**Title: Data-driven new targets identification for chronic liver diseases**

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**Abstract:** To the best of our knowledge, Ochre Bio has generated more human liver deep phenotyping data than anyone else. Deep phenotyping involves studying how perturbation of genes affects the liver, by juxtaposing tissue, blood and clinical phenotypes with functional genomics data to produce a map, or knowledge graph, of the relationships between genes and phenotype. We are building on this data to enable knowledge-graph based gene prioritisation. Running such ‘in silico’ screens allows us to narrow down the universe of genes for further study in our cellular, tissue, and organ models.

**Keywords**: biotech R&D; bioinformatics; liver disease; data-driven drug discovery; AI/ML; knowledge graphs.

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