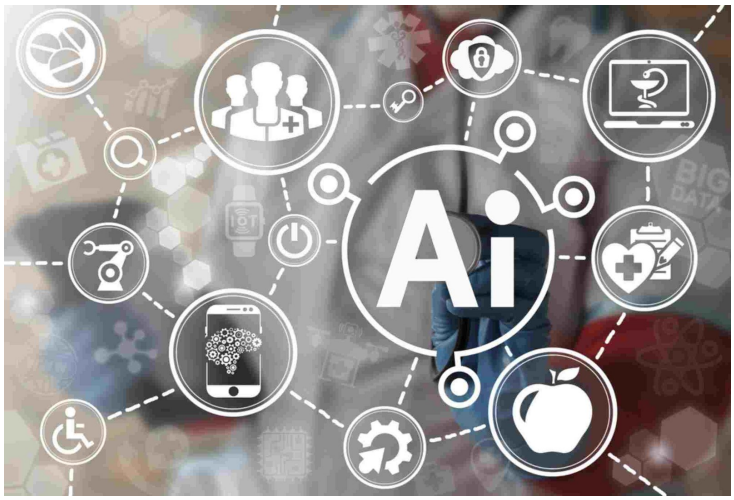
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ASIA EDITION

Exact therapy for rare genetic disorders of obesity

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To improve the treatment of rare genetic disorders of obesity WuXi NextCODE used artificial intelligence



WuXi NextCODE, the emerging global standard platform for genomic data, announced a partnership with Rhythm Pharmaceuticals, a biopharmaceutical company.

Partnership focused on developing and commercializing therapies for the treatment of rare genetic disorders of obesity, under which Rhythm is applying WuXi NextCODE's proprietary deep learning capabilities to identify key genetic markers for rare metabolic syndromes.

The goal is to use that information to optimize the development of Rhythm's investigational compounds.

The first phase of the partnership involved mining WuXi NextCODE's knowledgebase of all major reference datasets to identify all rare sequence variants in the POMC, PCSK1, and LEPR genes in the MC4R pathway.

This is a key biological pathway in humans that regulates weight by increasing energy expenditure and reducing appetite.

WuXi NextCODE's advanced artificial intelligence (AI) laboratory then applied its proprietary Deep CODESM algorithm to score the variants for their predictive impact on obesity.