

IN THE SPOTLIGHT

Issue 74 | Mar 2020

A Common MET Polymorphism Harnesses HER2 Signaling to Drive Aggressive Squamous Cell Carcinoma. (Nat Commun, Mar 2020)

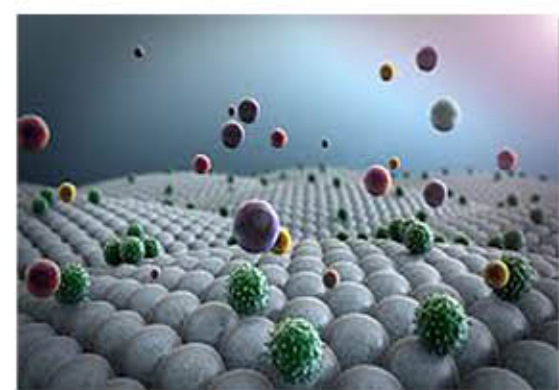
In this impactful study, research team led by Prof. Goh Boon Cher and Dr. Kong Li Ren uncovered a genetic variant in a gene called MET, which encodes for a cancer promoting protein that relays growth, survival and signal transmissions in cancer cells. Findings revealed that the single amino-acid change in the MET receptor leads to strong binding to another cancer promoting protein, HER2, thereby driving cancer aggression. This groundbreaking discovery may lay the foundation for the deployment of precision therapeutics for patients with variants in MET gene.



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Targeting Microtubules Sensitizes Drug Resistant Lung Cancer Cells to Lysosomal Pathway Inhibitors. (Theranostics, Feb 2020)

A recent study led by Prof. Daniel G. Tenen and Dr. Chin Tan Min demonstrated that a disorganized microtubule network results in a defective endosome-lysosome degradation pathway. This hinders the efficient degradation of phosphorylated proteins, resulting in the amplification of downstream proliferative and survival pathways. Findings from this study provide an enhanced road map for the study of tumors with mutated tyrosine kinases, underscoring the significance of microtubule organization and lysosomal pathway as a potential therapeutic option.



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NanoVar: Accurate Characterization of Patients' Genomic Structural Variants Using Low-Depth Nanopore Sequencing. (Genome Biol, Mar 2020)

Researchers from Dr. Touati Benoukraf's lab recently devised NanoVar, an optimized structural variant (SV) caller utilizing low-depth (8X) whole-genome sequencing (WGS) data. NanoVar displays higher structural variant calling accuracy when compared against current tools using low-depth simulated datasets. With the emergence of WGS as a potential clinical strategy, NanoVar holds promising prospects for the discovery of novel pathological SVs for precision therapeutics.



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UPCOMING EVENTS



6TH RNA BIOLOGY SYMPOSIUM
1-2 OCT 2020
SINGAPORE

6th RNA Biology Symposium

1 - 2 October 2020

NUS Shaw Foundation Alumni House
Level 2 auditorium

11 Kent Ridge Drive
Singapore 119244

Frontiers in Cancer Science 2020

2 - 4 November 2020

Lee Kong Chian School of Medicine
Auditorium

11 Mandalay Road
Singapore 308232



FCS 2-4 November 2020
Lee Kong Chian School of Medicine
(Novena Campus)



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