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(54) Title: HIGH VALIDITY REAL-WORLD EVIDENCE STUDY WITH DEEP PHENOTYPING

(57) Abstract: Systems and methods are described for implementing an advanced, "research-grade" or "regulatory-grade," real-world evidence (RWE) approach. The advanced RWE is able to extract a deep phenotype from rich data sources using advanced technologies including artificial intelligence. The rich data sources include both unstructured data and structured data from electric health records and may include additional data sources such as claims or registries. Systems and methods are also described for validating the deep phenotype which can then be used to create a patient cohort that may be linked to exposure or outcome data to make credible clinical assertions.



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