



Longer survival

reduced cost

Smaller body size

less compound and cost

Lower spontaneous tumor incidence

reduced research variables, improved animal welfare

Global breeding and monitoring system

consistent research outcomes

Reliable, repeatable results

RccHan[®]:WIST Rat

IMPROVES STUDY EFFICIENCY

Over 20 years of stable control data compiled from over 1,000 studies

Acute to oncogenicity studies - 3, 6, 12 and 24 months

- Survival rates
- Growth
- Food and water consumption
- Clinical observations
- Functional observation battery
- Ophthalmoscopy
- Clinical pathology
- P450 enzymes
- Gross lesions and organ weights
- Bone marrow differentiation
- Incidence and images of spontaneous neoplastic and nonneoplastic changes
- Reproductive and developmental data

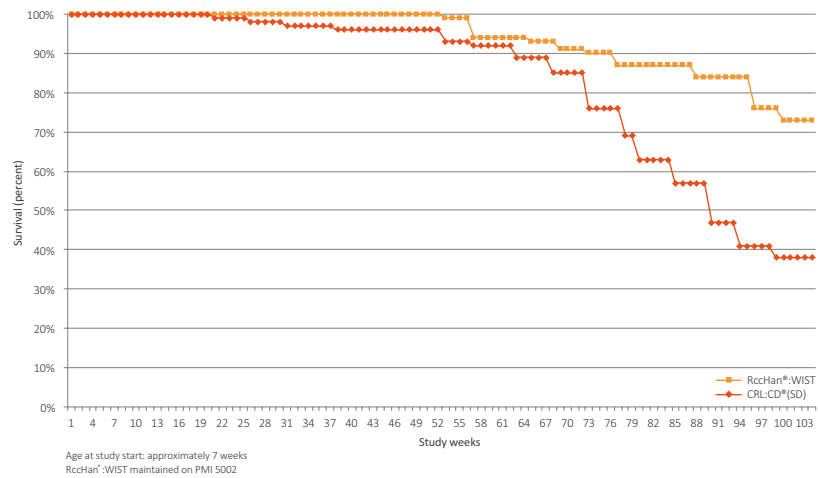
Millions of data points to compare to your research to validate the RccHan[®]:WIST as the model of choice!

inotivco.com/toxicology

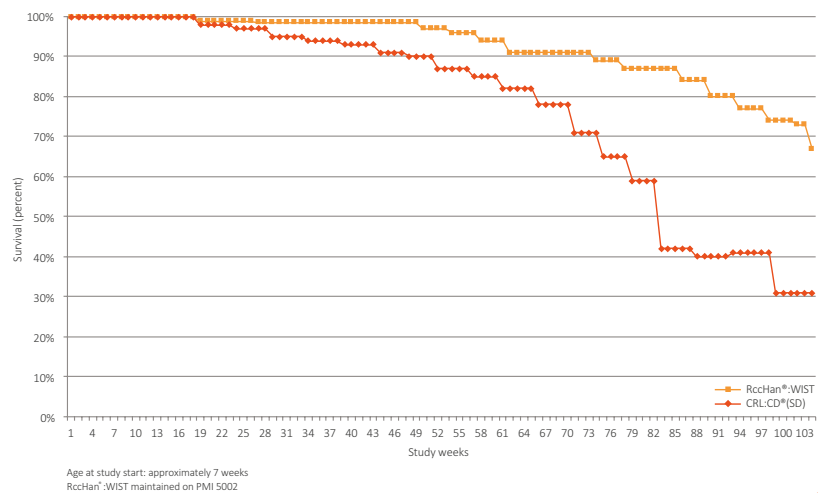
LONGER SURVIVAL

Survival comparison between rat models (104 weeks)*

RCCHAN[®]:WIST AND CRL:CD[®](SD) 104-WEEK MALE SURVIVAL



RCCHAN[®]:WIST AND CRL:CD[®](SD) 104-WEEK FEMALE SURVIVAL



Over 70% survival at 104 weeks of age

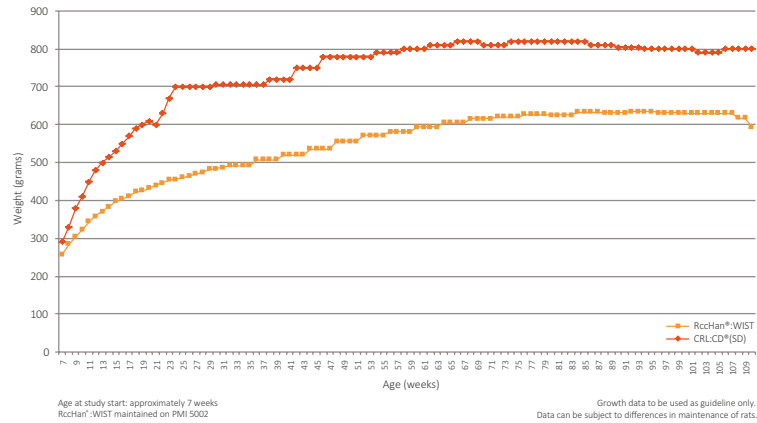
Longevity of the RccHan[®]:WIST ensures study completion with confidence

SMALLER BODY SIZE

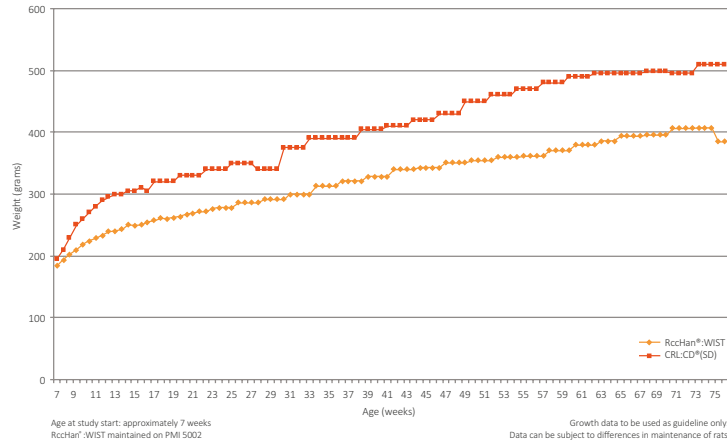
Body weight comparison between rat models (104 weeks)*

Up to 28% lighter weight in two-year studies without restricting diet compared to the leading US model.¹

RCCHAN®:WIST AND CRL:CD®(SD) 104-WEEK MALE GROWTH CURVE



RCCHAN®:WIST AND CRL:CD®(SD) 104-WEEK FEMALE GROWTH CURVE

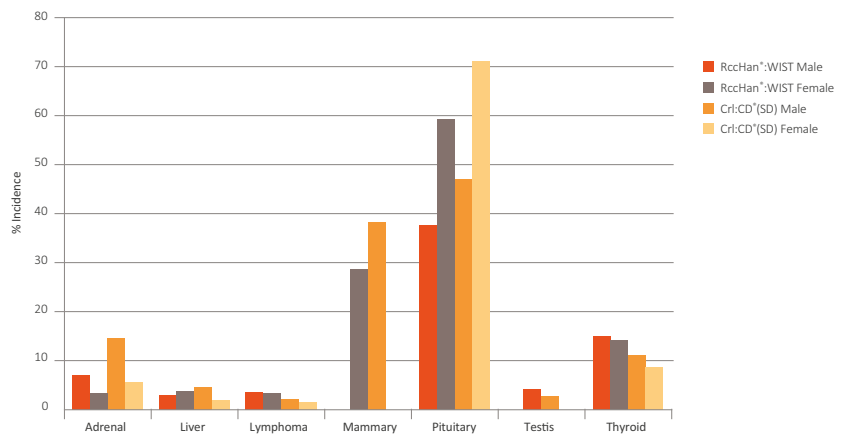


LOWER SPONTANEOUS TUMOR INCIDENCE

Overall tumor incidence of common tumor types at 104 weeks is significantly lower in the RccHan®:WIST

Reduced attrition due to spontaneous lesions

SPONTANEOUS TUMOR INCIDENCE



* RccHan®:WIST study completed in March 2016. Crl:CD®(SD) data compiled from historical control database maintained at Inotiv.

¹ Hooks, W.M. (2001) A Review of the Mortality, Body Weight and Food Consumption Data from CD (SD) IGS Rat Tumorigenicity Studies Completed in 1998 to 2001, Huntingdon Life Sciences now Envigo, Huntingdon, UK, 2001:131-137.

ULTIMATE BENEFITS

Cost savings

- Less compound use
- Fewer animals
- Reduced labor: Fewer animals, housing efficiency, no need for diet restriction
- 18% lower food consumption compared to leading US model*

Reduced research variables

- Twenty years of historical background data for comparative evaluation
- Fewer background lesions to evaluate
- More robust data due to longer survival

Improved animal welfare

- Fewer animals needed at study start
- Smaller body size allows pair housing in standard size caging
- Smaller body size reduces risk of foot lesions
- Lower tumor incidence

A STRONG AND PROVEN LINEAGE

Only Inotiv has maintained the original RccHan®:WIST rat developed from the Wistar stock at the Wistar Institute. This model was transferred to the Hannover Institute (Zentralinstitut für Versuchstierzucht) in 1960 and then to RCC Ltd., Füllinsdorf, Switzerland, in 1989. RCC Ltd. was acquired by Envigo in 2004. Unlike competitive models, the Inotiv RccHan®:WIST rat has been maintained from the original nucleus of 156 breeding pairs from Hannover, Germany.



At Inotiv, we have a passion for science and for developing solutions to help you achieve your goals. With research models, diets, bedding and contract research services we can support your toxicology research needs.

GLOBAL AVAILABILITY

The RccHan®:WIST is available in the United States, Europe, and Japan.

TEKLAD GLOBAL DIETS® REDUCE RESEARCH VARIABLES

Use Teklad Global laboratory animal rodent diets 2014 or 2016 (certified and non-certified) for toxicology studies. These diets have lower, more appropriate nutrient levels for rodents and are soy, alfalfa, and animal by-product free and may reduce research variables.

SURGICAL SERVICES

Our surgical units offer multiple surgical procedures, including cannulations and soft tissue surgeries.

The use of the Inotiv Rounded Tip Catheter for vascular access in catheterized rats offers increased long-term patency with a flushing interval of 5–7 days and reduced maintenance requirements.

CONTRACT RESEARCH SERVICES

The RccHan®:WIST is the model of choice for studies in our contract research laboratories. Inotiv provides a full range of pre-clinical research studies for the pharmaceutical, biotech, chemical and agrochemical industries.

INOTIV GLOBAL BREEDING AND GENETIC MONITORING PROGRAM

Inotiv employs a global breeding program in the RccHan®:WIST stock using a Poiley rotational system. This breeding system reduces the inbreeding coefficient and maintains maximum heterogeneity between animals within the colony. All RccHan®:WIST colonies are genetically tested on an annual basis using a custom 96 single nucleotide polymorphism (SNP) marker panel to assess allelic frequencies within and between colonies worldwide.

* RccHan®:WIST study completed in March 2016: CrI:CD®(SD) data compiled from historical control database maintained at Envigo.

CrI:CD®(SD) is a trademark of Charles River Laboratories International, Inc.