

## IARC Meeting 34: March 29th 2019: minutes

The meeting commenced at 22:00 AEDT. AC, MC, and MO were in attendance. William Lees joined the meeting.

1. The minutes for Meeting 33 were discussed and issues relating to haplotype analysis were identified that needed correction prior to acceptance of the minutes.
2. The issue of the reporting of sequences that may have a missing terminal nucleotide was discussed. It was agreed that a statement should be provided, at the OGRDB website, pointing out the likelihood that an affirmed sequence might be missing a nucleotide. IARC will explore solutions to this problem with WL.
3. The committee then considered the submitted IGHV1-58 variant from Submission S00008 (IGHV1-58\*01+G29A). The submitted sequence is as follows:

>IGHV1-58\*01+G29A

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CAAATGCAGCTGGTGCAGTCTGGGCCTGAAGTGAAGAAGCCTGGGACCTCAGTGAAG
GTCTCCTGCAAGGCTTCTGGATTCACCTTTACTAGCTCTGCTGTGCAGTGGGTGCGAC
AGGCTCGTGGACAACGCCTTGAGTGGATAGGATGGATCGTCGTTGGCAGTGGTAACAC
AAACTACGCACAGAAGTTCCAGGAAAGAGTCACCATTACCAGGGACATGTCCACAAGC
ACAGCCTACATGGAGCTGAGCAGCCTGAGATCCGAGGACACGGCCGTGTATTACTGTG
CGGCAGA
```

This sequence represents IGHV1-58\*01+G33A in the IMGT numbering system. The committee noted a rearrangement frequency of 0.15%, with 178 alignments including 127 perfect matches to the inferred allele. There was abundant variation in the CDR3 regions of the aligned sequences. The genotype showed the individual to be heterozygous at the IGHV1-58 locus, with the alternative IGHV1-58\*01 allele being associated with 214 sequences for an allele ratio of 45:55. All members of the committee agreed that the sequence should be accepted as a Level 1 sequence.

This sequence has previously been catalogued by IgPdb as IGHV1-58\*p04, though the IgPdb sequence is derived from the S0008 dataset. The S0008 submission noted that haplotyping was not possible, The submitted sequence will be recognized up to and including nucleotide 319 as follows:

>IGHV1-58\*01+G29A

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CAAATGCAGCTGGTGCAGTCTGGGCCTGAAGTGAAGAAGCCTGGGACCTCAGTGAAG
GTCTCCTGCAAGGCTTCTGGATTCACCTTTACTAGCTCTGCTGTGCAGTGGGTGCGAC
AGGCTCGTGGACAACGCCTTGAGTGGATAGGATGGATCGTCGTTGGCAGTGGTAACAC
AAACTACGCACAGAAGTTCCAGGAAAGAGTCACCATTACCAGGGACATGTCCACAAGC
ACAGCCTACATGGAGCTGAGCAGCCTGAGATCCGAGGACACGGCCGTGTATTACTGTG
CGGCAG.
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This decision will be recorded in OGRDB.

4. There was brief discussion of issues relating to submission S00009. AC will raise this issues with the submitter.
5. There was brief discussion of developing the capacity of OGRDB to report on recognised germine genes within submitted genotypes. WL will try to develop a section within OGRDB that can be privately viewed by IARC members as this capability is developed.

The next meeting (Meeting 35) will be on Friday April 12th at a time to be determined via email.

The meeting ended at 23:20 AEDT.