham Laboratories where they were testing the botulinum toxin Dysport – not Botox."

However, it also defended its own use of the LD50 test. The spokesperson added: "LD50 tests are still

ANIMAL TESTING: THE LAW

The Home Office licenses testing on animals, but only when there is no alternative. Tests that cause pain or distress, or where the animal's death is the end result, are not sanctioned.

The Animal Procedures Committee is the non-departmental advisory body that advises the Home Secretary on matters concerning the Animals (Scientific Procedures) Act 1986. It is made up of a wide variety of people, from those who use animals in experiments to those who oppose such practices.

stipulated by the regulatory authorities around the world. While mandated to conform to these requirements, Allergan strives to minimise animal testing."

Dr Patrick Treacy, regional representative for Northern and the Republic of Ireland at the British Association of Cosmetic Doctors, spoke of the need for an LD50 replacement. "As someone with further qualifications in molecular biology, it is apparent that alternative assays are urgently needed to replace vivo bioassay methods for assessment of the safety and potency of these botulinum neurotoxin-based therapeutic products," he said.

"From my understanding, the SNAP-25 assay has been proved to be more sensitive than the mouse bioassay for detection of toxins in therapeutic preparations."

A spokesperson for the Animal Procedures Committee said that the Home Office would be looking into the reports of animal neglect at Wickham Laboratories and the use of the LD50 test. He said: "The Home Office Minister Meg Hillier MP commissioned a review of procedures and I understand that the scope of the review will also cover the appropriateness of the use of LD50 test in this instance." **PB**

Consumer view

What do you think about botulinum toxin testing?



"This is despicable and it would be a

reason for me not to have the treatment. It's a product aimed at people's vanity rather than to improve their health."

Richard Lyons, script writer, Leeds



"This would put me off, and I'm not much

of an animal lover. I wouldn't have the treatment because of this, and would try to find alternatives not tested on animals."

Sonia Dzivane, sales manager, Edinburgh



"I don't agree with testing animals in this way

for a cosmetic procedure that is unnecessary. I didn't realise this happened and it would put me off having the treatment."

Lisa Berwin, senior reporter, London