A.32	Sumatriptan - migraine
Does the application adequately address the issue of the public health need for the medicine?	☒ Yes ☐ No ☐ Not applicable Comments: Migraine s a potentially debilitating condition characterized by recurrent moderate to severe pain, a well-documented cause of disability, and has a substantial societal burden. The Global Burden of Disease report of 2019 documented its high prevalence and socio-economic and personal impact. Globally migraine is underdiagnosed, and treatment quality is poor. Patients easily suffer from Because migraine disproportionately affects women it could potentially be neglected.
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.	Oral Sumatriptan is being proposed for the acute treatment of migraine attacks and cluster headaches at a dose of 50my equivalent (70mg succinate) Current treatments for migraine are ASA, paracetamol, and Ibuprofen. Risks of overdosing and abuse of these substances are common including medication overuse headaches, drug specific AEs, and other conditions requiring hospitalization. Sumatriptan appears to provide more relief with less risks. A Cochrane SR suggests the oral 50 mg dose provides complete relief of pain in almost 3 in 10 people (28%) compared with about 1 in 10 (11%) after placebo (NNT 6.1 (5.5 to 6.9) in 6447 participants).
Have all important studies and all relevant evidence been included in the application?	☒ Yes ☐ No ☐ Not applicable If no, please provide brief comments on any relevant studies or evidence that have not been included:

Does the application provide adequate evidence of efficacy/effectiveness of the medicine for the proposed indication?	☒ Yes ☐ No ☐ Not applicable 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). 1. Efficacy: A Cochrane SR found that a single dose was effective in relieving migraine headache pain and associated symptoms of nausea, sensitivity to light, and sensitivity to sound. Pain was reduced from moderate or severe to no pain by two hours in about 3 in 10 people (32%) taking sumatriptan 100 mg, compared with about 1 in 10 (11%) taking placebo. Pain was reduced from moderate or severe to no worse than mild pain by two hours in 6 in 10 people (61%) taking sumatriptan 100 mg, compared with about 3 in 10 (32%) taking placebo. Almost a quarter (24%) of people taking sumatriptan 100 mg had freedom from pain at two hours which was sustained during 24 hours without the use of rescue medication, compared with fewer than 1 in 10 (8%) taking placebo. In addition to relieving headache pain, sumatriptan also relieved symptoms of nausea and sensitivity to light and sound by two hours in about half of those who took it, compared with about one-third of those taking placebo. Updated GRADE profiles attached with this application confirm efficacy with high certainty. 2. Tolerability and safety: Adverse events were mostly of short duration and mild or moderate in severity, and were experienced by about 4 in 10 (43%) of people taking sumatriptan 100 mg, and by 2 in 10 (23%) taking placebo. The 50 mg dose had slightly lower efficacy but was associated with fewer adverse events. 3. Cost: limited evidence available. Available evidence is unclear. Is there evidence of efficacy in diverse settings (e.g. low-resource settings) and/or populations (e.g. children, the elderly, pregnant patients)? No, there is limited evidence on efficacy and safety for children under age of 12.
Does the application provide adequate evidence of the safety and adverse effects associated with the medicine?	☒ Yes ☐ No ☐ Not applicable Comments: I was still unclear about safety in pregnancy and breastfeeding.
Are there any adverse effects of concern, or that may require special monitoring?	☐ Yes ☒ No ☐ Not applicable Comments:

Briefly summarize your assessment of the overall benefit to risk ratio of the medicine (e.g. favourable, uncertain, etc.)	Favourable: Using the Sumatriptan for migraine could greatly reduce the burden of disease resulting from migraine. There is little risk and high benefits as reported above. My conclusions are based on oral tablets of 50mg for non-pregnant or non-breastfeeding adults.
Briefly summarize your assessment of the overall quality of the evidence for the medicine(s) (e.g. high, moderate, low etc.)	High: there is high-certainty evidence that Sumatriptan is effective against migraine. Further research is needed to explore the following: 1. Use in pregnancy. 2. Use in breastfeeding. 3. Cost in different settings
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)	☒ Yes ☐ No ☐ Not applicable Comments: Yes, I propose the need to check for potential drug interactions.
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)	☐ Yes ☒ No ☐ Not applicable Comments:
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)	☐ Yes ☒ No ☐ Not applicable Comments: several guidelines already mention the use of the agent in their recommendations: 1. World Health organization (WHO) 2. National Institute for Health and Clinical Excellence (NICE) 3. Scottish Intercollegiate Guidelines Network (SIGN) 4. American Academy of Neurology (AAN) 5. International Headache Society (IHS) 6. TRIP Database However approval from GRC cannot be confirmed.
Briefly summarize your assessment of any issues regarding access, cost and affordability of the medicine in different settings.	Reducing the burden of disease from migraine will significantly improve wellbeing, reduce costs from absenteeism from work. There is sufficient high quality evidence on its efficacy and safety in adults. Evidence of safety in children, pregnant women, and breastfeeding mothers is still limited. Evidence of cost is still limited.

Any additional comments	
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.	Considering the body of evidence in support of efficacy and tolerability of sumatriptan and the risks and AEs associated with existing treatments within the EML, sumatriptan is a promising agent for migraine. Because evidence in pregnancy and breastfeeding is limited, I reserve recommending this agent in these conditions. Mindful of all the above, I recommend the inclusion of sumatriptan in the EML.
References (if required)	