
THE WALL STREET TRANSCRIPT

Questioning Market Leaders For Long Term Investors

Panacea Pharmaceuticals, Inc.



DR. HOSSEIN A. GHANBARI co-founded Panacea Pharmaceuticals, Inc. and serves as Chairman, Chief Executive Officer & Chief Scientific Officer. Dr. Ghanbari worked at the world headquarters of Abbott Laboratories in Chicago, Illinois for more than ten years, where he developed several pharmaceuticals and the first Alzheimer's disease test marketed in the world. He served on Abbott's Technical Advisory Board and was inducted into its Volwiler Society, a prestigious honorary organization that serves as Abbott's recognition of the highest standards of scientific accomplishment. Prior to founding Panacea, he was a co-founder and served as Senior Vice-President for Research & Development of Molecular Geriatrics Corporation, a bio-pharmaceutical company that focused on developing drugs for neurodegenerative diseases. He also was the Founder, CEO, & President of Medical Toolworks, which was created to develop highly needed and innovative medical tools. Dr. Ghanbari served as Senior

Vice-President for Research & Development and Strategic Planning, as well as Director for four years at Nymox Pharmaceutical Corporation. Dr. Ghanbari was instrumental in starting Nymox (NASDAQ: NYMX), and was responsible for bringing in an array of technologies that have established Nymox as an international presence in the area of Alzheimer's diagnostics and therapeutics. Dr. Ghanbari is the current Chairman of the Board of the Alzheimer's Corporation of Albuquerque, New Mexico.

(ACE103) TWST: We were just talking about memory and cognition, etc. I wonder if you could give us some idea of where you feel the company will be in about three years and what might be the steps from here to there?

Dr. Ghanbari: In three years, we are anticipating to have three diagnostics products in cancer—that is, prostate, liver, and then breast—so prostate screening, liver surveillance, and breast cancer monitoring. Those would be approved by the FDA and marketed hopefully with the help of a larger company as a co-marketer. In terms of therapeutics, in three years, we anticipate to have a stand-alone antibody drug and one toxin-conjugated antibody drug to be in Phase I clinical studies with a co-development partner in place since we have always planned to either market or co-market or co-develop our products. This is in our cancer or oncology area. In terms of CNS (Central Nervous System), in Parkinson's disease, we hope to have the preclinical study completed on a lead candidate, and then be in

discussions with a big pharma to help us to do the clinical studies since it is quite an expensive undertaking. With our neuroprotection program, within 18 months we want to be in Phase I, and in three years we hope to be in Phase II clinical studies. Even with that program, we hope to work with a co-development partner. In fact, with all our human clinical studies, we would like to work with a big pharma to help us in co-developing the drug. This is where we would like to be in three years. What we need to do between now and then is continue what we have been doing thus far. We are actually quite far along in the process, and for cancer therapeutics we are in pre-clinical studies. And then, with the neuroprotection program, we do have the compound that doesn't need much more preclinical work. It simply needs additional funding to take it forward. For our Parkinson's program, it does require a lot of preclinical work, and it requires a lot of resources to do the work at hand, but we are now on target for getting the financing to pursue all of our programs.

TWST: Perhaps you could go on from there to tell us a little bit about your own background and expertise, and the same for one or two of your colleagues.

Dr. Ghanbari: My own background is that I am a biochemist by training from Penn State University. It was 1975 that I got my doctorate degree, and I worked in academia for seven years. After that, I joined Abbott Laboratories and worked both in the therapeutic area and diagnostic area. In the therapeutic area, I helped develop a drug called Survanta, which is for premature babies and is being used very extensively now. And also, I was on the NDA (New Drug Application) team for a drug called Leuprolide, which is the first prostate cancer drug that was ever marketed. It is one of the best selling drugs now in Japan, and it's a very big one in the U.S. too. I was on the NDA team with that, and I was a Director on an IND (Investigational New Drug) for another drug, as well. In terms of diagnostics, I have worked in the area of neurodegenerative diseases, particularly Alzheimer's, and I led the development of a diagnostic test that was marketed by Abbott Laboratories for Alzheimer's. And then, in the subsequent company, we developed a test based on spinal fluid and thereafter in urine. I have developed the first three marketed diagnostics for Alzheimer's. And from thereon, this is the fifth company that I have founded and then the other-two have dealt with Alzheimer's disease and neurodegenerative diseases and both are public now. Two others have dealt with medical devices. And the last one here that I founded with my son six years ago is Panacea Pharmaceuticals. Essentially, we are mostly in the discovery area, and this is my strength. As you noticed, every time I've said that after we file the IND, we'll work to get a partner or when we get approval from FDA to market, we want to have a marketing partner. Therefore, my background is the discovery side of it, and I was pleasantly surprised recently to realize that I am an inventor on more than 60 patents. To me, it was very interesting because I never counted them and never bothered. As soon as I file the patent, it's gone as far as I am concerned; I don't pay attention to it. So that's where we are, that's my background. As for my colleagues, the strategy of the company is to work with academia and essentially recruit them to be a part of the team in the company. We work with Professor Jack Wands of Brown University. My relationship with him goes back about 17 years now. He is by far the collaborator with the most impact on the company. He was the discoverer of the HAAH (human aspartyl [asparaginy] beta-hydroxylase) cancer technology. Therefore, he is a real key person in the company, and we have supported his laboratory since November 1999. At his laboratory there are about ten people working on the project with a lot of support-governmental support, NIH-NSF and all of that-as well as our support under a collaborative research and development agreement. The other one that we work with is Professor Dane Wittrup from MIT. He has a novel technology for coming up with very high affinity antibodies synthesized from human sequences, therefore making the engineered antibodies all human and making them viable anti-cancer drug candidates. Since we are

going to use an antibody drug, we decided four years ago that he was the right person to work with. And then, early this year, we achieved a major milestone with them (MIT), which is an antibody that has an all human sequence. The human immune system doesn't recognize it as foreign; it binds to our target HAAH ten times better than our current monoclonals, and it has all the attributes of the antibodies that we currently use, so we're very excited about it.

TWST: Now, I believe your company is open to external investors, correct?

Dr. Ghanbari: Absolutely, yes. Even today, we have announced the closing of our Series C financing. We have gone through, other than the initial seed round, several rounds designated A, B and C. And in each we have had various investors into the company. The Series C round was just closed at the end of June. We raised \$7 million from all new investors investing into the company. Then, of course, we are always in the mode for securing more money into the company because our revenue is limited to collaborations and we are going through a very expensive phase of product development. Therefore, we'll require more funding from investors with the understanding that the potential for the investment could be favorable based on developing multiple programs and our partnering model. I should put a disclaimer that we don't know for sure, but we believe having even one successful program in the company would put us in par with midsize biotech companies.

TWST: Yes then, what would be the two or three best reasons for a long-term investor to take a very good look at Panacea?

Dr. Ghanbari: The first reason that I would say is that we have a technology that Panacea owns all rights to; no one else owns it. We have exclusive rights to the HAAH cancer technology. To date, we have five issued patents on this technology. Two, the technology makes a lot of sense scientifically, technologically, and biologically. The compound or the target that we are using has relevance to the cancer. It doesn't just happen to be there like the prostate-specific antigen. PSA just happens to be there because the prostate becomes enlarged. It has nothing to do with cancer itself. Whereas with HAAH, it has a biological function; we know why it is there, what it does, and how it is related to cancer. And also, the other attributes to oncology are that we have both therapeutics and diagnostics using the same target. It's called theranostics or companion diagnostics or integrated therapeutics, which is very, very sought after. A lot of large companies are actually trying to develop an integrated program themselves and/or trying to in-license them. This is the wave of the future. And lastly, something that I would not want to ignore, is the ability or the commitment of the people that are associated with the company to make the company successful: MIT, Brown, our Board, management, employees, and advisors.

TWST: You were talking about the people with the company.

Dr. Ghanbari: Yes, first of all, everybody that is associated with the company is very much dedicated to making the programs

successful. This is aside from monetary reasons. They think that this would be a great help to humanity, and they have a lot of hopes for that. All of these people are so dedicated, so excited about the products or the products that may come out of the work that they show extreme dedication to the project, to the success of the project. Therefore, the reasons would be, first, the ownership, which is solid; two, the target, which makes a lot of sense to all of us; and three, the people within the company, these are on the scientific side. On the other financial side, we have very good-actually excellent-investors that have been with us and will be with us, and whatever it takes, they're going to help us to go forward with our needs. Those are all very good signs for a company that is on the road to success, although the success is not guaranteed, but it is very important that all the ingredients are there.

TWST: Is there anything you would like to add to the things we were talking about, particularly, with regard to your strategy and your long-term objectives?

Dr. Ghanbari: The strategy of the company has been to do its best to accumulate extremely promising technologies, and then, through its own discovery or help of other collaborators, develop it to a point of commercialization and get the help of other groups that are good at commercialization, that have enough resources to do that

and expertise to do that, to take it forward and take it to the patient. Then, from bench to patient; it is a cliché, but it works in our situation because we are in the middle and we are very aggressive, and we know how to take it from the concept all the way to the patient. And that is what we are proud of and that is what we are striving for.

TWST: Thank you.

DR. HOSSEIN A. GHANBARI
Co-founder, Chairman, Chief Executive
Officer & Chief Scientific Officer.
Panacea Pharmaceuticals, Inc.
207 Perry Parkway, Suite 2
Gaithersburg, MD 20877
(240) 243-8000
(240) 465-0450 – fax
www.panaceapharma.com