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MoFo BioMeter™

A quarterly deal report covering the biotechnology industry

Introducing the BioMeter

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Morrison & Foerster is pleased to introduce the MoFo BioMeter, an index that measures the health of the biotechnology industry. By "biotechnology industry" we mean companies that are engaged in developing new therapies, be they small molecules, biologicals, probiotics, cells, devices, etc. They may include companion diagnostics. We include as well transactions for companies that have become commercial organizations, with revenues, sales, marketing, and (usually) profits. The BioMeter will capture data from their transactions involving development-stage assets.

The BioMeter is an index that averages up-front payments in licensing, collaboration, and development agreements between biotechnology companies (broadly defined) and companies that pay for commercialization rights. These agreements can take many forms, from licensing agreements, to joint ventures, to acquisitions. Their common characteristic is that one company (the licensor or seller) has developed an asset, and another company (the licensee or buyer) is paying for commercialization rights to that asset. For simplicity we call these "collaboration agreements." Often the licensee is "pharma" but sometimes it is another biotechnology company. For this first analysis, we are focusing on licensing and collaboration agreements. In future editions of this newsletter we will look at acquisitions.

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We focus on up-front payments for several reasons. First, up-front payments are the most concrete representation of the value of a development-stage asset. Parties to a collaboration agreement may have different assumptions about the likelihood of achieving any developmental or regulatory milestones that are built into an agreement, and may ascribe different values to future payment streams. Cash up front, on the other hand, is assured and easy to measure.

Second, in an era of constricted venture funding for unapproved therapeutics, up-front payments from collaboration agreements have become an increasingly necessary source of capital for companies to sustain their development efforts. Recipients of up-front payments can use that cash for continued development. Depending on the deal, such cash might fund development of the therapies subject to the transaction, or pay for development of other products. Sometimes some of the money will flow back to investors.

Data for up-front payments is also relatively accessible, allowing for robust analysis. We found that over 1,000 transactions between 2006 and 2011 disclosed up-front payments. When total deal value is reported, these numbers include development and sales-based milestones that are highly contingent (so-called "Biobucks") and are heavily discounted by the industry. Recently, the Securities and Exchange Commission has started requesting that publicly listed biotechnology companies provide more detailed disclosure of potential milestone payments. It remains to be seen how industry adapts to these disclosure requirements, but even if disclosure of potential milestones becomes more common, the contingent nature of the milestones will make them inherently difficult to value.

The BioMeter seeks to answer several questions. First, "What is a development-stage asset worth?" Or, more to the point, "How much will someone pay for this asset?" Up-front payments are only part of the answer, but a very important part. From an investor perspective, the up-front payments help answer the question, "If I invest $X million in this program to get it to Phase Y, how much can I expect to get paid with certainty at Phase Y?"

The BioMeter also allows us to measure changes in the industry, or by sector, over time. Our analysis looks at changes from year to year and, going forward, will look at changes on a quarterly basis. We can also perform analysis across sectors and across development stages.

The BioMeter is not perfect. The amount of up-front payments in a collaboration agreement can be structured by the parties to achieve desired financial reporting results. Licensees, in particular, often want to spread payment streams to manage their financial reporting, and licensors may be willing to agree, so long as the total committed funding achieves a desired result. For example, committed payments for development expenses, which may or may not be reported for a given transaction, might be negotiated and reduce what would have been a higher up-front payment. Likewise, up-front payments may be negotiated down and replaced with milestone payments for events that are assured, or nearly assured. These difficulties make specific deal-to-deal comparisons difficult, but by aggregating larger numbers of transactions, we believe that the distortive impact of these structuring tactics is reduced, as the percentage of transactions that have these characteristics should remain stable over time.

By focusing on up-front payments, the BioMeter also necessarily understates the "true" value of an asset subject to a collaboration agreement. Parties may disagree on the right discount rate to apply to milestone-based payment streams or potential future royalties, but those payment streams do have value, often significant. Still, we believe the BioMeter gives useful comparative information.

Along with focusing on the value of up-front payments in collaboration agreements, we have also analyzed the number of reported transactions. High BioMeter values are a good sign for the industry. A lot of high BioMeter value transactions are even better.

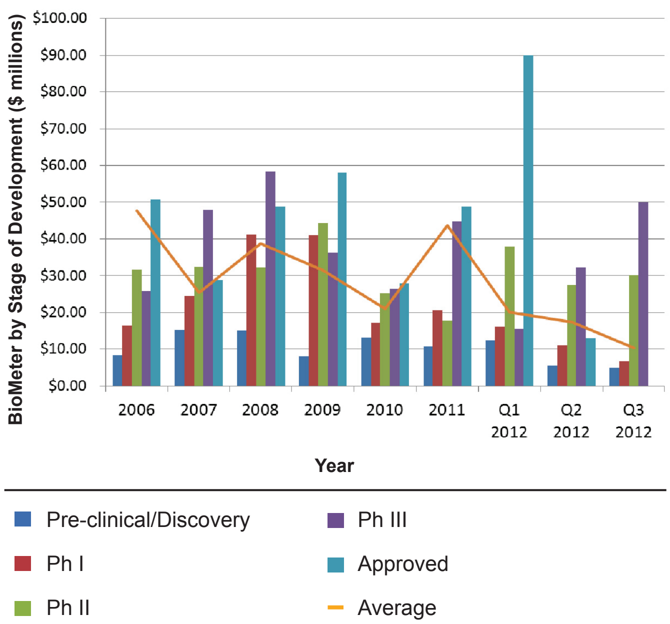
Our initial BioMeter analysis provides annual BioMeter calculations for 2006 through 2011 and for the first three quarters of 2012. We present the analysis by development stage (pre-clinical, Phase 1, Phase 2, etc.), with additional analysis by indication. We will report this data and other supplements on a quarterly basis. We hope you find it useful, and we welcome your feedback.

Results and Analysis

Table 1 shows the average BioMeter by year and by stage of development from 2006 through 2011, and for the first three quarters of 2012. From 2006 through 2011, the average BioMeter value for all transactions in all stages of development was $35.5 million. Generally, assets in later stages of development have higher BioMeter values in any given year, and BioMeter values fall within three distinct bands, with transactions for pre-clinical assets having BioMeter values between approximately $8 million and $15 million, transactions for Phase 1 or Phase 2 assets having BioMeter values between approximately $16 million and $45 million, and transactions for Phase 3 or approved products having BioMeter values between approximately $25 million and $60 million.

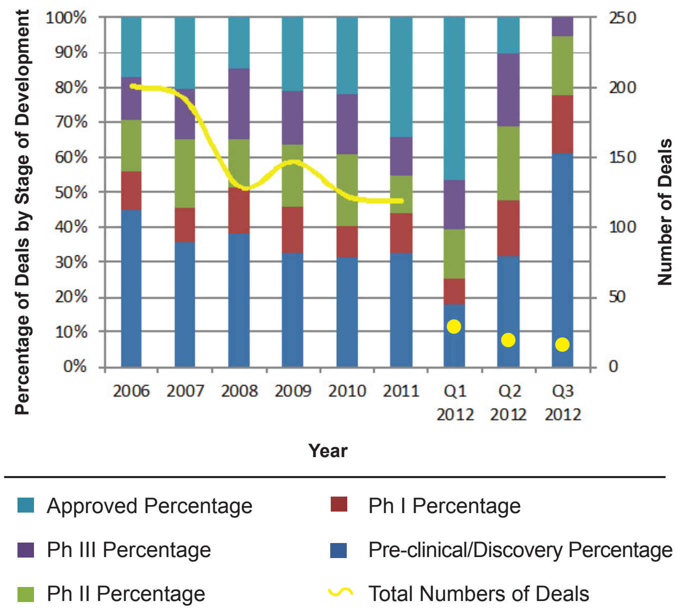
2011 saw an increase in the average BioMeter value compared to prior years. The increase in 2011 compared to 2010 is largely the result of increases in the BioMeter for transactions involving Phase 3 and approved products, which is consistent with anecdotal observations that licensees are interested in later-stage assets to fill their drug development pipelines. While approved products continued to achieve high values in Q1 2012, with the BioMeter value for approved product transactions reaching $90 million across 13 transactions in the first quarter, the overall average retuned to $20.1 million, in part because the BioMeter for Phase 3 transactions declined to $15 million, the lowest seen for this stage in our analysis. In the second quarter of 2012, the average BioMeter value declined to $17.3 million across 22 transactions, with average values of $32.3 million and $26.3 million for Phase 3 or approved products, respectively. The decline in BioMeter value continued in the third quarter, where the average across all transactions was $10.3 million, reflecting a preponderance of pre-clinical stage transactions.

Table 1: BioMeter Values by Stage of Development and Average by Year



Along with the BioMeter value of transactions, the number of transactions is also an important indicator of the health of the industry. Table 2 shows the number of transactions by year disclosing up-front payments and stage of development for each year from 2006 through 2011 and for the first three quarters of 2012, as well as the percentage of transactions by stage of

Table 2: Number and Percentage of Collaboration Agreements by Stage of Development



development. The absolute number of deals per year with a reported stage of development has declined significantly from a high of 201 in 2006 to 119 in 2011, roughly the same as the 122 deals reported in 2010. The decline in number of deals is continuing with 28 reported deals in the first quarter of 2012, 19 reported deals in the second quarter, and only 18 in the third quarter.

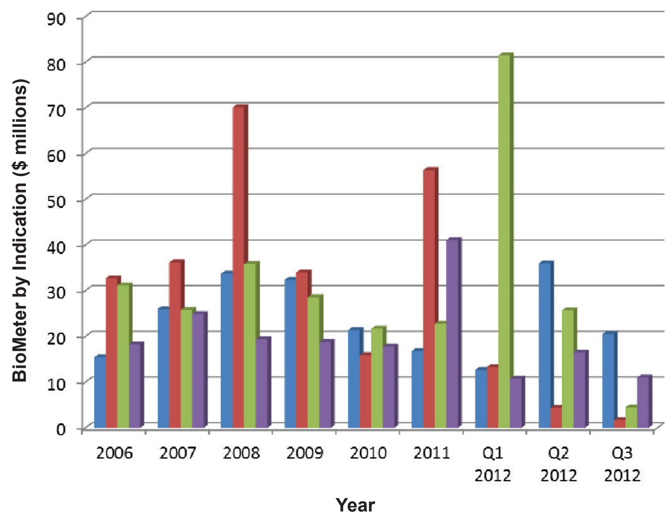
The percentage of pre-clinical deals was highest for full years in 2006 at 45% but since that time has held steady at approximately one-third of all reported transactions for each year in our survey. Our data suggests that pre-clinical assets remain valuable to the right buyers, as the BioMeter values have remained relatively constant, but finding the right buyers is becoming more challenging as the number of transactions has decreased. The percentage of deals for Phase 1 assets rose in 2008 and 2009 from approximately 10% in prior years to approximately 13%, but has since settled back to 10%. The BioMeter value of these deals has declined significantly compared to 2008 and 2009, from approximately $41 million to less than $20 million in 2012.

In 2011 and the first quarter of 2012, the number of transactions for products with regulatory approval has increased relative to the number of transactions for products in Phase 3, suggesting that buyers for later-stage assets are willing to wait to remove regulatory risk. The first quarter of 2012 also showed the highest percentage of deals for approved products, at 46%, and the lowest number of deals for pre-clinical or Phase 1 products, at 25% combined (compared to 56% in 2006 and generally between around 40% and 50% between 2007 and 2010). In the second quarter of 2012, the percentage of pre-clinical deals returned to slightly over 30%, while the percentage of deals for approved products declined to slightly more than 10%. The third quarter of 2012 saw a shift in favor of early stage deals, with pre-clinical deals representing approximately 61% of reported transactions, while Phase 3 deals represented only approximately 5% of reported transactions, and there were no reported transactions for approved products in our survey.

From 2006 through 2011, the most common indications for transactions have been oncology (20–30% of reported deals), CNS (12–18% of reported deals), autoimmune/immunologic/hematologic (11–21% of reported deals), and infectious disease (bacterial and viral) (8–16% of reported deals).

As shown in Table 3, the BioMeter values by indication have varied from year to year. BioMeter values for oncology transactions increased from $15.4 million in 2006 to $33.75 million in 2008, but declined back to $16.8 million in 2011. This figure dropped to $12.7 million in the first quarter of 2012, rose to $36 million in the second quarter of 2012 and was $20.5 million in the third quarter. Autoimmune/immunologic/hematologic BioMeter values have oscillated between approximately $20 million and $35 million but spiked to $81.5 million in the first quarter of 2012, largely based on the $150 million up-front payment in the Galapagos NV-Abbott deal. BioMeter values for CNS have also jumped up and down, rising from $32.7 million in 2006 to $70.1 million in 2008, but declining to $15.9 million in 2010 and then rebounding to $56.4 million in 2011. The BioMeter value for infectious disease transactions bounced between approximately $17 million and $25 million from 2006 through 2010 and spiked to $41.1 million in 2011, and oscillated between around $11 million and $25 million in the first three quarters of 2012.

Table 3: BioMeter Values by Indication



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