Minutes meeting 67, April 6, 2021 (10.00 UTC)

MC, AC, KJ, GY, MO, CW, WL

- 1. Mats Ohlin was unanimously elected as new chair of the IARC. (MO was not present during the discussion of this matter or during the voting procedure)
- 2. Minutes of Meeting 66 were approved.
- 3. Completion of evaluation of IGHV1–69*13 G238A: Many different sequences were identified in the updated version (spring 2021) of VDJbase (sample P4_I7_S1; PRJEB28370; ID in study: C7) including 1020 sequences, 463 unique CDR3s of unmutated sequences, and 860 unique CDR3s. Linkage to IGHV2-70*15 had been defined by IGHD2-21 haplotyping. MC highlights the importance of linkage between alleles of closely spaced genes (linkage disequilibrium) as a way to assess appropriate inference. Provisionally approved as a level 1 sequence. Final approval is awaiting analysis of a full submission to OGRDB. Of note, this sequence could also be annotated as IGHV1-69*05 G54A, highlighting the importance of selection of an appropriate naming strategy for this allele.



- 4. Consideration of IGHV3-21*01 G278C (VDJbase P4_I27_S1; PRJEB28370; ID in study: SC2; ERR2843413). In the original version of VDJbase this allele was inferred based on 520 sequences, 277 unmutated sequences, and 520 unique CDR3s. Haplotyping based on IGHJ6 firmly separated this inferred allele from the other allele (IGHV3-21*01) of this gene in the genotype. This inferred sequence, however, no longer appears in VDJbase following its update during spring 2021. It was discussed if it is still up for consideration. It is presumed that this is the result of the new analysis pipeline implemented by VDJbase. GY described his view on why this allele was not inferred anymore, a consequence of specific details of the TIgGER method of inference. Additional analysis will be carried out and reported in the next meeting.
- 5. Wider discussion on the difficulty of assigning genes names to alleles and on the role of the IUIS subcommittee in defining names of genes and alleles.
- 6. Initial discussion on how we are to proceed with evaluation of terminal nucleotides of VDJbase inferences.
- 7. Future 2021 IARC publication googledoc AC makes sure that everyone gets access to the document.
- 8. A document covering all new affirmations that have been made from VDJbase data sets will be prepared (AC).
- 9. Next meeting on April 26, 2021 at 10.00 UTC.