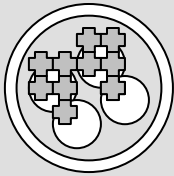
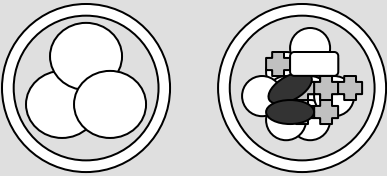
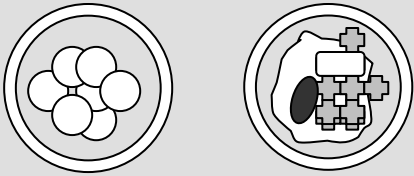
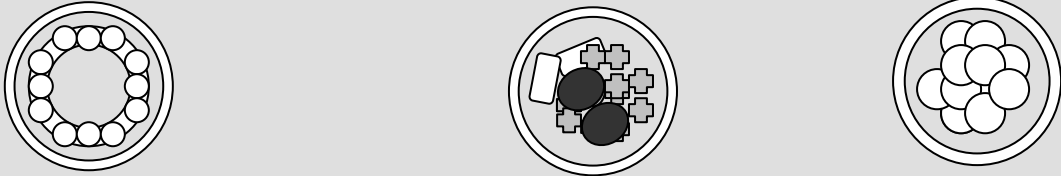


Unsuitable for implantation, in relation to a human embryo, means a human embryo that:

- (a) has been identified by preimplantation genetic diagnosis as carrying a serious genetic condition; or
- (b) is determined by a qualified embryologist* to be unsuitable for implantation according to the objective criteria below;

DAY 1	DAY 2	DAY 3	DAY 4
No 2PN from the first mitotic division	 ≥50% frag/deg/vacs	 < 4C <u>or</u> with ≥50% frag/deg/vacs	 < 8C <u>or</u> with ≥ 50% frag/deg/vacs
DAY 5 – 7			IN ADDITION
 Blastocyst with ≥ 80% reduction in size of ICM ≥ 50% frag/deg/vacs No compaction			Any embryo with ≥50% multinucleated blastomeres
+ = fragmentation □ = vacuole ● = degeneration ○ = cell			

Definitions

C = cells	deg = degeneration, ie non-viable cells	ICM = inner cell mass	vacs = vacuoles, ie fluid filled space within the cytoplasm of the cell(s)
frag = fragmentation, ie small pieces of the cell that bud off during cell division and accumulate into the extracellular region inside the zona pellucida (the outer 'shell' of the oocyte)	compaction = a process occurring on the 4 th day of human embryo development where cells merge together so that individual cells can no longer be distinguished from each other	Blastocyst = stage of human embryo development occurring on the 5 th day consisting of two distinct cell types; a hollow sphere of cells called the trophoctoderm (cells which will form the placenta) and an ICM (cells which will form the foetus)	2PN = 2 pronuclei indicating successful fertilisation; one pronucleus containing chromosomes from the oocyte, the other pronucleus containing chromosomes from the sperm

- * A qualified embryologist is defined as an embryologist who can demonstrate completion of the *Scientists in Reproductive Technology (SIRT) Training Log Book* in sections relating to embryology and embryo assessment or its equivalent and the continuing education requirements outlined in the *Reproductive Technology Accreditation Committee (RTAC) Code of Practice for Assisted Reproductive Technology Units* (ie. have at least 12 hours of accredited continuing education annually in ART or clinical laboratory practice and do at least 20 ART procedures per year).

Note. These objective criteria have been endorsed by the Scientists in Reproductive Technology (SIRT) Committee.