Mortality Prediction

- Efficacy and safety of trans-carotid approach for mechanical thrombectomy in acute ischemic stroke: a multicenter two-arm case series with systematic review and meta-analysis
- Predictors of treatment response and overall survival in patients with breast cancer brain metastases treated with stereotactic radiosurgery: a prospective study using the NeuroPoint Alliance SRS Registry
- The Circadian Rhythm Gene Network Could Distinguish Molecular Profile and Prognosis for Glioblastoma
- Predictive Factors and Impact of Delayed Spine Surgery: A Nationwide Retrospective Cohort
- Global, regional, and national burden of older adults peripheral nervous system tumors (1990-2021): a systematic analysis of incidence, dalys, and deaths with projections to 2050
- Ablative Techniques for Lung Metastases: Patient Selection and Outcomes Following Treatment with Stereotactic Radiotherapy or Radiofrequency Ablation
- Population-Based Real-World Outcomes of Post-Operative Adjuvant Brain Cavity Radiotherapy Versus Observation
- Predictive Factors Affecting the Need for Mechanical Ventilation in Acute Traumatic Cervical Spinal Cord Injury

Mortality prediction typically refers to the estimation or forecasting of the likelihood of an individual's death within a specified period. This can have applications in various fields, including healthcare, insurance, and public health. Predicting mortality involves analyzing various factors and risk factors that can contribute to an increased likelihood of death. Here are some key aspects and approaches related to mortality prediction:

Healthcare Data Analysis:

Electronic Health Records (EHRs): Analyzing data from electronic health records, including medical history, laboratory results, and diagnostic information, can help identify patterns and risk factors associated with mortality. Vital Signs Monitoring: Monitoring vital signs such as heart rate, blood pressure, and respiratory rate can provide real-time data for predicting mortality in critical care settings. Risk Factors:

Chronic Conditions: The presence of chronic diseases such as heart disease, diabetes, and respiratory disorders can significantly impact mortality risk. Age: Advanced age is a well-established risk factor for mortality. Different age groups may have different mortality rates. Lifestyle Factors: Smoking, excessive alcohol consumption, and sedentary lifestyles contribute to mortality risk. Machine Learning and Predictive Modeling:

Machine learning algorithms, including logistic regression, decision trees, and neural networks, can be applied to analyze large datasets and identify patterns associated with mortality. Feature selection is crucial for identifying the most relevant variables for predicting mortality. Scoring Systems:

Various scoring systems, such as the Charlson Comorbidity Index (CCI) or Acute Physiology and Chronic Health Evaluation (APACHE) score, are used in healthcare to assess mortality risk based on specific criteria. Public Health and Epidemiology:

Mortality prediction is also used in public health to estimate mortality rates for specific populations, track disease outbreaks, and allocate resources effectively. Ethical Considerations:

Predicting mortality raises ethical considerations, such as the potential impact on an individual's

privacy and the responsible use of predictive models. It's important to note that mortality prediction models are not perfect, and uncertainties exist. Additionally, ethical considerations must be taken into account to ensure responsible use of the predictions and to safeguard individuals' privacy and rights.