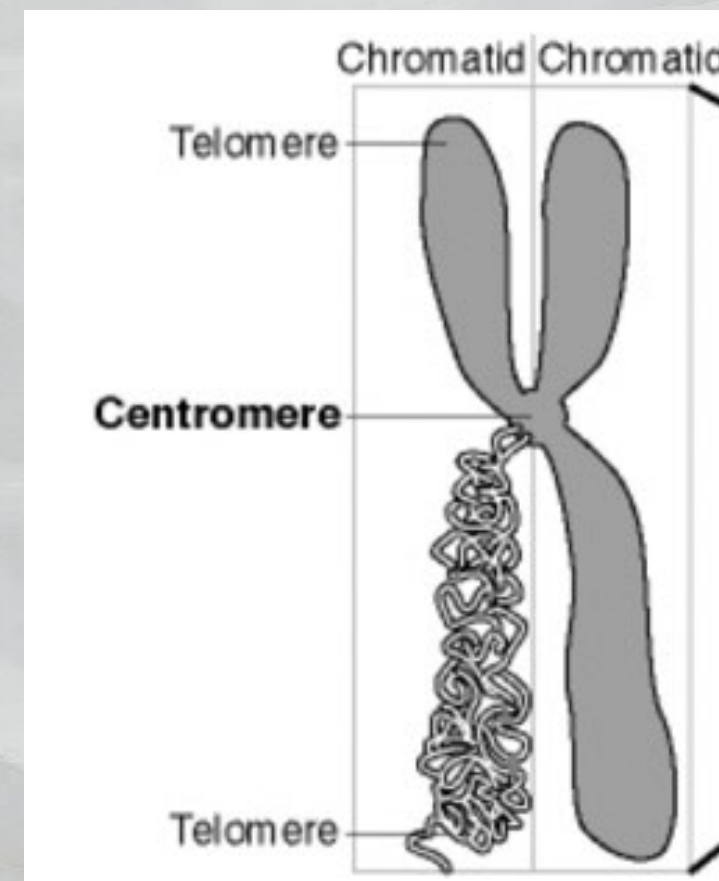
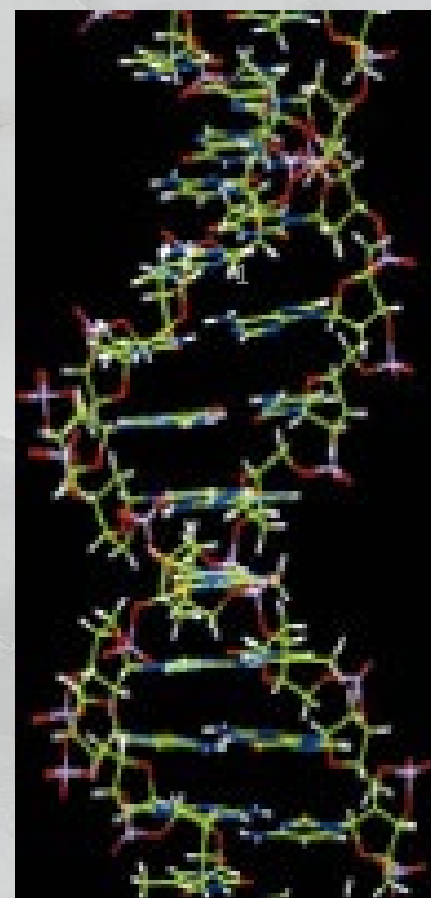
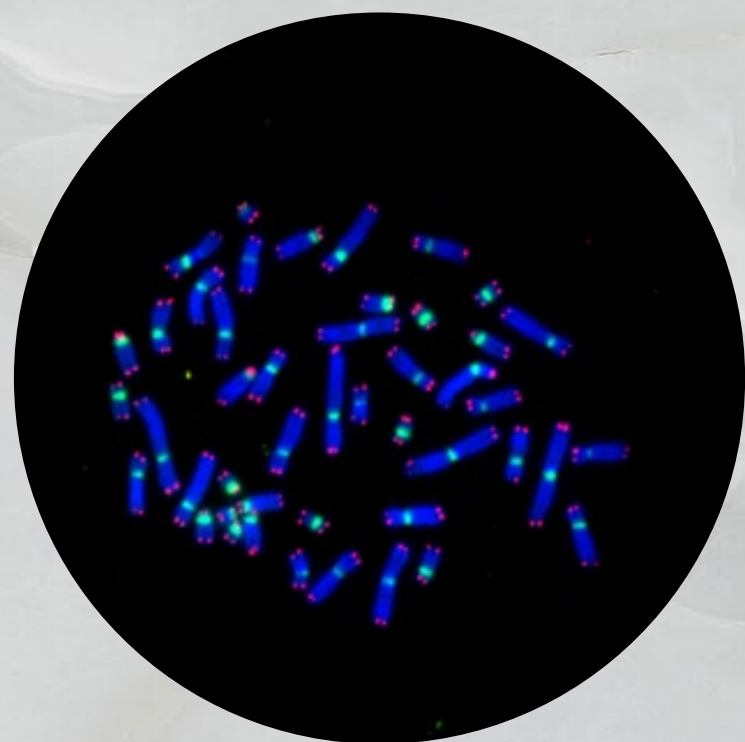
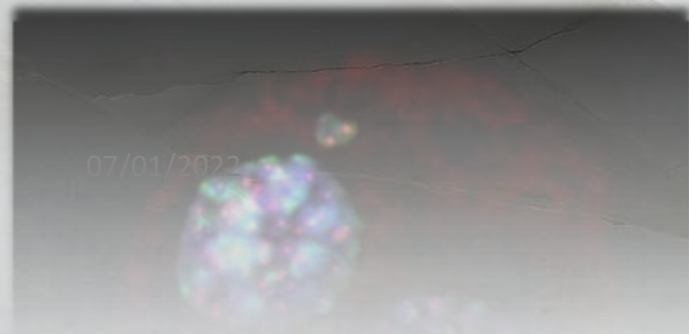
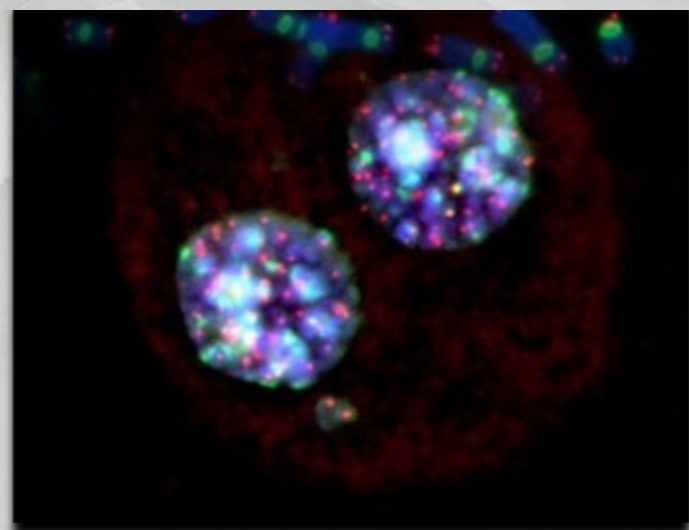




Your research service outsourced company to

“Prevent” the “cancer” risk

GLP compliance ANSM & GIPC



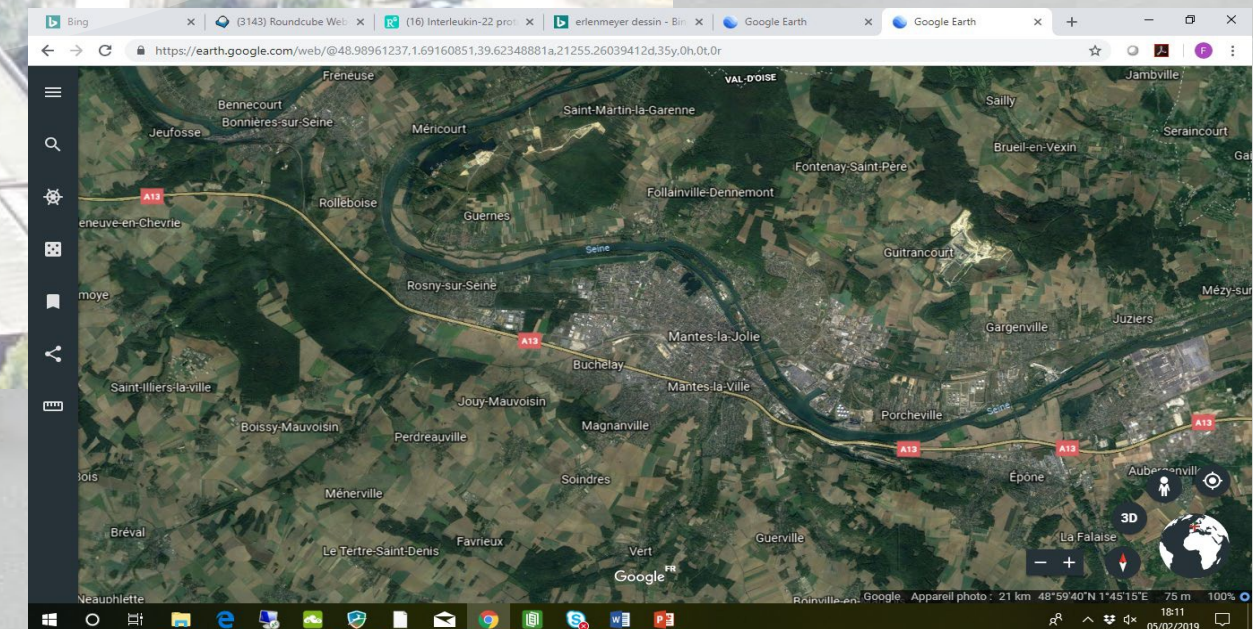
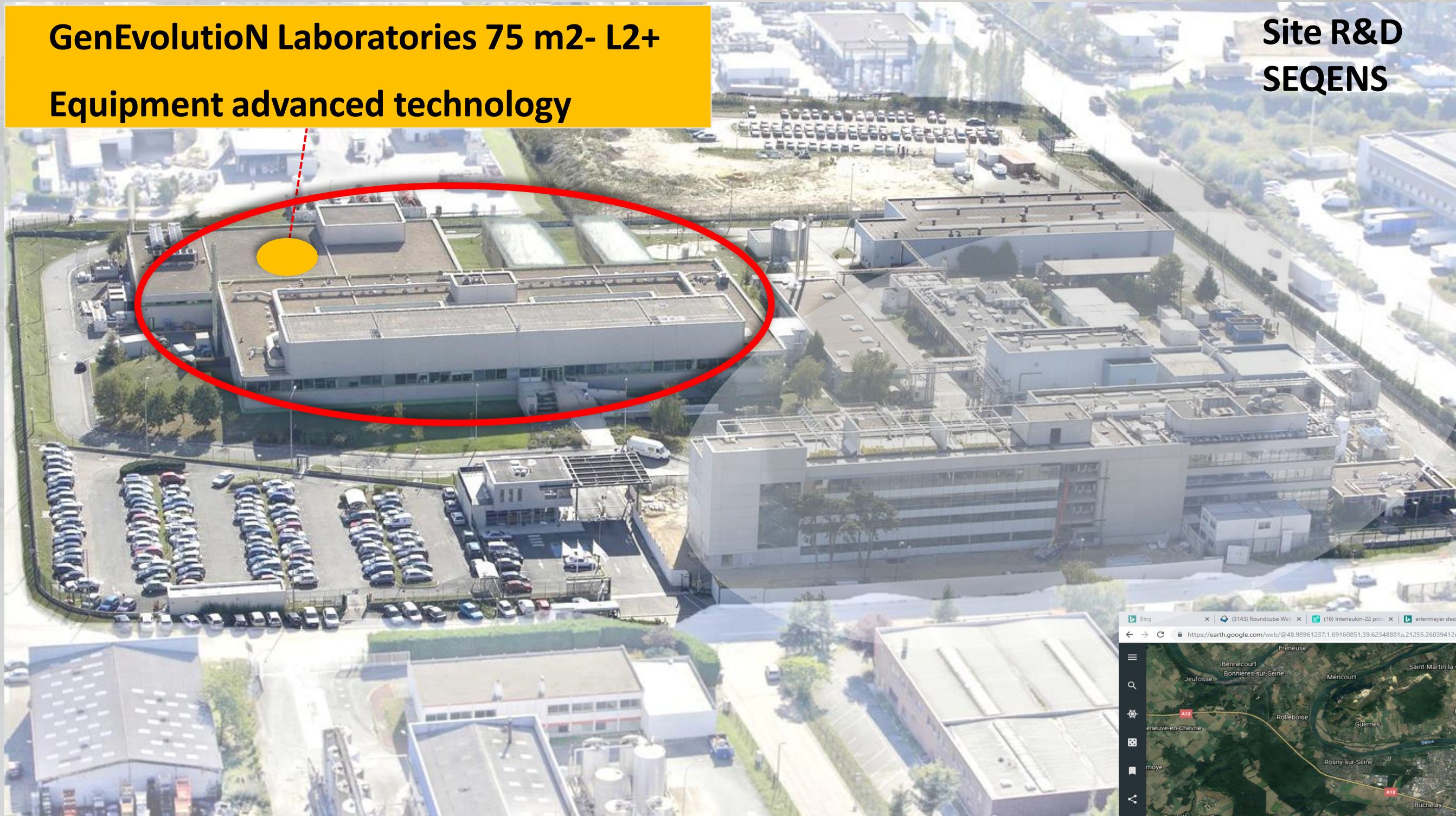
07/01/2022



# Who are we? Independent Facilities on SEQENS Labs site

**GenEvolutionN Laboratories 75 m2- L2+  
Equipment advanced technology**

**Site R&D  
SEQENS**





a CRO with genotoxicity expertise



INNOVATION

GenEvolutionN  
Holding SAS  
(February 2018)

Status «A» GLP

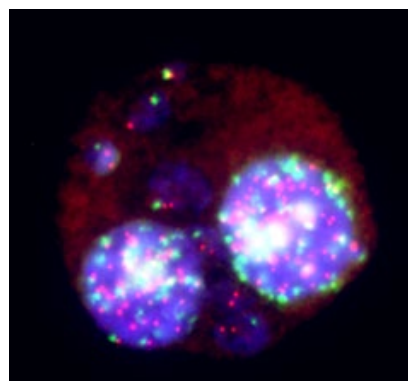
2018, 2021

GenEvolutionN  
Prospective &  
Innovation Group

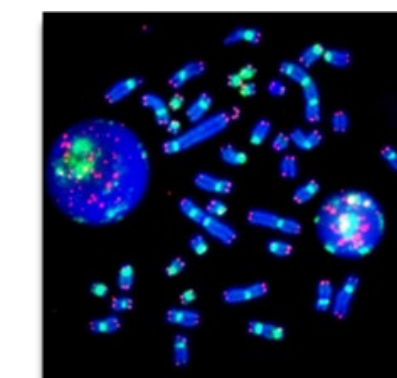
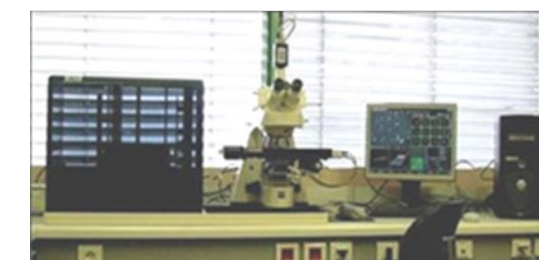
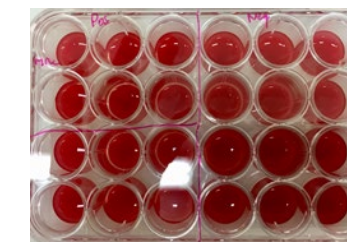
GenEvolutionN  
Testing  
Group

Research activity  
Technology transfert

Regulatory tests



Tests and Guidelines	Description
Ames Test OECD 471	Detection of mutagen compounds in contact with humans or animals
HLCA test (innovation telo/centromère) OECD 473	Chromosomal aberration test
Micronucleus test (innovation (telo/centromère) OCDE 487	Detection clastogen and aneugens effects
<i>in vitro</i> Phototoxicity OECD 432	Sun effect on compound and on human skin
<i>in vitro</i> Cytotoxicity OECD 432	<i>In vitro</i> toxicity on cell lines
<i>in vitro</i> irritation/ corrosion OECD431/439	Irritation on reconstructed human epiderminis
<i>GARD (Genomic Allergen Rapid Detection) in vitro</i> (LLNA alternative)	Hypersensitivity of pure test article or mixture in partnership with SENZAGEN
<i>in vitro</i> Endocrine disruptions	YES / YAS transfected yeasts in partnership with XenometriX
Expertise	Analyze the process of the test of the customer and propose tests <u>or</u> specific solutions



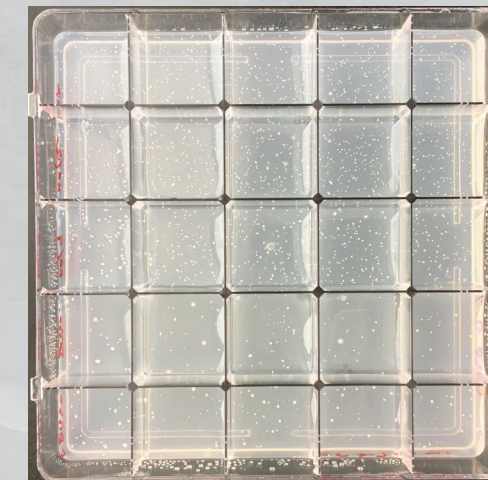
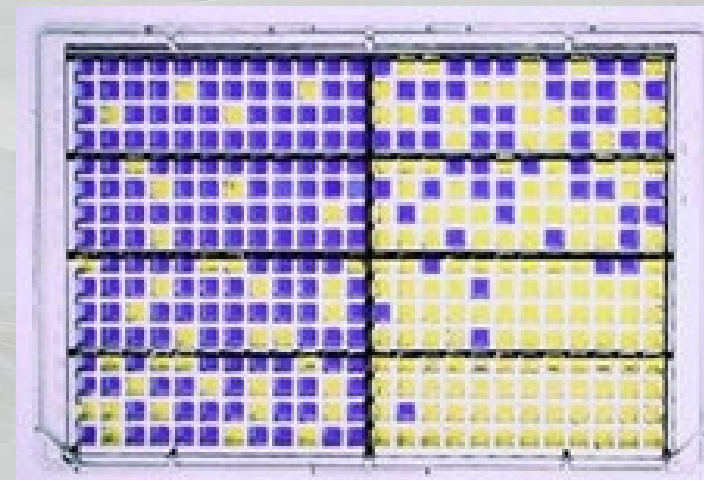
“

# Bacterial Mutation Test

## Ames test

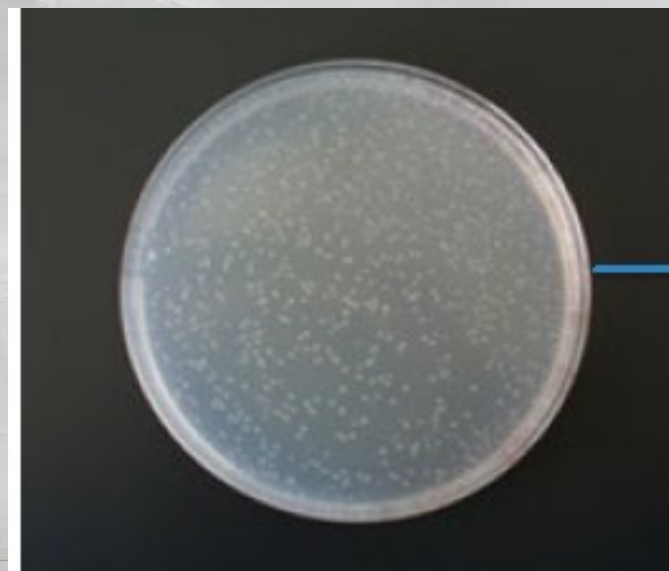
### Standard/ Treat and Wash/Fluctuation

### NanoAmes



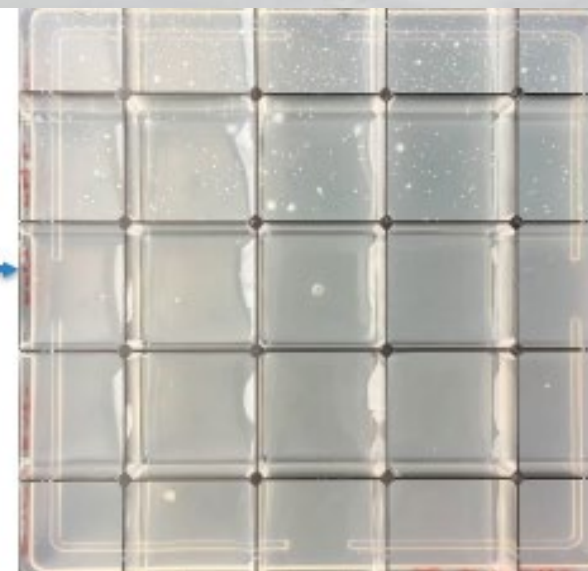
# NanoAMES™ assay development

Standard GLP AMES



20X

Standard  
MiniAMES



100X

Pre-incubation  
step

NanoAMES™



*2000X to standard AMES*

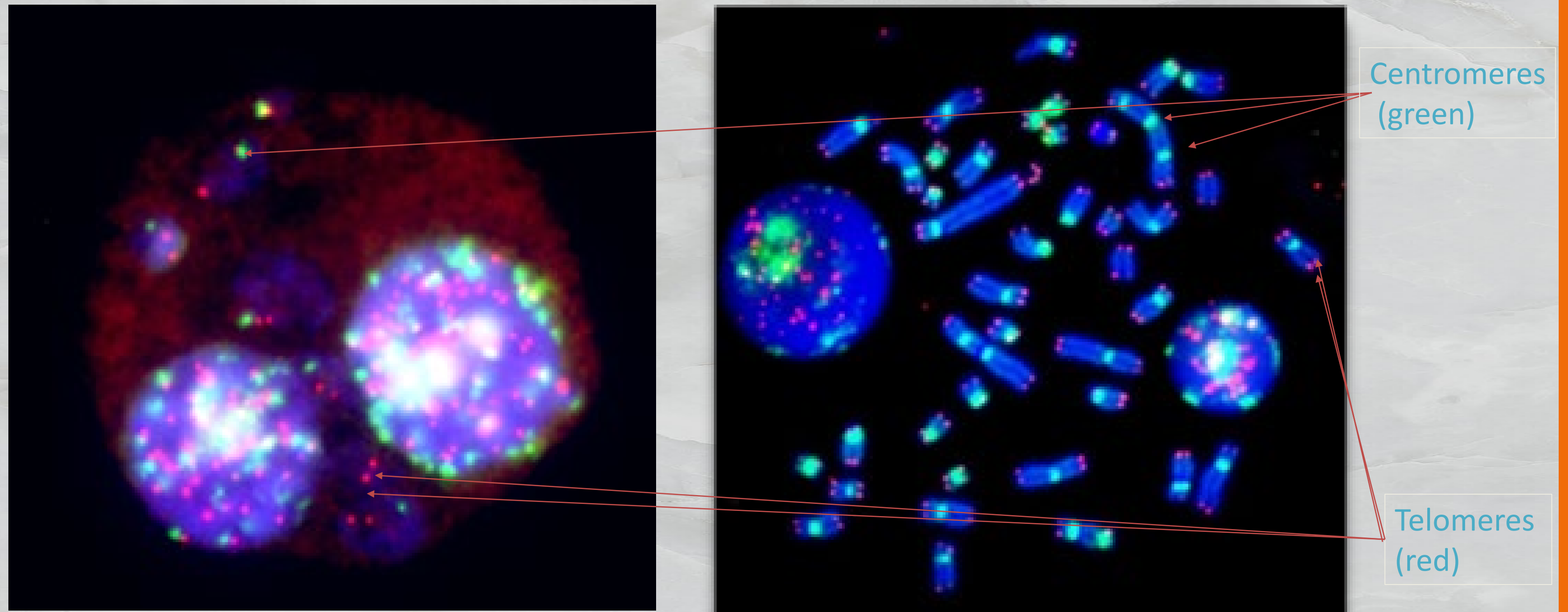
5000 µg/plate for Standard  
Test  
(quantity required 500 mg)

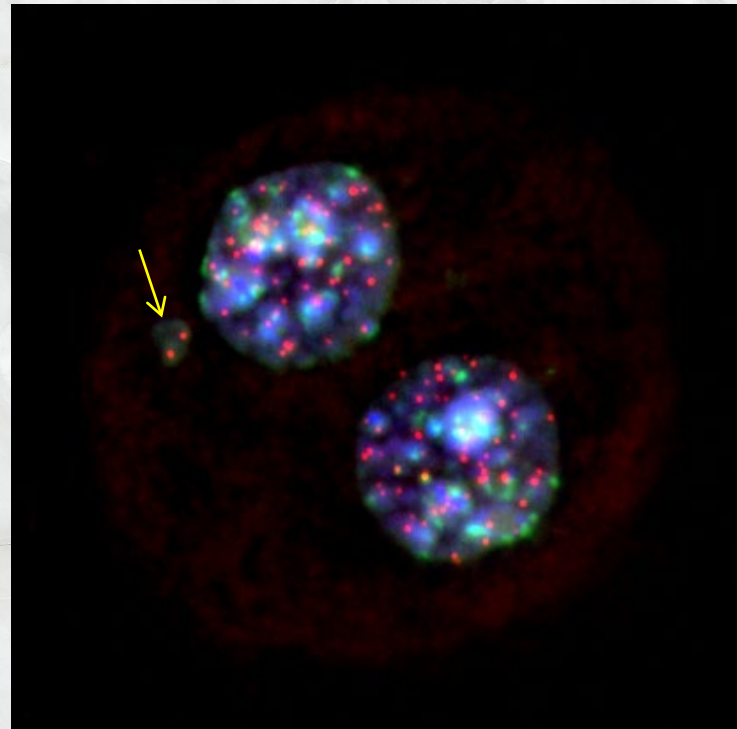
250 µg/well for MINI Ames  
(quantity required 35 mg)

2.5 µg/well for NANO  
AMES (quantity required 35  
µg 2 main strains)

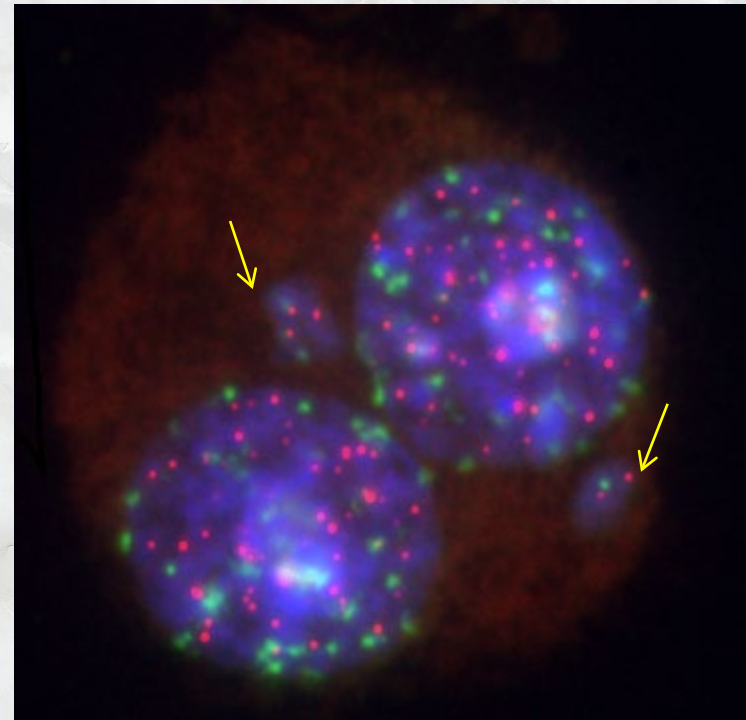
# *In vitro* Cytogenetic tests

## Micronucleus/Chromosomal Aberration/ GLP

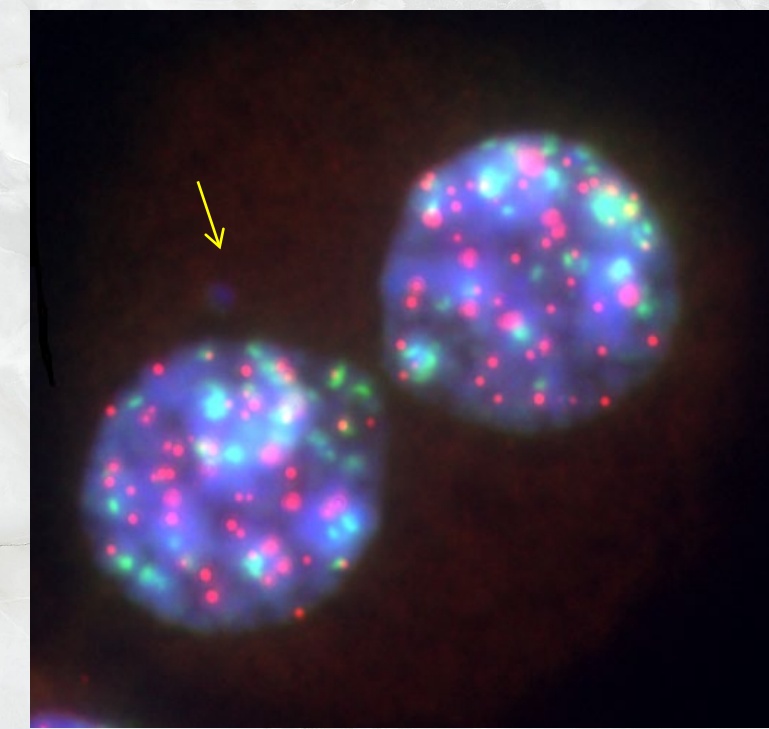




MN with only telomere sequences : clastogen



MN with telomere and centromere sequences: aneugen

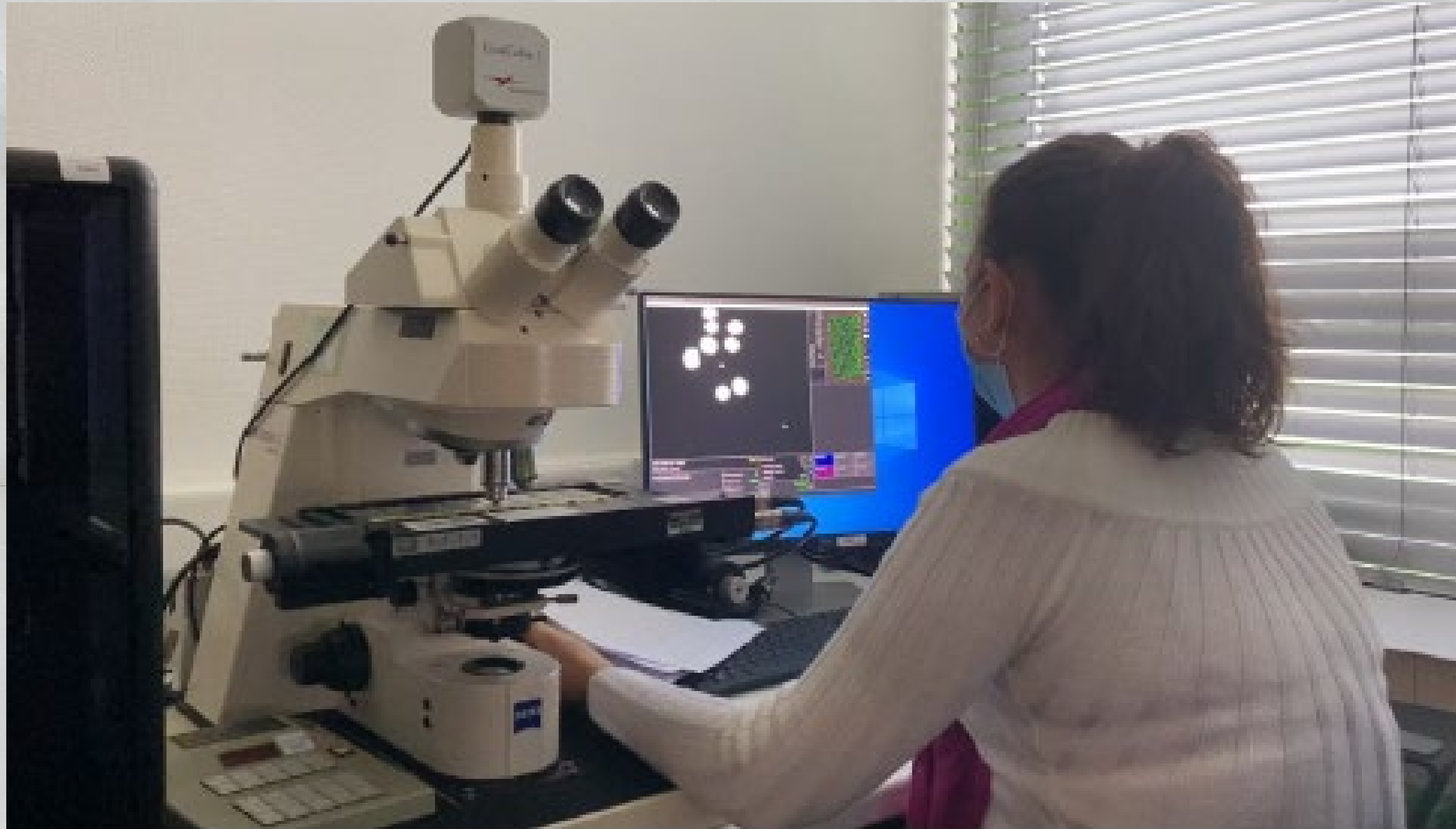


MN without telomere and centromere sequences

After telomere and centromere staining, it is easy to detect the cytoplasm due to slight fluorescent background : no further coloration is needed

Better characterization of micronucleus with double labelling Telomere centromere

# Example of image analyser



# NEW SERVICES



Phototoxicity



Regulatory Archiving  
high quality level , ie  
GLP:

- Surface 600 m2,
- About 8000 boxes



Formulation analysis

# To conclude GenEvolutionN commitments

Innovative company with human size  
that gives answers in the field of  
health and ability to develop tests  
for you

Short timelines : 4-6 weeks (GLP  
Micronucleus) report included (safe  
time)  
GLP compliance Status “A”,

Skilled (25 to 39 years in field) and  
reactive team

A customized/personalized support  
in the development of your projects ,  
and also for SME and Biotech



Merci !  
Thank you !  
감사 해요 !

