



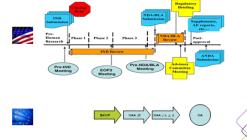
### **Conclusions and perspectives** (EU)

Francesco Pignatti European Medicines Agency, London, UK

Vienna, BDA, Sept 2012

#### Bridging the gaps





#### Merck Serono

#### The European HTA Authority Map is complex...



| Patient Access to Health Technologies                        |                                       |                                  |                                             |                                          |  |                                        |  |  |  |  |
|--------------------------------------------------------------|---------------------------------------|----------------------------------|---------------------------------------------|------------------------------------------|--|----------------------------------------|--|--|--|--|
| EU                                                           | Drugs<br>(therapeutic,<br>preventive) | Devices<br>(implantable,<br>etc) | Diagnostics<br>(lab tests,<br>imaging, etc) | Procedures<br>(surgery,<br>physio ther.) |  | ther<br>educational,<br>ampaigns, etc) |  |  |  |  |
| Benefit Risk<br>(Marketing<br>Authorisation)                 | EMA                                   |                                  |                                             |                                          |  |                                        |  |  |  |  |
| Relative Efficacy<br>Assessment (CAV)<br>Rel. Effectiveness  |                                       | Hor                              | rizonta                                     | land                                     |  |                                        |  |  |  |  |
| Health Technology<br>Assessment (incl.<br>cost consequences) | ١                                     | /ertica                          | l incor                                     | nsister                                  |  |                                        |  |  |  |  |
| Coverage decision<br>(incl. appraisal,<br>soc. preferences)  |                                       | between member<br>states         |                                             |                                          |  |                                        |  |  |  |  |
| Utilisation (on-/off-<br>label, med. errors)                 | _                                     |                                  | Sidic                                       | 5                                        |  | 15                                     |  |  |  |  |

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#### Different outcomes from different reimbursement agencies in Europe

| Brand<br>name  | Glivec   | Tasigna   | Avastin     | Revlimid     | Tyverb    | Lucentis      | Rasilez   | Byetta   |
|----------------|----------|-----------|-------------|--------------|-----------|---------------|-----------|----------|
| olecule        | Imatinib | Nilotinib | Bevacizumab | Lenalidomide | Lapatinib | Ranibizumab   | Aliskiren | Exenatid |
| herapy<br>area | Oncology | Oncology  | Oncology    | Oncology     | Oncology  | Ophthalmology | CV        | Diabeter |
| UK             | •        | ж         | ж           | •            | ж         | •             | ×         | •        |
| FR             | •        | •         | •           | NA           | •         | •             | •         | •        |
| п              | •        | •         | •           | •            | •         | •             | •         | •        |
| ES             | •        | •         | •           | •            | •         | •             | •         | •        |
| cz             | •        | •         |             |              |           |               | •         | •        |
| POL            |          | •         |             | •            |           | •             | ×         | ×        |

#### Source: Sparrowhawk, PriceSpective, ISPOR 2010

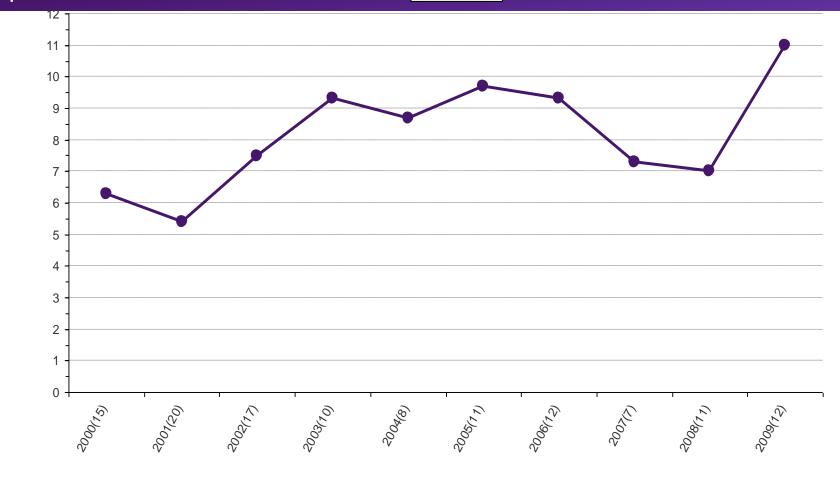
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EDA NTA ESNO 2012

#### Trend in actual clinical development time for new development projects

approved between 2000-2009

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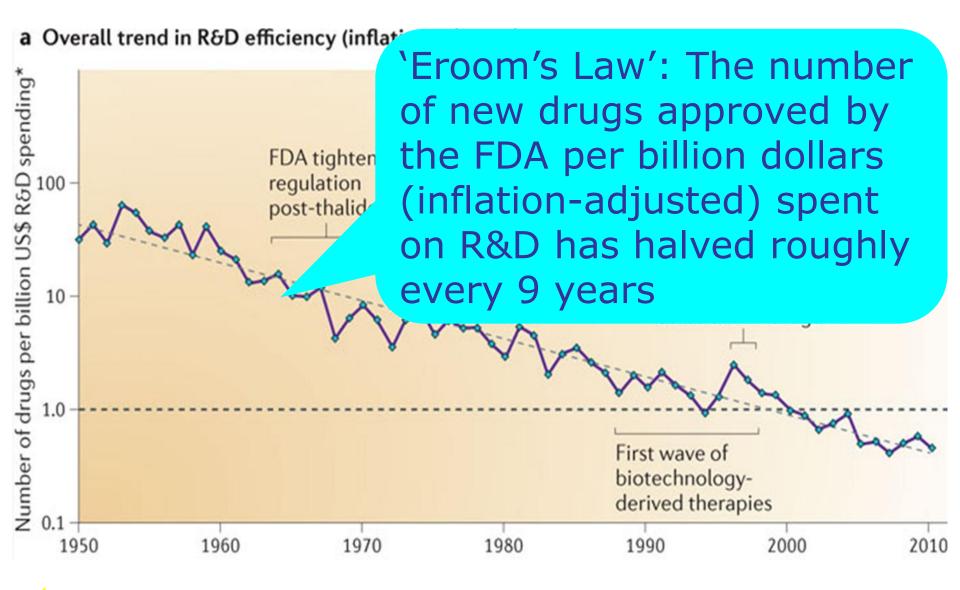


Year of approval

Actual clinical development time is calculated for new development projects as the time between 'First human dose' (T-1-1) and 'First approval' (T-4-2). Data represent all new development projects that reached 'First approval' (T-4-2) between 2000-2009, where the start and end milestone dates for the interval are available. (n) = number of projects analysed in each year. This analysis is based on data from a consistent cohort of 17 companies participating each year between 2001 and 2010.

THOMSON REUTERS

Total clinical development time (years)



Scannell JW et al. Nature Rev Drug Disc, March 2012



## The binary nature of drug regulation

Current model of licensing "The Magic Moment"

#### Evidence vs. access tradeoff



#### The regulator's dilemma

"...it has been said that the FDA has just two speeds of [drug] approval – too fast and too slow."

Hamburg MA & Sharfstein JM. NEJM 360;24: 2493-5; 2009



#### Adaptive licensing in a nut shell...

Taking a less ambitious regulatory review route

that would limit the drug to a far smaller and

higher-risk group of patients, at least initially

San Diego Union-Tribune (10 Feb 2011)



# "Precursors" to Adaptive Licensing

- Conditional Marketing Authorization
- New Pharmacovigilance legislation
- Risk Management Plans
- Periodic Safety Update Reports
- Five-year renewal of marketing authorization
- (Compassionate use programs)

# A better model for evolution? EUROPEAN MEDICINES AGENCY

Current model of licensing "The Magic Moment"

> Adaptive Licensing

Time (years)

# Possible AL model rare cancer we we agency

Knowledge, investment

RCT in less-severe population; PFS/OS endpoint, safety assessments patient Revision o population Initial narrow MA. label

Multistakeholder SA; payers, HCP, and patients Initial, narrow MA; reimbursement mirrors label; restrictions on prescribers

Real-life treatment experience

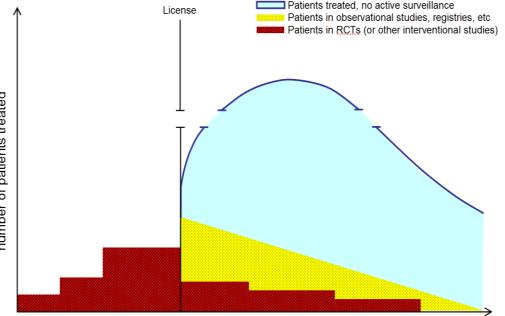
recorded in all patients +

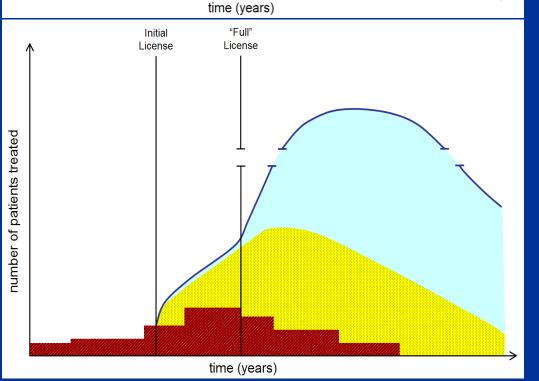
Revision of label (restrictions up or down)

Time

### Different names, same ideas

- EMA: staggered approval
- FDA: progressive reduction of uncertainty
- Health Canada: progressive authorization
- HSA Singapore: test bed for adaptive regulation
- Payers: managed entry (HTAi), CED
- MIT/NEWDIGS: adaptive licensing project





EUROPEAN MEDICINES AGENCY

#### Current scenario:

Post-licensing, treatment population grows rapidly; treatment experience does not contribute to evidence generation

#### Adaptive Licensing:

after initial license, number of treated patients grows more slowly, due to restrictions; patient experience is captured to contribute to real-world information

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#### **Obstacles to Adaptive Licensing**

- concerns over lowered standards
- how to communicate uncertainty?
- doable under current statute?
- getting commitment from industry to conduct "stage n+1 studies"?
- are follow-on studies doable after "loss of equipoise"?
- alignment between regulators and payers
- different reward structure required to incentivise drug development enterprise?
- ensuring appropriate prescriptions



# Addressing the obstacles; next<sup>erent</sup> steps?

- Address economic consequences for drug development
- Design pilots cases using current sponsor assets
- Address legal underpinnings of AL
- Explore opportunities for collaboration with payers
- Obtain buy-in from all ranks of regulatory community
- Conduct pilots (EMA work program 2012)



### EMA Road map to 2015

[...] a key issue for regulators will be whether a more 'staggered' approval (or progressive licensing) concept should be envisaged for situations not covered by conditional marketing authorisations [...] The Agency would like to launch a debate with all stakeholders on the appropriateness of introducing such a concept, including a consideration of appropriate incentives to support new medicines development.

### Thank you!



