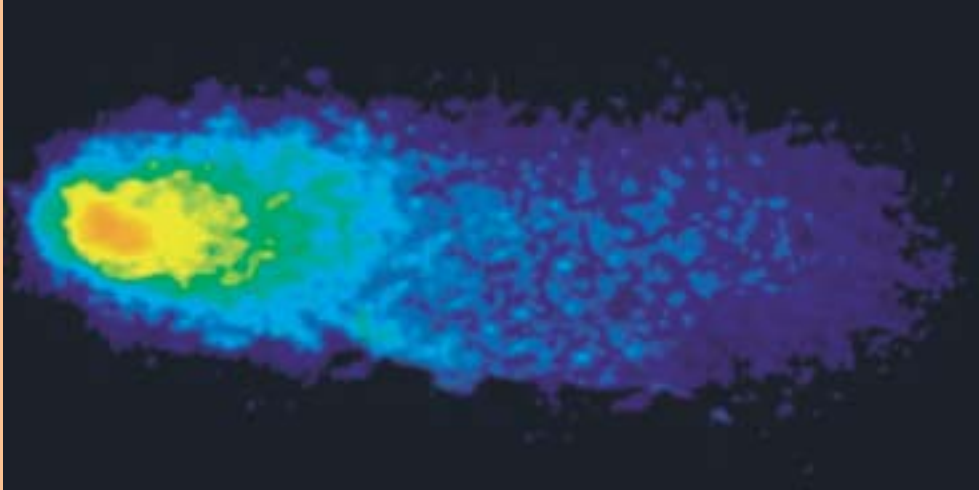


Metafer



CometScan CometImager

Comet Assay
Systems

Automatic and Semi-Automatic
Comet Assay Analysis

Reproducible Evaluation of Tail Moment,
Tail Moment Olive, Tail and Head Size
and More

Comet FISH Analysis with Full Integration
of the Metafer MetaCyte FISH Scanning
System

Comprehensive Data Presentation, Export
and Report Generation



M E T A
S Y S T E M S

www.MetaSystems.de

CometScan CometImager

Comet Assay Systems

The single cell gel electrophoresis (*comet*) assay is acknowledged as a fast and easy method to determine DNA strand breakage at the single cell level. The MetaSystems comet assay imaging systems CometScan and CometImager provide reliable solutions for precise and convenient quantification of DNA damage with the comet assay.

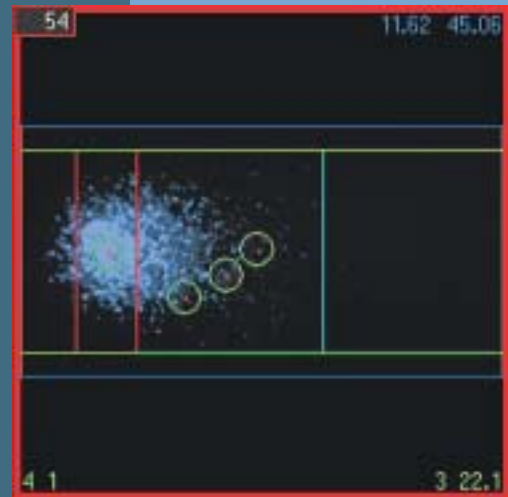
CometScan

The automatic scanning system CometScan gives precise, unattended evaluation of comet assay data. Adaptive thresholding algorithms guarantee the reliable identification of head and tail regions. All measured parameters are stored automatically and can be evaluated using the built-in graphing functions.

Since CometScan is a module for the FISH scanning system Metafer - MetaCyte, the unique features of this software can also be applied to the comet assay, providing the capability of automated comet FISH analysis.

CometImager

If a fast interactive system is required, CometImager is the solution. Using CometImager, capturing images, cell selection and measurement are carried out in a convenient, rapid process. Data is stored automatically allowing the user to analyse the next cell.



Gallery images of automated comet FISH with Metafer CometScan: the *comet* is automatically separated into head and tail area and the measured features are given as numbers in the corner of the image. Upper left: image and object number; upper right: tail moment Olive (left) and % DNA in tail; lower left: total FISH spot number (left) and number of spots in head; lower right: number of FISH spots in tail (left) and horizontal distance between closest spot in tail and the center of the head.

Image courtesy of: Dr. C. Volpato, Policlinico St. Orsola; Bologna, Italy.