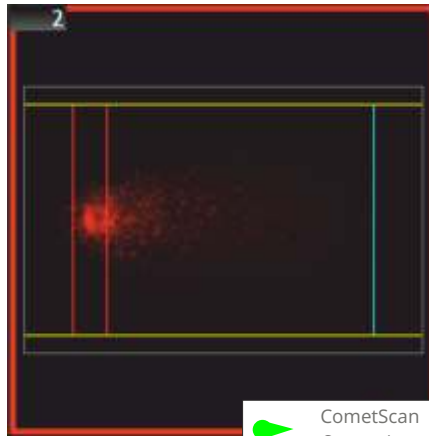


# Metafer

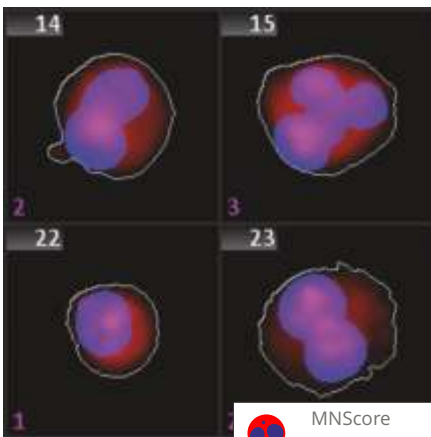
Standardized  
Genetox Analysis



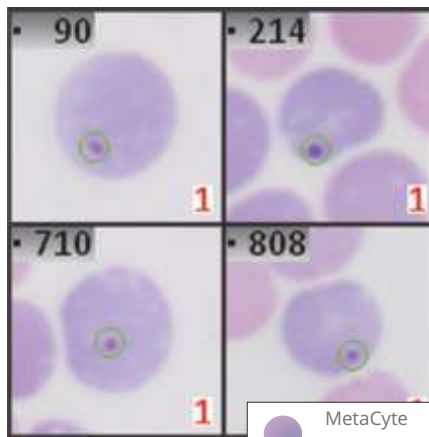
MSearch  
CA Assay



CometScan  
Comet Assay



MNScore  
*in vitro* Micronuc.



MetaCyte  
*in vivo* Micronuc.

Standardization is a highly important goal in the design of pre-clinical toxicology tests. The slide scanning platform Metafer has proven to be the most versatile and reliable tool to automate the analysis of OECD compliant tests like the erythrocyte micronucleus test (#474, 1997), the *in vitro* micronucleus test (#487, 2004), the *in vivo* mammalian alkaline comet assay (#489, 2014), and the chromosome aberration test (#473, 1997).

In addition to the assays above Metafer also provides other modules, e.g. for the Ames II test, the digitization of tissue sections, and more.

# TOXICOLOGY

## References

Metafer users publish their results in many peer-reviewed journals, and Metafer as a system for toxicology automation has been subject to several studies. Please find below a list of recent citations of studies performed with Metafer in toxicology studies and research.

Oxidative stress and chromosomal aberrations in an environmentally exposed population. *P. Rossner et al., Mutat.Res. 707(2011).*

Critical issues with the *in vivo* comet assay: A report of the comet assay working group in the 6th International Workshop on Genotoxicity Testing (IWGT). *G. Speit et al., Mutat.Res. 783(2015).*

Influence of experimental conditions on data variability in the liver comet assay. *M. Guérard et al., Env.Mol.Mutagenesis 55(2014).*

Automation of the *in vitro* micronucleus and chromosome aberration assay for the assessment of the genotoxicity of the particulate and gas-vapor phase of cigarette smoke. *E. Römer et al., Toxicol.Mech.Methods ePub(2015).*

Assessment of the Genotoxic Potential of Azidothymidine in the Comet, Micronucleus, and Pig-a Assay. *M. Guérard et al., Tox.Sci. 135(2013).*



# MetaSystems

### MetaSystems Hard & Software GmbH (Headquarters)

Robert-Bosch-Str. 6  
68804 Altlußheim, Germany  
tel +49 6205 396 10 | fax +49 6205 322 70  
info@metasystems.de

### MetaSystems Group, Inc.

70 Bridge Street  
Newton, MA 02458, USA  
tel +1 6179 2499 50 | fax +1 6179 2499 54  
info@metasystems.org

### MetaSystems S.r.l.

Via Gallarate 80  
20151 Milano, Italy  
tel +39 0236 7587 51  
fax +39 0245 3753 03  
info@metasystems-italy.com

### MetaSystems India Pvt., Ltd.

No. 1/1, 2nd Floor, 1st Main Rd., 2nd cross  
Thimmaiah Garden, R T Nagar  
Bangalore Karnataka, 560 032, India  
tel +91 9535 7788 01  
info@metasystems-india.com

### MetaSystems Asia Co., Ltd.

Unit 322, 3/F, Core Building 2  
No. 1 Science Park, West Avenue  
Hong Kong Science Park  
Shatin, New Territories, Hong Kong  
tel +852 2587 8333 | fax +852 2587 8334  
info@metasystems-asia.com

# TOXICOLOGY



info@metasystems-international.com  
www.metasystems-international.com