board. Have board members been selected for their 'star power'? Are they respected individuals with the requisite background? Have they perhaps been selected instead on the basis of friendship (i.e., individuals who will let the CEO run the company without interference)? Are any board members nominees of venture capital or other firms that have a large investment in the company with their own agenda? This is important to know as those individuals may control the board in such a way that they interfere with your responsibilities to the public shareholders as a whole.

You also need to make sure that the CEO is really interested in the board of directors being a resource to make better strategic decisions. In this regard, does the CEO provide the board with the information that it needs to make the important decisions early enough so it can analyze and be ready to weigh in on the topic at a board meeting? A key factor is to determine whether the board plays an active role in the company's strategic direction. Does the CEO give the board access to key management, legal counsel, auditors and other outside advisors? Aside from your meetings or conversations with the chairman of the board or the lead director, as well as other board members and management, you should ask to talk to these outside advisors to get their perspective on the company and discern whether there are any major issues lurking in the background that the CEO or management has not disclosed to you. For a board to function effectively, it needs to be cohesive enough to fulfill its legal obligations, including removing a CEO not up to the task. Thus, the personalities of the other board members cannot be ignored. A director who does not know how to play in the board sandbox can be a very disruptive element to board effectiveness.

Putting in the time. Most public biotech boards have about six to eight independent directors. In addition to the regular board meetings, you can also expect to serve on one or more of the audit, compensation and governance committees (all of which are mandated by the regulators). In general, the board will need to meet a minimum of four times a year, and the committee meetings generally are set up around the same dates. However, special situations can easily involve more board time—financings, major business transactions or litigation are some situations commonly encountered. In the case of a major conflagration, you could be tied up in endless crisis meetings. Thus, you need to be certain that you will be able to put in the time to prepare for the meetings and actually attend them and that your academic or other employer is not opposed to you devoting this amount of time to an outside activity. There is a legal requirement for companies to disclose board attendance and list directors who have attended less than 75% of the board and committee meetings. This is not insignificant to a company as ISS and Glass Lewis may recommend a vote against directors with poor attendance records.

Conclusions

Biotech companies, recognizing the importance of the board to investors, are in constant need of qualified directors, especially those who have the requisite background to fulfill the legal requirements necessary to serve on audit committees. The composition of the board is often looked upon by investors as a key ingredient in their determination as to whether to buy, hold or sell the stock of the company. Investors often divest their holdings if they discern a lapse in corporate governance with the concomitant adverse impact on the stock price. As prospective directors are exposing themselves to potential liability and reputational risk and are expected to put in the time to do their job, the pool of qualified directors for biotech companies who are inclined to join a board is not plentiful. Many are called but not all respond.

If you are invited to join a board, you need to do your diligence and, in the end, be assured that the CEO is really looking to team up with the board and there is a true, appropriate balance of power between the two. Also, you should be convinced that other directors do not call all the shots so as to preclude your voice from being heard. However, this does not mean that directors responding to pressure from investors should micromanage the company and hamstring the CEO. But it does mean that all the power does not reside with the CEO or any single director or subset of directors. b

SciCafé nature publishing group npg

Startups on the menu

In 2012, Salvatore Albani, then at the Sanford-Burnham Medical Research Institute in La Jolla, California, presented at SciCafé his work exploiting the role of heat shock protein (HSP) in rheumatoid arthritis. Albani has developed a 15-mer synthetic peptide, dnaJP1, derived from HSP dnaJ. Oral administration of the peptide, which is one of the dominant proinflammatory epitopes in rheumatoid arthritis, is thought to induce mucosal tolerance and suppress inflammation. A company formed around the intellectual property, Archimedes Therapeutics, took the peptide into a proof-of-concept phase 2a trial in rheumatoid arthritis (E.C. Koffeman *et al.*, *Arthritis Rheum.* **60**, 3207–3216, 2009) and is now seeking funds to support a phase 3 trial. *Nature Biotechnology* talked to Albani about his involvement in Archimedes.

***Nature Biotechnology*: When did you decide to start a company?**

Salvatore Albani: The idea was the outcome of discussions with friends and colleagues who became excited by the opportunity to do something novel. Targeting the HSP proinflammatory circuit, rather than the initial antigen triggering disease, was a completely new approach to arthritis treatment; there is also a need for an alternative to current biologic treatments against tumor necrosis factor-a, which mediate nonspecific immunosuppression and are associated with serious adverse toxicities. A group of professionals with complementary experiences and expertise formed Archimedes Therapeutics with the objective to raise sufficient capital to support clinical development. Seed funding was provided by some of the company's partners.

NBT: What are your future plans for Archimedes?

SA: In addition to dnaJP1, we have a biomarker platform that addresses a large unmet medical need—the inability to predict responsiveness to expensive therapies that work only in a proportion of RA patients. The development of this biomarker technology into a chip to be used to inform therapeutic decisions is potentially attractive for the patients, first and foremost, but also for the payers and for industry, which is jockeying for market share in a crowded space. This technology has been acquired by another company and licensed for co-development.

NBT: How do you balance your academic and entrepreneurial roles?

SA: At Archimedes I provide information and advice for scientific development of the product. There is no intersection at this time with anything I do in academia, and I go to great lengths to ensure that my roles are well demarcated.