## SUBMISSION OF COMMENTS ON DRAFT COMMISSION PAEDIATRICS GUIDELINE



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## **GENERAL COMMENTS**

## SPECIFIC COMMENTS ON TEXT

## **GUIDELINE SECTION TITLE**

Section. + paragraph no.	Comment and Rationale	Proposed change (if applicable)
	AIPES would like to make the following comments on the concerned guideline on paediatric investigation plan:	
	AIPES would like Authorities to take into consideration the particular case of radiopharmaceuticals in this guideline for the following reasons:	
	Radiopharmaceuticals are products generally indicated for the treatment or the diagnosis of pathologies concerning adult population and should not be administered to patients below 18 years old (general radioprotection rules).	
	However, when clinically justified, children can be treated with	

Submit all comments to: by email to peter.arlett@ec.europa.eu in word forma please.

Deadline for comments: <30 March 2007>

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Date of transmission:

radiopharmaceutical products, mainly technetium-99m labelled products for diagnosis of renal or bone pathologies or iodine-131 labelled products for diagnosis or treatment of thyroid disease. This corresponds to less than 5% of radiopharmaceutical use. These products are however now of well established use in this class of population.	
In the case of a new product under development for which paediatric population is concerned, clinical trials could be difficult to conduct even not possible.	
Radiopharmaceuticals are products on which a radioelement (gamma or beta emitter) is linked. These products are generally administered by intravenous route. They are then distributed in the body, fixed by the target organ and then eliminated. Nevertheless radioactivity can be present in the body some hours to days necessitating particular precautions up to staying in hospital until radioactivity is totally eliminated.	
That means that for demonstration of efficacy in paediatric population, children would have to follow often heavy protocols. They should receive radioactive products by intravenous route. To demonstrate efficacy the tested product should be compared to the reference product which is generally also a radiopharmaceutical (that means another intravenous injection of radioactive product) or in the case of diagnosis to a method that could be very invasive like for example biopsy or coronaro angiography.	
Recruitment of children in such trials could be difficult even not possible due to the heaviness of the protocols or for ethical reasons.	
In addition there is in most cases no real need of clinical trials in children as radiopharmaceutical products used have generally no pharmacodynamic effects. The activity of the molecule is due to radioactivity and pharmacokinetics (imaging) or dosimetry data (tolerance) can be extrapolated from adult data. This is the case for the current radiopharmaceuticals already on the market.	
Currently most of approved radiopharmaceutical products have in their Summaries of Product Characteristics, when use in children is not	

contra-indicated, recommendations for posology and data for dosimetry for children.	
These figures are extrapolated from adult population.	
Posologies for children is a fraction of the adult dose calculated from the body weigh according to a table established by the paediatric group of EANM (European Association of Nuclear Medicine).	
Dosimetry in children is obtained from the ICRP Publication (International Commission on Radiological Protection).	
Due to the difficulty to conduct clinical trials in paediatric groups and to the questionable information that these trials could bring, it could be recommended for radiopharmaceuticals under development that children would be contra-indicated until sufficient data are available in adult to extrapolate to children.	
In conclusion, for ethical and radioprotection reasons, and since efficacy and safety are available in adults and can be extrapolated to paediatric population, it appears unnecessary, and even not recommended to perform clinical studies in children with radiopharmaceuticals.	

Please feel free to add more rows if needed.