

Case 16: Pharmaceutical Pricing (I of IV)

BCG, Round 2

Problem statement narrative

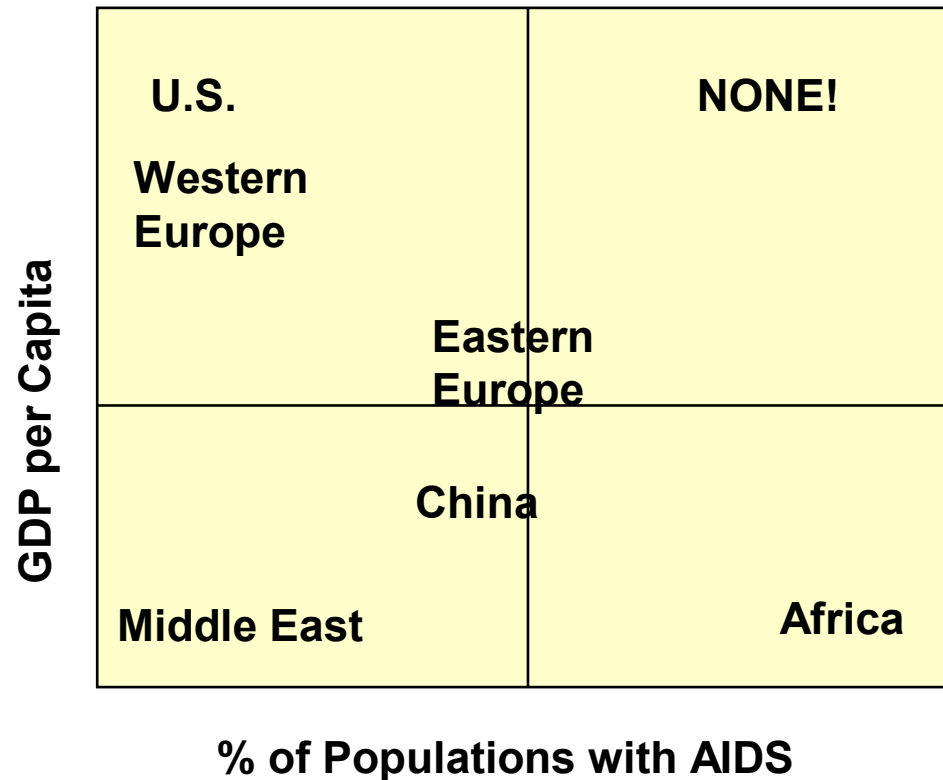
Your client is a pharmaceutical firm that has developed an AIDS drug. They have already created a plan to roll the drug out to the developed world (e.g., U.S., Europe, Japan), but have not yet developed a roll-out plan for the developing world, which nations that range from extremely poor, such as sub-Saharan Africa, to nations that are close to developed, such as Eastern Europe. The client wants to know how it should price this drug for the developing world.

Guidance for interviewer and information provided upon request⁽¹⁾

- Candidate should indicate that the drug will be priced different depending where in the developing world it will be sold.
- When the candidate walks through his/her framework, push them to tell you what factors should be considered in pricing the drug. The two most important factors are GDP/Capita (proxy for the countries willingness to pay) and percent of population infected with HIV/AIDS.
- Once the candidate identifies the above two criteria, have them draw a matrix with GDP/Capita on the y-axis and HIV/AIDS population on the x-axis. Ask the following questions (see next slide for chart):
 - Where would you plot the U.S.?
 - Where would you plot Eastern Europe?
 - Where would you plot Africa?
 - Where would you plot China?
 - What region/countries would be in the lower left of the chart (low AIDS / low GDP/capita)?
 - What countries would be in the upper right? (high GDP/capital / high AIDS)

Case 16: Pharmaceutical Pricing (II of IV)

BCG, Round 2



The candidate should consider:

- What drives the penetrations of AIDS:
 - Level of education
 - Degree to which religion influences the society (e.g., in the Middle East)
- U.S.: high income and low AIDS rate due to education and affluence; same with Western Europe
- Eastern Europe: lower GDP/Cap than U.S., but not still not a “poor” region. More incidences of AIDS than U.S., but not yet a huge issue
- China: Income lower than Eastern Europe but similar level of AIDS incidence
- Middle East: low income (on average), but low AIDS due to influence of religion
- Africa: very poor and have highest AIDS incidence
- Upper right: there are no countries that fit this criteria.

Case 16: Pharmaceutical Pricing (III of IV)

BCG, Round 2

Once the Income / AIDS rate matrix is create, ask the candidate how the drug should be priced in the following regions. The candidate should hit on the issues raised below.

- **Eastern Europe**
 - Need to worry about people in Eastern Europe buying the drug and bringing it to Western Europe.
 - Because income in Eastern Europe is not too much lower than income in Western Europe, the drug can be priced to prevent arbitrage:
 - $\text{Price of Drug in Eastern Europe} = \text{Price of Drug in Western Europe} - \text{Cost of Transporting Drug from Eastern to Western Europe}$
- **Africa**
 - Ability to pay (income) is below the cost of manufacturing and selling the drug – what are the clients options
 - Walk away – this would a PR disaster since Africa is the region with worst AIDS problem in the world and could lead to regulatory repercussions in the West.
 - Give the drug away (charity)
 - How can the client give the drug away and prevent it from being smuggled to the West?
 - Legal enforcement – governments in Africa will likely be too pre-occupied with other issues to help
 - Distribution – have drug distributed in single doses at hospital or by Red Cross
 - How can the client tell if the drug is being smuggled to the West?
 - Color—code pills by region
- **Middle East**
 - Can walk away from this market – low ability to pay, but AIDS is not a serious problem.

Case 16: Pharmaceutical Pricing (IV of IV)

BCG, Round 2

What are the revenues client can earn for this drug in China?

Candidate should lay out the following approach:
Population of China x % with AIDS x percent that can be reached x market share x price of drug.

Provide data when asked by candidate

- Population: 1 billion
- Percent with AIDS: 1%
- Percent that can be reach: 20% (some may be in rural villages, some may not have education to get tested and thus don't know they are infected)
- Market share: there are four other firms offering an AIDS drug. All drugs have the same efficacy and are priced the same (thus can assume equal share between the five firms → 20% market share)
- Price: \$50/month

Provide data when asked by candidate

1 Billion people
x 1% w/ AIDS
x 20% addressable
x 20% market share
x \$50/month
x 12 months

= \$240MM / year

NOTE: This case does not require a traditional “case summary. The interview can end once the market sizing is completed.