Latest News & Updates from the Personalized Medicine Coalition

Letter from the Executive Director:

When Raju Kucherlapati, the Paul C Cabot Professor of Genetics at Harvard Medical School (MA, USA) and chair of the organizing committee for the conference 'Personalized Medicine: The Time is Now', summed up the defining annual event on 18–19 November 2009 in Boston (MA, USA), he noted that not only is the time for personalized medicine now, but that personalized medicine is here.

It was only 5 years ago that the Personalized Medicine Coalition (Washington DC, USA) helped organize the first international conference at Harvard entitled 'Personalized Medicine: Promises and Prospects'. A third of the size of this year's conference, which brought together over 600 high-level executives from across the healthcare spectrum, it made the case that the accelerating pace of discovery was rapidly making one-size-fits-all trial and error medicine obsolete. We argued that it was important, if not critical, to realign our regulatory, reimbursement and educational systems in order to harness the power of new insights and new technologies for the benefit of patients requiring safer and better drugs as well as for society, which can no longer afford the inefficiencies of 20th Century medicine.

At that time, we were struggling to define personalized medicine while the Royal Society (London), the UK's independent academy of science and technology, issued a troubling report on the future of personalized medicine that may be summed up in a single phrase: 'don't hold your breath'.

Today, as Dr Kucherlapati pointed out, we see evidence of personalized medicine's potential impact on millions of individuals. Not only is the list of widely prescribed drugs that are targeted to specific populations growing for many different kinds of cancer, heart disease and other disorders, personalized medicine is being adopted in the USA by large institutions whose programs have the capacity to touch millions of people.

DNA Direct (CA, USA), a company that provides guidance and decision support for genomic medicine, and Humana (KY, USA), an insurance company that covers 11 million individuals, have announced a program to help physicians understand how genetic counseling can assure better outcomes and avoid unnecessary expenses. Generation Health (NJ, USA), a new genetic testing health benefit management company, is partnering with CVS Caremark (RI, USA), a pharmacy benefit manager for 50 million subscribers, to analyze more than a dozen drugs with associated diagnostic tests to determine the best prescriptions for patients with selected diseases, including cardiovascular disease, cancer and HIV. The two companies think that they can also improve patients' health, reduce adverse events and save costs by not prescribing drugs to nonresponders. And Medco (NJ, USA), the largest pharmacy benefit manager in the USA, has created a program to help advise physicians when to prescribe a diagnostic test to improve patients' health and lower the costs of care for their members. Medco has heavily invested in its own research, for example, to test the hypothesis that genetic testing can improve warfarin dosing. Warfarin is the second most widely prescribed drug in the USA and also, according to the US FDA, is the second leading cause, after insulin, of drug-related emergency room visits.

In a sign of the times, Pfizer (NY, USA) and Abbott (IL, USA), two large pharmaceutical companies, have formed a partnership to develop a drug and companion diagnostic test for non-small-cell lung cancer, based on the knowledge that some 6–7% of patients with these tumors have the genetic markers that make them good candidates for the drug in development. According to Stafford O'Kelly, president of Abbott Molecular, "What's happening is that [once] the understanding of the molecular basis for disease is validated, it's increasingly important to get these tests".

To be sure, we have a long way to go before all therapies are linked to molecular diagnostic tests of one sort or another. But, as Mr Kelly's comment suggests, we are on the right road because the science points us in that direction.

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