

NEWS



GSK and Google form partnership to develop bioelectronic medicines

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GlaxoSmithKline (GSK) has announced a new partnership with Google's parent company, Alphabet, to carry out research into bioelectronic medicines.

GSK, the United Kingdom's biggest drug company, will form a joint venture with Verily Life Sciences (formerly Google Life Sciences), a division of Alphabet. The joint venture, Galvani Bioelectronics, will focus on the research, development, and commercialisation of bioelectronic medicines. It will be 55% owned by GSK, and Verily will hold the remaining 45%.

The new company's headquarters will be at GSK's global research and development centre in Stevenage, UK. It will also operate a second research hub at Verily's facilities in South San Francisco, USA. The joint venture will combine both companies' intellectual property rights and will receive combined investment of as much as £540m (€639.6m; \$717m) over seven years.

GSK has been conducting research in bioelectronic medicine since 2012 and believes that it could be effective in treating conditions such as arthritis, diabetes, and asthma. The process uses miniaturised implantable devices to modify electrical signals that pass along nerves in the body, including irregular or altered impulses that occur in some chronic illnesses.

The two companies said that the new partnership would combine GSK's drug development and understanding of disease biology with Verily's knowledge of miniaturised electronics, device development, data analytics, and software development for clinical applications. The new company will initially employ around 30 scientists, engineers, and clinicians.

Kris Famm, GSK's vice president of bioelectronics research and development, has been appointed president of the new company. Its board will be chaired by Moncef Slaoui, GSK's chair of global vaccines, and will also include Verily's chief executive, Andrew Conrad.

Slaoui said, "Many of the processes of the human body are controlled by electrical signals firing between the nervous system and the body's organs, which may become distorted in many chronic diseases. Bioelectronic medicine's vision is to employ the latest advances in biology and technology to interpret this electrical conversation and to correct the irregular patterns found in disease states, using miniaturised devices attached to individual nerves. If successful, this approach offers the potential for a new therapeutic modality alongside traditional medicines and vaccines.

"This agreement with Verily to establish Galvani Bioelectronics signals a crucial step forward in GSK's bioelectronics journey, bringing together health and tech to realise a shared vision of miniaturised, precision electrical therapies. Together, we can rapidly accelerate the pace of progress in this exciting field, to develop innovative medicines that truly speak the electrical language of the body."

Brian Otis, Verily's chief technology officer, said, "This is an ambitious collaboration allowing GSK and Verily to combine forces and have a huge impact on an emerging field.

Bioelectronic medicine is a new area of therapeutic exploration, and we know that success will require the confluence of deep disease biology expertise and new highly miniaturised technologies."

Figure

