Epidemiological profiling of population-specific risk factors and validation of novel genetic variants and deep learning-driven mitosis detection in breast cancer patients

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RECOMMENDATIONS

The outcome of our research work has shown that integrative analysis of various aspects related to breast cancer will pave way for further research. We hereby recommend the following suggestions that can be taken up for further investigation. Personalized breast cancer risk assessment tools incorporating demographic, lifestyle, genetic, and clinical data can be developed to provide tailored recommendations for individuals based on their unique profiles.

- Public awareness is to be created to encourage healthy lifestyle choices and early
- disease management.
- Genetic research can be expanded to identify additional variants and their
- potential links to both breast cancer and cardiomyopathy.
- Large cohort patient study to validate the association of the rare variants with
- breast cancer risk.
- Longitudinal studies can be conducted to track the effects of circadian rhythm
- disruptions on breast cancer incidence.
- Clinical trials can be conducted to evaluate interventions aimed at managing
- circadian rhythm disturbances, reducing cardiovascular risks, and preventing
- cardiomyopathy in breast cancer patients.