Review of the European Haematology Association 2024 Congress

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I would like to thank the UK Myeloma Society and Menarini Stemline for awarding me a travel bursary to attend the European Haematology Association 2024 Congress in Madrid. This was my first time attending an international conference and it was an invaluable experience. Hearing about a wide variety of fascinating haematology research reaffirmed my interest in this specialty.

My research on how multiple myeloma causes changes in fatty acid metabolism in tumour-associated macrophages via a FATP2-dependent mechanism was selected for a poster presentation. I particularly enjoyed talking to researchers presenting posters on related topics which helped me think of new ideas and further consider how research in this area could be translated into clinical practice.

I found Cirino Botta's (University of Palermo) presentation on the immune system and gut microbiome in multiple myeloma and its precursors particularly interesting. His research looks into the possibility that the gut microbiota could be responsible for immune microenvironment remodelling by investigating immunological and gut changes in the progression of MGUS to myeloma. Considering the key role the immune system plays in multiple myeloma advances in this area could greatly improve our understanding of how MGUS and smouldering multiple myeloma progress to multiple myeloma and help develop ways to prevent this progression.

Another highlight was an insightful presentation from Paola Neri (University of Calgary) on how the immune microenvironment affects responses to T cell-based therapies. It was interesting to learn more about how therapy can be individualised to patients through immune profiling to estimate the likelihood of their disease responding to different treatments.

Sara Gandolfi's (University of Helsinki) presentation on the mechanisms of sensitivity and resistance to natural killer cells in multiple myeloma was also very interesting. Her research investigates the potential role of natural killer cells in patients whose multiple myeloma has not responded to T-cell based immunotherapy. She found myeloma cells induce a downregulation in natural killer cell activation and myeloma cells showed a reduced response to natural killer cells at a transcriptomic and cytokine level. This natural killer cell resistance was associated with a TRAF3 mutation. It was interesting to hear about how these findings could lead to new treatment options, especially for those with treatment resistant disease.

I also found it interesting hearing about how metabolic targets are being utilised in other haematological cancers, particularly Jan Jacob Schuringa's (University Medical Centre Groningen) presentation on AML.

As a medical student I also found attending some of the more clinical sessions very interesting. I found it particularly valuable attending the session on 'Perspectives on end-of-life care in haematology', an important area which is often less covered in medical school curriculums. Hearing about the translation of research into practice through the clinicians and psychologists perspective was very valuable for considering how the advances being discussed can be implemented to improve patient care.

As a student it is rare to have access to such a diverse range of prominent researchers talking about their current research, making this a particularly enlightening experience. After spending a year researching a specific aspect of multiple myeloma it was inspirational to learn more about a wide range of novel research tackling all aspects of the disease. Thank you once again to the UK Myeloma Society and Menarini Stemline whose generous bursary allowed me to experience this enriching opportunity.