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**Nanomaterial:** A natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50% or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm - 100 nm.

**Neoplasia:** the abnormal proliferation of benign or malignant cells.

**Neoplasm:** [See 'tumour'.](#)

**Neoplastic:** Abnormal cells, the growth of which is more rapid than that of other cells.

**Neural tube defect (NTD):** Is a birth defect in which an opening in the spine or cranium remains from early in human development.

**Nephrotoxicity:** Toxicity to the kidney.

**Neurobehavioural:** Of behaviour determined by the nervous system.

**Neurotoxicity:** Toxicity to the nervous system.

**Neurotransmitter:** A chemical that is released from a nerve cell which thereby transmits an impulse from a nerve cell to another nerve, muscle, organ, or other tissue. A neurotransmitter is a messenger of neurologic information from one cell to another.

**No observed adverse effect level (NOAEL):** The highest administered dose at which no adverse (qv) effect has been observed.

**Non-Hodgkin lymphomas:** (NHLs) are a diverse group of hematologic cancers which encompass any lymphoma other than Hodgkin's Lymphoma

**No observed genotoxic effect level (NOGEL):** This is the highest experimental dose level where no statistically significant increase in the genotoxic effect measured in the study is identified.

**Non-genotoxic:** [See 'carcinogens'.](#)

**Nucleic acid:** One of the family of molecules which includes the DNA and RNA molecules. Nucleic acids were so named because they were originally discovered within the nucleus of cells, but they have since been found to exist outside the nucleus as well.

**Nucleosome:** A repeating subunit of DNA packaging consisting of DNA wound in sequence around histone proteins.

**Nucleotide:** the "building block" of nucleic acids, such as the DNA molecule. A nucleotide consists of one of four bases - adenine, guanine, cytosine, or thymine - attached to a phosphate-sugar group. In DNA the sugar group is deoxyribose, while in RNA (a DNA-related molecule which helps to translate genetic information into proteins), the sugar group is ribose, and the base uracil substitutes for thymine. Each group of three nucleotides in a gene is known as a codon. A nucleic acid is a long chain of nucleotides joined together, and therefore is sometimes referred to as a "polynucleotide."

**Null allele:** inactive form of a gene.

**Null hypothesis:** type of conjecture used in statistical tests, which are formal methods of reaching conclusions or making decisions on the basis of data. In toxicology, a common null hypothesis is that there is no effect of treatment with a substance. Statistical testing may enable a conclusion that this is most likely incorrect, i.e. the null hypothesis is rejected with a stated probability of error, or it is not possible to reach a conclusion. It is not possible by conventional statistical testing to prove the null hypothesis is most likely correct, i.e. that there is no effect. This is the axiomatic difficulty of "proving a negative".