Centre for
Heart Lung Innovation
UBC and St. Paul's Hospital

Centre for Heart Lung Innovation Research in Progress (R.I.P.)

Role of RARγ and its genetic variants S427L in transcriptional response to doxorubicin-induced cardiotoxicity

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Monday, June 7th, 2021
9:00 – 10:00 a.m.

Zoom Video Conference
(Meeting ID: 693 1997 7044; Passcode: 030679)

"Doxorubicin is a commonly used chemotherapy drug that showed effective outcomes in treating many adult tumors and more than half of all childhood cancers, but its clinical usefulness is limited by doxorubicin-induced cardiotoxicity (DIC). A genetic variant of retinoic acid receptor gamma (RARγ, S427L) has been identified associated with DIC and is a potential genetic screening site for future personalized medicine.

To better compare the functional impacts of this variant, we used genome-edited iPSC-CMs as isogenic study model. We performed protein structure modeling, luciferase reporter assay and RNA sequencing to investigate the role of RARγ-S427L in transcriptional response to DIC."

This event is a Self-Approved Group Learning Activity as defined by the Maintenance Certification Program of the Royal College of Physicians and Surgeons of Canada