XCellR8
Redefining testing

World-leading **science** *World-leading* **ethics**

ANIMAL-FREE *IN VITRO* SAFETY
AND EFFICACY TESTING SERVICES
FOR THE COSMETICS INDUSTRY

Our founders Dr Carol Treasure and Bushra Sim

"From an early stage in our careers, we arrived at the conclusion that animal testing poses not only ethical issues, but scientific ones too"

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"We met at the University of Nottingham in 1996, so we've been colleagues and friends for over 25 years. From an early stage in our careers, we arrived at the conclusion that animal testing poses not only ethical issues, but scientific ones too – so we teamed up to run the European business of a US-based company providing human cell culture systems to scientists.

Data from animal tests, most of which had never been validated, simply was not accurate enough to predict human safety to an acceptable standard. In 2008 we took the plunge and founded XCellR8, with a mission to XCellR8 the world's transition to 100% animal-free testing.

Over the years, we have built a reputation for delivering high quality science. We provide OECD Test Guidelines in full compliance with GLP, enabling ingredient manufacturers to meet regulatory requirements in their safety assessments. Our additional portfolio of innovative non-regulatory tests helps build a weight-of-evidence on safety and efficacy and supports new product development. We love getting to know and working closely with our clients, helping to design testing strategies as unique as every new product or ingredient designed for the vibrant cosmetics industry.

One of the aspects we are most proud of is our animal-product-free (APF) approach, which makes us globally unique among regulatory testing labs. It's an often-overlooked fact that the majority of *in vitro* methods use animal-derived components. At XCellR8, our APF commitment means that we don't use any animals or animal derivatives in our lab. Each test comes with a full ethical assessment - a critical factor in the current global climate - where total transparency is increasingly important, particularly for products making vegan claims.

We still refuse to accept the current status quo of safety testing and believe our industry has reached a tipping point where animal-free tests now represent the default rather than the alternative. We are proud to be at the forefront of this movement, by continually researching new innovative science with maximum human relevance, to enhance the safety and efficacy of cosmetic products and ingredients."

Innovative *in vitro* technology

XCellR8 offers a wide portfolio of in vitro *safety, toxicological and efficacy tests from our 3,568 sq ft premises at the National Science and Innovation Campus, Sci-Tech Daresbury, UK.*

Backed by consultancy support, our tests ensure the safety and efficacy of your product or cosmetic ingredient to support their claims.

DEEP EXPERTISE IN THE COSMETIC INDUSTRY

Ingredient manufacturers, cosmetic companies and multi-national brand owners around the world trust us with their regulatory testing strategies and use our test data in new product development programmes, often partnering with us to develop new *in vitro* methods where they don't currently exist. Our service is designed to help clients launch new personal care products and ingredients that satisfy consumer demands for safe, cruelty-free or vegan cosmetics, while achieving cosmetic regulatory compliance.

We are GLP accredited by the MHRA, offering animal-free *in vitro* safety tests performed in compliance with OECD Test Guidelines. We contribute to OECD expert working groups, as well as being regular international conference speakers.

Cosmetics and personal care *testing services*

Our expert technical team is here to offer help and guidance at all stages of your new cosmetic product development process.

From safety and toxicology evaluation and regulatory submissions, to efficacy assessments to support cosmetic claims, we can provide powerful *in vitro* data from our GLP accredited lab to optimise the candidate formulations you progress with or take into clinical testing.

You might learn the most effective concentration of an active ingredient or compare the efficacy of several different compounds. We have in depth experience of testing a wide variety of products and ingredients, such as shower gels, shampoos, moisturisers and baby products, as well as anti-ageing formulas, surfactants and botanical ingredients.

In vitro safety testing services

END POINT	REGULATORY SAFETY TESTS *These tests are performed to GLP compliance. They meet the requirements of OECD Test Guidelines and comply with regulations including REACH and EU Cosmetics Regulation 1223/2009.*	NON-REGULATORY SAFETY TESTS *These tests can be used as part of a weight-of-evidence approach to safety assessment or as a useful screen in new product development.*
Skin corrosion	OECD TG 431 Reconstructed human epidermis (RhE)	n/a
Skin irritation	OECD TG 439 Reconstructed human epidermis (RhE)	Skin irritation ET50: Reconstructed human epidermis (RhE) XtraMild Mildness to skin Phototoxicity (Photo-irritation)
Eye irritation	OECD TG 492 Reconstructed human cornea-like epithelium (RhCE) OECD TG 496 Macromolecular test method (Irritection®)	Eye irritation ET50: Reconstructed human cornea-like epithelium (RhCE)
Skin sensitisation	OECD TG 442C DPRA OECD TG 442D KeratinoSens™ OECD TG 442E h-CLAT	GARD®skin GARD®skin APF GARD®potency 3D skin model* kDPRA*
Genotoxicity	OECD TG 487 Micronucleus Test*	BlueScreen Animal-Free (BS-AF) Reconstructed human epidermis (RhE) with BS-AF Micronucleus Test
Acute toxicity	n/a	AcutoX: Human cell based screen
Inhalation toxicity	n/a	Respiratory irritation: Reconstructed human airway epithelium GARD®air
Oral care	n/a	Oral irritation: Reconstructed human oral epithelium Gingival irritation: Reconstructed human gingival epithelium
Intimate care	n/a	Vaginal irritation: Reconstructed human vaginal epithelium
Cytotoxicity	n/a	Cytoxicity: MTT and Neutral Red Uptake (NRU) Cytoxicity: ISO 10993-5

*Coming soon

In vitro efficacy testing services

Our most popular cosmetic efficacy claims include:

- Mildness to skin
- Mildness to eyes
- Antioxidant activity (OxiSelect™ method)
- Anti-pollution
- Anti-ageing
- Skin pigmentation (MelanoDerm™ method)
- Spot reduction

Suitable for natural cosmetic claims, vegan tested claims and for demonstrating social commitment and environmental responsibility.

We are always happy to develop bespoke tests so if you would like help to support a cosmetic claim not listed here, please get in touch with us.

WORLD-CLASS EXPERTISE

We contribute to major international expert regulatory and working groups, as well as enjoying regular platforms at industry conferences, panels and debates. This keeps us at the forefront of the latest thinking in animal-free technologies, and helps foster a culture of continual innovation for our efficacy testing services.

Vegan®

XCELLR8'S DPRA TEST IS CERTIFIED
BY THE VEGAN SOCIETY

www.x-cellr8.com **sales@x-cellr8.com** **+44 (0)1925 607 134**

Why choose *XCellR8*

SATISFY CONSUMER DEMAND FOR A MORE ETHICAL SUPPLY CHAIN

We can support 'vegan tested' claims and have adapted our test methods to animal-product-free conditions; our unique scale of animal-free testing helps you plan your cruelty-free strategy

MORE ACCURATE AND PREDICTIVE SAFETY TEST RESULTS

We use scientifically advanced human cell culture models and other *in vitro* techniques

GET YOUR RESULTS FASTER

With turnaround times from as little as 6 weeks, and express options available

MEET YOUR REGULATORY REQUIREMENTS

GLP accredited lab offering a range of animal-free tests that are compliant with the OECD test guidelines

ALREADY TRUSTED BY LEADING COSMETIC COMPANIES AROUND THE WORLD

Our clients include global retailers such as Lush and The Body Shop as well as multinational brand owners and ingredient manufacturers

AN ETHOS OF EXCELLENT CLIENT SERVICE

Our team put you and your needs at the heart of your testing programme

Why choose *100% animal-free*

Many in vitro *test methods still use animal-derived components such as Foetal Bovine Serum (FBS), tissue extracts and antibodies.*

However, an increasing body of evidence shows the importance of having a system that models human physiology as closely as possible, rather than relying on the use of animal-based culture systems. The significant ethical issues surrounding the use of animal-derived components, especially FBS, have also been well documented.

OUR ANIMAL PRODUCT FREE (APF) APPROACH

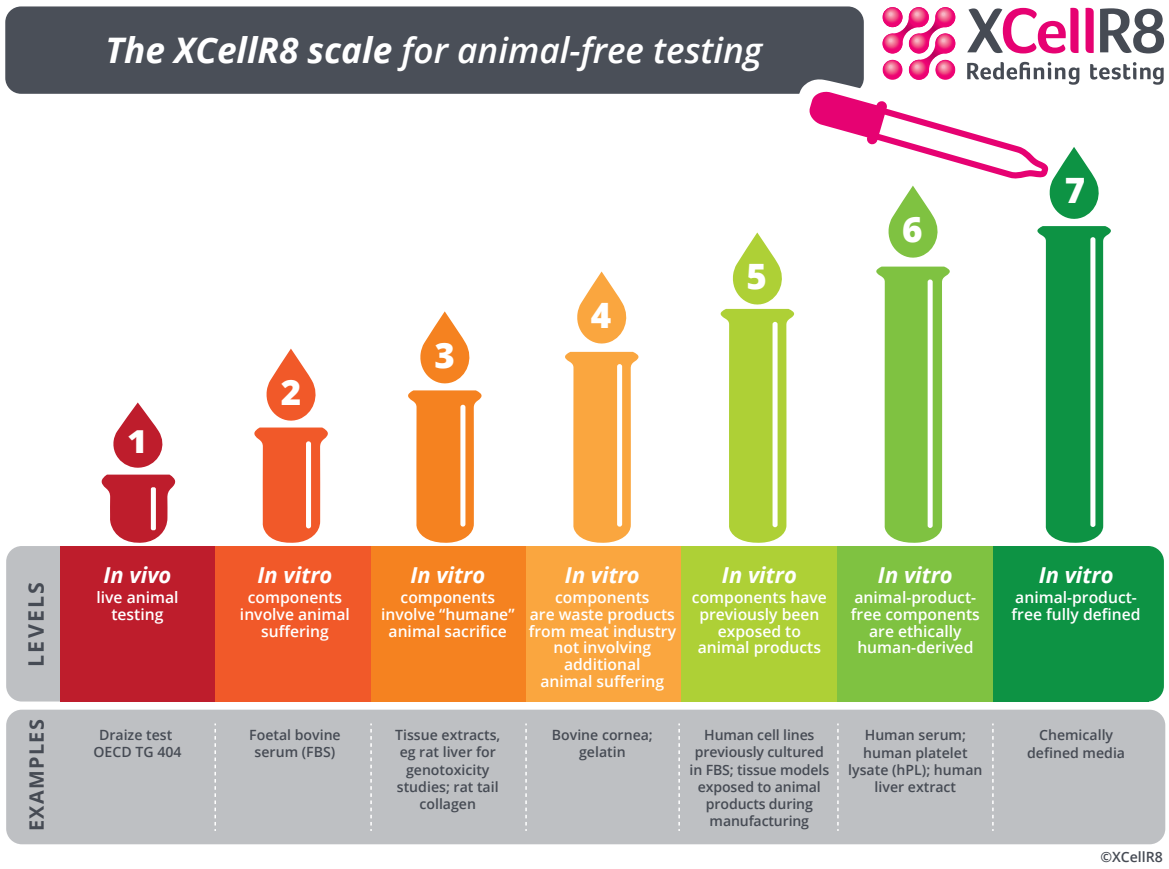
At XCellR8, we've invested years of research into developing adaptations of existing safety tests, where all animal components have been eliminated. In their place, we use human-derived serum and antibodies from approved sources as well as chemically defined products. Our approach maximises both the human relevance and reproducibility of the test results while maintaining regulatory compliance. Our adaptation of the skin sensitisation test KeratinoSens™ is now incorporated into OECD Test Guideline 442D, and we have several projects underway to ensure APF versions of other TGs become available for regulatory use.

Discover more about animal product free testing:

READ OUR ARTICLE

Why choose *100% animal-free*

Understanding the animal-free status of *in vitro* tests is important for cosmetic products and ingredients, especially those aimed at the rapidly increasing number of vegan consumers globally. Our 7-point scale for animal-free testing can be used as a tool to aid transparency across industry and to help with decision making about which tests are acceptable. The scale clearly shows a progression from the use of animals or components that cause animal sacrifice or suffering, through to waste products (eg from the meat industry) and human-based alternatives, finally progressing to fully APF, defined *in vitro* systems.



WE DON'T USE ANY ANIMALS OR ANIMAL-DERIVED PRODUCTS IN OUR LABORATORY

Every test that we offer comes with a complete, transparent ethical assessment. We undertake full due diligence with our suppliers to understand whether any test components have been exposed to animal derivatives during manufacturing. In this way we are constantly driving positive change in the supply chain, and ensuring we continue to push back the boundaries of what's possible.

We believe animal-free should mean animal product free too. It's the best way to maximise human safety without making compromises on animal welfare.

"A growing number of in vitro *assays are included in the Guidelines that can be used as alternatives to animal studies. There is increasing interest for these assays to also be free from animal-derived products to improve human relevance and reproducibility, and to reduce the use of animals … More generally improved* in vitro *assays would be relevant to a range of industrial sectors including those where animal testing is not conducted (e.g. cosmetics)."*

NC3Rs, CRACK-IT Challenge 36, 2020

Our values

Xtraordinary
Inspired by pioneering animal-free science
Xcellence
Delivering exceptional quality in all that we do
Xemplary
Always treating others with respect and integrity
Xtramile
Consistently exceeding expectations

Trusted by leading companies

"Our partnership with XCellR8 enhances the safety of our customers and brings benefits for the whole industry."

KARL BYGRAVE
DIRECTOR, LUSH

"The XCellR8 team is so responsive and easy to work with. We also admire the fact that XCellR8 is at the forefront of research into alternatives to animal testing (including the use of animal-derived components in certain *in vitro* tests) Pricing is very competitive and their project turnaround times are exactly as promised."

DR CHRIS EACOTT
MANAGING DIRECTOR,
STEWARDSHIP SOLUTIONS

"I have been delighted with XCellR8's service and especially the explanation and mentoring, often about emerging methodology, which has been invaluable."

CAROL SHEANE
REGULATORY MANAGER, ITACONIX

"The results provide a trustworthy dataset to take to market, meeting demand for ultra-mild surfactants that have been tested in animal-free conditions."

SEAN HODGKINSON
SALES DIRECTOR, LANKEM

Hosting Instagram influencers in the XCellR8 lab as part of an education campaign with The Body Shop about animal-free testing.

CONTACT US

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