The objective of this initiative was to review all the available scientific data on antibiotics studied as PEP, in order to revise the existing recommendations, if necessary, and to develop tools for clinicians.

After a tick bite in certain geographical areas, single-dose doxycycline post-exposure prophylaxis (PEP) may be proposed to prevent Lyme disease, if certain criteria are met.

The patient could feel that it is not worth it to take an antibiotic, given the low risk of contracting Lyme disease. The patient could harm his or her disposal to prevent Lyme disease.

The patient might feel that he or she has taken the means at his or her disposal to prevent Lyme disease.

The patient could feel that it is not worth it to take an antibiotic, given the low risk of contracting Lyme disease. The patient could experience minor and transient adverse effects associated with the use of PEP in 9/100 people. The patient could feel that taking an antibiotic was not necessary. The patient might feel that he or she has taken the means at his or her disposal to prevent Lyme disease.

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CONCLUSION
In a context of uncertainty regarding the actual efficacy and safety of PEP, the shared decision-making process enables the patient to make an informed decision that is in line with his or her preferences and values. This initiative is part of INESSS’s project on the diagnosis and treatment of Lyme disease.

TABLE 1. Efficacy of the antibiotics studied as PEP, based on different indices

<table>
<thead>
<tr>
<th>Antibiotic</th>
<th>Total number of patients</th>
<th>NNT</th>
<th>ARR</th>
<th>ARR from meta-analysis (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amoxicillin</td>
<td>365</td>
<td>1/192</td>
<td>0.5%</td>
<td>-2.8% (-11.7; 6.1)</td>
</tr>
<tr>
<td>Doxycycline</td>
<td>482</td>
<td>1/235</td>
<td>0.4%</td>
<td>-2.8% (1.1; 220)</td>
</tr>
<tr>
<td>Penicillin</td>
<td>56</td>
<td>0/17</td>
<td>0.0%</td>
<td>-2.8% (3.4; 220)</td>
</tr>
</tbody>
</table>

In Québec, Lyme disease is transmitted to humans by the black-legged tick (Ixodes scapularis). In North America, a single dose of doxycycline PEP may be proposed to prevent Lyme disease, if certain criteria are met. The results of the American study may not be reproduced in other contexts; there are no data on the efficacy of PEP in preventing symptoms other than erythema migrans. The patient could feel that it is not worth it to take an antibiotic, given the low risk of contracting Lyme disease.