Value of generic medicines
Medicines for Europe Vision 2020

Our 5 pillars

- PATIENTS
- QUALITY
- VALUE
- SUSTAINABILITY
- PARTNERSHIP
Pressure on EU budgets
Reduction of healthcare spending

Growth rates of health spending for selected functions per capita, OECD average, 2005-2013

Reduction of healthcare spending
Focus on pharmaceuticals

Average annual growth in pharmaceutical expenditure\(^1\) per capita, in real terms, 2005-09 and 2009-13 (or nearest periods)

\(^1\) Includes medical non-durables.

An ageing population: Major EU social and economic challenge

Modern lifestyle and an ageing population increase prevalence of chronic disease

129 Million patients
2014
+50%
Population over 65 years

191 Million patients
2050

Source: Eurostat Population Statistics
A surge in innovation: Major EU social and economic challenge

Global spending on new brand medicines has more than doubled in 2014 and is 2.6% of global pharmaceutical spending.

Source: IMS Health, R&D Focus, May 2015; MIDAS, Q4 2014, constant USD
Generic medicines are key to EU healthcare sustainability

VALUE OF GENERIC MEDICINES

- Increased access to medicines
- Better health outcomes
- Reduction of health inequalities
- Improved medication adherence
- Positive Economic impact

Increased access to medicines leads to better health outcomes, which in turn reduces health inequalities and improves medication adherence, leading to a positive economic impact.
# Generic Medicines
## A Cornerstone of Healthcare Sustainability

### Key Figures on Generic Medicines

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>56%</td>
<td>Of dispensed medicines</td>
</tr>
<tr>
<td>22%</td>
<td>Of pharmaceutical expenditures</td>
</tr>
<tr>
<td>-€100bn</td>
<td>Less spending through generic competition</td>
</tr>
<tr>
<td>+350</td>
<td>Manufacturing sites in the EU</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular</td>
<td>Hypertension</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Depression</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>Mental disorder</td>
</tr>
<tr>
<td>Gastro-intestinal</td>
<td></td>
</tr>
<tr>
<td>+100%</td>
<td>Patient access over 10 years</td>
</tr>
<tr>
<td>+160,000</td>
<td>Employees</td>
</tr>
<tr>
<td>UP TO 17%</td>
<td>R&amp;D investment of turnover</td>
</tr>
</tbody>
</table>

High quality medicines to over 500 millions patients.
Contribution to overall economy

Generic medicines industry
Activation of investments, employment and value added

Depreciation and value added trends – 2005-2013 (Italy)

Still considerable opportunities to increase uptake throughout Europe

 Protected and off-patent marked share (volume) by country, June 2015

Source: IMS Health, MIDAS, Q2 2015, retail and hospital channel

Note: Non-original brands and branded generics include copy products in some countries; Generics include INN branded and company branded
Generic medicines are key to EU healthcare sustainability

Increased access to medicines

Reduction of health inequalities

VALUE OF GENERIC MEDICINES

Better health outcomes

Positive Economic impact

Improved medication adherence
Generic medicines increase patient access

Twice as many patients treated... without an impact on treatment costs

Evolution of volume, price and treatment cost in seven therapy areas

Selected therapy areas: Hypertension, epilepsy, gastro-intestinal disorders, mental health, high cholesterol and diabetes.

Benefits accrue in different ways across countries

Increased access to medicines delivers long-term benefits to society and to healthcare providers

<table>
<thead>
<tr>
<th>Country</th>
<th>Price (€/TD)</th>
<th>Volume (TD/cap)</th>
<th>Treatment Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>−62%</td>
<td>153%</td>
<td>−7%</td>
</tr>
<tr>
<td>UK</td>
<td>−64%</td>
<td>143%</td>
<td>−13%</td>
</tr>
<tr>
<td>France</td>
<td>−51%</td>
<td>40%</td>
<td>−31%</td>
</tr>
<tr>
<td>Italy</td>
<td>−53%</td>
<td>121%</td>
<td>−9%</td>
</tr>
<tr>
<td>Ireland</td>
<td>−59%</td>
<td>148%</td>
<td>−9%</td>
</tr>
<tr>
<td>Sweden</td>
<td>−69%</td>
<td>108%</td>
<td>−40%</td>
</tr>
<tr>
<td>Spain</td>
<td>−50%</td>
<td>109%</td>
<td>0%</td>
</tr>
<tr>
<td>Czech</td>
<td>−53%</td>
<td>132%</td>
<td>2%</td>
</tr>
<tr>
<td>Austria</td>
<td>−49%</td>
<td>133%</td>
<td>14%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>−69%</td>
<td>152%</td>
<td>−30%</td>
</tr>
<tr>
<td>Poland</td>
<td>−51%</td>
<td>192%</td>
<td>33%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>−63%</td>
<td>207%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: IMS Health, MIDAS, Q4 2014; OECD Population statistics

Selected therapy areas: angiotensin II antagonists, anti-epileptics, anti-psychotics, anti-ulcerants, cholesterol regulators and oral anti-diabetics.
Generic medicines reduce healthcare inequalities

Cost-efficiency gains

Reduce healthcare expenditure without compromising health outcomes

Investment in health

Improve health outcomes through better patient access without increasing health expenditure

Source: Kaló, Z et al. (2014). Investment aspects of generic drug policies in countries with severe resource constraints. Poster presented at ISPOR Annual European Congress in Amsterdam
Generic medicines are key to EU healthcare sustainability

VALUE OF GENERIC MEDICINES

- Increased access to medicines
- Better health outcomes
- Improved medication adherence
- Positive Economic impact
- Reduction of health inequalities
Better adherence will improve health outcomes and lead to a positive economic impact

Lack of adherence is estimated to cost the European governments €125 billion / year

Avoidable cost for the National Healthcare System

- Additional cost of poor adherence compared to the total healthcare expenditure


Note: €125bn/year is an A.T. Kearney estimate based on US avoidable cost data
Better adherence will improve health outcomes and lead to a positive economic impact

Appropriate generic medicine policies can improve adherence

Generic medicines positively influence adherence in systems with lower co-payment for generic medicines

The pharmacist’s role in ensuring patient understanding and comfort with medication through accurate information and dialogue is crucial to maximize adherence when substituting

Adherence is linked to patient co-payment*  
Italian patients receiving generic amlodipine, with lower patient co-payment, were more adherent compared to branded amlodipine**

Impact of substitution  
Adherence of Dutch patients, which have one designated pharmacy, was not influenced by substituting generic hypertensive medicines for a branded medicine**

*Co-payment exists across Europe, including but not restricted to the following countries: Belgium, Bulgaria, Finland, Hungary, Ireland, Italy (regional), Portugal, Romania, Switzerland. (Source: EGA market review 2015)

**Source: IGES Study, Value of Generic Medicines, 2015
Generic medicines are key to EU healthcare sustainability

- Increased access to medicines
- Better health outcomes
- Reduction of health inequalities
- Positive Economic impact
- Improved medication adherence

VALUE OF GENERIC MEDICINES
Better health outcomes - Hypertension

- Antihypertensive drugs reduce mortality in hypertensive patients
- 50% decrease in hypertension related mortality in DE (1998-2010)
  - Increased access and treatment rates
  - Better medicinal treatment options
  - Smoking reduction
  - Better hypertension control
  - Guideline implementation

Increased cost-effectiveness

Source: IGES based on data in Schwabe/Paffrath (various years)
Better health outcomes - Breast cancer

- Adjuvant endocrine therapies: Over 15 years after treatment start, mortality is reduced by 1/3 and recurrence rates by 40%
- Breast cancer related mortality decreased since late 1980s
  - Improved treatment options
  - Increased access
  - Early detection programs

Decreased cost/QALY


Source: IGES based on data in Schwabe/Paffrath (various years)
Better health outcomes - Depression

- Anti-depressants: More effective than placebo in treatment of severe depression
- 45% of suicides attributable to depression
- Mortality due to suicide decreased since 1980s
  - Improved treatment options
  - Improved psychotherapy
  - Increased access

Facilitated continued increase of low treatment rates

Source: IGES based on data in Schwabe/Paffrath (various years)
Generic medicines are key to EU healthcare sustainability

Increased access to medicines

Reduction of health inequalities

Better health outcomes

Positive Economic impact

Improved medication adherence

VALUE OF GENERIC MEDICINES
Back-up
Still considerable opportunities to increase uptake throughout Europe

Protected and off-patent marked share (value) by country, June 2015

Source: IMS Health, MIDAS, Q2 2015, retail and hospital channel
Note: Non-original brands and branded generics include copy products in some countries; Generics include INN branded and company branded