

## Comet Assay IV

# **Do you want to join the Industry Leaders in comet assay scoring?** With Comet Assay IV, you can!

The majority of scientific publications, pharmaceutical investigations and regulatory testing all use Comet Assay IV for their genetox analysis. What's more, Comet Assay IV is the system of choice for the working group who developed the comet assay OECD guideline.

Comet Assay IV is a live video imaging system designed for those seeking fast, accurate and reproducible comet slide scoring.

Comet Assay IV's unique single-click scoring method and instant live video technology make it the most efficient and easy-to-use system available for measuring DNA damage using single cell gel electrophoresis. There are no complicated parameters to adjust and no hardware to install – simply connect the camera and you're ready to start scoring!

By using the mouse to click once on each cell, you can typically score all the cells on a single comet slide within two minutes!

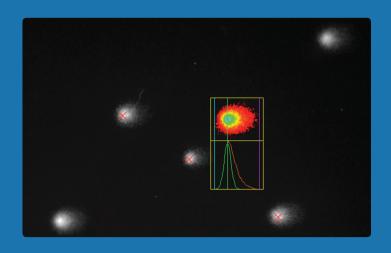
Comet Assay IV can score many different types of cell; regardless of species, cell size and level of DNA damage. Comet Assay IV uses the parameters defined by Olive *et al* on the principle of DNA damage and comets are scored appropriately.

With its outstanding functionality and enviable reputation, it is clear to see why Comet Assay IV is the market-leading comet scoring system, with over 500 systems in use at academic, CRO and pharmaceutical laboratories worldwide!



### Free Trial

Try Comet Assay IV for one week for free when you download our trial version of the software. Contact genetox@instem.com for details



## Key Highlights

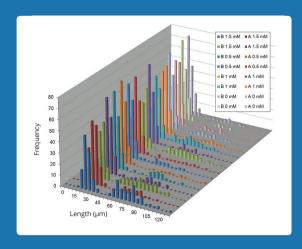
- ▶ Increase speed Single click automatic scoring in Comet Assay IV enables you to score comets from a live video. This makes Comet Assay IV the fastest and easiest way to score comets. Improve your laboratory's productivity today!
- ▶ Boost accuracy With no adjustable settings or tricky configurations to modify, we have eliminated all subjectivity from the scoring process. Comet Assay IV automatically compensates uneven backgrounds or varying levels of brightness, ensuring comparable and reproducible results across a wide range of slides.
- ➤ Comprehensively analyze Our integrated hedgehog counter ensures you capture and record all cells, even those with the most damage. All the parameters you need for your analysis: Tail % DNA, tail moment, tail length and more!
- ➤ Evaluate Graph and chart your Comet Assay IV data and use powerful macros to compare data across dose ranges. Include statistics, log transforms and frequency distribution graphs in your analysis using our Excel-based tool.
- ▶ Ensure compliance Work securely in the knowledge that your system is GLP and FDA 21 CFR compliant. We also offer an additional optional module, Data Extractor, which allows you to browse, sort and filter your result and audit data, you can also review, approve or reject your data.
- ▶ Integrated study management Combine Comet Assay IV with our world-leading genetox study management solution, Cyto Study Manager, for fully integrated data collection, management and reporting.

## System Capabilities

- Configure to work for you and your experimental set up
- Calibrate for accurate results
- ▶ Annotate files for easy sample identification
- Score comets from live video or images
- ▶ Visualize with pseudo color
- ▶ Measure all comet parameters
- Count hedgehogs or highly damaged cells
- **Edit** if desired
- Process your data electronically
- ▶ Graph your results with the Spreadsheet Generator
- Transfer data to an Oracle database (if required)
- **Be compliant** with FDA 21 CFR regulations
- Audit all actions
- Control user access
- ▶ Validate your experiments with confidence
- ▶ Get Help from our secure on-line customer support area
- Publish excellent quality data from a reputable scoring system!

# Minimum PC Specification

Windows 7, 8 or 10 (32bit or 64bit versions) and 32bit version of Microsoft Office (2010 or higher). 2GHz processor and 2GB RAM. An inbuilt FireWire port or a spare PCIe "x16" slot. A USB port for the Comet Assay IV USB security key.





### Compare Packages

Comet Assay IV is available in a range of packages:

- Comet Assay IV Lite Low price entry level functionality.
- Comet Assay IV a complete solution for those wishing to use live video images, either from their own camera\* or one supplied by us.
- Comet Assay IV GLP Suite a suite of products specifically designed for those working within a regulatory environment.

Feature	Comet Assay IV Lite	Comet Assay IV	Comet Assay IV GLP Suite
Score comets from live video input		•	•
High sensitivity digital camera included		•	•
Connect to third-party cameras*		•	•
Score comets from stored image files	•	•	•
Score comets in a single click	•	•	•
Save comet data to Excel or Oracle	•	•	•
Perform advanced data processing with the Spreadsheet Generator	•	•	•
Automatically save measured images	•	•	•
View and recreate measurements from archived images	•	•	•
Batch export study data to Excel			•
Filter, sort and search data			•
Approve and reject data using electronic signatures			•
Securely archive data in accordance with OECD guidelines			•
View and extract results and audit trail data from Oracle			•
Uniquely identify individual users			•
Manage users in accordance with GLP and FDA 21 CFR Part 11			•
Track and automatically record all user activity			•
Record all unauthorised login attempts			•

<sup>\*</sup>Compatible with Leica, QImaging, AVT and Basler cameras.

### Scientific Leadership

Comet Assay IV delivers accurate and reproducible comet results. That's why hundreds of experts around the word choose to use Comet Assay IV in their laboratories. The internationally recognized OECD guideline for the comet assay was developed using a multinational working group who choose Comet Assay IV for their experiments. We are extremely proud of the dependability and reputation of Comet Assay IV.

#### You work to GLP and so do our genetox solutions...

All of Instem's genetox solutions are designed with reference to the OECD and S2(R1) guidelines. We ensure our solutions are fully compliant with the principles of Good Laboratory Practice (GLP) and the FDA 21 CFR part 11 rule on electronic signatures.



### Instem

Instem is a global provider of leading software solutions and services that are helping over 500 clients bring their life enhancing products to market faster. We enable clients in the life sciences to more efficiently collect, analyze, report and submit high quality regulatory data, while maintaining compliance for their products around the world. Our solutions are in use by customers worldwide, meeting the rapidly expanding needs of life science and healthcare organizations for data-driven decision making, leading to safer, more effective products.

Our solutions for genetox testing are used in over 50 countries globally. Our genetox solutions are used in universities, research institutes, and various government programs, such as those at the National Center for Toxicological Research (NCTR), a Food & Drug Administration (FDA) division. Our products also serve many small and medium-sized contract research organizations, multi-national life sciences organizations, and the top 10 pharmaceutical companies worldwide.

We produce systems for a range of genetic toxicology assays including Ames Test, Comet Assay, Micronucleus Test, Chromosome Aberration Test and Mouse Lymphoma Assay. These products are designed to fulfil the requirements of Good Laboratory Practice, FDA 21 CFR Part 11 and other international regulatory requirements.

We operate a Quality Management System to ISO 9001:2008 as approved by BSI, the UKAS accredited certification body.

Instem supports its global roster of clients through offices in the United States, United Kingdom, France, Japan, China and India.



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