Ramsey Pricing:
A Tool to Overcome Economic Disparities in Markets

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Europe - The Common Pharmaceutical Market

- Directives 65/65, 75/319 on Drug Approval / Safety
- European Patent Office since 1973
- GMP, GLP, GCP – Guidelines
- Common EU Trade Mark – Regulation 90/40
- Labelling, Packaging, Advertising - Directives 92/26-28
- EU Medicines Evaluation Agency – Regulation 93/2309
- European Monetary Union ⇒ „Eurozone“ since 1999
Reimbursement is a Local Issue

• Reimbursement is a local issue, and local authorities seek to understand the benefits of a new product for their patients and the cost to their budget.

• A key principle in health economics is that cost-effectiveness is based on the country-specific health care setting: local treatments patterns and local financing system determine the clinical and economic outcomes.
Dynamic of Growth in Europe’s Main Pharma Markets

<table>
<thead>
<tr>
<th>Region</th>
<th>New Prod</th>
<th>Volume and Mix</th>
<th>Price</th>
<th>% Contribution to Sales Growth (excludes impact of exchange rates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>1.0%</td>
<td>7.3%</td>
<td>1.0%</td>
<td>-4.0%</td>
</tr>
<tr>
<td>Italy</td>
<td>1.8%</td>
<td>7.9%</td>
<td>2.7%</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Germany</td>
<td>1.2%</td>
<td>5.7%</td>
<td>1.2%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Spain</td>
<td>0.0%</td>
<td>7.3%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>France</td>
<td>2.5%</td>
<td>6.4%</td>
<td>2.5%</td>
<td>4.0%</td>
</tr>
<tr>
<td>UK</td>
<td>0.7%</td>
<td>10.5%</td>
<td>0.7%</td>
<td>-3.0%</td>
</tr>
</tbody>
</table>

Source: Machtiger, Feb 2002, IMS Health: MIDAS, Sep 2001
Most Frequently Used Approaches to Control Prices

- **National Price Referencing**: comparing with the prices of standards or similar products in the same country
- **International Price Referencing**: comparing with the prices of the same product in other countries
- **Health-economic Data**: using direct, indirect and intangible cost savings as a basis for pricing

Source: Simon•Kucher & Partners
Time for Pricing and Reimbursement

Average Time Intervals Between Application and Award of Pricing and Reimbursement (Days)

<table>
<thead>
<tr>
<th>Country</th>
<th>Pricing</th>
<th>Reimbursement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>67</td>
<td>56</td>
</tr>
<tr>
<td>Spain</td>
<td>124</td>
<td>56</td>
</tr>
<tr>
<td>Italy</td>
<td>215</td>
<td>361</td>
</tr>
<tr>
<td>France</td>
<td>361</td>
<td>452</td>
</tr>
<tr>
<td>Portugal</td>
<td>66</td>
<td>452</td>
</tr>
<tr>
<td>Greece</td>
<td>264</td>
<td>278</td>
</tr>
<tr>
<td>Belgium</td>
<td>102</td>
<td>464</td>
</tr>
</tbody>
</table>

Time limit of Transparency Directive 89/105

There is no separate pricing procedure in Sweden, Italy or France

Source: Europe Economics, 2000
# Pharmaceuticals - Time to Market

<table>
<thead>
<tr>
<th>Basis</th>
<th>Marketing Approval Process</th>
<th>Reimbursement, Listing Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency</td>
<td>Good</td>
<td>Poor/ bad</td>
</tr>
<tr>
<td>Speed</td>
<td>Accelerating</td>
<td>Slowing down</td>
</tr>
<tr>
<td>Inter-state differences</td>
<td>Lessening</td>
<td>No change</td>
</tr>
<tr>
<td>Opportunity for pre-submission dialogue</td>
<td>Good</td>
<td>Rare</td>
</tr>
<tr>
<td>Guidelines documents</td>
<td>Good</td>
<td>Bad</td>
</tr>
<tr>
<td>Appeal Mechanism</td>
<td>Well defined</td>
<td>Poor</td>
</tr>
<tr>
<td>Attitude to NCEs</td>
<td>Advance in therapeutics</td>
<td>Potential budget problem</td>
</tr>
<tr>
<td>Future prospects</td>
<td>Harmonisation</td>
<td>Fragmentation</td>
</tr>
</tbody>
</table>

...for many new prescription drugs reimbursement is now the rate limiting step to market

Source: Pharma Pricing Review, 1999
Europe - The Uncommon Pharmaceutical Market

Conflicting Principles

National: Pricing and Reimbursement

versus

European: Free Flow of Goods
One Market – Nine VAT Rates
General VAT Rates in the “Eurozone”, 2001 in %

- Finland: 22%
- Belgium: 21%
- Austria: 20%
- Ireland: 20%
- Italy: 20%
- France: 19.6%
- Netherlands: 19%
- Greece: 18%
- Portugal: 16%
- Germany: 16%
- Spain: 16%
- Luxembourg: 15%

Source: BMF
# Price Variations in the EU

## Selected Branded Goods

<table>
<thead>
<tr>
<th>Product</th>
<th>Germany</th>
<th>France</th>
<th>UK</th>
<th>Sweden</th>
<th>Divergence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victorinox Swiss Army Knife No 16795</td>
<td>48.45</td>
<td>58.90</td>
<td>81.35</td>
<td>72.32</td>
<td>68 %</td>
</tr>
<tr>
<td>Bosch Accumulator Drill PSR 9.6</td>
<td>51.60</td>
<td>77.45</td>
<td>98.68</td>
<td>99.00</td>
<td>92 %</td>
</tr>
<tr>
<td>Kodak Digital Camera DC5000</td>
<td>806.73</td>
<td>913.30</td>
<td>841.85</td>
<td>926.53</td>
<td>15 %</td>
</tr>
<tr>
<td>Calvin Klein After Shave &quot;Eternity&quot; 100ml</td>
<td>39.24</td>
<td>36.28</td>
<td>47.86</td>
<td>54.50</td>
<td>50 %</td>
</tr>
<tr>
<td>Panasonic CD Player SL/SX 270</td>
<td>91.93</td>
<td>135.90</td>
<td>124.75</td>
<td>130.68</td>
<td>48 %</td>
</tr>
<tr>
<td>GAP T-Shirt &quot;Big Oxford&quot;</td>
<td>35.29</td>
<td>38.13</td>
<td>49.27</td>
<td>69.52</td>
<td>97 %</td>
</tr>
<tr>
<td>Salomon Ski Boot Evolution 28,0</td>
<td>274.47</td>
<td>234.62</td>
<td>279.18</td>
<td>315.46</td>
<td>35 %</td>
</tr>
<tr>
<td>Nike Football &quot;Geo Merlin&quot;</td>
<td>83.21</td>
<td>72.42</td>
<td>83.32</td>
<td>86.00</td>
<td>19 %</td>
</tr>
</tbody>
</table>

Source: Swedish Ministry of Foreign Affairs; EIU; 2001
Annual Salary of National EP Members in 1999

Spain 34,548.24
Finland 40,332.73
Portugal 44,203.47
Ireland 48,294.44
Sweden 52,915.58
Luxembourg 55,433.50
Denmark 60,679.57
Greece 64,414.07
Belgium 68,619.50
Netherlands 74,056.93
UK 74,592.13
France 78,057.07
Germany 78,994.60
Austria 102,422.62
Italy 119,708.89

Source: National Parliaments
Rich and Poor EU Regions: Up To 600% Divergence

GDP per capita in standard purchasing power: Average of 200+ Regions = 100*

Source: Eurostat, *reported year 1998
Segmented Market and Ramsey Pricing

- Where there is a need to recover fixed costs from sales in several markets, all participants can be made better off by price discrimination due to price elasticities different between the various markets.

- The mark up over marginal cost in each market should be inversely proportional to the price sensitivity of demand, i.e. willingness to pay.

- Increased access to the product spreads the burden of fixed costs.

Approach adopted by utilities, e.g. airlines, railways.

Source: Europe Economics, 1999
The Global Price Corridor Concept

Optimal Solution: 1.) Differentiate prices as much as possible  
2.) Harmonize prices as much as necessary  
3.) Define target price for all countries

Source: Simon•Kucher & Partners