



## New Research Shows How Testing Can Advance the Identification and Treatment of Harmful Drug-Drug Interactions

Findings of recently published two-part study demonstrate that InterACT Rx<sup>™</sup> can significantly enhance the diagnosis and treatment of DDIs, improving patient outcomes and reducing costs

*A two-part research study presented in Journal of Clinical Medicine Research and Journal of Clinical Medicine*

## Identifying Opportunities to Prevent DDIs and Adverse Drug Events

**While DDIs have a significant impact on the healthcare system, they are almost entirely preventable. Aegis Sciences Corporation conducted a two-part research study to measure the ability of primary care physicians to adequately and accurately identify drug-drug interactions and to determine the utility of InterACT Rx<sup>™</sup> in primary care.**

The clinical study was carried out in two phases. The first phase established the measures most commonly used by primary care physicians to evaluate patients for DDIs and demonstrated overall care while utilizing these measures. The second phase of the study measured ability to identify and manage DDIs by comparing a control group of physicians against those physicians that underwent an educational intervention and had access to InterACT Rx<sup>™</sup> testing.

**Phase 1: Published in *Journal of Clinical Medicine Research***

## Drug-Drug Interaction Assessment and Identification in the Primary Care Setting<sup>1</sup>

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Phase 1 served as a baseline assessment of how 330 board-certified primary care physicians currently identify and manage DDIs when treating patients. Researchers scored the physicians' care recommendations against evidence-based criteria, including overall care quality and treatment for DDIs.

Phase 1 captured gaps in care quality and uncovered that the lack of recognition of DDIs is widespread. Despite a reliance on standard medication reconciliation practices, physicians did not recognize or adequately treat DDIs.

**15%**

In only 15.3% of patients, physicians identified that a DDI contributed to the self-reported adverse medical issue despite over 99% of participating physicians self-reporting use of medication reconciliation practices and tools.

**1%**

Physicians identified the specific DDI less than 1% of the time amongst those 990 patients who were cared for in the study.

**16%**

Only 16.4% of physicians indicated that they would appropriately coordinate care with other providers and only 5.6% indicated they would counsel their patient on the risks of DDIs.

Phase 2: Published in *Journal of Clinical Medicine*

## Clinical Utility of Definitive Drug-Drug Interaction Testing in Primary Care<sup>2</sup>

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In phase 2 of the study, researchers placed 313 physicians into three groups to assess the clinical utility of the new test, InterACT Rx™, and its ability to identify DDIs and improve patient care. The groups included a control group, a group that participated in an educational intervention and were provided with InterACT Rx™ results, and a group that participated in an educational intervention and had the option to order the InterACT Rx™ test.

Phase 2 of the research study demonstrated that the introduction of a definitive DDI test significantly increased identification, appropriate management, and counseling of DDIs among PCPs, which has the potential to improve clinical care.

**40%** 40.4% **more** patients were correctly diagnosed with a DDI as a primary cause of their adverse health issues when provided InterACT Rx™ education and patients' test results.

**26X** When InterACT Rx™ results were provided, a 26-fold improvement in identifying the specific interacting substances involved in the DDI was realized

**58%** Those providers that ordered InterACT Rx™ stopped the interacting medications in 58% more patients than those that elected not to order the test.

**23%** Those providers that ordered the InterACT Rx™ test counseled 23% more patients on the risks associated with the identified DDI than those that elected not to order the test.

### KEY TAKEAWAYS

Patients exposed to a DDI have been shown to experience greater healthcare utilization. A change in practice has the potential to produce significant benefits to the patient and savings to the health system.

Phase 1 of the study illustrated sub-standard patient care in regards to identification and management of DDIs when physicians relied solely on standard medication reconciliation practices.

Phase 2 demonstrated that educational materials alone do little to improve diagnosis and treatment of DDIs. However, introducing definitive testing, such as Aegis Sciences Corporation's InterACT Rx™, can dramatically improve diagnosis, treatment, and patient outcomes.

## INTERACT Rx™

InterACT Rx™ testing detects over 120\* substances known to cause drug-drug interactions. It is designed to reduce the risk of adverse drug events associated with DDIs through objective identification and reporting of interactions.

## InterACT Rx™ can play a key role in medication management strategy, providing clinicians with actionable insight.



### OPTIMIZE CARE

Increase positive outcomes and improve understanding through valuable insight



### REDUCE RISK

Actionable insight to prevent adverse effects from unknown sources



### SAVE TIME

Know the full story faster and reduce inefficient treatment adjustments and follow-ups

If you would like additional information, call 800.533.7052 or visit [aegislabs.com](http://aegislabs.com).

## References

1. Peabody, J., Acelajado, M., Robert, T., Hild, C., Schrecker, J., Paculdo, D., Tran, M., & Jeter, E. (2018). Drug-Drug Interaction Assessment and Identification in the Primary Care Setting. *Journal Of Clinical Medicine Research*, 10(11), 806-814.
2. Peabody, J.; Tran, M.; Paculdo, D.; Schrecker, J.; Valdenor, C.; Jeter, E. Clinical Utility of Definitive Drug-Drug Interaction Testing in Primary Care. *J. Clin. Med.* 2018, 7, 384.

\* Composition and number of analytes in test profile subject to periodic updates.

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