

#### The Paediatric Regulation as an instrument for European paediatric research

ENPREMA, London 10/11 March 2011

Presented by: Paolo Tomasi, MD PhD Head of Paediatric Medicines, European Medicines Agency





## Why is there a EU Paediatric Regulation?

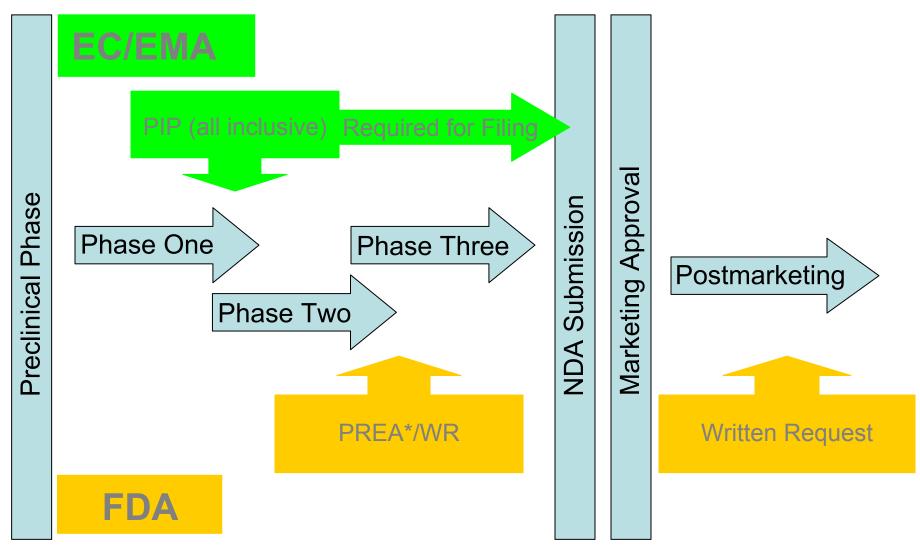


### **Objectives of the EU Paediatric Regulation**

- Improve the health of children:
  - Increase high quality, ethical research into medicines for children
  - Increase **availability** of authorised medicines for children
  - Increase **information** on medicines
- Achieve the above:
  - Without unnecessary studies in children
  - Without delaying authorization for adults
- 3 The Paediatric Regulation as an instrument for paediatric clinical research in Europe P Tomasi



#### **New Drug Development Process: US vs EU**





#### **Paediatric Investigation Plan**

- Basis for development and authorisation of a medicinal product for all paediatric population <u>subsets</u>
- Includes details of the <u>timing</u> and the <u>measures</u> proposed, to demonstrate:
  - Quality
  - Safety
  - Efficacy

- Marketing
- Authorisation
   Criteria
- To be agreed upon and/or amended by the PDCO
- Binding on company → compliance check (but modifications possible, at the company's request)

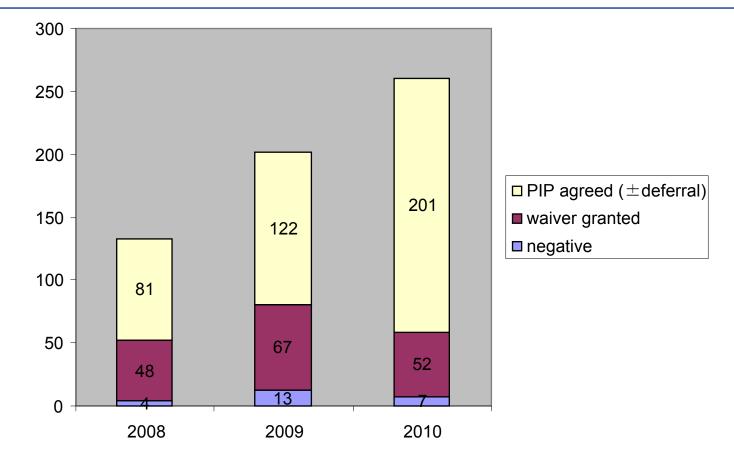




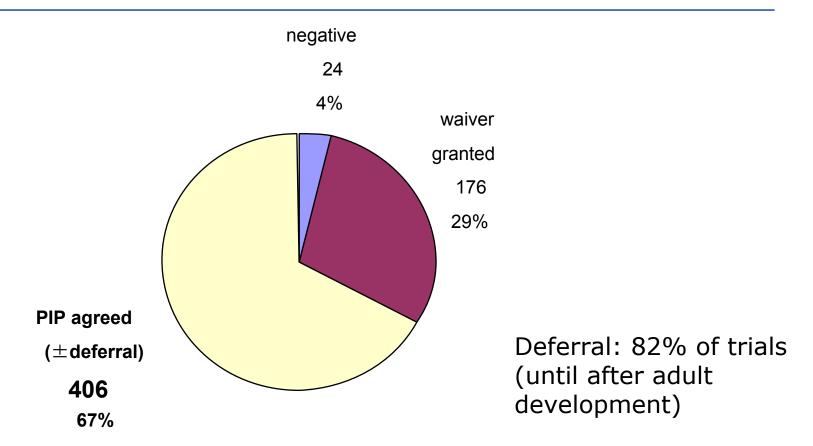
### PDCO Opinions on Paediatric Investigation Plans and Clinical Trials



### PDCO opinions on applications 2008-2010

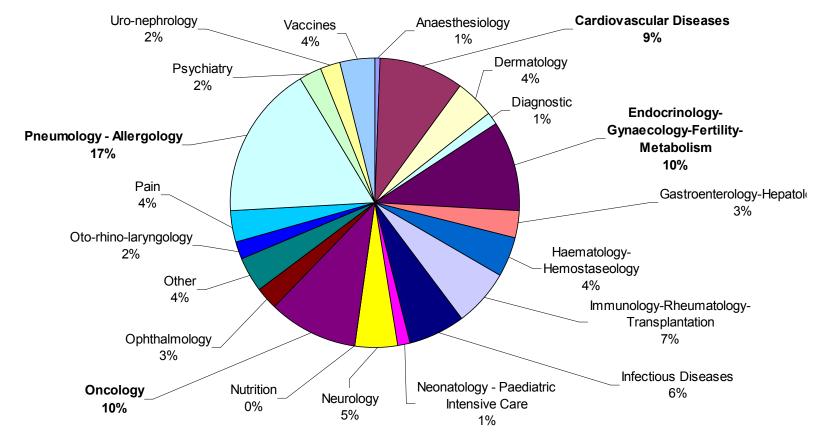


## PDCO opinions on applications 2007-2010, total



#### Therapeutic areas of applications

(all applications, 2007 - today)



#### Deferrals

(Study in the first 96 PDCO procedures)

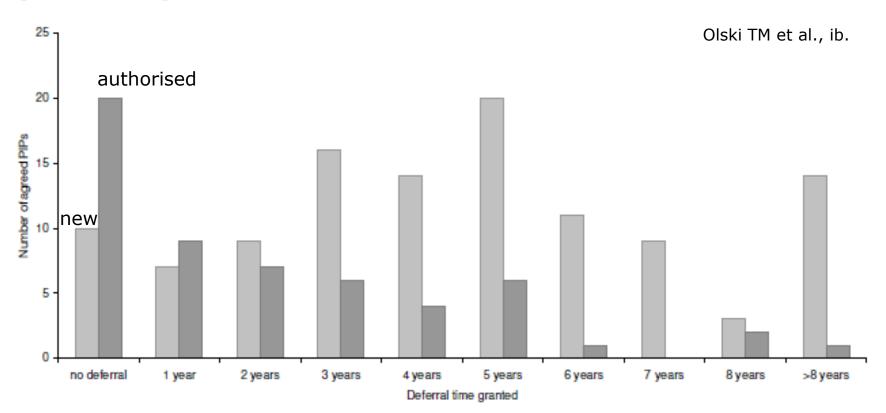
- At least one deferral granted in:
  - -91% of applications for <u>new</u> products
  - -64% of applications for <u>already authorised</u> products
- Usual deferral duration: 3-5 years from MAA in adults
- Deferral is the instrument to avoid delaying marketing authorisation in adults

*Olski TM et al., Three Years of Paediatric Regulation in the European Union. Eur J Clin Pharmacol 2011 (in press)* 



## Deferral granted in 91% of new medicinal products and 64% of authorised (2007-2009)

#### Figure 3. Deferral time granted for PIPs



#### Clinical trials design (Study in first 96 PDCO procedures)

 PDCO increased studies in neonates from 15% to 26% (subsequent data showed an increase in proposed neonatal studies)



- Staggered approach proposed, encouraged and occasionally imposed
- N. of patients required: PDCO requested an

✓ Increase in 5/54 (9.3%)

✓ Decrease in 8/54 (14.8%)

Olski TM et al., ib.

Clinical trials design (study in the first 96 PDCO procedures)

- Primary endpoint accepted in 90% of cases
- General design endorsed in almost all cases (97%):
  - ✓ 2/96: double-blinding imposed
  - ✓ 23 additional trials imposed (20 comparative, 6 active-controlled, 12 placebo-controlled, 2 dosecomparison)

#### EUROPEAN MEDICINES AGENCY

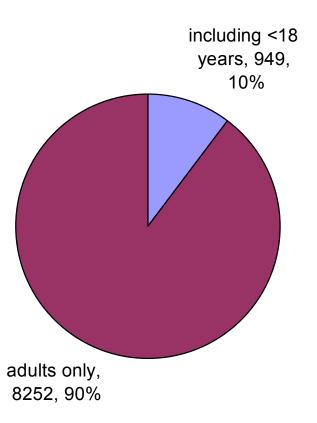




#### Clinical trials in Europe (data from EudraCT)

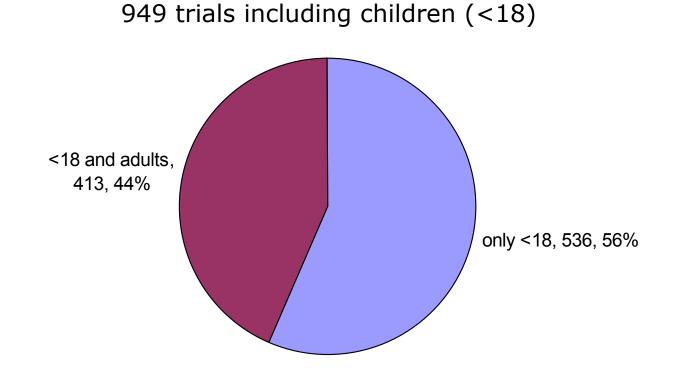


#### **Clinical trials involving children (<18)** 2010, EEA



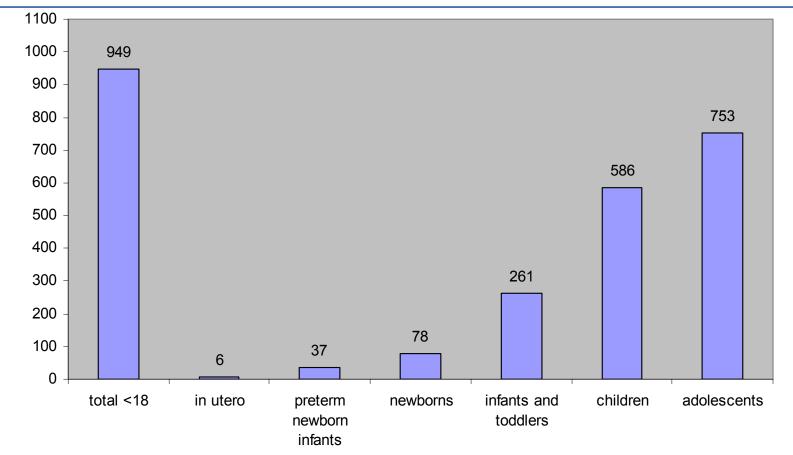


#### **Clinical trials in children (2010, EEA)** paediatric only vs. paed. + adult





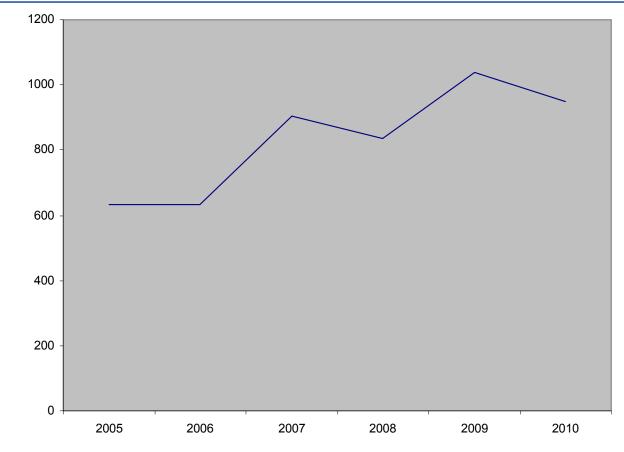
#### Paediatric clinical trials by age groups (2010, EEA)



<sup>17</sup> The Paediatric Regulation as an instrument for paediatric clinical research in Europe - P Tomasi



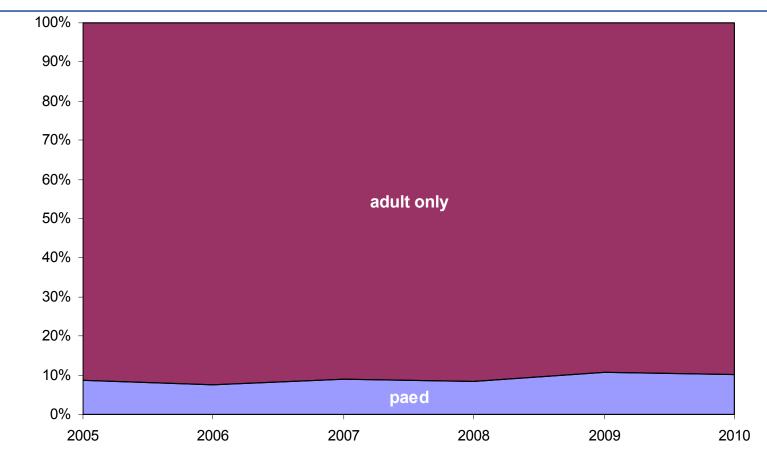
## Is the number of paediatric trials increasing in the EEA?



18 The Paediatric Regulation as an instrument for paediatric clinical research in Europe - P Tomasi



### The % of paediatric trials is substantially stable (appr. 9-10%, EEA)



## Are clinical trials moving outside the "first world"?





# A substantial proportion of patients in <u>adult</u> CTs is from outside the EU

- 61% of the patients in pivotal trials submitted in MAA to the EMA during the observation period from January 2005 to December 2009 were from third countries, comprising 25.9% from the ROW region (Africa, Middle East/Asia/Pacific, Australia/New Zealand, Central/South America, CIS, Eastern Europe-non EU), and 35.2% from North America.
- 7.8% of patients in pivotal trials submitted in MAA to the EMA during the observational period from January 2005 to December 2009 were included in trials in Middle East/Asia/Pacific.
- 9.2% of patients in pivotal trials submitted in MAA to the EMA during the observational period from January 2005 to December 2009 were included in trials in Central/South America.

Clinical trials submitted in marketing authorisation applications to the EMA EMA/INS/GCP/154352/2010



#### Are clinical trials moving outside the "first world"? EMA/INS/GCP/154352/2010

Clinical trials submitted in marketing authorisation applications to the EMA.

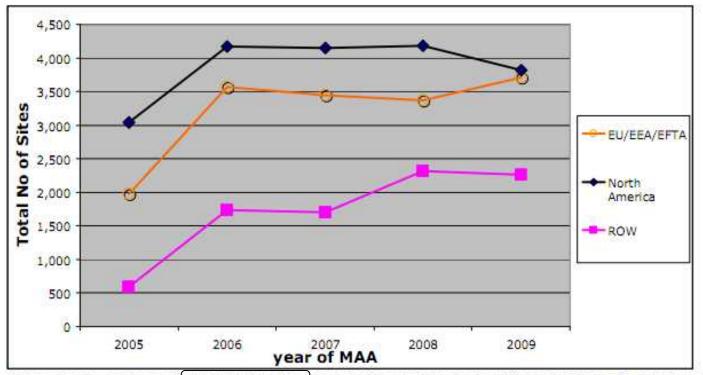


Figure 7: The number of investigator sites involved in pivotal clinical trials submitted in MAAs to the EMA per region and year. The data are shown as three "global regions" - EU/EEA/EFTA, North America and ROW (Rest of the World).

#### The role of ENPREMA

### **Key operational goals**

- Collaboration and communication (between existing networks and stakeholders)
- Facilitation of recruitment in clinical trials
   (providing expertise and access to infrastructure for industry to conduct studies in children)
- Building competences

   (defining strategies for resolving major challenges)
- Avoiding unnecessary studies
- Stimulating high quality research (consistent and transparent quality standards; harmonising clinical trial procedures)
- Strengthening the foundations of the European Research Area







### What ENPREMA is **NOT** supposed to do

- To fund studies
- To conduct studies
- to decide on areas of paediatric research, which is under the responsibility of:
  - the Member States
  - the Commission through the Community programmes
  - each individual network



#### **Paediatric Regulation and Clinical Trials in Children - Conclusion**

- Paediatric development has gone from very very optional to compulsory in principle (unless a waiver is granted)
- Paediatric Investigation Plans, agreed between EMA and pharmaceutical companies, require a substantial increase in n. of clinical trials in paediatric age groups
- Unless capacity is sufficient in Europe, companies will need to find alternatives





### Thanks for listening



#### PDCO meeting at EMA