

WimComet

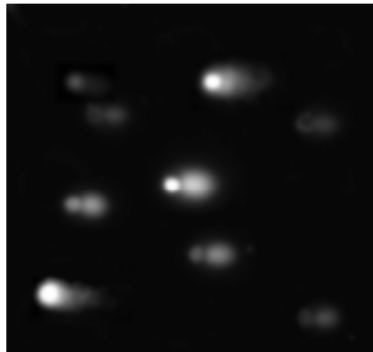
Image Analysis for Comet Assays



The comet assay or single cell gel electrophoresis (SCGE) assay is a fast, easy and reliable method for the detection of DNA damage in individual cells. In the comet assay, damaged DNA extends outside the nucleus forming a comet-like structure, where the damaged DNA is the tail of the comet and the non-damaged DNA is the head. The comet can be easily observed using fluorescence microscopy techniques and the DNA damage quantified measuring the intensity and size of the head signal and comparing it to the tail one. The simplicity of this method makes it a useful tool to study DNA lesions in a great variety of investigations, such as the study of genotoxicity in the screening of new drug compounds, the monitoring of environmental contamination with genotoxins and the research of fundamental DNA damage and repair.

WimComet tool is specially designed to measure objectively the DNA damage in comet assay images with high precision and reliability. It makes an automated and reproducible quantification of the comet head and tail using high-end image processing algorithms to detect and compare the signals of the two of them. With WimComet, you will get your comet assay images automatically analyzed in record time.

WimComet uses as input fluorescence microscopy images of the comet assay, where the bright comets are shown in a dark background. Both images with one or several comets can be analyzed.



Comet assay image

WimComet tool provides the following output data per comet analyzed:

- Total comet intensity.
- Comet length.
- Percentage of DNA in the tail.
- Tail length.
- Olive tail moment (tail length multiplied by the percentage of DNA in the tail).

Try WimComet for free at mywim.wimasis.com and experience for yourself the objective quantification of DNA damage in comet assay.

WimComet is engineered with flexibility to adapt to the needs of each researcher and process images of every kind of comet assay. If your comet assay images do not fit the requirements above, send us a quick note or reach us at:

contact@wimasis.com or +49 (0)89 452 44 66 50