

## Negotiation Exercise: MPharm

After receiving his MD from University of California, San Francisco, Dr. Chris Chen has been working as a self-employed medical doctor in San Francisco, California. In his private time he conducts some experiments that interest him. His father suffered from acid reflux, a condition that is both extremely unpleasant and dangerous, as it can lead to esophageal cancer. Chris experimented with traditional Chinese medicines, and settled on a compound made up of orange peel, licorice, turmeric, coptis, and codonopsis. This compound was added to calcium carbonate, the main ingredient in antacid, and compressed into a tablet.

After seeing dramatic benefits for his father, Dr. Chen did a pilot study and used the data to obtain a patent on the use of traditional medicines for acid reflux. The results were published in the *Journal of Traditional and Complementary Medicine*. After the article came out, he started receiving inquiries from companies looking to obtain an exclusive license to the patent. One company “iDiet” wants to use the tablet as a dietary supplement. Dr. Chen hired lawyer Sam Greene to help negotiate the deal. Hasan was surprised and pleased when Greene came back with a \$20 million all-cash offer.

While this is a nice option, as a physician and scientist Dr. Chen wants the invention to have the credibility of a medicine, not a dietary supplement. That is not an option with iDiet, who has no experience or interest in seeking Food and Drug Administration (FDA) approval. However, Greene has been communicating with another potential buyer “MPharm”, who has experience with the FDA approval process. The process would likely cost \$10 million, but since getting FDA approval would be a huge boost to sales, MPharm is willing cover the expense. After lots of back and forth with Zincit, the following packages are options under mutual consideration:

Package	Upfront	Bonus If FDA Approval
A	\$25m	\$0
B	\$20m	\$15m
C	\$15m	\$20m

With FDA approval, the company expects to earn \$120 million in profits over the life of the drug (in terms of present value). If the FDA does not grant approval, MPharm would settle for the dietary supplement route, where its estimated profits would be \$20 million. Note: \$120 million and \$20 million are the profits after taking into account the \$10 million FDA submission cost.

MPharm has concluded Dr. Chen’s compound only has a 10% chance of being approved. Even after hearing MPharm’s estimates, Dr. Chen still believes the efficacy of the drug is so great there is a 60% chance it would be approved.

Given the iDiet offer, MPharm knows it can’t buy the license for less than \$20 million. At the other extreme, MPharm can’t afford to pay more than its expected profit of \$30 million (a 90% chance of

\$20 million plus a 10% chance of \$120 million). Although risk might be a legitimate concern, all contracts should be evaluated by their expected cost.

Dr. Chen and Sam Greene have made a contract that as the lawyer, Greene receives a fee of 5% of Dr. Chen's upfront payment, and does not receive any share of a bonus in the event of FDA approval. There is no potential to go back and renegotiate iDiet's \$20 million offer. And there are no other potential bidders.

Hint: you can come up with new packages and do not need to stick to the packages listed above.

Note: If there are only two people in the negotiation, you should omit the lawyer role. All three parties are reading the same case material so there is no private information.