# Custom Research Presented at AMIA Informatics Summit Reveals Promising Findings for Healthcare Innovation

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SAN FRANCISCO, March 14, 2023 (GLOBE NEWSWIRE) -- Syapse®, a leading real-world evidence company dedicated to extinguishing the fear and burden of serious diseases by advancing real-world care, today announced two new studies focused on developing drug ontologies to support real-world evidence generation and the use of machine learning to predict time to diagnosis. Syapse will be presenting at the American Medical Informatics Association (AMIA) Informatics Summit being held March 13-16 in Seattle, WA.

"We are thrilled to present the results of our custom research at the AMIA Informatics Summit," said Vinod Subramanian, Chief Product and Data Officer. "This study shows that AI-based tools can play a critical role in developing standards in RWE, in addition to early disease detection."

Unveiled at AMIA Informatics Summit, the Syapse studies include:

- Developing a comprehensive drug ontology to support real world evidence
  Effective Real World Data (RWD) utilization requires data integration from disparate sources including disease registries, electronic health records, claims and billing data, pharmaceutical companies, and regulatory agencies. With drug therapy as an integral component of RWD and precision oncology, there is a need for a drug ontology that would present an up to date and comprehensive set of drugs (including investigational and biosimilar) and provide accurate and multi-faceted drug information. This information currently exists in multiple disparate sources, but none provides a comprehensive integrated ontology that can be used for various analytical and research purposes. We developed a drug ontology which contains information on approved, investigational, and biosimilar drugs, including drug classifications obtained from multiple sources to serve as a knowledge base to support various academic and business requirements such as knowledge management, data integration, and decision support.
- Transformer-based embedding of patient attributes for characterization of disease onset in breast cancer patients

Early identification of disease in a patient's journey is of critical importance in patient care. However, the complex, multidimensional and frequently incomplete nature of patient data make this difficult. We created a novel pipeline to predict relative time to diagnosis in breast cancer patients using natural language vectors produced by sentence transformers on patients' ICD-10-CM diagnosis descriptions.

Subramanian added, "We are excited to continue our research and work with healthcare providers to further develop and refine our AI-based capabilities. We believe that they have the potential to revolutionize the way that healthcare is delivered, and we are committed to making this a reality."

In addition to presenting this research at AMIA, Syapse will be attending ISPOR, ASCO, and AACR. To learn more about Syapse research, solutions, and connect with the team, please visit https://info.syapse.com/meet-with-us-2023.

**About Syapse**

Syapse is a company dedicated to extinguishing the fear and burden of oncology and other serious diseases by advancing real-world care. By marrying clinical expertise with smart technologies, we transform data into evidence—and then into experience—in collaboration with our network of partners, who are committed to improving patients' lives through community health systems. Together, we connect comprehensive patient insights to our network, to empower our partners in driving real impact and improving access to high-quality care.

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