Shift toward early-stage deals favors biotechs

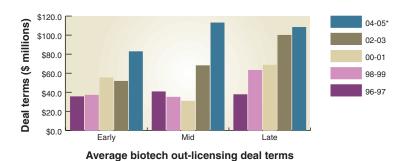


Figure 1 Average biotech out-licensing deal terms. Source: Recombinant Capital

On December 6, Basel's Novartis signed a \$520-million licensing deal with Cambridge, UK-based Astex Pharmaceuticals. The deal focuses on two experimental oncology drugs of the cell cycle inhibitor family, one in preclinical and one in phase 1 development. As biopharmaceutical companies move further up the pipeline in search of candidates, phase 1 and preclinical deals are increasing in number and, even more so, in value. Even firms making discovery-stage deals are announcing record-breaking terms. Meanwhile, laterstage deals are scarcer as biotechs try to retain value by pushing their products further in development than ever before.

Ahead of the Astex deal, Novartis executed the largest recorded preclinical deal this year with Anadys Pharmaceuticals of San Diego, California, for \$570 million in oral prodrugs for hepatitis B and C vaccines. Meanwhile, Genentech struck the 4th largest preclinical deal this year, on November 30th, with PIramed, a two-year-old British oncology company based in Slough. The deal is a \$230-million preclinical collaboration on a new class of oncology drugs targeting PI 3kinase, a key intracellular enzyme involved in a broad range of cancers. At \$113 million, the average value for a preclinical or phase 1 deal actually outstripped that of phase 2 or later deals—estimated to represent a total of \$108 million—for the first time.

Indeed, "It's the push to acquire a potential blockbuster drug as early as possible," says Jerry Swiss, a partner in the intellectual property department of international law firm Foley & Lardner in Silicon Valley. Last year, discovery and lead-molecule stage deals were only 55% of the total, a decline from almost three-quarters in 2001. But phase 1 and preclinical deals have doubled their share to about 15% last year from 7% in 2001.

That's because major biopharmaceutical companies have become less likely than they used to be to maintain a research program when there are multiple competitive, similar, late-stage candidates. "The research field is becoming more competitive and fearful of the state of their pipeline," argues James Thomas of healthcare private equity firm Thomas McNerney & Partners, based in Stamford, Connecticut. "People think that the competitive speed that they need to move at is higher now. In the old days, when one pharma got a hot target, the others started a program to catch up. That doesn't happen now."

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Out of the ten largest disclosed discoverydeals ever disclosed, eight were signed this year. For example, Novartis has intensified its discovery deal-making activity since it modified its corporate structure to encourage early-stage deal making. "We have over 400 early-stage collaborations worldwide, a significant increase each year for the last three to four years," notes Jeremy Levin, the global head of strategic alliances for the Novartis Institutes for BioMedical Research in Cambridge, Massachusetts. "Last year we made over 200 and this year there were even more."

Indeed, this year Novartis has 4 out of the top 15 largest discovery announcements and 8 deals in total. The largest was a \$700-million deal for RNA inhibitor research with Cambridge, Massachusetts-based Alnylam. Other players such as S. San Francisco, California-based Genentech has also stepped up seeking discovery-stage deals, closing 3 of the top 20 largest deals so far this year, with 5 deals in all.

In total, the value of research partnership deals with biotech companies reached almost \$11 billion last year, according to an estimate from industry investment bank Burrill & Company, based in San Francisco.

That's up more than 45% from \$7.5 billion in 2001. And 2005 looks to be on track to surpass 2004; partnership deal value reached \$10 billion already in the first three-quarters

Even as the total value of research partnerships continues to grow, the number remains relatively stable at around 650 for the last several years. So, inevitably, more money on average is going into each deal. Data from industry research group Recombinant Capital based in Walnut Creek, California, confirm this trend. Over the last year or two, biotech companies have been able to command far more for earlier-stage partnership deals. The average value for pre-phase 2 deals increased dramatically-by about two-thirds-over the last few years, after seeing only gradual increases throughout most of the previous decade (see Fig. 1).

Not only is it a matter of increased competition, but Novartis' Levin argues that earlystage deals are in demand simply because pharmaceutical companies need them as part of their ongoing research efforts. "You have to look at deals as part of a spectrum whether they be early or late stage," he notes. "The timing of those deals is simply related to what place in the pipeline you need to be supplemented."

Although early-stage deals have increased in value, this does not seem to have affected the amount of money available for late-stage deals. Indeed, those now account for almost one-third of all partnership deals, dramatically up from one-fifth since 2001. But, in contrast to early-stage deals, they have simply held their value over the last few years; the rapid growth in value that occurred around the turn of the century has now faltered. "In the last year or so, the later-stage deal terms haven't changed much. But there just aren't enough of them," notes Marya Postner, a partner in the life sciences practice of law firm Cooley Godward in San Francisco.

For large biopharmaceutical companies, "the number of opportunities at a late stage has diminished because of their own doing and also because of some reluctance by the biotech companies; they want to make the profit for themselves," Foley & Lardner's Swiss argues. Indeed, "the further along you go on a project and the more credible your phase 1 or phase 2 studies are—the value of the technology goes up proportionally," he notes. "Companies are less willing to give away the store to big pharma."

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