



# It's all about diagnostics, stupid!

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A recent analysis of real-world, diagnostic testing data for common biomarkers in cancer indicates that 156,000 patients miss out on appropriate treatments each year (1), due to inefficient testing practices such as slow turnaround times and inconsistent results. Consequently, these patients are taking much longer to get properly diagnosed and are not getting the best treatment available to them. The impact of these potential therapeutic options varies depending on the disease space, and ranges from improving quality of life to potentially saving lives.

There is a known link between appropriate test ordering and result interpretation/utilization, and the potential for reducing diagnostic errors. Increasing awareness about poor diagnostic and testing practices by healthcare professionals has prompted publications on the subject (2), as well as pleas within the clinicians' community to test their patients (3). The many financial benefits of good testing practices have been built to become rock solid arguments (4) yet, patients continue to be missed out.

Despite attempts to stimulate the adoption of better testing practices, more needs to be done. Understanding the clinical utility and need for consistent, high-quality testing, with extensive access and reimbursement across all geographies is vital to improving the precision medicine ecosystem. Recent recommendations in the US to deliver on these testing approaches have been made to support broader access to important testing technologies and are a step in the right direction (5).

Figuring out how to implement these changes, while keeping up with developments in an increasingly challenging healthcare system may be difficult but, if done effectively, will have an enormous impact on the lives of many people.

## How to repair the broken testing ecosystem

The advantages of good testing practices for patients have been well established. We have an opportunity to help patients raise their voices to ask important questions to drive improved diagnostic testing practices and better treatment decisions.

Key questions may include:

- ❖ Has my tumor been sequenced?
- ❖ Have my proteins been assayed?
- ❖ Have my macrophage been imaged?
- ❖ Has my tissue been properly analyzed?
- ❖ What does this lab result mean for me?
- ❖ Are there other tests that supplement this diagnosis?
- ❖ Can we double check and verify the test result?
- ❖ Are these tests appropriate for my ethnicity or gender?
- ❖ Are the range of test results meaningful given my comorbidity?

Joining forces with patients and their caregivers to help them ask the right questions to make sure they are tested in the right way will produce improved or Shared Decision Making (6).

## Patient empowerment for better testing, better treatments, better outcomes and better quality of life

Sub-optimal testing practices may be compromising patient quality of life. The Diaceutics Precision Medicine Connective, a non-profit organization, aims to drive an initiative forward to make expert resources available for patients, so they can help propel better testing practices forward. The ultimate goal is to revolutionize patient

testing to promote better outcomes for them and positively impact their lives, and the lives of their loved ones.

We are partnering with patient advocacy organizations and key opinion leaders to make diagnostic testing a subject of public concern and improve the overall testing ecosystem to help deliver on the promise of precision medicine.

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