

IARC Meeting 33: March 15th 2019: minutes

The meeting commenced at 22:00 AEDT. AC, MC, and MO were in attendance. CS gave her apologies.

1. The minutes for Meeting 32 were accepted. The minutes of Meeting 31 now include numerous edits that require processing. The minutes will therefore be edited before being reconsidered by the committee via email.
2. An update was provided on the IGHJ submission of Chaim Schramm. He has indicated that he is still intending to submit the sequence.
3. The committee was informed of a submission by Moriah Cohan and Gur Yaari. MO, CB, and AC are assisting with the submission.
4. The committee discussed issues that should be brought before the next meeting of the Working Group. It was agreed that the WG rather than the IARC should draw up recommendations for the Genoa meeting of the AIRR-C, regarding the terms of appointment of the IARC, and the timing of their appointments. The definition of Goals for 2019 should also be a responsibility of the WG. There was also some discussion of the suggestion from Jamie Scott that Standing Committees might be formed, to take responsibility for ongoing activities of the AIRR-C.
5. It was agreed that prior to the Genoa meeting we should publish all affirmed sequences and notify IMGT of these decisions. AC will work with Corey Watson to ensure that this happens. It was agreed that the recently affirmed IGHV sequences should be published.
6. The committee then considered the submitted IGHV5-51 variant (IGHV5-51*03+C203T) from S0007. The submitted sequence is as follows:

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>IGHV5-51*03+C203T
GAGGTGCAGCTGGTGCAGTCTGGAGCAGAGGTGAAAAGCCGGGGGAGTCTCTGAAG
ATCTCCTGTAAGGGTTCTGGATACAGCTTTACCAGCTACTGGATCGGCTGGGTGCGCC
AGATGCCCCGGGAAAGGCCTGGAGTGGATGGGGATCATCTATCCTGGTGACTCTGATAC
CAGATACAGCCCGTCCTTCCAAGGCCAGGTTACCATCTCAGCCGACAAGTCCATCAGC
ACCGCCTACCTGCAGTGGAGCAGCCTGAAGGCCTCGGACACCGCCATGTATTACTGTG
CGAGA
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This sequence represents IGHV5-51*03 C228T in the IMGT numbering system. The committee noted a rearrangement frequency of 1.25%, with 1128 alignments including 304 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 IGHV5-51 locus, with the alternative IGHV5-51*03 allele being associated with 1539 sequences for an allele ratio of 42:58. 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 IGHV5-51*p13, though the

IgPdb sequence is derived from the S0007 dataset. The S0007 submission noted that haplotyping was not possible, but the haplotype analysis provided by MC (using the IGHJ4 locus) supports the decision of the committee. All alignments to the inference are associated with a single chromosome. The output of the inference included bases up to and including base 318 as the closest germline gene in IMGT (IGHV5-51*03) is only reported up to and including base 318. The submitted sequence will be recognized up to and including nucleotide 318 as follows:

>IGHV5-51*i01

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GAGGTGCAGCTGGTGCAGTCTGGAGCAGAGGTGAAAAGCCGGGGGAGTCTCTGAAG
ATCTCCTGTAAGGGTTCTGGATACAGCTTTACCAGCTACTGGATCGGCTGGGTGCGCC
AGATGCCCCGGGAAAGGCCTGGAGTGGATGGGGATCATCTATCCTGGTGA CTCTGATAC
CAGATACAGCCCGTCCTTCCAAGGCCAGGTTACCATCTCAGCCGACAAGTCCATCAGC
ACCGCCTACCTGCAGTGGAGCAGCCTGAAGGCCTCGGACACCGCCATGTATTACTGTG
CGAGA
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This decision will be recorded in OGRDB.

The next meeting (Meeting 34) will be on Friday March 29th at 22:00 AEDT.

The meeting ended at 23:20 AEDT.