



# It's all about diagnostics, stupid!

Piarella Peralta<sup>1,2</sup>

<sup>1</sup>Associate Director, Patient Advocacy, PM Connective, New Jersey, USA; <sup>2</sup>Patient Advocate, Inspire2Live, Amsterdam, The Netherlands

Correspondence to: Piarella Peralta. Associate Director, Patient Advocacy, PM Connective, New Jersey, USA. Email: [piarella.peralta@pmconnective.org](mailto:piarella.peralta@pmconnective.org).

Received: 21 December 2018; Accepted: 24 January 2019; Published: 04 March 2019.

doi: 10.21037/pcm.2019.02.01

View this article at: <http://dx.doi.org/10.21037/pcm.2019.02.01>

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.

## Acknowledgments

I would like to thank Diaceutics for their commitment to Better Testing from the Patient Perspective and Inspire2live for their relentless patient advocacy efforts.

Diaceutics funds the PM Connective's work to empower patients in their diagnostic journey through awareness and advocacy.

*Funding:* None.

## Footnote

*Provenance and Peer Review:* This article was commissioned by the Guest Editor Peter Kapitein for the series "The Road to Personal Medicine" published in *Precision Cancer Medicine*. The article did not undergo external peer review.

*Conflicts of Interest:* The author has completed the ICMJE uniform disclosure form (available at <http://dx.doi.org/10.21037/pcm.2019.02.01>). The series "The Road to Personal Medicine" was commissioned by the editorial office without any funding or sponsorship. The author has no other conflicts of interest to declare.

*Ethical Statement:* The author is accountable for all

aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

*Open Access Statement:* This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

## References

1. Keeling P. Transforming the pharma business model to prevent lost treatment opportunities and optimize return on investment. Database (Diaceutics). 2017 May.
2. Kris MG. Next-Gen Sequencing for Lung Cancer: Do it Early, for all of Your Patients. Medscape, June 09, 2018.
3. Singh H, Schiff GD, Graber ML, et al. The global burden of diagnostic errors in primary care. *BMJ Qual Saf* 2017;26:484-94.
4. Available online: [http://www.ohe.org/sites/default/files/WP\\_EpemedOHE\\_final.pdf](http://www.ohe.org/sites/default/files/WP_EpemedOHE_final.pdf). Date accessed May 1st, 2018.
5. Available online: <https://www.diaceutics.com/?expert-insight=the-cms-national-coverage-decision-on-ngs>. Date accessed May 1st, 2018.
6. Available online: <https://health-union.com/news/free-download-shared-decision-whitepaper>. Date accessed June 1st, 2018.

doi: 10.21037/pcm.2019.02.01

**Cite this article as:** Peralta P. It's all about diagnostics, stupid! *Precis Cancer Med* 2019;2:6.