

METTL14 and its oncogenic roles in breast cancer cells

Shahrazad Ilbeigi

School of Medicine Shiraz University of Medical Science, Shiraz, Iran

Abstract

Statement of the Problem: As an important m6A dynamic modification-related protein, METTL14 was reported not only played an oncogenic role but also functioned as a tumor suppressor gene. However, regulation of METTL14 across mRNA and copy number variation (CNV) remain elusive and its role in breast cancer cells has not been clarified clearly.

Methods: Analysis of TCGA and cell experiments.

Findings: There is a strong positive correlation between METTL14 mRNA and CNV among all subtypes of breast cancer, which indicated a regulation between METTL14 mRNA and CNV. In addition, we found that knocking down METTL14 in breast cancer cells resulted in inhibition of cell growth and increased apoptosis in breast cancer cells.

Conclusion & Significance: (1) METTL14 expressed differently in various subtypes of breast and there is a possible regulation existed between mRNA and CNV. (2) METTL14 knockdown lead to slower cell growth and increased cell apoptosis.

Biography

Yanfang Liu is studying for a PhD degree in Peking University. She has published more than 5 papers in reputed journals and was often invited to participate in paper review

Received Date: March 4, 2022

Accepted Date: March 16, 2022

Published Date: March 27, 2022