Targeting escape signaling in resistant non-Hodgkin's lymphoma

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Diffuse large B cell lymphoma (DLBCL) is the most common subtype of non-Hodgkin lymphoma (NHL) with 1400 cases diagnosed yearly in the USA. While some patient can be cured for like, approximately 30% of these patients have lymphoma that comes back despite therapy and will die prematurely. In recent years advances in treatment have shown Ibrutinib blocks a driver of cancer termed BTK. While ibrutinib is initially effective, most individuals with different types of lymphomas develop resistance to and have a short survival. With this growing problem on potentially curable lymphoma, we plan to learn how ibrutinib stops working and overcome this problem with mechanistically derived new treatments for DLBCL, which will apply to many blood cancers. There are two major problems that stand in the way of identifying curative therapy. One is an incomplete understanding of drugs blocking the driver Bruton tyrosine kinase (BTK) which loses its effectiveness and allows regrowth of DLBCL. A second problem is suppressed immune cells which would normally recognize and eliminate DLBCL, but in relapsed DLBCL fail to eliminate DLBCL. Said another way, the immune cells have the brakes applied and are not free to eliminate DLBCL cells. We have made progress to show possible ways to understand how ibrutinib drug loses its effectiveness. The information contained in this e-mail message may be privileged, confidential, and/or protected from disclosure. This e-mail message may contain protected health information (PHI); dissemination of PHI should comply with applicable federal and state laws. If you are not the intended recipient, or an authorized representative of the intended recipient, any further review, disclosure, use, dissemination, distribution, or copying of this message or any attachment (or the information contained therein) is strictly prohibited. If you think that you have received this e-mail message in error, please notify the sender by return e-mail and delete all references to it and its contents from your systems.

Speaker Biography

Lalit Sehgal has research interests focused on the communication between lymphoma cells and stromal cells. His recent finding revealed that communication between the tumor and stroma could modulate the expression of key oncogene, which can be further targeted for effective therapy in MCL relapse. The findings have forwarded the hematology field by exploring new targets for therapy.

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