



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

# Data exclusivity, market protection and paediatric rewards

---

Workshop for Micro, Small and Medium Sized Enterprises  
EMA  
26 April 2013

Presented by: Zaide Frias  
Head of Regulatory Affairs, EMA





# Evolving regulatory framework and introduction of different types of incentives

In 1990's	2000	Revision 2004-5	2006
<b>Data exclusivity</b> <ul style="list-style-type: none"><li>• MRP/NAP: 6 or 10 yrs</li><li>• CAP: 10 yrs</li></ul>	<b>Orphans</b> <p>Market exclusivity (ME)</p>	<b>Data exclusivity/ market protection</b> <ul style="list-style-type: none"><li>• 8+2/(+1) yr ME (new indication)</li><li>• +1 yr data exclusivity for well established substance (new indication)</li><li>• +1 yr data exclusivity legal status switch</li></ul>	<b>Paediatrics</b> <ul style="list-style-type: none"><li>• Supplementary Protection Certificate extension</li><li>• 10+2 yrs ME (orphans)</li></ul>



# Data exclusivity and market protection provisions





## Rules on data exclusivity and market protection

<b>MAA reference product submission date</b>	<b>Centralised procedure</b>	<b>National, MRP, DCP</b>
<b>Before</b> 20 Nov. 2005 (CP) 30 Oct. 2005 (NP)	10 years data exclusivity	6* or 10** years data exclusivity
<b>After</b> 20 Nov. 2005 (CP) 30 Oct. 2005 (NP)	<b>8 years data exclusivity +2 years market protection (+1 year market protection)</b>	

\*AT, DK, FI, IE, PT, ES, EL, PL, CZ, HU, LT, LV, SE, SK, MT, EE, CY, BG, RO, NO, IS, LI

\*\* BE, DE, FR, IT, NL, SE, UK, LU



## Incentives:

# Data exclusivity and market protection

### Data exclusivity

= Period of time during which a Company cannot cross-refer to the data in support of another marketing authorisation, i.e.:

*generics, hybrids, biosimilars cannot be validated by the Agency*

### Market protection

= Period of time during which a generic, hybrid or biosimilar cannot be placed on the market, even if the medicinal product has already received a marketing authorisation



# 8+2(+1) exclusivity formula

*Data Exclusivity*

*Market Protection*

*Data  
Exclusivity*

8 years

2 years

(1 year)

1 year \*

Marketing authorisation  
of reference product

Generics  
application

Generics  
launch  
(no new patent)

OTC/WEU  
new indication  
\* study data only

Assessment – MA granted  
MRP Pricing & Reimbursement  
Prepare to Launch

Extra market protection  
if new indication is  
registered in first 8 years and  
brings significant clinical  
benefit over existing therapies

Submitted since November 2005



## Provisions on extended market protection and data exclusivity

**+1 year market protection** for a new therapeutic indication which brings significant benefit in comparison with existing therapies (*Art. 14(11) Reg. (EC) No 726/2004*) - *For initial MAA submitted after 20 November 2005 and authorisation of new indication within 8 years*

**+ 1 year data exclusivity** for a new therapeutic indication for a well-established substance, provided that significant pre-clinical or clinical studies were carried out in relation to the new indication (*Art. 10(5) Dir. 2001/83/EC*) (= +1 WEU)

**+1 year data exclusivity** for a change in classification of a medicinal product on the basis of significant pre-clinical tests or clinical trials (*Art. 74(a) Dir. 2001/83/EC*) (= +1 OTC switch)



# Decision tree for +1 year market protection

*EC Guidance on elements required to support the significant clinical benefit in comparison with existing therapies of a new indication in order to benefit from an extended (11-year) marketing protection period [November 2007]*







## Is it a new indication?

SmPC guideline [Sep 2009], Section 4.1 Therapeutic indications

*'The indication(s) ... should define the **target disease** or **condition** distinguishing between treatment (...), prevention (...) and diagnostic indication. When appropriate it should define the **target population** ....'*

- New target disease
- Different stages or severity of a disease
- Extended target population for the same disease
- Change from the 2<sup>nd</sup> line to 1<sup>st</sup> line treatment
- Change from combination therapy to monotherapy, or from one combination therapy to another
- Change from treatment to prevention or diagnosis of a disease
- Change from treatment to prevention of progression or to prevention of relapses of a disease
- Change from short-term treatment to long-term maintenance therapy in chronic disease



## What are the existing therapies?

Satisfactory methods of diagnosis, prevention or treatment of the disease. These include:

- **Authorised medicinal products** in 1 or > MSs in the proposed indication
- **Non-pharmacological** approaches (e.g. psychotherapy)
- Other 'state-of-the art' **therapeutic methods** for the indication

Off-label use of medicinal products not considered existing therapies!



# How does it compare to existing therapies?

Justification of significant clinical benefit

## ➤ **Improved efficacy**

*Same level of evidence needed to support a comparative efficacy claim for two different medicinal products. Direct comparative clinical trials preferred*

## ➤ **Improved safety**

*The relative safety profile will have to be globally assessed compared to existing therapy(ies), preferable through comparative trial(s).  
No important reduction in benefit should be seen*

## ➤ **Major contribution to patient care**

- *New mode / route of administration*
- *Treatment alternative*
- *Response different from other treatments in a substantial part of the target population*



# Examples

## 8 + 2(+1) year market protection

Medicinal product	Therapeutic indication	Grounds for acceptance/refusal
<b>TORISEL</b> (temsirolimus)  <b>+1 year granted</b>	<i>Treatment of adult patients with relapsed and/or refractory mantle cell lymphoma (MCL)</i>  <b>New target disease</b>	In the EU there are <u>no</u> approved treatments for relapsed MCL.
<b>ZYTIGA</b> (abiraterone)  <b>+1 year granted</b>	<i>Treatment of men with mCRPC after failure of androgen deprivation therapy.</i>  <b>Different stages or severity of a disease</b>	There are <u>no available treatment options</u> in the EU for patients with mCRPC who are asymptomatic or mildly symptomatic.



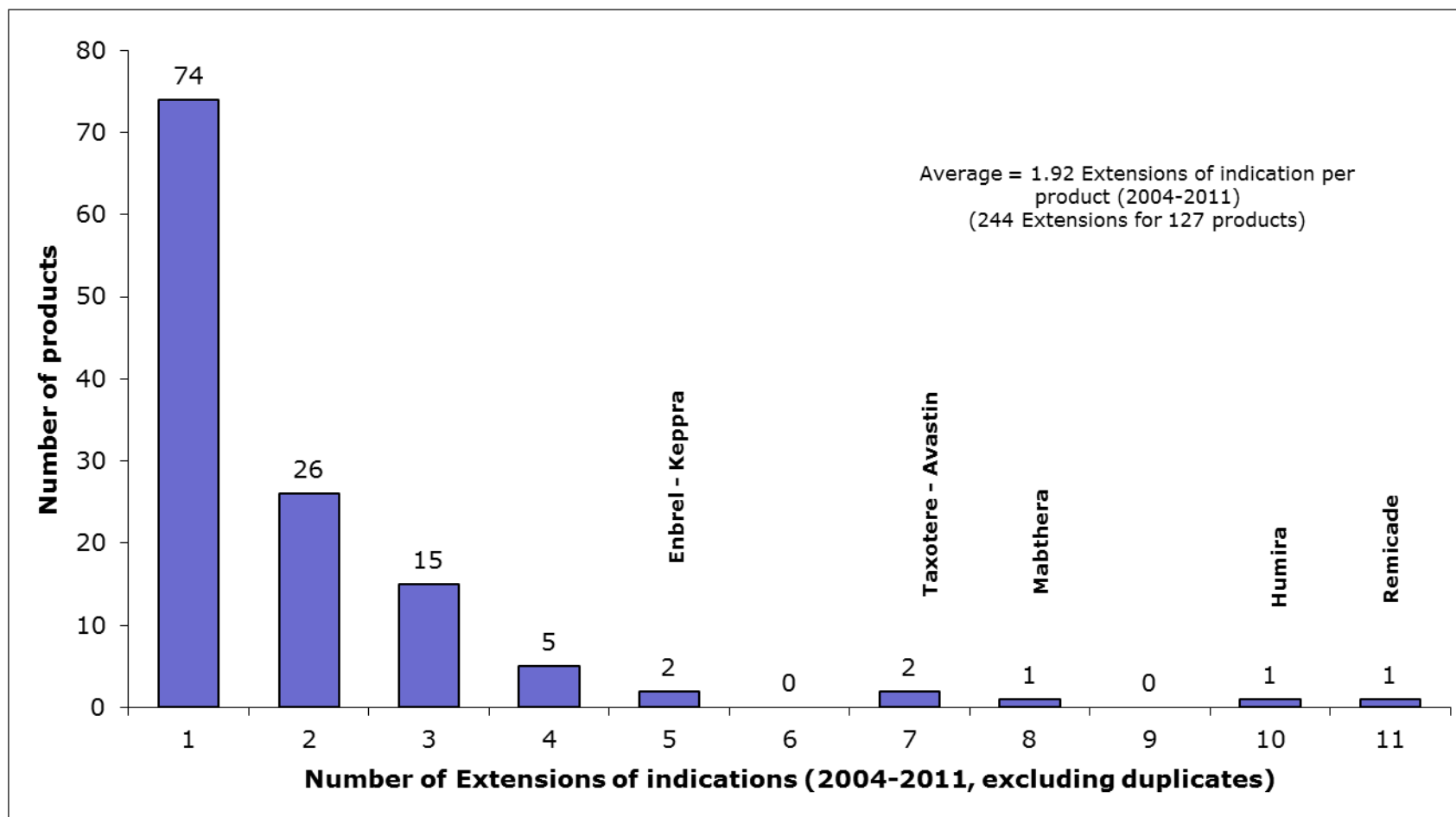
# Examples

## 8 + 2(+1) year market protection

Medicinal product	Therapeutic indication	Grounds for acceptance/refusal
<b>ISENTRESS</b> (raltegravir) <b>+1 year refused</b>	<i>ART-naïve patients</i>	Lack of proof of superior efficacy results and safety profile.
<b>PREZISTA</b> (darunavir) <b>+1 year refused</b>	<i>Co-administered with low-dose ritonavir in combination with other antiretroviral medicinal products for the treatment of HIV-1 infection in ARV treatment-naïve adults.</i>	Lack of proof of superior efficacy and safety profile not significantly better.
<b>YONDELIS</b> (trabectedin) <b>+1 year refused</b> 12	<i>Treatment of patients with relapsed platinum-sensitive ovarian cancer in combination with pegylated liposomal doxorubicin (PLD)</i>	Lack of <u>head-to-head comparison</u> of trabectedin + PLD with platinum based regimens

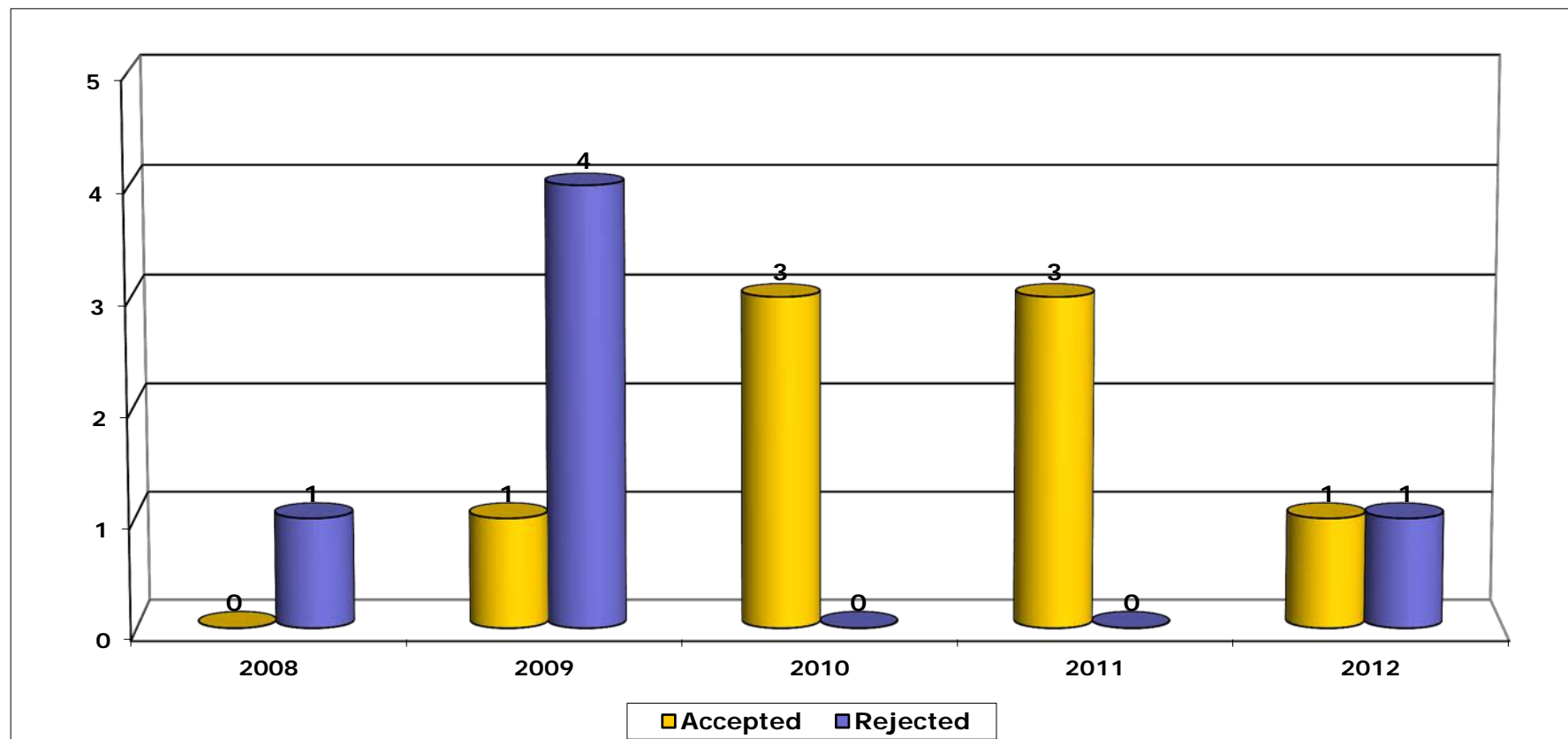


# Extensions of indications – 2004-2011





# Overview of extensions of exclusivity 2008-2012





## Orphan medicinal products



New =  
market exclusivity!





# Development of orphan medicines

*“Patients affected by rare diseases have the same rights as fellow citizens.”*

## Orphan designation criteria

- Rarity of condition (< 5 in 10,000) or insufficient return on investment
- Seriousness of condition (Life threatening/chronically debilitating)
- Existence of satisfactory methods



# Incentive: Market exclusivity

## Market exclusivity (=Orphan)

= Period of time during which a medicinal product which is similar\* to an orphan medicinal product cannot be validated by the Agency, even if based on a full, complete dossier

\* Similar means similar principal molecular structure and same mode of action and same indication

## Extend Market exclusivity to 12 years (=Paediatric orphan)

= for orphan indication(s) covered by a condition benefiting of 10 years of market exclusivity and for which the paediatric investigation plan (PIP) is completed



# Market exclusivity for orphans

## Data Exclusivity

8 years

Submitted since November 2005

## Market Protection

2 years

(1 year)

1 year \*

Marketing authorisation of reference product

Generics application

Generics application

OTC/WEU  
\* study data only

## Market Exclusivity (Orphan)

10 years

2 years

Marketing authorisation of reference product

for indication(s)  
for a separate orphan  
designation for which  
the PIP is completed

'similar'  
application

Generics  
application



## Market exclusivity principles

- Market exclusivity in Orphan Regulation runs in parallel with normal rules on data exclusivity and market protection
- Therapeutic indication for a separate orphan designation benefits from 10 years market exclusivity
- No mix of orphan and non-orphan indications in the same MA allowed

However, the MA can cover several ODD

➤ which triggers its own market exclusivity period kicking-off from start of approval of the indication (i.e. initial MA or Type II/extension)



# Market exclusivity for orphans

## *Market Exclusivity (Orphan)*

**10 years – Indication 1 market exclusivity**

↑ Marketing authorisation of reference product

↑ Submission of a 'similar' application

**10 years – Indication 2 market exclusivity**

↑ Submission of a 'similar' application

## *Market Exclusivity (Orphan)*

**6 years**

↑ Marketing authorisation of reference product

↑ Submission of a 'similar' application

***Note: Only if therapeutic indications are for separate orphan designations***



## Example Nexavar orphan with several ODD and ME periods

Orphan condition	Nexavar indication	EC approval
Hepatocellular carcinoma (treatment) (EU/3/06/364)	<ul style="list-style-type: none"><li>• <i>Treatment of hepatocellular carcinoma</i></li></ul>	29/10/2007
Renal cell carcinoma (treatment) (EU/3/04/207)	<i>For the treatment of patients with advanced renal cell carcinoma who have failed prior interferon-alpha or interleukin-2 based therapy or are considered unsuitable for such therapy.</i>	19/07/2006



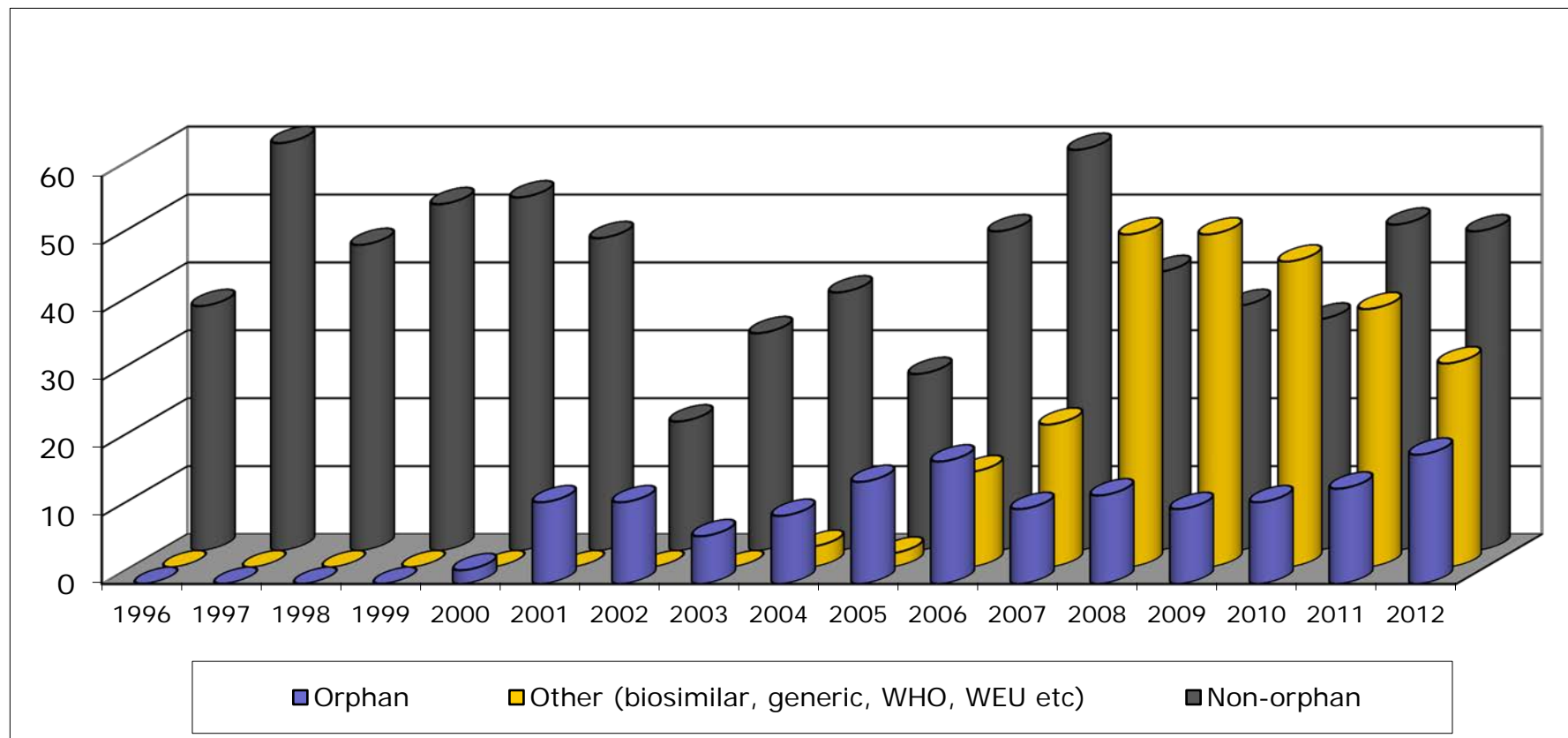
# Example Tracleer

## orphan with several ODD and ME periods

Orphan condition	Tracleer indication	EC approval
Pulmonary arterial hypertension and chronic thromboembolic pulmonary hypertension (treatment) (EU/3/01/019)	<ul style="list-style-type: none"><li>• <i>Treatment of pulmonary arterial hypertension (PAH) to improve exercise capacity and symptoms in patients with WHO functional class III. Efficacy has been shown in:</i><ul style="list-style-type: none"><li>- <i>Primary (idiopathic and familial) PAH;</i></li><li>- <i>PAH secondary to scleroderma without significant interstitial pulmonary disease;</i></li><li>- <i>PAH associated with congenital systemic to pulmonary shunts and Eisenmenger's physiology;</i></li><li>- <i>Some improvements have also been shown in patients with PAH WHO functional class II</i></li></ul></li></ul>	15/05/2002
Systemic sclerosis (scleroderma) (treatment) (EU/3/01/019)	<i>Indicated to reduce the number of new digital ulcers in patients with systemic sclerosis and ongoing digital ulcer disease.</i>	07/06/2007



# Trends in EU marketing authorisation applications 1995-2012







## Paediatric medicines



New =  
SPC extension



# Development of paediatric medicines

## ➤ Obligation

To study drugs in children for new products or authorised products with new indication, pharmaceutical form and route of administration

## ➤ Agree Paediatric Investigation Plan by Paediatric Committee (PDCO)

- PIP outlines timing & measures to be undertaken
- Deferral or Waiver, if applicable
- Compliance check at time of marketing authorisation application



## EU Paediatric REG: obligations vs incentives

	<b>Obligation</b>	<b>Incentive</b>	<b>Type of MP</b>
<b>New# Medicinal product</b>	Paediatric Investigation Plan or Waiver	6 months extension of SPC*	Necessary for <b>validation</b> of application
<b>On Patent and authorised Medicine</b>	Paediatric Investigation Plan or Waiver	6 months extension of SPC*	When new indication or new route or new pharmaceutical form: necessary for <b>validation</b>
<b>Orphan Medicine</b>	Paediatric Investigation Plan or Waiver	2 additional years of market exclusivity*	In addition to 10 years
<b>Off patent Medicine</b>	None (voluntary PIP possible for PUMA)	8+2 years of data protection	Research funds Paed. Use MA (PUMA)



## Incentive: SPC extension



- '*Sui generis*' intellectual property right
- Provide additional monopoly to compensate the time to get a MA
- SPC application to be lodged within 6 months of the grant of the MA
- SPC extension to be lodged 2 years before the SPC expiry
- Enter into force after the expiry of the 'basic patent'
- Duration: negative (*Merck v Deutsches Patent Case C-125/10*) up to 5 years



## Rewards conditions

- Development is compliant with agreed PIP
- Results of studies included in Product information
- Product is authorised in all MSs (except for PUMA)
- Compliance statement in MA

*Product-specific or class waiver does **NOT** trigger the reward*  
*"Negative" PIP results do allow reward*



## Trends in paediatric developments within the centralised procedure 2007-2011

- New medicines authorised with a paediatric indication: 31 / 152  
(linked to PIP: 10)
- New paediatric uses authorised for already existing medicines: 38  
(linked to PIP: 18)
- New pharmaceutical form adapted for children: 15  
(linked to PIP: 3)

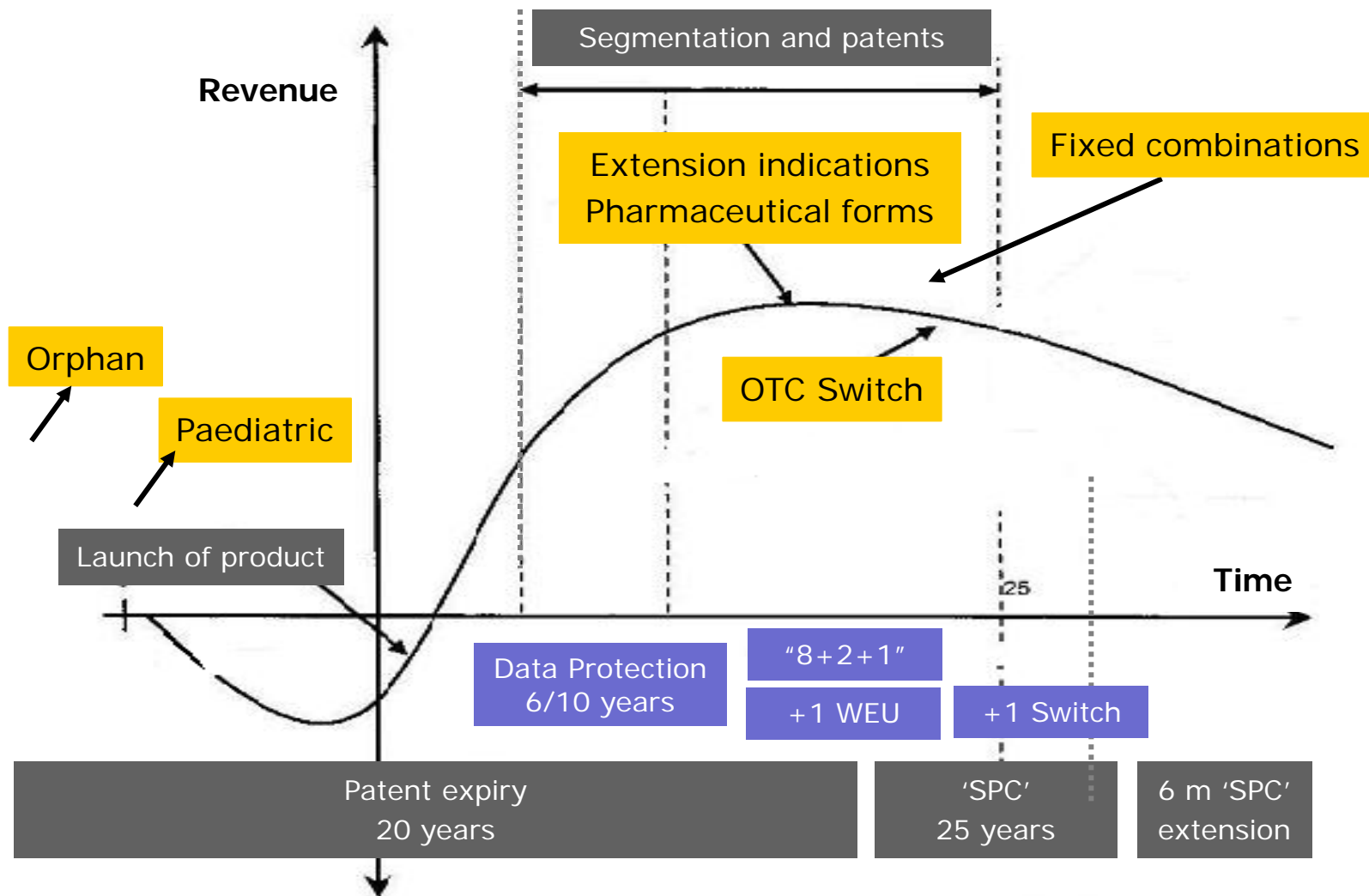


# Adaptive strategies for incentive maximisation





# Life cycle of innovator product







# Adaptive strategies for incentive maximisation

Across the life cycle of the product:

- Explore different regulatory strategies to maximise existing legislative incentives
- Engage in early discussions of strategies with the competent authorities and with rapporteurs
- Seek regulatory and scientific advice



## Zaide Frias

Head of Regulatory Affairs

Tel: +44 (0) 207 523 7019

[zaide.frias@ema.europa.eu](mailto:zaide.frias@ema.europa.eu)

EMA

7, Westferry Circus

Canary Wharf

London E14 4HB

United Kingdom

[www.ema.europa.eu](http://www.ema.europa.eu)