

SAGE CROSSROADS
Interview with Wayne Rosenkrans
Personalized Medicine

KYLE JENSEN: Welcome to SAGE Crossroads, the premier online forum on the issues of human aging. These podcasts feature lively discussion with the experts on the ethical, political, economic, scientific, and societal implications of aging related science. Thank you for listening.

I'm joined now with Dr. Wayne Rosenkrans. He is the president and chairman of the Personalized Medicine Coalition and he is also the external relations director at Astrazeneca Pharmaceuticals in Wilmington, DE. Dr. Rosenkrans, given that the pharmaceutical companies have such a large impact on the healthcare system, how will your company, Astrazeneca, play a role in the implementation of personalized medicine?

WAYNE ROSENKRANS: Well, Astrazeneca is what we call a healthcare product developer, or a healthcare product provider. We make things for the healthcare system. So, the pharmaceutical industry, the biotechnology industry, the diagnostic industry and the device industry are all included in that group. I think the contribution that we will all be making to personalized healthcare is in products that take us down the path of personalization of care. That might be a drug diagnostic tandem, where the prescription or prescribing of the drug is guided by a molecular diagnostic of some kind or it might be an imaging test or it could be an informatic process that leads you to prescribing a specific medication that will increase the benefit of the drug or the intervention to the patient.

KYLE JENSEN: The blockbuster model of drug production as it's known currently dominates the healthcare system at large. How can pharmaceutical companies like Astrazeneca shift, where appropriate, to break away from this model and embrace personalized treatments?

WAYNE ROSENKRANS: Well, this is sort of the classic conundrum of our industry. And I think really what we're talking about here is a redefinition of what a "blockbuster" is. We have had essentially a vertical definition of a blockbuster—a single drug with multiple indications that we sell to billions and billions of people and that generates a single blockbuster drug with appropriate ____ attached to it. I think we're going to redefine what a blockbuster is. A blockbuster will switch from being a vertical definition to a horizontal definition, where we have a series of drugs, each of which is a small revenue generator which are keyed or targeted to specific places along disease pathways and that will meet certain personal needs for the individual patients. So the definition of the blockbuster will be a horizontal definition across a series of drugs that are geared towards specific disease states. That's a change for the industry, there's no question about that. And, as in any kind of major change to any large organization or industry, it will take time to get there. But, I have absolutely no doubt that that's where we will end up and that the industry will adapt accordingly.

KYLE JENSEN: Well, you mentioned smaller revenues there for a second. Is it possible for pharmaceutical companies to have the same kind of profits they are experiencing now in an individualized treatment system?

WAYNE ROSENKRANS: Oh I think so. As I said, moving away from having 2 or 3 “blockbuster drugs” that are really the fuel for the organization, we’re going to move to having a series of smaller drugs, or whatever the intervention might be. It all goes back to really demonstrating value to the healthcare system. And in the past, that demonstration of value has occurred almost empirically as things are introduced, and it hasn’t really worked very well. For the future just being able to do it empirically is not going to work, it generates too much waste in the system. And, as long as we can demonstrate the appropriate place in healthcare and the appropriate value for the intervention, we will generate sufficient revenue to keep the industry going.

KYLE JENSEN: Would you say that is the greatest challenge facing the pharmaceutical industry, or is there another one you can think of?

WAYNE ROSENKRANS: Oh there are multiple challenges. We are really talking about a significant change in the way the pharmaceutical industry operates—a big change in the basic business model. But we’re not alone. This is a brave new world that we’re going into. The regulatory agencies are trying to figure this out, the reimbursing agencies, the public and the private payers are trying to figure this out; we’re trying to figure this out. So it’s not going to be an easy path, but I think one of the bigger challenges for the pharmaceutical industry is going to be basically breaking out of its old mode of both developing its products and going to market with its products into a new world that’s dominated by personalized healthcare issues and demonstration of value and effectiveness. That’s going to change the way we do things and it’s going to take time and it’s going to be difficult, but we will get there.

KYLE JENSEN: So should we expect big changes in the next 5 years?

WAYNE ROSENKRANS: Big changes in the industry, in—

KYLE JENSEN: In the industry of pharmaceuticals within a 5 year context.

WAYNE ROSENKRANS: Oh I think so. The industry right now is going through a fairly dynamic dislocation in that most of the pipelines are a bit thin at this point. The old models are dying basically. The industry is going to have to reshape itself and remake itself as so many other industries have. You know, look at IBM and its classic example of remaking itself. I think the pharmaceutical industry is going through the same thing. Will it be done in 5 years? I hope so. Probably good portions of it will. I think we will see a fairly dynamically different looking industry in 5 years.

KYLE JENSEN: Like I asked Dr. Downing, is there one statement that you would like to make to the audience of SAGE crossroads, which is made up of scientists, policy makers and consumers about personalized medicine?

WAYNE ROSENKRANS: Well, I think the watchword for the future for personalized medicine and personalized healthcare, just healthcare in general, is going to be cooperation between the healthcare sectors. What has characterized healthcare really up until now has been a “siloization” of the sectors of healthcare. The product producers such as the pharma. industry really didn’t talk very well with the payers and the payers didn’t talk very well with the patients and the patients sometimes talked well and sometimes didn’t with the care provider networks, and that simply has got to stop. All the sectors have to start working together to solve the issues that we have or the entire system is going to implode. So, I think the big watchword that I see is to pull the silos down between the healthcare sectors and work together to create the solutions we are going to need.

KYLE JENSEN: Thank you for your time. On behalf of SAGE Crossroads, I’m Kyle Jensen.