European Medicines Agency
Pre-authorisation Evaluation of Medicines for Human Use

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REVISED PRIORITY LIST FOR STUDIES INTO OFF-PATENT PAEDIATRIC MEDICINAL PRODUCTS

DRAFT FOR PUBLIC CONSULTATION

NOTE and DISCLAIMER

The list includes only products considered to be off-patent, i.e. not covered by a basic patent or a supplementary protection certificate. Information on the off-patent status is not guaranteed by EMEA. It should be noted that information on the authorisation status as well as on available paediatric formulations of medicinal products is very limited and not available for all European Member States. Users of this list are therefore advised to check the patent and authorisation status of the medicinal products of interest.

The methodology used to establish the list was based as much as possible on evidenced based medicine. It is however acknowledged that identification of priorities for research into medicinal products for paediatric use is partly based on subjective criteria and that identified priorities may change over time.

OBJECTIVE OF THE LIST:

The aim of Regulation (EC) No 1901/2006 of the European Parliament and the Council on Medicinal Products for Paediatric Use as amended, (entry into force: 26 January 2007), is to increase availability of medicines authorised for children as well as to increase the information available on the use of medicinal products in the paediatric population. The Regulation includes provisions for funding of studies into off-patent medicinal products. This funding, provided through the EU Framework programmes, should cover the development of off patent medicinal products with a view to the submission of a Paediatric Use Marketing Authorisation (Art. 40, http://ec.europa.eu/enterprise/pharmaceuticals/eudralex/vol-1/reg_2006_1901/reg_2006_1901_en.pdf).

The objective of the revision of the priority list is to provide the basis for the work programme for the Third Call for Framework Programme 7 of the European Commission. It ensures that funds are directed into research of medicinal products with the highest need in the paediatric population.

The following list of off-patent products has been revised by the Paediatric Committee (PDCO) and is released for public consultation. **Comments are welcome until 16 June 2008 via e-mail to** paediatrics@emea.europa.eu.

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PRIORITY LIST FOR STUDIES INTO OFF-PATENT PAEDIATRIC MEDICINAL PRODUCTS

The products are listed according to their therapeutic field and condition(s) in alphabetical order.

Therapeutic field	**Product**	**condition(s)**	**specific needs**
Cardiology	amiodarone	supraventricular and ventricular arrhythmia	Data on long-term safety (eg eyes, thyroid)
	dobutamine	shock	Data on efficacy in neonates
	lisinopril	hypertension; cardiac failure	Data on efficacy and safety
Child & adolescent psychiatry	fluoxetine	major depressive disorder (MDD), general anxiety disorder (GAD), psychosis	Data on efficacy in GAD and psychosis and on long term-safety [testicular toxicity in pre-clinical studies]
	risperidone	psychosis; conduct disorders	Data on efficacy in - psychosis in adolescents - conduct disorder in children (not mentally retarded)
Endocrinology	levothyroxine	hypothyroidism	Data in extreme preterm infants, also ondosing
	metformin	diabetes mellitus type II (DM II); growth deficiency	Data on efficacy in DM II and in low birth weight children with precocious puberty
	sulfonylurea	diabetes type 2 (DM II)	Data on efficacy and safety (hypoglycaemia) in children and adolescents
Gastroenterology	azathioprine	Crohn's disease	Data on efficacy and safety [concerns about combination with biologicals such as anti TNF]
	baclofen	gastro-oesophageal reflux (GER)	
	methotrexate	Crohn's disease	Data on efficacy and safety [concerns about combination with biologicals such as anti TNF]
Immunology	azathioprine	Rejection in transplantation	Data on efficacy in graft versus host disease (GVHD)
	muronomab-CD3	Rejection in transplantation	Data on efficacy in relation to ATG (anti-thymocyte globulin)
Infectiology	amphotericin B	mycotic infection	Data in immuno-compromised and neonates
	azithromycin	neonatal chlamydia infections; infections caused by *mycoplasma, bordetella pertussis, shigella.*	Data on efficacy and safety

Therapeutic field	Product	condition(s)	specific needs
	ciprofloxacin	Infections caused by *Pseudomonas aerigunosa* and Shigella	Data on long-term safety
	clindamycin	osteomyelitis; infections caused by resistant organisms, e.g. MR Staphylococcus Aureus and MR Staphylococcus Epidermidis	Data on efficacy, safety and long-term efficacy
Intensive care/anaesthesiology	midazolam	premedication/ sedation (procedures)	Data on oral formulation (dosing, efficacy and safety)
	propofol	premedication/ sedation (procedures)	Data on safety and efficacy.
Neonatology	caffeine citrate	apnoea of infancy	Data on long-term safety
	milrinone	pulmonary hypertension	Data in neonates
Nephrology/urology	ciclosporin	idiopathic nephrotic syndrome	Data on long-term efficacy and safety
	imipramine	organic enuresis	Data on PK in different age subsets
	oxybutynin	organic enuresis	Data on PK
Neurology	bumetanide	neonatal seizures	Data on efficacy in combination with phenobarbital
	lamotrigine	partial seizures; Lennox Gastaut syndrome	Data on efficacy in various epileptic syndromes
Oncology	busulfan	cerebral tumours	Data on PK in children
	carboplatin	cerebral tumours germ cell tumours hepatoblastoma retinoblastoma, nephroblastoma rhabdomyosarcoma	Data on efficacy compared to cisplatin and on PK in children
	cyclophosphamide	cerebral tumours germ cell tumours Ewing sarcoma, retinoblastoma rhabdomyosarcoma neuroblastoma Hodgkin's disease, Non Hodgkin's disease, acute lymphoblastic leukaemia	Data on activity of metabolites and efficacy
	temozolomide	cerebral tumours	Data on PK in children
Rheumatology	methotrexate	juvenile idiopathic arthritis	Data on long-term safety

METHODOLOGY

The original list 2003 had been prepared from a public health perspective prioritising **in a first step** conditions based on factors such as severity of disease, non-availability of treatment alternatives, affected paediatric age groups and paediatric prevalence data. **In a second step** for each condition medicinal off-patent products were identified according to published therapeutic reviews.

For this revision medicinal products were prioritised also taking into account the WHO list of essential medicines for children, the FDA/NICHD list of products and further paediatric needs. Potential collaboration with FDA/NICHD has been taken into consideration with a view to avoid duplication of efforts.