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1837 **GLOSSARY AND ABBREVIATIONS USED IN THE OPINION**

1838 To assure a consistent use and understanding throughout this opinion, some words of key
1839 importance are defined.

1840 **Glossary**

Term	Definition used in the opinion
Allele	A gene that occupy a particular chromosomal locus. A diploid organism has two alleles, one on each chromosome.
Blastomere	Any one of the cells formed from the first few cell divisions in animal embryology. The embryo usually divides into two, then four, then eight blastomeres, and so on
Blastocyst	The early stage in the development of mammalian embryos. The blastocysts have an inner cell mass which will become the foetus and an outer cell mass (trophectoderm) that will become part of the placenta.
Caesarian section	Birth by surgical intervention
Chromatin	The complex of DNA and various proteins that makes up the chromosomes
Cloned embryo, embryo clone	Embryo resulting from somatic cell nuclear transfer
CpG	A region of DNA where a Cytosine nucleotide is separated by a phosphate to Guanine nucleotide. A CpG island is a region which has a high concentration of CpG sites.
Cytoplasm	The living content of the cell, except the nucleus, consisting of an aqueous protein matrix or gel, and where vital cellular organelles (e.g. mitochondria) are located
DNA methylation	Biochemical modification to the DNA through the addition of a methyl group.
Donor animal	Animal delivering the cell used in the cloning procedure
Dystocia	Abnormal or difficult birth giving or labour
Embryo	A multicellular, diploid structure of cells formed after fertilization of the oocyte and until all organs have been formed, from then it is called a foetus
Embryo, Reconstructed	An embryo that has been reassembled from its component parts by micro manipulations <i>in vitro</i>
Epigenetic processes	Alteration of gene expression by biochemical modifications (e.g. methylation) of the DNA or of DNA-binding proteins. The process does not involve changes of the DNA sequence
Epigenetic dysregulation	Abnormal or impaired control of gene expression
Epi-alleles	Alleles that are epigenetically modified
Foetus	A developing mammal after the embryo stage and before birth
Gamete	A mature reproductive cell (haploid) capable of fusing with a cell of similar origin but of opposite sex to form a zygote (diploid) from which a new organism can develop. The oocyte and spermatozoote are gametes.
Gametogenesis	The process of the formation of haploid gametes
Genotype	The entire genetic constitution of an individual
Germ line cell	A reproductive cell such as a spermatocyte or an oocyte, or a cell that will develop into a reproductive cell
Heteroplasmy	The presence of more than one type of organelle (e.g. mitochondrial DNA) within a cell
Healthy	Within the range of zootechnical and physiological parameters of mean of any given character from the point of view of food safety or animal welfare
Heifer	A female bovine that has not yet produced a calf

Hydroallantois	Abnormal fluid accumulation in the allantoic cavity of the placenta
Hydrops (fetalis)	A condition in the foetus characterized by accumulation of fluid, in at least two compartments (e.g. subcutaneous tissue, pleura, pericardium, abdomen). Hydrops sometimes leads to spontaneous abortion
Imprinting	A genetic phenomenon by which certain genes are expressed in a parent-of-origin specific manner.
LOS	Large Offspring Syndrome. The size of the offspring is greater than 20 % above the average for the species or breed (> mean + 2SD).
Oocyte	Unfertilized egg, the female gamete
Oocyte donor	Animal delivering the oocyte used in the cloning procedure
Parturition	The act or process of giving birth to offspring
Perinatal period	A species dependent time period around 7 days before and after birth for livestock
Phenotype	The totality of the observable and structural characteristics of an organism as determined by genotype and its interaction with the environment
Placentome number	The number of interfaces between the cotyledons of the foetus and the caruncles of the dams forming the cotyledonary placenta in ruminants
Pluripotent	The possibility of a stem cell to differentiate into any of the three germ layers. A pluripotent cell can give rise to any foetal or adult cell type but is not as potent as a totipotent cell.
Postnatal period	Time period after birth
Progeny of clone	F1 and subsequent generations of animals born by sexual reproduction where at least one of the ancestors were clone animals
Sexual reproduction	normal way of reproduction between male and female, involving fusion between sperm and oocyte
Somatic cell	Any cell of an animal that is not a germ line cell
Surrogate dam	Animal carrying the cloned embryos
Telomere	A region of highly repetitive DNA at the end of a chromosome
Totipotent	The possibility of a single cell to divide into any differentiated cell. See also pluiipotent
Transgene	Foreign genetic material inserted, e.g. in a cell, embryo or organism (also: genetically modified)
Trophectoderm	The group of cells in the blastocyst that form the placenta and other non-foetal tissues
Zona pellucida	The glycoprotein membrane surrounding the plasma membrane of an oocyte.
Zygote	The cell that results after fertilization of two haploid cells (usually the sperm and the oocyte)

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Abbreviations

Term	Definition used in the opinion
AI	Artificial insemination
ART	Assisted reproductive technology
IVF	<i>In vitro</i> fertilization
LOS	Large offspring syndrome
mtDNA	mitochondrial DNA
SCNT	Somatic Cell Nucleus Transfer

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