Japan-China merger puts growth in East Asia first

The Tokyo-based pharmaceutical development firm GNI announced its merger with Shanghai Genomics on June 20, marking the first such partnership between a Japanese and a Chinese biotech in over a decade. The newly formed venture has a research staff of more than 80 in Japan, China and England, and a portfolio of drugs in preclinical and early-stage clinical development. GNI simultaneously announced it had raised an additional $13 million from private equity sources including Japanese heavyweight Nomura Research & Advisory (NR&A).

The deal emerged from a successful collaboration between the two companies in which GNI had turned to Shanghai for wet lab validation of its proprietary gene regulatory network technology. Armed with this platform for predicting genome-wide effects of disturbance in gene regulation, the combined companies now aim to capitalize on the speed and cost efficiency of drug development in mainland China, both in bringing agents developed by the two parties to market and in contract research, which will continue to be branded as a Shanghai Genomics service.

In the near term, the partnership will continue to move forward with ongoing phase 1 trials in China of GNI's lead compound, a small molecule for lung fibrosis and lung injury, such as damage from cancer radiotherapy. With China home to an estimated 300 million smokers and air pollution commonplace in its cities, the treatment of damaged lungs represents an attractive development target, says Christopher Savoie, GNI's chief executive.

Following close on the heels of Invitrogen's acquisition of BioAsia (*Nat. Biotechnol.* **23**, 159, 2005) earlier this year, the GNI-Shanghai Genomics merger highlights the flurry of activity stemming from intensifying interest in mainland China as a locale for biomedical R&D. A range of activities, from the outsourcing of routine molecular biology, medicinal chemistry and preclinical testing to full-scale drug development, has quickly evolved.

Few would dispute that working in China offers advantages in the form of low costs, access to large patient populations for clinical trials and early penetration into a huge, rapidly growing market. But although China has made strides in getting Good Practice standards signed into law, the issues of compliance, enforcement and informed consent continue to nag the nascent industry (*Nature*, **435**, 138, 2005) and whether data gathered in China can be exported to the rest of the world remains a potential major stumbling block.

China is increasingly becoming a target for commercial biotech activities.

For GNI at least, the global transferability of results is not an immediate issue. "In the near future, Japan and China will be the world's second and fifth largest pharmaceutical markets," says Savoie. "We're very satisfied with those market sizes even if it's not immediately possible to bridge studies directly to the US and Europe." The company is eyeing the increasingly well-to-do population of more than 100 million coastal Chinese with the means to afford more costly healthcare. By targeting diseases more prevalent among East Asian populations, such as hepatitis B and C and some forms of cancer, GNI hopes to identify potentially underserved groups in both Japan and China. The game plan buoyed GNI's second round of financing, led by investments of Japanese firms looking to buy into a booming market. "The year-on-year double-digit growth of the Chinese life sciences sector has generated a lot of interest here," comments Ken-ichi Kominami, a senior manager at NR&A.

Not everyone shares in this full-steam-ahead outlook. Ames Gross, president of Pacific Bridge Medical, a consultancy set up to help Western biomedical companies doing business in Asia, remains wary of potential problems such as copycat patents and piracy. "Small companies that lack the resources to protect their IP in court need to be especially careful when thinking about sharing their inventions. Regulation and enforcement in places like China and India is improving, but it's still possible to get burned."

Those concerns may not be enough to deter firms optimistic about the sheer size of the Asia market, which Gross estimates accounts for 30% of all new healthcare expenses worldwide. Past attempts to look to Asia first have met with limited success, however. The Taiwanese government, albeit in a smaller segment of the Chinese market, vigorously promoted drug development in the late 1990s, but has yet to see those efforts yield real business.

Tina Huang, vice president for life sciences investments in the Taiwan office of WI Harper Group, a venture capital firm specializing in linking the US and Greater China, cautions that Taiwan's aspirations fizzled in large part because of the absence of sufficient regional markets to support either biotech or pharma ventures. Savoie nonetheless remains sanguine about prospects, seeing the move to ally with a partner in Shanghai as another indicator of the strong economic ties between Japan and China, where the volume of trade now exceeds that between Japan and the US.

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