

## Can Bioventures Succeed in Japan?

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The title is a two part question: Can Foreign Bioventures Succeed In Japan? Can Japanese Bioventures Succeed In Japan? The answer to the first question is a resounding YES. The answer to the second question is NOT YET. Let me explain.



### Foreign Bioventures

Certainly not all, but a significant number of foreign bioventures are setting up shop in Japan rather than licensing out their assets to Japanese companies. Particularly those who commercialized drugs outside Japan. This means they have the resources to establish a Japan presence. Early stage, cash poor bioventures must resort to a licensing out strategy to fund their operations.

Getting into Japan is a slam dunk given the following prerequisites:

- \* A drug that satisfies an unmet medical need.
- \* Proof of concept clinical trial data or approval in a foreign country.
- \* Financial resources to fund a development program in Japan.

Given these factors Japan is fertile ground just waiting to be plowed and planted. Consider these reasons:

- \* Key opinion leaders (KOLs) are easy to identify and contact.
- \* Ditto for patients who are often organized in support of gaining access to new drugs in a timely manner.
- \* Talented employees are available because the challenge of developing a new drug that makes a difference in treatment is better than spending time to develop line extensions of old drugs.
- \* All of the above are within a limited geographical area, thus readily accessible.
- \* Regulatory authorities are sensitive to the need to eliminate the "drug lag."
- \* Finally, but certainly not least, initial reimbursement prices are very attractive, and this is a rich society that wants the best therapy available.

Over the next several years more of these bioventures will move from the development stage

to commercialization. Their drugs will experience rapid adoption by doctors and patients for obvious reasons. And in Japan there are essentially no formulary restrictions. Rapid diffusion is the name of the game.

Do not overlook the fact that these niche drugs can be promoted and marketed by a limited number of MRs, and discounts in the supply chain can be minimized. What more can you ask for than high prices and low expenses? The ROI on the Japan entry investment is very attractive.

### Japanese Bioventures

Difficult to be optimistic about the success of Japanese bioventures. To date the track record is miserable. Out of the roughly 600 bioventures only 22 managed to go public. Twenty of these are analyzed in the chart below. Please note the following:

- \* For most companies the first listed price was above the offering price. This means pre IPO investors could realize a capital gain if they sold their shares soon after the IPO.
- \* The net amount of money raised for companies via an IPO was rather modest considering the cost of taking new drugs through clinical trials.
- \* IPO investors took a bath if you compare the price of shares as of September 30, 2009 with the first listed price. Potential market capitalization for all but four of the firms is negative.

Given this experience with investments in bioventures there is no appetite for more of the same. It also throws cold water on the dreams of bioventure founders who hope to become rich with their ideas.

Seeds or ideas for new drugs have and will emerge from Japan as they do in the US and Europe. The rest of the world doesn't mater, at least for now.

But seeds need fertile ground in which to germinate, grow, blossom, and yield fruit. According to a friend who is president of a bioventure the ground in Japan is like cement. Sure, you might see a plant emerge from a crack in a cement wall, but it is a tough environment in which to thrive. Here are some of the barriers that must be overcome.

| Name of company                           | Offering price (1) | First listed price (FLP) (2) | Market capitalization at IPO (3) | Amount raised at IPO (mil. yen) | Net amount raised for the company at IPO (mil. yen) | Stock split | Current price (09/09/30) (yen) | Current market capitalization (09/09/30) (mil. yen) (4) | Potential market capitalization loss or gain (4) - (3) |
|---|--------------------|------------------------------|----------------------------------|---------------------------------|---|-------------|--------------------------------|---|--|
| AnGes MG Inc.                             | 220,000            | 400,000                      | 18,042                           | 5,236                           | 3,358   | -           | 152,700                        | 17,981  | -61  |
| Trans Genic Inc.                          | 180                | 235                          | 10,197                           | 3,654                           | 2,700   | -           | 19,660                         | 2,144   | -8,053   |
| MediBic Co., Ltd.                         | 270,000            | 518,000                      | 10,009                           | 2,700                           | 2,295   | 1→2         | 7,850                          | 1,383   | -8,626   |
| Medinet Co., Ltd.                         | 350,000            | 1,260,000                    | 14,588                           | 5,635                           | 4,200   | 1→10        | 14,800                         | 9,111   | -5,477   |
| Onco Therapy Science, Inc.                | 1,000,000          | 2,400,000                    | 59,470                           | 17,000                          | 8,000   | 1→3         | 184,000                        | 37,247  | -22,223  |
| Soiken                                    | 650,000            | 1,360,000                    | 37,699                           | 10,335                          | 2,600   | 1→2<br>1→2  | 19,100                         | 4,962   | -32,737  |
| Shin Nippon Biomedical Laboratories, Ltd. | 3,000              | 4,110                        | 47,316                           | 7,200                           | 6,000   | 1→2         | 669                            | 22,976  | -24,340  |
| DNA Chip Research, Inc.                   | 680,000            | 1,280,000                    | 9,248                            | 2,720                           | 680   | 1→2         | 47,600                         | 1,613   | -7,635   |
| Sosei Co., Ltd.                           | 800,000            | 800,000                      | 48,976                           | 14,168                          | 11,240  | -           | 186,900                        | 22,034  | -26,942  |
| LTT Bio-Pharma Co., Ltd.                  | 220,000            | 301,000                      | 10,703                           | 2,151                           | 880   | -           | 44,000                         | 5,802   | -4,901   |
| TAKARA Bio Inc.                           | 200,000            | 230,000                      | 52,400                           | 9,000                           | 8,000   | -           | 232,300                        | 65,525  | 13,125   |
| MediciNova, Inc.                          | 400                | 405                          | 38,913                           | 13,800                          | 12,000  | 10→1        | 585                            | 7,062   | -31,851  |
| Effector Cell Institute, Inc.             | 380,000            | 240,000                      | 37,259                           | 7,410                           | 3,800   | -           | 33,250                         | 6,647   | -30,612  |
| Immuno-Biological Laboratories            | 11,000             | 10,000                       | 6,150                            | 2,561                           | 1,100   |             | 2,230                          | 1,375   | -6,150   |
| GNI                                       | 90                 | 80                           | 5,671                            | 1,414                           | 900   |             | 18                             | 1,333   | -4,338   |
| J-TEC                                     | 120,000            | 96,000                       | 9,700                            | 3,981                           | 3,000   |             | 72,500                         | 7,341   | -2,359   |
| Nano Carrier                              | 20,000             | 27,000                       | 3,186                            | 759                             | 600   |             | 32,250                         | 4,098   | 912  |
| Carma Biosciences                         | 110,000            | 99,300                       | 5,282                            |                                 | 1,100   |             | 82,100                         | 4,367   | -915   |
| tella, inc.                               | 310                | 300                          | 3,435                            | 620                             | 285   |             | 1,505                          | 17,657  | 14,222   |
| Cambus                                    | 2,100              | 3,730                        | 5,893                            | 1,545                           | 1,236   |             | 3,390                          | 9,513   | 3,620  |

### Financing

The chart identified reasons for lack of enthusiasm by investors. Add to this a virtually closed IPO market. Why? Because the Tokyo Stock Exchange (TSE) says they will be pleased to list a company IF it has an approved product. Where will the money come from to take a new drug all the way through the development and registration process? Initial investors must not only weigh the risks inherent in new drug development, but also the uncertainty of when a drug can be approved.

This is not a policy designed to foster innovation in Japan. In fact it is like a herbicide that kills seedlings as soon as they sprout from the ground.

### Pharma Support

Japanese pharma companies with few, very few exceptions, do not invest in Japanese bioventures. They would rather spend their money on US bioventures. This is strange, but reflects the historical chasm between academia and industry in Japan. People in academia do not move to industry or vice versa. And if they do move they can never go back.

Several Japanese pharma companies established venture capital like funds in the US with tens of millions of dollars. I am not aware of one in Japan. More foreign companies are searching for seeds in Japan than Japanese companies. Is this a case of familiarity breeds contempt?

### Government Support

Government money is becoming available to support bioventures but it is administrated by several different ministries, hardly a formula for focused action and quick decisions. Bureaucrats tend to be risk averse because of the many audiences they must satisfy.

### Clinical Trial Support

Hospitals, doctors, and patients are not particularly enthusiastic about taking seeds into the clinic for testing. Thus, as we all know, the time and cost of a clinical trial is a national disgrace. Seeds need a place to germinate before transplanting them into the wider scope of efficacy trials.

### Entrepreneurs

Seeds are most often discovered by scientists not businessmen. But if seeds are going to grow and bear fruit they require people who know how to raise money and make money or else the seeds will remain in the laboratory and never reach a patient.

But bioventures need more than salaried men, they need entrepreneurs. People who are willing to risk everything and work outside the womb of large corporations. These people are hard to find. Why? Because if you fail in Japan that is the end of the road. In the US failure is often a prerequisite for success. If you want a person to build a bioventure, find someone who experienced failure.



### Is There Hope?

Yes, because there are many people in Japan with ideas that will alleviate diseases untreatable by current therapy. Bioventures will also create new jobs and contribute to economic growth. Smart people in Japan must find ways to provide an infrastructure that will foster the discovery and growth of this dynamic industry.

*P. Reed Maurer does not believe any one country has a monopoly on ideas.*