بسمه تعالی

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Title: Prediction of metastasis rate in breast cancer patients using deep learning and multivariate data

Patients No= 3700

Recruitment Period: 15 yr

Recruitment sites: Multi-center

Variables: 54

Variable Categories: Demographic – Pathologic – Clinical – dates – Follow up times -

Process: data updating – periotic follow up (death – metastasis – recurrence)

Specific aims

- Develop an AI-based system utilizing deep neural networks and multimodal data for accurate metastasis and survival rate prediction in breast cancer patients after surgery.
- Providing the potential of an AI-driven breast cancer metastasis and survival prediction platform, leveraging multi modaldata, to personalize treatment approaches.
- To investigate the breast cancer metastasis and survival rate in cancer patients based on demographic data, biomarkers (ER, PR, Her2, K67), Pathology, and clinical features.
- Analyze the research findings to identify key factors influencing breast cancer and theirapplication in preventive measures and public health initiatives.
- Empower the physicians to choose the best treatment for their patients based on their metastasis and survival prediction.
- Contribute indirectly to improving the life expectancy of breast cancer patients, using this AIbased metastasis and survival prediction
- The feasibility of using the results of this study to make major decisions related to lifestyle and women's health.

Thank You