

CONFERENCE REPORT - JIM SYMPOSIUM

”Targeted therapy in B-cell malignancies”

Guest editor: Karin Ekström Smedby

Symposium organizers: Karin Ekström Smedby and Richard Rosenquist

The meeting

The Journal of Internal Medicine’s international symposium ”Targeted therapy in B-cell malignancies” was held the 29th and 30th of September 2016 at the Nobel Forum, Karolinska Institutet. The meeting was fully booked and the auditorium consisted mainly of clinicians and researchers interested in lymphoma biology and patient care from Sweden and other Nordic/European countries. The symposium aimed to review and discuss recent developments in the treatment of B-cell malignancies as well as the underlying biological basis for targeted therapies and epidemiological disease patterns.

The topic

The therapeutic landscape in oncology, and especially in hematological malignancies, is undergoing dramatic changes with the introduction of targeted biological therapies either alone or in combination with traditional chemotherapy schemes. The program covered the full spectrum from experimental and translational studies providing the biological rationale for recently introduced drugs and compounds under development, as well as clinical studies and state-of-the-art treatment of B-cell malignancies.

The presentations

The program was divided into five sessions with an introductory session encompassing epidemiology and etiology, ontogeny and evolution of B-cell malignancies. In this session, Keynote speaker Professor Riccardo Dalla-Favera from Columbia University (New York) elegantly presented common and distinct pathways that are deregulated and partake in the development of diffuse large B-cell lymphomas. In the next session focusing on chronic lymphocytic leukemia (CLL), speakers covered the evolving molecular landscape of CLL and the dual role of immunoglobulins linking ‘inside with outside’. Keynote speaker professor Michael Hallek from Cologne gave a comprehensive overview of current and future targeted therapy schemes in CLL. In the mantle cell lymphoma session, the focus was on the genomic landscape of indolent and aggressive disease and the driving “forces” in relapsing cases, as well as outlining current and future directions of targeted therapy in mantle cell lymphoma.

The second day opened with a session on follicular lymphoma tracking early phases of lymphomagenesis and highlighting importance of unusual glycosylation of surface Ig to engage lectin drivers, as well as recent therapeutic developments. Keynote lecture distinguished professor Louis Staudt from the National Cancer Institute covered targeting of B-cell receptor signaling in diffuse large B-cell lymphoma and presented exciting preliminary findings from a study of central nervous system lymphoma. The complex genomic landscape and current clinical treatment trials were further laid out in diffuse large B-cell lymphoma. The last B-cell malignancy subtype to be discussed was marginal zone lymphomas where lectures highlighted

genetics, microbes as disease initiators and new therapeutic strategies. The conference ended with a panel discussion of unifying themes and unmet needs in lymphoma research and patient care.

Conclusion

In recent years, there has been a dramatic increase in the knowledge of key pathways that are commonly affected in B-cell malignancies. Central mechanisms that have been revealed include B-cell receptor signaling that has paved the way for a paradigm shift in lymphoma therapy and led the development of new targeted therapy compounds alone or in combination with standard chemotherapy-based approaches. This improved understanding of the distinct biology of B-cell malignancy subtypes provide an important basis for further tailored treatment and personalized medicine in future lymphoma care. For further advances in the field, the importance of large-scale collaborative research efforts in basic as well as translational and clinical studies cannot be underestimated.