In This Issue: Personalized Medicine

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In this issue of *The Oncologist*, we offer several different views of the entity known as *Personalized Medicine*, 2013. The concept of fitting therapy to the genotype of the individual tumor has a strong rationale and early evidence of success. However, as pointed out in the succeeding commentaries, the concept is neither new nor particularly straightforward in its execution.

Dan Longo, the Editor-in-Chief of Harrison's *Principles of Internal Medicine* and the Deputy Editor of the *New England Journal of Medicine*, and an oncologist of great repute, addresses the novelty of the concept and rightly makes the point that good doctors have individualized therapy for decades. The molecular revolution has only added a new dimension to what has been the standard of good medical practice—to offer the best treatment to each patient.

Sandra Swain, the Immediate Past President of the American Society of Clinical Oncology, reminds us of the early pioneering work of Jane Cooke Wright, one of the first African American oncologists, who used in vitro tumor testing as the basis for rationalizing therapy, a concept that led to a number of unsuccessful attempts to develop predictive tumor-based assays for drug sensitivity.

Mark Lawler and Peter Selby, distinguished researchers in cancer genomics and translational research, argue for a balance between the financial rewards reaped by sponsors of

successful drugs and the needs of all patients for access to new, extravagantly priced medications.

James Doroshow, the Deputy Director of the National Cancer Institute and a noted translational oncologist, makes a plea for careful studies of drug mechanisms of action upfront in subject of our phase I trials to allow us to rationalize drug development and pin our hopes on a winner, rather than spending fruitless efforts on drugs that miss their targets.

Ed Liu and Patrick Johnston, two outstanding contributors to molecular medicine, argue for expanded genotyping efforts in the academic centers as the linchpin of drug development for pharma and the biotech industry. They rightly see the relationship of academia and industry as essential to progress in cancer drug development.

As a final thought, my colleagues at Massachusetts General Hospital and I note that the general application of new knowledge of "personalized" medicine will ultimately depend on the availability of molecular tests, an issue now being addressed in many European countries, but only partially by the "free market" system in the United States.

It is still uncertain what fraction of solid or liquid tumors will have an actionable and identifiable driver mutation or "druggable" target. Nonetheless, the concept of individualized therapy deserves our full attention as the foremost current approach to cancer drug development.

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