**Pharma+**  
Consulting Club at MIT  
Category: Pharmaceutical  
Difficulty: Medium  
Case written by Jeremy Curuksu, PhD

### 1) Presentation

Pharma+ has developed an ultra fast treatment for dyspepsia (heartburns/other mild abdominal pains). Take the pill and symptoms disappear within the hour. Pharma+’s CEO believes the new molecule is revolutionary. He wants your help to fix the price.

### 2) Type of Case and Expectations

- New product and pricing strategies  
- Creative thinking for non industry experts: side effects, coverage by insurance, ...  
- Think about who really are the customers: patients, physicians, hospitals, ...  
- Creative thinking about value proposition (e.g.: benchmark price of commodities)

### 3) Suggested Framework

- Product characteristics and target market  
- Market sizing  
- Competitor benchmarking  
- Economic value to the consumer

### 4) Recommended Strategy for Interviewee  
(Q: Question, M: Math, C: Creativity)

Q: Are there side effects, can both male and female use the pill, OTC or prescription?  
M: Define and size the market (adult males and females)  
Q: How much more efficient is it compared to similar products?  
Q: Disadvantages compared to other products? Spectrum of substitutions.  
C: Based on all costs including R&D/manufacturing/marketing, propose a price for a significant markup, targeting the high end of competitors’ price range.  
C: Extend beyond the standard model, draw a price line, consider what the market is willing to pay for similar value propositions (e.g. wellness, healthy diets)
5) Data

**Product characteristics**
- Clinical trials showed side effects limited to frequent migraine (i.e. not to be advised for children), with similar results for males and females
- During clinical trials 75% of patients stopped reporting symptoms using 2 pills/day
- Can be sold OTC => patient is the real customer

**Competition**
- Treatments (antacids, prokinetics, H2-RA and PPI agents) are all popular for their frustratingly low efficacy: in >50% of patients, herbal products such as ginger or peppermint generally have as much anti-dyspeptic effect as best-in-class medications
- Prices range from $15 to $50 for a month supply with posology from 2 to 3 pills/day

**Market Sizing**

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<th>Age</th>
<th>#</th>
<th>Affected</th>
<th>#</th>
<th>Treated</th>
<th>#</th>
<th>Total</th>
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<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
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<td>32m</td>
<td>50%</td>
<td>16m</td>
<td>~40m</td>
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<tr>
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<td>16m</td>
<td>100%</td>
<td>16m</td>
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</table>

- US population ~320m, consider only 20-80 year-olds
- Assume biases, for instance an higher prevalence in young professionals (stress-induced) and an higher willingness in elderlies (who generally take pills every day)

**Costs**
- R&D = $10m
- Manufacturing (marginal cost) = $.50
- Marketing and sales (effective cost per pill) = $.50

6) Proposed Conclusion

a) I recommend advertising lab results & targeting the high end of competitive prices.

b) 1-month supply of competitors’ pill amounts to $50 and since in the US people tend to spend a few extra bucks every day for a healthy diet, I believe that we can target up to $100 for 1-month supply. This means $2/pill, 100% markup.

c) With this $1-profit margin, breakeven is 10m pills or 20000 customers per year. This represents less than 0.1% share. If we tap 1% of the US market we’re looking at 200 millions earning per year. Our CEO was right! --this is a billion dollar molecule.
7) Exhibits

<table>
<thead>
<tr>
<th>$15</th>
<th>$50</th>
<th>$60</th>
<th>$100</th>
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</thead>
<tbody>
<tr>
<td>competition</td>
<td>costs</td>
<td>economic value to consumer</td>
<td>no demand</td>
</tr>
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Price Line ($/month)