TITLE: Screening Donated Cells, Tissues, and Organs for West Nile Virus: Clinical Evidence, Cost-Effectiveness, and Guidelines

DATE: 02 February 2016

RESEARCH QUESTIONS

1. What is the clinical evidence regarding the risk of transmission of West Nile virus from donated cells, tissues, or organs to the donation recipient?

2. What is the cost-effectiveness of screening donated cells, tissue, or organs for West Nile virus prior to transplantation?

3. What are the evidence-based guidelines regarding the screening of donated cells, tissues, or organs for West Nile virus prior to transplantation?

KEY FINDINGS

One non-randomized study was identified regarding the risk of transmission of West Nile virus from donated cells, tissues, or organs to the donation recipient.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit retrieval by publication type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2011 and January 25, 2016. Internet links were provided, where available.

SELECTION CRITERIA

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.
Table 1: Selection Criteria

<table>
<thead>
<tr>
<th>Population</th>
<th>Patients requiring donated cells, tissues, or organs</th>
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<tbody>
<tr>
<td>Intervention</td>
<td>Screening of cells, tissues (e.g., ocular tissue, bone marrow, stem cells), or perfusable organs for West Nile virus</td>
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<tr>
<td>Comparator</td>
<td>No screening for West Nile Virus</td>
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<tr>
<td>Outcomes</td>
<td>Q1: Risk of disease transmission, safety</td>
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<td>Q2: Cost-effectiveness</td>
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<td>Q3: Evidence-based guidelines and best practice</td>
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</table>

| Study Designs                | Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, economic evaluations, non-randomized studies |

RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, economic evaluations, and evidence-based guidelines.

One non-randomized study was identified regarding the risk of transmission of West Nile virus from donated cells, tissues, or organs to the donation recipient. No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, economic evaluations, or evidence-based guidelines were identified.

Additional references of potential interest are provided in the appendix.

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies


Economic Evaluations
No literature identified.

Guidelines and Recommendations
No literature identified.
APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies – Screening Not Mentioned


Clinical Practice Guidelines and Position Statements


Case Reports or Case Series


Review Articles


Additional References


