

Special Thematic Issue for the journal: Journal of Fuzzy Logic and Modeling in Engineering (FLME).

Title of the Thematic Issue: Decision-Making Models for the Diagnosis and Treatment of Cancer

Sectional Editor: Dr. Dilber Uzun Ozsahin

• Scope of the Thematic Issue:

The Diagnosis and treatment of medical diseases is a global concern that requires outstanding research attention. Many patient morbidity factors in recent decades have been traced to wrong systematic diagnostic and therapeutic decisional approaches deployed either by the concerned physicians, patients, or close associates. To circumvent the hurdles associated with poor decision-making policies in healthcare sectors and to eliminate scenarios associated with uncertainties in any decision-making platform, different diagnostic, and therapeutic measures for different types of cancer diseases have been discussed in our study, made available by deploring the multi-criteria decision making (MCDM) models and artificial intelligence models.

Decision-making models for the diagnosis and treatment of medical diseases are relevant to the fuzzy logic and modeling in engineering (FLME) journal, as the principal focus of our studies is related to deploying fuzzy logic models and other MCDM models for proper and adequate decision-making processes which relevance to physicians, patients, and researchers cannot be completely exhausted.

Keywords: Decision-making, Decision Analysis in cancer diseases, Fuzzy PROMETHEE, Artificial Intelligence, Machine learning, Cancer diagnosis, Cancer treatment

Sub-topics:

- Background of the thematic issue
- Cancer as a morbidity factor, diagnosis, and treatments.
- Decision-making models in healthcare
- AI-based models for decision analysis.

Tentative titles of the articles:

- Colorectal cancer epidemiology review using intelligent ensemble machine learning paradigms in Lake County, Illinois
- Comparative study on male breast cancer treatment alternatives.
- Diagnosis and treatment evaluation of testicular cancer using MCDM
- A novel approach to the clinical diagnosis and treatment of vulva cancer using MCDM methods
- Screening Techniques for Ovarian Cancer using Fuzzy PROMETHEE
- A comparative evaluation of the treatment alternatives for cancer of the eye
- Bladder cancer diagnosis and treatment alternatives Using Analytical Evaluation Models
- Novel therapeutic techniques in treating pediatric leukemia using MCDM
- Cervical cancer diagnostic comparison using fuzzy PROMETHEE
- Modern Treatment Alternatives for Burkitt's Lymphoma using MCDM techniques

Schedule:

✧ Thematic issue submission deadline: December 26, 2022.

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