

BEFORE YOU INVEST • DRUG PROGRAM INVESTMENT LESSONS

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Lessons from what patient data reveals about drug programs



by Pawel Zawadzki, PhD

The \$400M algorithm mistake





CASE STUDY

THE WRN HELICASE

\$400M+

Invested by multiple companies

A COSTLY FAILURE

Despite massive investment from multiple companies, clinical trials for WRN inhibitors have repeatedly shown minimal benefits for cancer patients.

This outcome highlights a stark disconnect between strong data from preclinical models and the complex reality of patient responses.

WHAT THE **PATIENT DATA** REVEALED

Deep, AI-augmented analysis of patient data uncovered an error produced by a commonly used algorithm:

- A previously undetected type of *WRN* mutation was identified by Gordion technology.
- This mutation proved that *WRN* is not essential for cancer cell survival, hence a poor drug target. Actually, it appears *WRN* is rather a tumor suppressor!
- This single, patient data-derived finding directly explained the widespread failure of the clinical trials of *WRN* inhibitors.

Mutations inactivating both copies of a gene

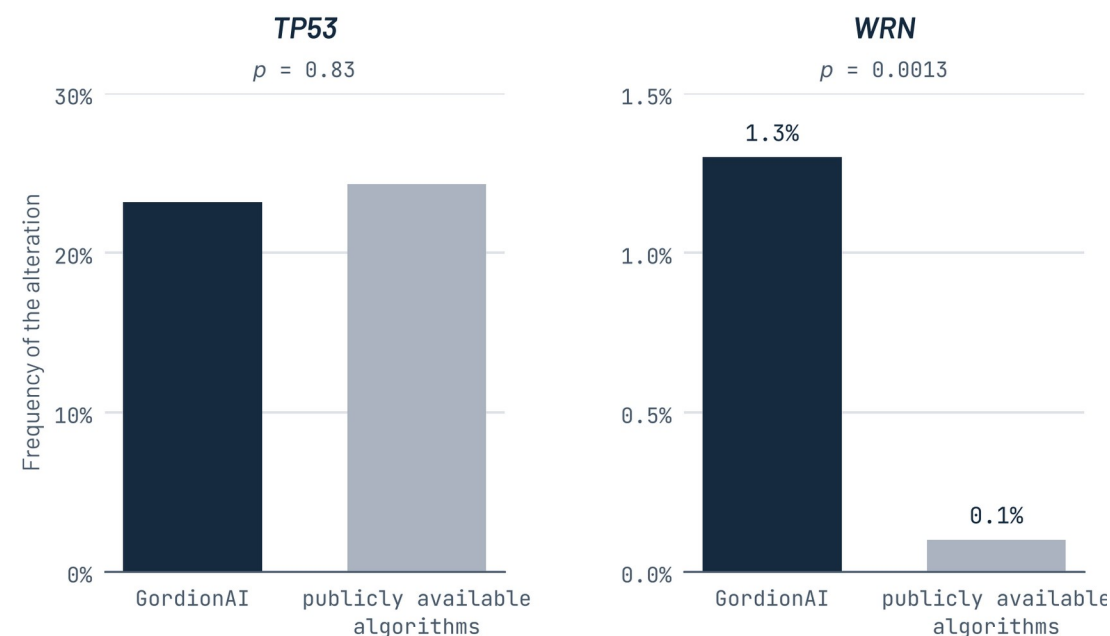


Figure 1. Bi-allelic gene losses detected by GordionAI vs publicly available algorithms. For *TP53*, both the publicly available and the Gordion algorithm detected the same number of mutations. However, the commonly used algorithm was blind to mutations affecting *WRN*.

THE TAKE-HOME MESSAGE

ABSENCE OF EVIDENCE IS NOT EVIDENCE OF ABSENCE



The flawed assumption

Publicly available algorithms failed to detect the key mutation type. Investment teams mistakenly concluded WRN was an attractive target because the invalidating evidence was "absent."

AI warning

This is a critical lesson for all AI users: the origins of AI-generated insights can be unclear. However, even a greater challenge is assessing what your models might be overlooking.



STRATEGIC RECOMMENDATIONS

FROM INSIGHT TO ACTION

CONSULT PATIENT DATA FOR **RELIABLE OUTCOMES**

01 Be skeptical about computational tools, as each has its own limitations.

A proper AI stack can eliminate these problems.

02 Target selection is still oncology's biggest single-point failure.

Patient data and well-designed AI are the only reliable way to know which targets truly matter.

03 But do not delay AI adoption, as others will outcompete you.

Select your AI partner wisely, as this will define your future.





**Medicines intended to work in patients should
be developed with patient data in mind.**

FULL WRN REPORT

gordion.bio/portfolio-optimization · contact@gordion.bio · linkedin.com/company/gordion-bioscience