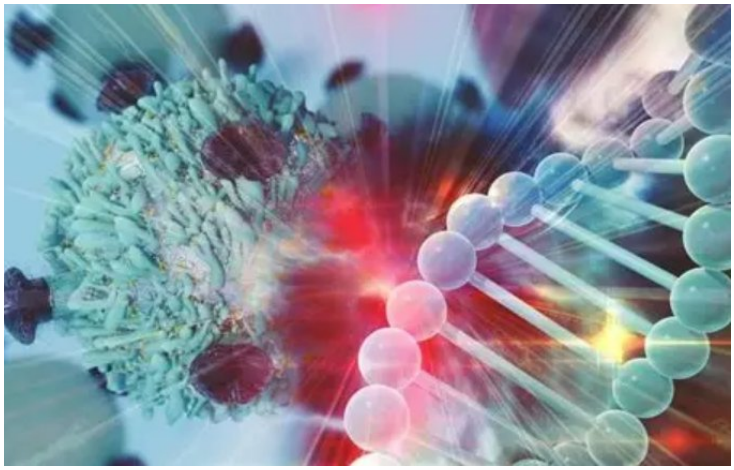
BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

Collaboration between Israel and Australia to advance AI-driven cancer therapeutics

20 February 2026 | News

Aiming to introduce a new therapeutic strategy for overcoming chemotherapy resistance in lung cancer



Israel-based Evogene has announced a collaboration with the pioneering research group of Dr Mark Adams, a leading cancer genomics expert in the School of Biomedical Sciences and Faculty of Health at the Queensland University of Technology (QUT), Australia.

This partnership aims to accelerate the discovery and optimisation of novel small molecules as potential drug candidates for the treatment of chemotherapy and targeted therapy-resistant non-small cell lung cancer (NSCLC), as well as other cancers.

Despite significant advancements in cancer treatment, resistance to standard-of-care chemotherapies and targeted therapies remain a major hurdle in treating patients with aggressive cancers, such as NSCLC.

Based on breakthrough findings from Dr Adams' lab uncovering a novel druggable cellular detoxification pathway driving Cisplatin resistance in NSCLC, this collaboration aims to design novel small-molecule inhibitors that effectively block this critical mechanism and restore treatment sensitivity.

The collaboration combines Evogene's ChemPass AI™'s state-of-the-art computational capabilities for generative molecular design with Dr. Adams' leading expertise in cancer cell biology. By targeting this previously unrecognized enzymatic pathway of chemotherapy resistance, the collaboration seeks to introduce a new therapeutic strategy for overcoming chemotherapy resistance in lung cancer.

The collaboration will focus on:

- **Pinpointing critical mechanisms** within Cisplatin-induced detoxification processes that can be therapeutically disrupted.
- **Applying ChemPass AI™ to generate high-quality chemical leads,** prioritizing molecules with strong inhibitory potential and favorable drug-like properties.

- **Iteratively refining compound design** using integrated biological insights from Dr. Adams' lab into ChemPass AI™'s generative model for multi-parameter optimization of drug candidates.