

The 4 types of mutations detected in MAF file are:

- 1) Frameshift mutation- caused by “Framing Errors” due insertions and/or deletions of nucleotides that are not in frames of 3.
- 2) Missense Mutation- A point mutation that leads to a switch in amino acid being coded by the codon.
- 3) Nonsense Mutation- A point mutation that changes a coding codon to a stop codon, leading to truncation of a protein.
- 4) Nonstop Mutation- A mutation in the stop codon.

The missense mutation can be the most deleterious of all the type of mutations as it changes an amino acid which may lead to alteration of structure and function of the overall protein leading to formation of a new protein which may have completely different characteristics.