## Antigen vs Allele mismatches

Examples of antigen matches and mismatches can be found in this table:

patient	donor	Ag match?	patient	donor	Ag match?	patient	donor	Ag match?
B16	B16	yes	B39	B39	yes	B3901	B3901	yes
	B38	yes		B3901	yes		B39	yes
	B39	yes		B3902	yes		B16	yes
	B3901	yes		B16	yes		B3902	no
	B3902	yes		B38	no		B38	no

When comparing DNA typing for both patients and donors, the following rules are applied:

- When serology has been assigned for the DNA typing for both donor and patient, then the logic in the table above is applied.
- When no serology is known, the following logic is applied:
  ° For alleles where no serology exists the allele family is used as a proxy for serology to distinguish between allele and antigen mismatches.
  - ° When HLA-C typing has a first field of higher than 10 the first field is considered the Antigen • e.g. HLA-C\*12:02 -> 12
  - Any HLA-DPB1 mismatch is considered an Antigen mismatch. In HLA-DPB1 all alleles should be treated equally as mismatched, unless using a secondary algorithm, such as one of the TCE models. Therefore, there cannot be any allele mismatches.

The above is based on recommendations that have been approved by the WMDA Bioinformatics & Innovation Committee following discussions with the group, and finalised on 2024-02-07.