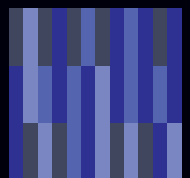


PARTNER.

INNOVATE.

DELIVER.



SIMCRO™

PARTNER.
INNOVATE.
DELIVER.



REVOLUTIONARY SEKURUS™
TWO-STAGE SAFETY INJECTOR
INCORPORATING THE PATENTED
SELF TENDING NEEDLE
GUARD ENABLING USERS TO
ADMINISTER ONE-HANDED
SUBCUTANEOUS INJECTIONS.



THE BEAUTY IS IN THE DETAILS

A Simcro solution is built on solid partnerships, genuine innovation and trusted ability to deliver. With a long history in pharmaceutical delivery systems our focus is on the future.

As the world grows, the pressure is on to develop more efficacious pharmaceutical treatments for production and companion animals. This can often mean creating compounds that are challenging or even dangerous to administer using traditional delivery system methodologies. Simcro has proven experience creating highly innovative solutions to administer these discoveries effectively, efficiently, and safely.

Our most recent developments, such as the Optiline™ sheep drencher for Novartis Animal Health, the Sekurus™ safety injector family for Pfizer Animal Health, and the intramammary syringe for Merial, have all overcome significant challenges that previously had never been solved. These projects highlight Simcro's ability to deliver solutions that others can't imagine.

We also know there's more to consider than simply delivering an unfailingly accurate dose. Our solutions are fully integrated and include primary and secondary packaging, protective shrouds and related accessories. A focus on animal welfare, operator safety, treatment efficacy, user experience and commercial viability are the hallmarks of our products. Simcro products enhance the value of our clients' brands.

Simcro Partners, Innovates and Delivers.

PARTNER.

INNOVATE.

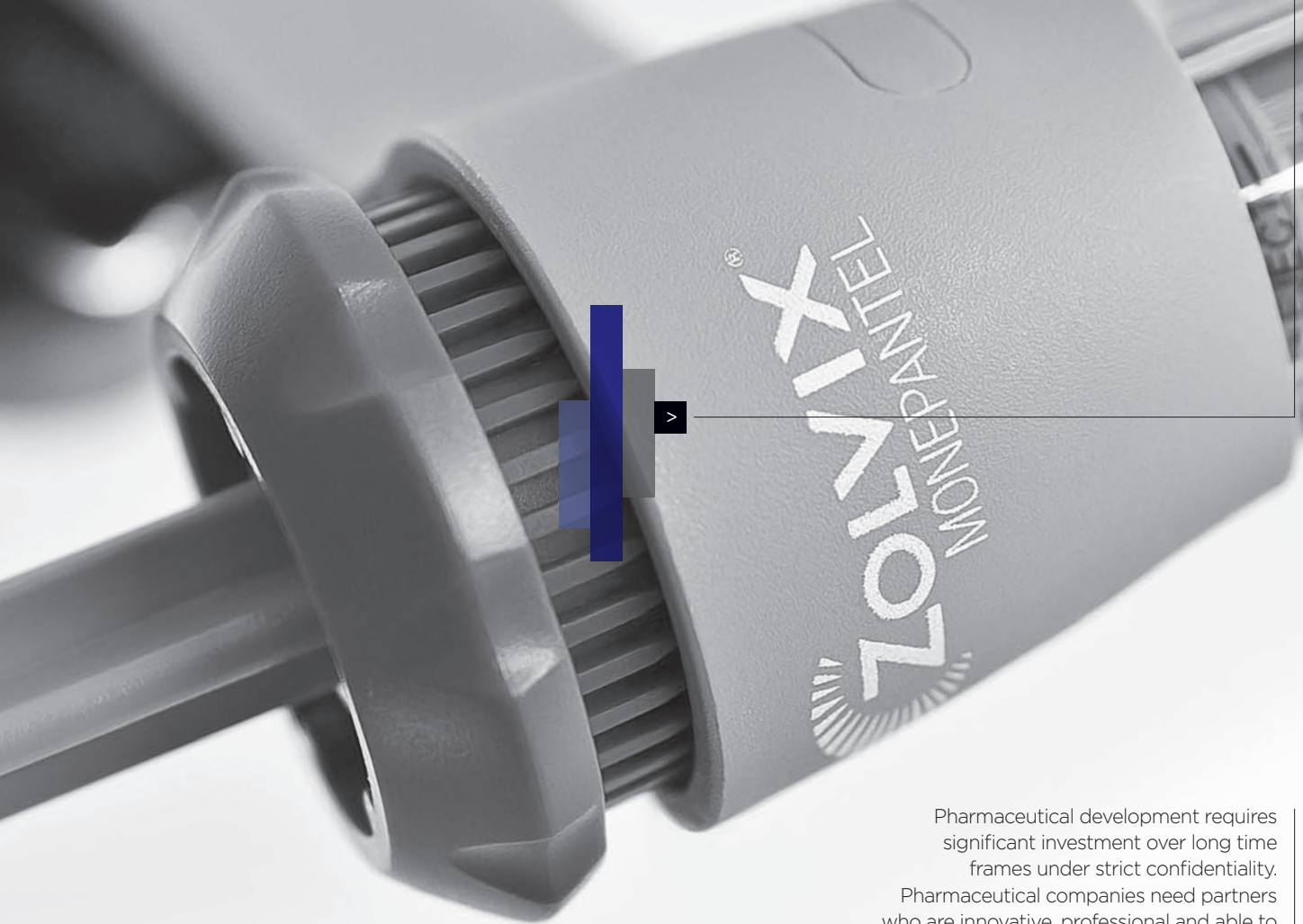
DELIVER.

COLLABORATIVE,

CONFIDENTIAL &

PROFESSIONAL.

THE INNOVATIVE OPTILINE™ DRENCHER, A
HIGHLY CONFIDENTIAL COLLABORATION
BETWEEN SIMCRO AND NOVARTIS ANIMAL
HEALTH OVER SEVERAL YEARS, FEATURING
THREE INTERNATIONAL PATENTS
INCLUDING THE DOSE-LOCK SYSTEM.



Pharmaceutical development requires significant investment over long time frames under strict confidentiality. Pharmaceutical companies need partners who are innovative, professional and able to be trusted with confidential information.

Simcro has a significant record of partnering with the pharmaceutical industry globally, undertaking many highly confidential and market sensitive projects. We operate in a collaborative and professional manner with the complete confidence of our customers.

Our greatest breakthroughs are often the result of early project involvement. Many projects commence with a clean slate. The revolutionary in-line drench action of our Optiline™ sheep drencher is a prime example. A delivery method as innovative as the drench it administers. We're not afraid to challenge a brief if it improves the result.

These unique factors have been the difference for the world's largest pharmaceutical companies. Novartis, Pfizer, Merial and a number of other global pharmaceutical companies have partnered with Simcro to bring to market uniquely tailored, proprietary solutions.

PARTNER.

INNOVATE.

DELIVER.

CHALLENGING

CURRENT

THINKING.



THE AWARD WINNING
SEKURUS™ SAFETY INJECTOR,
A RESULT OF AN UNCOMPROMISING
DEVELOPMENT PROCESS SPANNING
SEVERAL YEARS. THIS PRODUCT
FEATURES OUR PATENTED DOUBLE
OVER-CENTRE HINGE.



Simcro believes current thinking needs to be challenged. Many in-market products have not kept pace with the changes in materials technology or the expectations of today's consumers, farmers and veterinary professionals. Our R&D team sees opportunities to converge a range of technologies into the pharmaceutical delivery industry.

The process of administering a pharmaceutical doesn't end with the device in question. Simcro's technology goes well beyond administering an accurate dose. Our solutions are measured against five primary criteria:

- ANIMAL WELFARE <
- OPERATOR SAFETY <
- TREATMENT EFFICACY <
- USER EXPERIENCE <
- COMMERCIAL VIABILITY <

The Simcro innovation process will consider issues such as intended frequency of use, posture of the user, fluid viscosity at projected ambient temperatures as well as food chain integrity, user environment, and animal temperament.

Each development is viewed as a seamless part of an integrated delivery system focused on satisfying our five key criteria. Our primary packaging and bottle protection innovations are often important and sometimes overlooked components of a successful pharmaceutical delivery solution.

PARTNER.

INNOVATE.

DELIVER.

A REPUTATION

FOR ACCURACY

AND USER EXPERIENCE

THE SIMCRO HI-VISCOSITY INJECTOR WAS DEVELOPED USING ADVANCED COMPUTATIONAL FLUID DYNAMICS ANALYSIS AND EXTENSIVE FIELD TESTING . PREVIOUS SOLUTIONS IN THE MARKETPLACE HAD PROBLEMS ADMINISTERING HIGH-VISCOSITY PHARMACEUTICALS AT AN ACCEPTABLE RATE. THE RESULTING CUSTOMISED DESIGN ALLOWS THE USER TO MAINTAIN COMFORTABLE HAND FORCE WHILE FLOW INNOVATIONS KEEP DISCHARGE TIME TO A PRACTICAL LEVEL, IN TEMPERATURES DOWN TO -20°C.



NCE.

The Simcro R&D team manages the product development process through to the production ready stage, at which point the quality assurance, production and marketing teams manage the products transition through to commercialisation.

Our reputation for delivering is exemplified by the long-standing relationships we have with our customers.

We understand that even the most innovative solutions still have to be commercially feasible in the real world. Our projects consider the commercial realities from the outset, with special attention given to ease of manufacture, quality assurance and shelf presentation.

As a result of our stringent quality expectations and innovative development approach, Simcro products enhance the brand value of the pharmaceutical that they deliver. Our reputation for accuracy and user experience spans nearly two decades and we see ourselves as a companion to global pharmaceutical brands.

We can also tailor our proprietary range of products to suit our clients' brands or designs, adding the value of the Simcro reputation for accuracy and delivery.

WORLD CLASS

PATENTED

TECHNOLOGY.

SEKURUS HAS SEVERAL GLOBAL
PATENT APPLICATIONS AND
ENABLES THE SAFE DELIVERY OF
SOME OF THE INDUSTRY'S MOST
REVOLUTIONARY PHARMACEUTICAL
BREAKTHROUGHS.





WORLD'S FIRST SELF-TENTING SAFETY INJECTOR

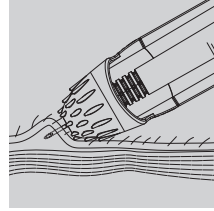
In 2004 Pfizer Animal Health issued Simcro with a demanding brief, to create a genuine two-stage safety injector that minimised the risk of self-injection by the user, administered the product at a precise depth to ensure efficacy, and satisfied animal welfare criteria.

Several concepts were trialled, but none that our development engineers were happy to present to Pfizer until 2007 when the patented double over-centre hinge concept was developed which is the genius within Sekurus™. This concept gave birth to the safety injector that Pfizer had been looking for and allowed the further development of the patented self-tenting needle guard. Together these innovations have created the ability to perform one-handed subcutaneous injections, completely satisfying the original challenge presented by Pfizer.

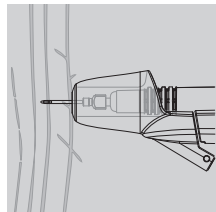
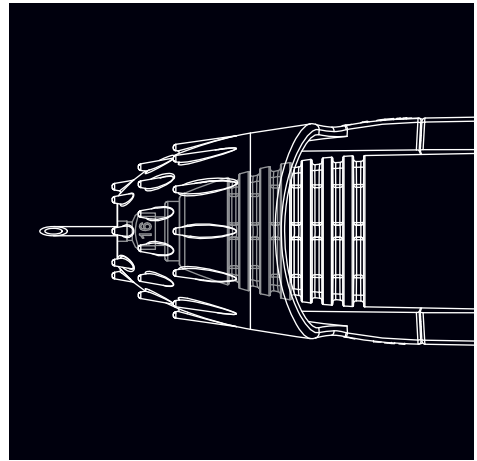
The design of Sekurus™ has several additional benefits:

- > The protective **needle guard** ensures the risk of self injection is minimised, even when Sekurus™ is not in use.
- > The two-stage action specific to Sekurus™ ensures that administration of the pharmaceutical will not occur until the needle reaches maximum **penetration depth**.
- > The potential for **needle breakage** during operation is significantly reduced maintaining a high level of food chain integrity.
- > Administering a one-handed subcutaneous injection is far easier and less hazardous for the operator than two-handed techniques, particularly in **confined spaces** such as a cattle crush.
- > One-handed injection techniques are much less invasive of an animal's space, particularly in the head region, **reducing stress and animal discomfort**.
- > The needle guard makes **needle changeover** a much safer and faster task, reducing the risk of needle-stick injuries.
- > Increased administration **speed** by proficient users of Sekurus™.

The Sekurus™ has won numerous design awards for its innovative design and proven accuracy. It reflects Simcro's commitment to the principles of animal welfare, operator safety, treatment efficacy, user experience and commercial viability.



THE PATENTED SELF-TENTING NEEDLE GUARD IS SHOWN BELOW AND LEFT. THIS INNOVATION ALLOWS THE USER TO RELIABLY PERFORM A ONE-HANDED SUBCUTANEOUS INJECTION.



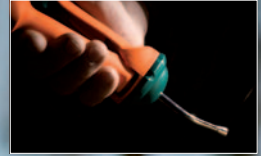
THE SEKURUS™ RANGE INCLUDES NEEDLE GUARDS DESIGNED FOR PERPENDICULAR (INTRAMUSCULAR) AND SUBCUTANEOUS INJECTION. DOSE VARIANTS INCLUDE MULTI STOP - SELECTABLE 1ML, 2ML, AND 12ML OPTIONS WITH OTHER DOSE VARIANTS UNDER DEVELOPMENT.

OPTIMUM

COMFORT

AND EFFICIENCY.

THE MULTI AWARD WINNING
OPTILINE™ DRENCHER,
A REVOLUTION IN
DRENCHING TECHNOLOGY.



OPTILINE™



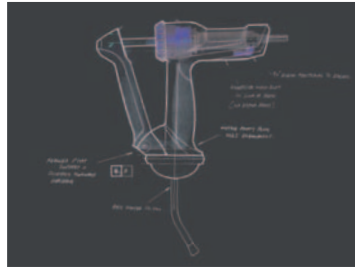
REVOLUTIONARY DESIGN

The Optiline™ sheep drencher is the world's first in-line drencher and its unique design is no accident. The long list of features that have made it so popular stem from Simcro's ability to Partner, Innovate and Deliver.

Novartis were looking for a delivery solution for ZOLVIX® the ground breaking sheep drench and first new class of anthelmintic in over 25 years. Novartis were clear in their requirements; they wanted a drenching system that would be as revolutionary as the product it delivered. In typical Simcro fashion, the technical team conceptualised delivery systems that were a radical departure from the traditional delivery systems that would raise the bar significantly for what farmers would expect in drenching equipment. Novartis selected Simcro as the development partner because they had complete confidence in our innovation, our technical abilities and proven track record of maintaining strict confidentiality.

The core of the Optiline™ solution came from Simcro's unique approach to innovation. We avoid getting stuck in any one method of application, considering all possibilities before deciding on a final concept. The in-line drench method at the heart of Optiline™ may seem familiar to those with hands-on experience in the farming industry. It uses the same hand and arm positioning as drenching with a bottle, although the similarities stop there. With an ergonomic mode of action, patented dose lock, internal valving technology, and a unique nozzle design, the Optiline™ sheep drencher has transformed the way sheep will be drenched in the future.

The commercialised Optiline™ sheep drencher is completely tailored to Novartis requirements with Simcro exceeding expectations throughout the project. While the brief may have been for a drencher, Optiline's success has come through Simcro's collaboration with Novartis in all aspects of the delivery system, from backpacks and harness through to the drencher itself. The true mark of Simcro's success has been the very successful commercial launch of ZOLVIX®, in part attributable to the innovative method of application.



OPTILINE™ IN USE,
 SHOWING DOSE LOCK,
 ERGONOMIC ACTION AND
 UNIQUE MOUTH GUARD
 DESIGN PREVENTING
 OVER INSERTION AND
 POTENTIAL INJURY TO
 WTHE ANIMAL.



DECEPTIVELY

SIMPLE

PROTECTION.

THE DRAXXIN® BOTTLE
PROTECTOR, DEVELOPED
BY SIMCRO FOR PFIZER.
A CHALLENGING BRIEF THAT
DEMANDED A SIMPLE YET
INNOVATIVE SOLUTION.



DRAXXIN[®] PROTECTED



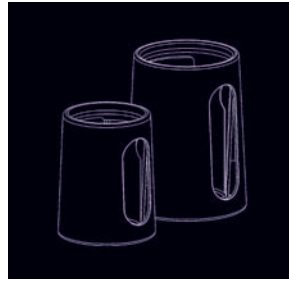
A SIMCRO PACKAGING AND PROTECTIVE SOLUTION

Delivery systems are not simply an injector or an applicator. They are an integrated system from the product reservoir through to the point that the pharmaceutical product reaches the desired location.

Our design capability and experience enables Simcro to consider all aspects of the delivery system from primary and secondary packaging, to bottle protectors, fluid transfer components and the delivery device itself, ensuring the entire system will successfully deliver the pharmaceutical product to the customers expectations.

Take our bottle protector for Draxxin as an example. The Simcro bottle protector looks deceptively simple. In fact, a bottle within this sleeve can withstand a 1.2m fall onto a concrete surface at -20°C without risk of breakage.

Within this innovative design, Simcro have allowed for the two Draxxin bottles of the same volumetric size, yet quite different shapes, to be fully protected when fitted into the sleeve. This is achieved by securing the bottle with two sets of snap tabs, ensuring that the product, in either bottle, is held secure while allowing easy loading and reloading as the job demands. Like many Simcro solutions, the Draxxin bottle sleeve is well-engineered simplicity.



SIMCRO ALWAYS GIVES CONSIDERATION TO THE COMPLETE DELIVERY SYSTEM ENSURING ALL OF THE COMPONENTS ARE PART OF A SEAMLESS INTEGRATED SOLUTION THAT WILL DELIVER THE CLIENT'S PRODUCT RELIABLY IN THE FIELD. COMPONENTS INCLUDE: PRIMARY AND SECONDARY PACKAGING, TRANSPORTATION AND DISPENSING COMPONENTS, BOTTLE PROTECTORS AND DELIVERY DEVICES.



SIMCRO INNOVATION PROCESS



FROM CONCEPT TO PRODUCT

Simcro's R&D, designs and develops highly customised delivery systems and packaging for the world's leading pharmaceutical companies.

Our industry leading innovation process has been responsible for world leading intellectual property and award winning products such as the Sekurus™ Safety Injector, and the Optiline™ sheep drencher.



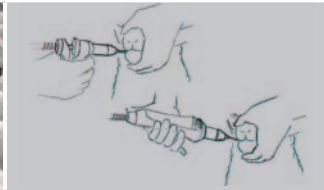
PRODUCT BRIEF

All of our products begin with a brief. It's Simcro's view that we should challenge the brief to extract the widest possible parameters for success.

We will always ensure that the completed brief addresses five fundamental criteria:

- > Animal Welfare.
- > Operator Safety.
- > Treatment Efficacy.
- > User Experience.
- > Commercial viability.

Frequently our proposes solutions are so innovative we enter into mutual confidentiality agreements with the client.

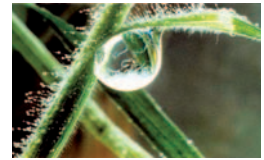


IDEATION

The first step in responding to the brief is to link the design brief to known technologies. From this technical base, we investigate more innovative possibilities, balancing them against the commercial requirements for the end product.

No idea is discounted, for instance the Optiline™ drencher is a technical evolution of traditional bottle drenching techniques in New Zealand farming conditions.

SHEEP CAN BE VULNERABLE TO WORM INFECTIONS PICKED UP DURING PASTORAL GRAZING. ZOLVIX BY NOVARTIS IS A NEW GENERATION OF DRENCH TO WHICH SIMCRO PROVIDED A NEW GENERATION OF DRENCHER.



CONCEPT VISUALISATION

Simcro presents an innovation storyboard to its clients, detailing inspirations and conclusions, before traversing a wide range of options that will fulfil the brief.

Our approach is to include thinking beyond the brief when we feel we can meet criteria in a different way.

03



CONCEPT FINALISATION

Our clients select their preferred concepts for further exploration.

Occasionally, the best solution will be a cross pollination of the variety of technologies Simcro has proposed. In this case, we present further concepts that marry the best attributes of our solutions.

04

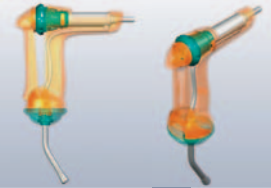


CONCEPT DEVELOPMENT

Concept development is where blue-sky thinking meets commercial reality.

After establishing a commercialisation agreement Simcro will begin creating a proof of principle prototype. These are machined from 3D CAD models and hand assembled to test ergonomic principles.

05

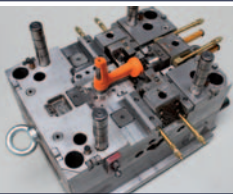


DESIGN DEVELOPMENT

This stage begins with an iterative design process that fully resolves the product against the client's requirements and the five key criteria of Animal Welfare, Operator Safety, Drug Treatment Efficacy, User Experience and Commercial Viability.

Each product is fully realised as a 3D CAD model that is manufacturing and assembly ready before being machined as a fully functioning prototype.

06



PRODUCT TOOLING

Tooling begins once the prototype has passed field-testing and is signed off by the client. Simcro then designs, manufactures and commissions the tooling and assembly jigs for commercial production.

07



ALPHA TRIALS

This is the first manufacturing and assembly trial. It is the first time the final product has been produced under commercial conditions, and it is released again for final field assessment.

08



PRODUCT DOCUMENTATION

Once Alpha trials are passed, Simcro documents all user and maintenance instructions to required international standards. Internal assembly and quality specifications are established and jigs created to facilitate the assembly process.

09



COMMERCIAL PRODUCTION

The finished product enters production at Simcro's production facility, and is packaged and delivered to client specifications, worldwide.

10

PRODUCT RANGE

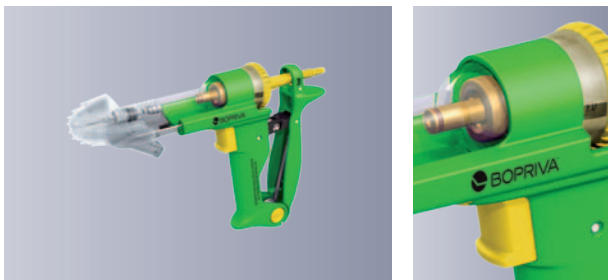


INJECTORS

Simcro produces injectors for a wide range of pharmaceutical delivery options. Our Sekurus™ range features the latest in safety innovations, minimizing the risk of self-injection through world-first patented technology.

Our premium and compact ranges have a reputation for accuracy and reliability, and are used by many of the world's largest pharmaceutical companies.

All our proprietary products can be customised to suit our clients branding and colour requirements.



APPLICATORS

Simcro produces applicators for all types of pharmaceutical delivery. Our Topical and Oral applicator models include 1mL, through to 75mL. With a range of sizes, and application styles, we can supply a proprietary range applicator to suit any need.

All our proprietary products can be customised to suit our clients branding and colour requirements.





PACKAGING

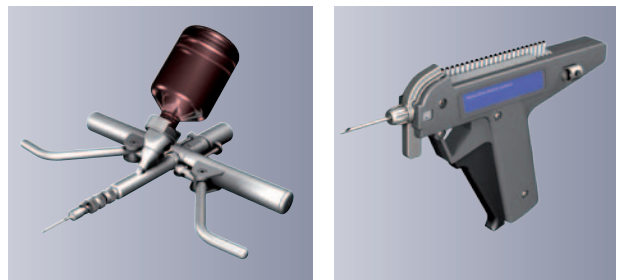
Simcro's packaging products include transit and draw-off caps as well as containers and sleeves for both thermal insulation, physical protection and as a cradle. These products can be combined with our delivery devices to form a complete delivery solution.

In addition, our sleeves can be customised to reflect client branding on request.



SPECIALIST ITEMS

Simcro has a number of different specialist products including implanter devices for animals and fish, tree injectors and thermal bottle warmers.



A SCIENTIFIC APPROACH



RESEARCH AND DEVELOPMENT EXPERTISE

Simcro's R&D programme responds to requests from our global customer base to develop novel and innovative delivery system solutions for new pharmaceutical formulations. Species include livestock, companion animals and fish. We are also investigating the areas of human health and pastoral health.

Projects are resourced by our highly qualified and experienced R&D team which is augmented by external specialists when required. Simcro appoint a lead project engineer for each project, who becomes the primary client contact point.

To contact Simcro about beginning a joint development opportunity with us, send an email to innovate@simcro.com.

ANIMAL.



PASTORAL.



COMPANION.



AQUACULTURE.



HUMAN.



AWARDS OVERVIEW

Simcro's ability to innovate internally and on behalf of its clients has led to recognition with a number of national and international awards. These awards showcase our products' reputation in market and around the globe and reinforce Simcro's commitment to Partnership, Innovation and Delivery.

AUSTRALIAN INTERNATIONAL
DESIGN AWARD - 2010



POWERHOUSE
AWARD FOR DESIGN
ENGINEERING - 2009



BAYER INNOVATORS
AWARD FOR DESIGN AND
ENGINEERING - 2009



DESIGNERS INSTITUTE OF NZ
BEST DESIGN AWARDS 09
BRONZE



INTERNATIONAL FORUM (IF)
2010 PRODUCT DESIGN AWARD



INTERNATIONAL FORUM (IF)
2011 PRODUCT DESIGN AWARD



NZ AGRITECH INNOVATION
AWARD - 2010



NZ INTERNATIONAL
BUSINESS AWARDS - 2009
FINALIST IN 4 CATEGORIES



NZ INTERNATIONAL
BUSINESS AWARDS - 2010
WINNER - BEST USE OF R&D
IN INTERNATIONAL BUSINESS
FINALIST IN 2 CATEGORIES



ISO 9001 CERTIFICATION

Simcro has successfully attained certification to the ISO 9001: 2008 Quality Standard.

Simcro's certification covers the Design, Manufacture and Supply of Delivery Systems and Packaging for the Veterinary, Medical, Agricultural and Related Industries.

BUREAU VERITAS
ISO 9001 : 2008
QUALITY STANDARD



www.simcro.com

PARTNER.

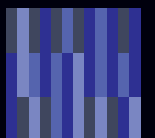
INNOVATE.

DELIVER.

Simcro Limited
6 Latham Court
Hamilton 3204
New Zealand
TEL +64 7 846 7723
FAX +64 7 846 7738

To contact Simcro
for R&D enquiries:
innovate@simcro.com

To contact Simcro for
sales and general enquiries:
deliver@simcro.com



SIMCRO™