

A.14	Fluoride toothpaste – dental caries
Does the application adequately address the issue of the public health need for the medicine?	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not applicable</p> <p>Comments:</p> <p>Dental caries can be considered as a pandemic due to the very high number of people affected and represents a real public health problem due to the costs of treatment. Thus, promoting prevention is essential to remedy this universal problem. In this context, fluoridated toothpaste is the most effective way to meet this need.</p> <p>The application is supporting a modification to the existing entry for “sodium fluoride” in group 27 to move it to a new category “30. Dental medicines” and a subgroup “30.1. Medicines for dental caries”.</p> <p>The rationale for the modification and addition of a new category for dental medicines and medical devices is grounded in the significant burden of oral diseases, particularly untreated dental caries.</p>
Briefly summarize the role of the proposed medicine(s) relative to other therapeutic agents currently included in the Model List, or available in the market.	<p>Fluoride toothpaste represents both an effective means of preventing dental caries and a safe form avoiding fluoride toxicity leading the fluorosis of the tooth enamel.</p>
Have all important studies and all relevant evidence been included in the application?	<p><input checked="" type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Not applicable</p> <p>If no, please provide brief comments on any relevant studies or evidence that have not been included:</p> <p>The current EML does not specify the form and concentration range of fluoride products used in the prevention of dental caries (In any appropriate topical formulation). Therefore, it is necessary to use a fluoridated toothpaste with a well-defined concentration range.</p> <p>The rationale for the modification and addition of a new category for dental medicines and medical devices is not well developed.</p>

2021 Expert Committee on Selection and Use of Essential Medicines
Application review

<p>Does the application provide adequate evidence of efficacy/effectiveness of the medicine for the proposed indication?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable</p> <p>Briefly summarize the reported benefits (e.g. hard clinical versus surrogate outcomes) and comment, where possible on the actual magnitude and clinical relevance of benefit associated with use of the medicine(s).</p> <p>Is there evidence of efficacy in diverse settings (e.g. low-resource settings) and/or populations (e.g. children, the elderly, pregnant patients)?</p> <p>Yes</p> <p>The use of fluoride toothpaste reduces caries lesions by 24% compared to non-fluoride toothpaste.*</p> <p>*Horst JA, Tanzer JM, and Milgrom PM. (2018). Fluorides and Other Preventative Strategies for Tooth Decay. Dent Clin North Am. 62(2): 207-234.</p>
<p>Does the application provide adequate evidence of the safety and adverse effects associated with the medicine?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable</p> <p>Comments:</p> <p>The amount needed to reach the likely toxic dose (TPD = 5.0 mg F/kg body weight) is very high compared to the amount present in the toothpaste. However, the application recommends specific use amounts for each age group given the risk of ingestion in children.</p>
<p>Are there any adverse effects of concern, or that may require special monitoring?</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable</p> <p>Comments:</p>
<p>Briefly summarize your assessment of the overall benefit to risk ratio of the medicine (e.g. favourable, uncertain, etc.)</p>	<p>Favorable</p>
<p>Briefly summarize your assessment of the overall quality of the evidence for the medicine(s) (e.g. high, moderate, low etc.)</p>	

2021 Expert Committee on Selection and Use of Essential Medicines
Application review

<p>Are there any special requirements for the safe, effective and appropriate use of the medicine(s)? (e.g. laboratory diagnostic and/or monitoring tests, specialized training for health providers, etc)</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not applicable</p> <p>Comments:</p> <p>To prevent the risk of ingestion:</p> <p>Limitation of package size and maximum fluoride content for a single unit</p> <p>Supervision of children to avoid ingestion the toothpaste slurry</p> <p>It should be taken into consideration the particularity of some regions whose inhabitants are subjected to an excessive exposure in fluoride which is at the origin of fluorosis.</p>
<p>Are you aware of any issues regarding the registration of the medicine by national regulatory authorities? (e.g. accelerated approval, lack of regulatory approval, off-label indication)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable</p> <p>Comments:</p> <p>Registration as drug could be not possible in some countries as the dossier should respond to a specific organization. We should find different modules for active substances, formulation development, preclinical and toxicological studies and clinical studies (efficacy-toxicity) studies which could not be evident for a medical device</p>
<p>Is the proposed medicine recommended for use in a current WHO Guideline approved by the Guidelines Review Committee? (refer to: https://www.who.int/publications/who-guidelines)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable</p> <p>Comments:</p> <p>fluoridated toothpastes containing between 1000 and 1500 ppm fluoride is the standard recommended by WHO as a public oral health measure for the prevention of caries.</p>
<p>Briefly summarize your assessment of any issues regarding access, cost and affordability of the medicine in different settings.</p>	<p>It seems that classification of fluoride tooth paste as an essential medicine is likely to reduce the cost and facilitate patient access.</p>
<p>Any additional comments</p>	

2021 Expert Committee on Selection and Use of Essential Medicines
Application review

Based on your assessment of the application, and any additional evidence / relevant information identified during the review process, briefly summarize your proposed recommendation to the Expert Committee, including the supporting rationale for your conclusions, and any doubts/concerns in relation to the listing proposal.	Favorable: The introduction of fluoridated toothpaste in the list of essential medicines because of its proven effectiveness in the prevention of dental caries, which could reduce the costs of treatment and also for a better control of quality and fluoride content.
References (if required)	