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ASIA EDITION

Sosei and PharmEnable enter technology collaboration for AI-driven drug discovery

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Joint drug discovery programme on a challenging GPCR target with key role in neurological diseases

Sosei Group Corporation (Sosei Heptares) in Japan and PharmEnable, a UK drug discovery company, have announced they have entered a collaboration to apply their respective technologies to drive novel drug discovery against a challenging G protein-couple receptor (GPCR) target associated with neurological diseases.

The collaboration will combine Sosei Heptares' world-leading GPCR-focused structure-based drug design platform, which has fully structurally enabled the GPCR target, providing detailed structural insights and an assessment of tractability, with PharmEnable's proprietary advanced artificial intelligence (AI)-enabled and medicinal chemistry technologies (ChemUniverse and ChemSeek) to identify novel, highly specific drug leads for further development.

PharmEnable's approach identifies three-dimensional (3D) drug candidate hits with improved specificity compared with traditional screening methods and allows the company to take on particularly challenging biological targets, such as "peptidergic" GPCRs, which have proved difficult to drug-using existing approaches.

The natural agonist ligand of a peptidergic GPCR is a large, complex peptide and is often very difficult to block with a small molecule, particularly one that has properties suitable for development as a therapeutic agent for neurological disease.

Under the agreement, the companies will jointly conduct and share the costs of the discovery and development program and will co-own any resulting products. No further financial details are disclosed.

Miles Congreve, Chief Scientific Officer of Sosei Heptares, commented: "collaboration will be highly complementary and synergistic for drug discovery on challenging GPCR targets. We are excited to apply these technologies on a peptidergic GPCR target that has proved particularly difficult to drug. We have so far assembled a wealth of structural and ligand-binding information on the target and created several promising molecules but have yet to identify compounds with sufficiently desirable neurological drug-like properties to advance into preclinical studies. Combining our respective technologies and expertise may be the key that unlocks this target and enables the identification of higher quality molecules to progress into

preclinical development.”