A New Method for Patient Stratification based on Multi-Layer Network Modeling and Molecular Data Integration
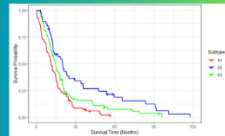
SAPIENZA
UNIVERSITÀ DI ROMA

Cohort

- **GBM** (n = 215)
- **BIC** (n = 105)
- **KRCCC** (n = 124)
- **LSCC** (n = 105)
- **COAD** (n = 92)

- Independent **Validation Cohort**
  - **NSCLC** (n = 393)

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Framework

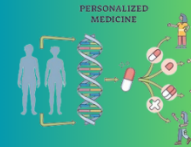- Iterated **Generalized Louvain + Lloyd K-Means**

Findings

- Significant **Patients Stratification**

- Clinical **Key Factors** for each Patients Subtype

Clinical Relevance

- Therapy Optimization for **Precision Oncology**

PERSONALIZED MEDICINE

Conclusion:
The proposed method put-performed SNF method (state-of-the-art). It enhanced patient stratification through data integration for clearer disease subtypes, and adnvaces precision treatment tailoring therapy to individual needs. Scalable for personalized medicine and able to reveal clinical-related survival differences.