

# Clinical grants: What is a fair market value?

As industry observers increasingly question whether sponsors' grant payments might influence the prescribing behaviour of investigators, a recent study unearths a variety of elements that play a role when setting grant amounts. **Harold Glass** analyses the findings

KEYWORDS: Clinical grant payments, Principal investigator, Prescribing behaviour, Benchmark data

**M**any observers of the pharmaceutical industry have grown concerned with the financial relationship between investigators participating in clinical trials and the pharmaceutical companies sponsoring those trials. Some critics question whether the grant amount for a clinical trial reflects payment only for work performed or an effort by the sponsoring pharma company to influence investigator behaviour.<sup>1-3</sup>

One might contend that any payment may influence behaviour. An article in the *Journal of the American Medical Association* points out that the number of physician investigators has increased dramatically over the past decade as most research moved from institution-based settings to practitioners' facilities, where less stringent ethical standards may prevail.<sup>4</sup> And an AMA-adopted report on the council on ethical and judicial affairs suggests that some payments to investigators may exceed the fair market value for services performed and may influence behaviour.<sup>5</sup> But it is probably unrealistic to assume that many clinical investigator and hospitals would undertake such studies for pharma companies without any payment whatsoever. So the issue becomes one of the relative amounts paid to investigators doing comparable levels of work. The University of the Sciences in Philadelphia (USP) and industry consultancy TTC conducted a study to examine two closely related questions: first, what factors influence the amount of the grant payment made to conduct clinical trials, and second, does the grant amount influence subsequent prescribing behaviour?

## Methods

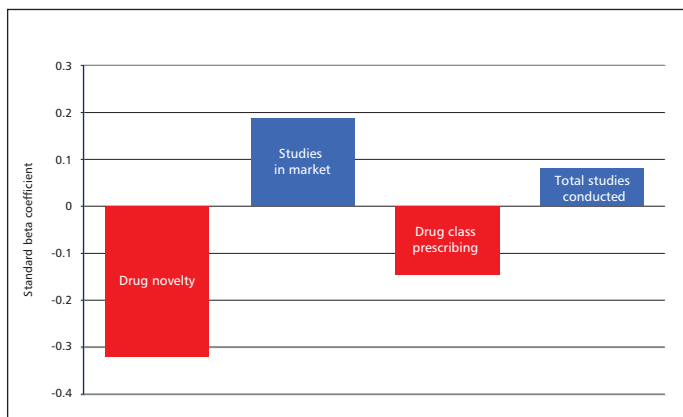
To answer the study questions, we randomly selected 2,108 physicians (at 2,897 clinical sites, since some physicians conducted more than one study) who were involved with at least one Phase III clinical

study as a principal investigator. The database we used involved clinical study investigator grant payment data and protocol design information from more than 40 pharma companies conducting Phase III clinical studies in ten major outpatient indications. Investigators in the study had demographic characteristics that closely corresponded to the demographics of the US clinical investigator population.

For each of the investigators, we knew how much they were paid in absolute terms as well as the exact medical protocol they were expected to follow. Our cost information included the exact procedures and lab tests to be undertaken at each visit, any special processes or methods the investigative site required, direct costs such as study co-ordinator fees, and any indirect costs such as organisational overheads. We had no information on items such as the number of evaluable patients treated or the number of protocol errors.

Our analysis focused on the relative grant amount paid to an investigator on a cost-per-patient basis, rather than the absolute amounts paid to the investigators. The relative payment percentile represented by the absolute cost-per-patient grant paid to any specific investigator was similar to other studies in this area. For example, an absolute cost-per-patient grant of US\$3,000 may be a relatively low or high amount depending on the specific tasks the protocol requires, and some physicians may be paid more, or less than, US\$3,000 for the same amount of work. Consequently, our study focused on the percentile that the investigator was paid above or below the rate paid to others for similar work. The higher the percentile the more an investigator was paid in relation to other investigators.

We drew prescribing behaviour and investigator demographics from the IMS Health databases provided to almost all pharma companies marketing drugs in the US.



**Figure 1: Standard beta coefficients indicate the importance of each variable in explaining the relative amount any specific investigator is paid to enrol a patient and complete treatment in a Phase III clinical trial.**

## Results

So how much is an investigator paid? Multivariate models provided evidence that many unremarkable factors may explain the relative grant amounts investigators receive. And, of course, there may be additional factors not included in our study that affect payment practices. Our data point to a number of rather ordinary explanatory variables associated with investigator characteristics and market demand in understanding the relative size of the clinical grant.

Clinical investigators indicate a desire to work on novel compounds,<sup>6</sup> and the grant payment data in our study demonstrate that those working on new compounds do accept lower relative payment levels. In fact, investigators working on a therapeutically novel compound accepted 18 percentiles lower than investigators working on follow-on, or non-novel, compounds (see Figure 1).

Basic supply and demand also plays a role in payment rates. In our study involving sites from over 400 trials in the market, as the number of studies being conducted simultaneously in the same indication increased, so did the relative size of the payment to investigators. Investigator payments increased nearly three percentiles for every additional study being done at the same time within the same indication. Finding and training new investigators is a labour-intensive and expensive process. As the demand for investigators increases, so does the relative amount paid to them when multiple clinical studies compete for an investigator's services.

Physicians who already write a higher volume of prescriptions for the current drugs treating the study's indication are willing to accept a lower price. These physicians may be actively looking for drug or other medical treatment alternatives for their patients.

Experienced investigators command a relatively higher price in the market. As the number of clinical studies an investigator conducts increases, so does the relative size of the payment they

receive. One reason for this is that pharma company recruiters may value the higher quality results experienced investigators produce and are willing to pay relatively more for this expertise.

## Prescribing habits and payment levels

Compared with a matched set of physicians who had not participated in clinical trials, investigators prescribed approximately twice as much of the study drug, as a percentage of prescriptions within the respective drug class (see Figure 2).<sup>7</sup>

A number of characteristics of the physician, the physician's practice, the drug and the company behind the research were associated with subsequent prescribing rates of the study drug when it reached the market.<sup>8</sup> For example, physicians who were the first to adopt new first-in-class drugs already wrote a larger percentage of their existing prescriptions from the company behind the new drug launch. These early adopters also tended to be younger, write a larger number of total prescriptions, and have more clinical experience. Yet, investigators who received relatively higher grant amounts did not subsequently prescribe more of the study drug, or other drugs from the sponsor company. Paying some investigators more to conduct a clinical trial may be necessary because of basic drug development, investigator and market considerations, but our study showed it did not lead to higher trial drug prescriptions up to 18 months after product launch.

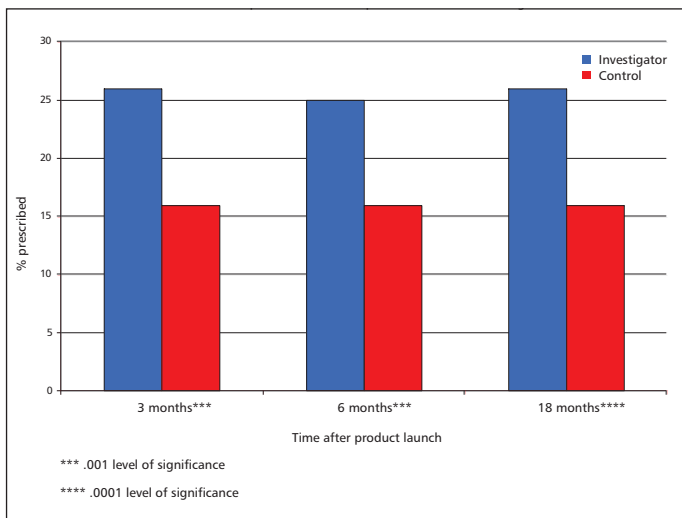
## Justifying the grant amounts

The issue of fair market value in the payment of clinical grants to clinical investigators will continue to concern drug development professionals. While there may be no empirical data demonstrating that grant payment practices influence the conduct of clinical research or the subsequent prescribing of the study drug, given the attention this issue is receiving, pharma companies should be prepared to justify that they are paying fair market rates for their clinical grants. Two activities can help with this process.

First, pharma companies must understand their own payment practices. Increasingly, companies must strive to understand how they pay investigators, including:

- How payment practices vary by therapeutic area
- What overheads are paid by sponsors to institutions and office-based practices
- How much variation in payment to individual sites will be accepted in a particular study
- How many patients will be placed in a particular country because of the relative costs of doing clinical research in that country.

Second, companies should compare their payment practices to industry and other medical benchmarks. Many pharma companies participate in third-party managed databases of clinical



**Figure 2: USC (uniform system of classification) share at three, six and 18 months after product launch completion for Phase III investigator and control doctors.**

grants. These databases usually include the major countries where clinical research is being conducted. Participating companies routinely share their clinical grant information through such a database. The data from the contributing companies are anonymised so that the names of the companies and clinical investigators are not identified. A participating company can then look at the market rates for specific types of studies.

For example, the participating company can specify the exact study design and execution activities its study uses, and then see the range of grant prices paid in the marketplace for comparable studies. Study design considerations might include such items as number of visits and exact medical procedures. Study execution activities could involve factors such as the type and level of clinical administrator used, the acquisition of study-specific equipment, or the method of patient recruitment. The pharma company may also need to understand what payment practices are common at the site being used, whether it is a hospital or office-based practice. Such site-specific considerations might include overhead rates, professional staff payment levels, regional and national differences and expected upfront payment practices.

The company may have a specific grant payment policy such as paying at the median, or 50th percentile for comparable studies involving similar levels of effort. However, the actual grant level to be paid is usually a function of what the company is willing to pay for the work involved and what a specific site is willing to accept. Industry databases can only indicate the range of what is being paid to investigators for designated levels of clinical research activity. Ultimately, the sponsor company and the investigator site must jointly determine what is actually paid.

Other kinds of data are available, including the

National Fee Analyzer in the US, which recommends payment levels for particular medical procedures. Most major countries have similar reference guides. For example, in the UK, the British Medical Association publishes payment guidelines for individual medical procedures. Other potential sources of benchmark data are insurance claim databases, and, in the US, even Medicare payment guidelines, although the latter may not accurately reflect payment practices for non-Medicare patient treatment.

In summary, our study found that grant payment practices are subject to the vagaries of sponsor company needs, investigator needs and market dynamics. There is no empirical evidence that differential grant payment levels influence a clinical investigator's subsequent prescribing levels. Market and business influences seem to account for the differences in what individual investigators receive for participating in a clinical study. Nonetheless, given the attention the issue of fair market pricing is receiving, sponsor companies would do well to understand and benchmark their own payment practices. [GCPJ](#)

## References

- 1 PA Komesaroff, IH Kerridge. 'Ethical issues concerning the relationship between medical practitioners and the pharmaceutical industry', *The Medical Journal of Australia*, 176(3), pp18–21, 2002.
- 2 FG Miller, AF Schorr. 'Ethical assessment of industry-sponsored trials', *Chest*, 121(4), pp1337–42, 2002.
- 3 S Vento. 'How tainted is medicine?', *Lancet*, 359(9319), pp1775–6, 2002.
- 4 K Morin, H Rakatansky, FA Riddick Jr, *et al.* 'Managing conflicts of interest in the conduct of clinical trials', *Journal of the American Medical Association*, 287, pp78–84, 2002.
- 5 H Rakatansky. *Report of the Council of Ethical and Judicial Affairs*, AMA, 2000.
- 6 HE Glass, RA Kane. 'Why investigators take part in clinical trials', *Applied Clinical Trials*, 9, pp46–54, 2000.
- 7 MH Corrigan, HE Glass. 'Physician participation in clinical studies and subsequent prescribing of new drugs', *Pharmacy & Therapeutics*, 30(1), pp1–7, 2005.
- 8 HE Glass. 'Do clinical grant payment practices in phase 3 clinical trials influence subsequent clinical investigator prescribing behavior?', *Disease Management*, 7, pp77–87, 2004.

### Harold E Glass, PhD

Professor, University of the Sciences in Philadelphia & President, TTC, llc  
Tel: + 1.215.243.4103  
E-mail: h.glass@usip.edu