

26<sup>th</sup> Annual Congress of the European Hematology Association  
9<sup>th</sup>-17<sup>th</sup> June 2021, Virtual  
By Aisha Jibril

In ongoing efforts to account for the safety and well-being of society during the current pandemic, EHA 2021 was held virtually once again this year. Nonetheless, EHA 2021 delivered in bringing together an international community of medical professionals and scientific researchers to share and discuss new developments and approaches in haematology through an extremely well organised, interactive, and educational conference.

I would like to thank the UK Myeloma Forum and GSK for awarding me with a bursary to attend my first EHA annual congress. I was fortunate enough to be selected to give an oral presentation to present my research titled: "Multiple Myeloma Derived Mitochondrial DAMPs Promote a Pro-inflammatory Bone Marrow Microenvironment".

My talk was featured in the basic and translational myeloma research category amongst 5 other speakers. Afsaneh M. Shariatpanahi presented her data on building an improved base editor/inflammation-based risk stratification system that better reflects the biological processes that drive myeloma progression and provides a more accurate risk classification of multiple myeloma.

Another speaker was Jennifer Totman. I learned that one of the most common myeloma translocations is t(4;14) and that overexpression of multiple myeloma SET domain leads to a dependency on SETD2 for myeloma cell growth and progression. Her research was the first to demonstrate the oncogenic driver capabilities of SETD2, as well as showing that targeting SETD2 with a small molecule inhibitor has potent in vitro and in vivo anti-proliferative activity. Therefore, this is a promising pre-clinical outcome that shows that SETD2 inhibition could be a therapeutic option to combine with current multiple myeloma therapies.

Leo Rasche presented his research demonstrating that biallelic BCMA gene deletion may be a key immune-evasion mechanism conferring resistance to BCMA targeting T-cell therapies. Therefore, highlighting a greater need for multi-specific CAR T-cells with different immunotargets to overcome the drug resistance caused by the loss of a single allele.

Finally, Brian Dolinski presented his research on improving BCMA CAR T-cell expansion, potency, and durability by engineering them with membrane bound IL-15 using Obsidian Therapeutics cytoDRiVE™ technology. The resulting engineered BCMA CAR T-cells were found to have a memory stem cell phenotype and increased anti-tumour activity with enhanced response duration. Thus, offering a potential way for physicians to have greater control over CAR T expansion and overall efficacy for multiple myeloma patients.

On Monday 14<sup>th</sup> June, a live Q&A panel discussion was held for the speakers in this session chaired by biomedical scientist Tom Cupedo and haematologist Jo Caers. We were each given an opportunity to present a summary of our research followed by a lively discussion with questions from the audience and from the Chairs. This was personally my favourite experience of EHA 2021, it was an honour to be included in such a session with other established researchers and healthcare professionals.

Given the virtual nature of the conference, not only did the live Q&A sessions provide a lovely interactive aspect, the on-demand features and online platform means that EHA 2021 doesn't have to come to an end on the 17<sup>th</sup>. With the vast amount of promising and novel research presented I will definitely be taking advantage of this to soak up all that EHA 2021 has to offer over the coming weeks.

Overall, EHA 2021 was a resounding success in my eyes. Thank you once again to the UKMF and GSK for the funding that allowed me to experience this excellent opportunity.