

Ixaka expands IP portfolio to enable use of targeted nanoparticle in vivo gene delivery technology with any cargo in any therapeutic area

London, UK, 21 March 2022- Ixaka Ltd, an integrated cell and gene therapy company, today announces an expansion of its IP portfolio to allow a broad range of applications for its polymeric targeted nanoparticle (TNP) gene delivery platform across multiple therapeutic areas. The extended IP enables the development of therapies encapsulating any cargo including mRNA, plasmids and adenovirus associated virus (AAV), and gene editing technologies as well as lentiviral vector-based therapies.

Ixaka's TNP – composed of proprietary polymer capsule ('OM-PBAE' polymers (oligopeptide end-modified poly β -amino-ester polymers)) directed to specific cells through targeting agents attached the capsule (an aptamer-based targeting moiety) and cell targeted efficient transduction (use of lentiviral vector cell specific promoter). This targeting enables the targeted nanoparticles to be directed to specific cells allowing beneficial gene transduction to occur directly within a patient's body. The technology is currently being applied as a gene delivery platform to generate CAR T-cell therapies in vivo for haematological malignancies, with the potential for improved efficacy and safety compared to similar products currently marketed or in development. The expanded IP allows for a broad range of cargos to be encapsulated providing greater flexibility to engineer new therapies which are optimized to specific diseases.

A new agreement extends the use of its OM-PBAE polymers for encapsulation of a broad range of cargos for use in any therapeutic area including mRNA, plasmids, and any other vectors in addition to lentiviral vectors and AAV

The extension of the license agreement opens the door to expansion of Ixaka's TNP platform, enabling the use of OM-PBAE polymers capsules to be used for delivery of numerous cargos with the choice of genetic modification technology tailored for each disease. Potential applications include drug delivery for oligonucleotides such as DNA, RNA and siRNA, plasmids, small molecules, and gene editing using tools such as CRISPR-Cas9, zinc finger or megaTALS – enabling Ixaka to broaden its therapeutic pipeline.

Joe Dupere, CEO at Ixaka, commented:

"This IP agreement further strengthens Ixaka's rapidly growing IP portfolio, highlighting the pioneering nature and broad potential of our targeted nanoparticle technology. The platform is already showing great

potential in generating CAR-T cells in vivo for CD19 blood cancers. With an array of other possible applications, we will now be seeking collaborations for our future pipeline, which could encompass solid tumours, rare genetic disorders, autoimmune diseases, broader immunotherapy applications, gene editing, immunodiagnostics and vaccines.

IP portfolio overview

Building a robust and broad IP portfolio is at the heart of Ixaka's development strategy. The Company's ongoing R&D and upcoming clinical data will allow filing of additional patent applications across multiple territories.

Ixaka's current IP portfolio contains 1 patent family for its multi-cell therapy platform and 11 patent families for its TNP platform, covering all key components of the technology, including a proprietary polymer, bald engineered lentiviral vector, T-cell specific promoter and aptamer-based targeting agent. The portfolio also provides protection across a wide geographic range (including Europe, the US, Canada, Mexico, Brazil, China, India, Korea, Japan, Australia).

The patent is for products developed under a licence agreement between Ixaka (previously aratinga.bio), Sagetis Biotech ("Sagetis") and universities (Institut Quimic de Sarria CETS Fundacio Privada and Institut d'Investigacions Biomediques).

About Ixaka

Ixaka is a cell and gene therapy company focused on using the natural powers of the body to cure disease.

Ixaka's proprietary technologies enhance the naturally therapeutic power of cells by increasing the presence of curative cells at the site of disease, or by directly modifying cells within the body to improve disease targeting and boost their restorative effect.

Ixaka's technologies – concentrated multi-cell therapies and nanoparticle therapeutics – demonstrate potential for the treatment of a broad range of serious diseases across oncology, cardiovascular, neurological and ocular diseases, and genetic disorders.

Ixaka has offices in London, UK with R&D and manufacturing operations in Seville, Spain and Paris, France and additional manufacturing capability in Frankfurt, Germany.

For more information, please visit www.ixaka.com

Connect with us: Twitter: https://twitter.com/Ixaka_Ltd ; LinkedIn: <https://www.linkedin.com/company/ixaka-limited>



For further information, please contact:

Ixaka

Joe Dupere



+44 (0) 203 7007 480

info@ixaka.com

www.ixaka.com

Instinctif Partners (Media Enquiries)

Tim Watson / Siobhan Sandford / Sirine
Zeineh / Grace Rutter



+44 7837 674 500

ixaka@instinctif.com

<https://instinctif.com>

