

I.8 Prednisolone – adrenal insufficiency – EML

Reviewer summary	<input checked="" type="checkbox"/> Supportive of the proposal <input type="checkbox"/> Not supportive of the proposal Justification (based on considerations of the dimensions described below): Very low-quality evidence suggests benefits of prednisolone in adrenal insufficiency (compared to hydrocortisone). Based on this it should be considered as an alternative in specific settings Prednisolone is administered once daily (compared to BID/ TID hydrocortisone) Prednisolone is affordable and widely available. This presentation is important for particular indications
Does the EML and/or EMLc currently recommend alternative medicines for the proposed indication that can be considered therapeutic alternatives? (https://list.essentialmeds.org/) Prednisolone is included for multiple other indications but not for adrenal insufficiency. Additionally, the proposed formulation (1mg tablet) is not included in the EML/ EMLc.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not applicable
Does adequate evidence exist for the efficacy/effectiveness of the medicine for the proposed indication? (e.g., evidence originating from multiple high-quality studies with sufficient follow up. This may be evidence included in the application, and/or additional evidence identified during the review process;) Low quality evidence suggests possible benefits of prednisolone over hydrocortisone (Impact on weigh, bone metabolism including growth, and CV outcomes). Additionally access to 1 mg tablets is critical for individualized, lower dosing — especially important in children or those tapering off high-dose steroids.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not applicable
Does adequate evidence exist for the safety/harms associated with the proposed medicine? (e.g., evidence originating from multiple high-quality studies with sufficient follow up. This may be evidence included in the application, and/or additional evidence identified during the review process;) Low quality evidence suggests that low-dose prednisolone is safe option for adrenal insufficiency when used at physiological doses (3–4 mg once daily). Most of the documented harms are associated with higher, supraphysiological doses (e.g., 5 mg or more), which the 1 mg tablet formulation is designed to help avoid.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not applicable
Overall, does the proposed medicine have a favourable and meaningful balance of benefits to harms?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable
Are there any special requirements for the safe, effective and appropriate use of the medicines? (e.g. laboratory diagnostic and/or monitoring tests, specialized training for health providers, etc) Patients with adrenal insufficiency should be managed by an experienced and trained team: <ul style="list-style-type: none"> • Prednisolone dose must be carefully adjusted to mimic physiological cortisol levels in order to avoid supraphysiological exposure (which increases risks of diabetes, cardiovascular disease, and osteoporosis) and undertreatment 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable

25th WHO Expert Committee on Selection and Use of Essential Medicines
Expert review

<p>(which could lead to adrenal crisis). This usually requires evaluation of multiple parameters.</p> <ul style="list-style-type: none"> • Management of additional steroid requirements (sick days) • Trained to recognize symptoms of adrenal insufficiency or adrenal crisis • Comprehensive patient education 	
<p>Are there any issues regarding price, cost-effectiveness and budget implications in different settings?</p> <p>The documents provide clear and compelling evidence that prednisolone 1 mg is highly cost-effective, especially when compared to hydrocortisone, and there are notable budget implications in low- and middle-income countries due to current limitations in tablet availability.</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not applicable</p>
<p>Is the medicine available and accessible across countries?</p> <p>(e.g. shortages, generics and biosimilars, pooled procurement programmes, access programmes)</p>	<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable</p>
<p>Does the medicine have wide regulatory approval?</p>	<p><input type="checkbox"/> Yes, for the proposed indication.</p> <p><input checked="" type="checkbox"/> Yes, but only for other indications (off-label for proposed indication)</p> <p><input type="checkbox"/> No <input type="checkbox"/> Not applicable</p>