Table S9: Summary and definition of the grouping variables.

Variable	Definition
Biological system	specific cell linee/tissue used in the exposure
Biological system_grouping	cell lines are grouped in primary cell lines and cancer ones
Organism	organism (homo sapiens or mus musculus) used in the exposure
in vivo-in vitro	exposure setting of the experiment
Core material	indicates the nanomaterial grouping without specific functionalisations or modifications
Specific subgroup	indicate the exact nanomaterial used in the exposure
Functionalisation	binary, if the nanomaterial is functionalised or pristine
Chemistry	main chemistry of the core material
Metal	binary, if the nanomaterial is a metal
Oxide	binary, if the nanomaterial is an oxide
Geometry	grouping of nanomaterial in particle shapes, tubes, fibers, polymers, oer sheet
Additional information	protocol information reported from the original publication, where possible
Material	Grouping of materials in Carbon based, Metals, Oxides, Minerals and Polymer
Time	time after the exposure reported in the original publication
Time_h	time after the exposure reported in the original publication xpressed in hours
Time_period	time after the exposure, grouped in short, intermediate and late. See methods for details.
Citation	original publication
doi	doi of the original publication
stabiliser	exposure stabiliser
coating	coating information of the material
crystal phase	crystal phase of the material
purity (%)	percentage of purity reported in the original data
impurities	presence or absence of impuritites
supplier/manufaqcturer	supplier or manufacturer
address	address of the manufacturer
supplier code	code of the manufacturer
batch or lot No.	batch or lot number of the material used
Nominal diameter (nm)	diameter expressed in nm
Nominal length (micron)	length expressed in micron
Nominal Specific Surface area (m*2/g)	surface area
Dispersant	dispersant used in the exposure protocol
TEM diameter (nm)	transmission electron microspopy derived diameter

TEM width (nm) (median)	transmission electron microspopy derived width
TEM length (nm) (median)	transmission electron microspopy derived length
N of walls	number of walls of the tested ENM
BET surface area (m*2/g)	Brunauer, Emmett and Teller theory derived surface area
DLS Mean Diameter (water) (nm)	dynamic light scattering derived diameter computed in
PDI	protein dispersibility index computed in water
DLS Mean Diameter (medium) (nm)	dynamic light scattering derived diameter computed in
PDI (medium)	protein dispersibility index computed in medium
Zeta Potential (water) (mV)	zeta potential calculated in water
Zeta Potential (medium) (mV)	zeta potential calculated in medium
Description of dispersion	dispersion protocol information
Endotoxins	presence or abence of endotoxins
Shape description	geometry of the material and other shape information reported in the original publication