

IngenOx Therapeutics Contributes to Review of Diagnostic Biomarkers for Precision Bowel Cancer Adjuvant Therapy

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IngenOx Therapeutics, an Oxford-based biopharmaceutical company, announced that its Chief Medical Officer, Prof. David Kerr had published a review on the use of diagnostic biomarkers to personalise adjuvant therapy for patients with colorectal carcinoma.

The review, titled **Personalizing adjuvant therapy for patients with colorectal cancer** (<https://doi.org/10.1038/s41571-023-00834-2>) is published in Nature Reviews - Clinical Oncology.

Currently, the standard adjuvant treatment for colorectal cancer (CRC) uses a fluoropyrimidine (5-fluorouracil or capecitabine) as a single agent, or in combination with oxaliplatin, spanning 3 to 6 months. The choice of therapy hinges on conventional histopathological staging procedures, which are considered blunt tools for patient stratification.

In contrast, high precision methods allow patients to be stratified into separate groups for different types of treatment. For example, CRC patients with low risk of disease recurrence and a high chance of cure by surgery, versus those with higher risk of cancer recurrence, who would derive greater benefits from chemotherapy.

To this end, in-depth genetic analyses were performed, leading to the discovery of germline determinants of toxicity from fluoropyrimidines. This allows for the identification of patients at high risk of life-threatening toxicity, enabling dose modulation to improve safety.

Further, the review described the application of artificial intelligence-driven models, trained from digital images of resected tissue, to help stratify cancer patients into distinct prognostic groups. The review also touches on liquid biopsy approaches involving measurements of circulating tumour DNA after surgery which are useful tools to identify patients at high and low risk of tumour recurrence.

The review concludes that the wider adoption of the new diagnostic technologies will better enable personalisation of adjuvant therapy for patients with CRC.

David Kerr, CMO of IngenOx, and Professor of Cancer Medicine at the University of Oxford commented:

"This review points the way forward, harnessing both tissue and blood-based assays to better enable selection of patients for adjuvant chemotherapy following apparently curative surgery – influencing treatment of approximately 1 million new patients per year. This review builds on my 30 year experience of leading the UK's national adjuvant trials portfolio and associated insights into the biology and natural history of colorectal cancer – truly embracing personalised cancer therapy."

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About IngenOx Therapeutics

IngenOx Therapeutics is a biopharmaceutical company focused on delivering new precision medicine drugs and vaccines to treat the most difficult cancers, often referred to as cold tumours. It is a spinout from the University of Oxford, and is located in the Oxford Science Park, UK. Its pipeline comprises early to late-stage products that work in different ways to activate the immune response against cold tumours, which are generally poorly recognized by the immune system. An exciting proprietary platform technology focusses on precision cancer vaccines that act by targeting the immune response to a novel source of cancer antigens.

The company's approach seeks to align the right drug with the right patient enabling a targeted precision medicine approach to cancer therapy. It has also built a proprietary platform around re-educating the body's immune system to recognise and destroy tumours. The assets in its pipeline have displayed convincing clinical benefits to late-stage cancer patients through disease control, tumour shrinkage, reduced side effects, and extended survival times.

For more information see www.ingenox.com