



AIUB DSpace Publication Details

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Abstract

Objective: Therefore, the objective of this study was to design hypertension ontology with the aim of improving integration of data, representation of knowledge and better decision making in hypertension management. **Methods:** First, we performed a systematic literature review (SLR) across ten different databases aiming at capturing the essential concepts. Using this extracted data a Hypertension Ontology (HPO) was created in Protégé which was loaded and published on BioPortal for availability. **Results:** HPO contains 114 classes and five properties that structure the risk factors, symptoms, diagnosis, and treatment. It improves knowledge discovery, data sharing capabilities, and surpasses existing hypertension-related ontologies in functionality. **Conclusion:** HPO facilitates standardized hypertension management in a research context and clinical practices. Next Steps will be integration of Real-world data and Interoperability to HER.

