<table>
<thead>
<tr>
<th>Study Type</th>
<th>Question</th>
<th>Level I</th>
<th>Level II</th>
<th>Level III</th>
<th>Level IV</th>
<th>Level V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnostic—Investigating a diagnostic test</td>
<td>Is this (early detection) test worthwhile?</td>
<td>Randomized controlled trial</td>
<td>Prospective cohort study</td>
<td>Retrospective cohort study</td>
<td>Case series</td>
<td>Mechanism-based reasoning</td>
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<tr>
<td></td>
<td>Is this diagnostic or monitoring test accurate?</td>
<td>Testing of previously developed diagnostic criteria (consecutive patients with consistently applied reference standard and blinding)</td>
<td>Development of diagnostic criteria (consecutive patients with consistently applied reference standard and blinding)</td>
<td>Nonconsecutive patients</td>
<td>Poor or non-independent reference standard</td>
<td>Mechanism-based reasoning</td>
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<tr>
<td>Prognostic—Investigating the effect of a patient characteristic on the outcome of a disease</td>
<td>What is the natural history of the condition?</td>
<td>Inception cohort study (all patients enrolled at an early, uniform point in the course of their disease)</td>
<td>Prospective cohort study (patients enrolled at different points in their disease)</td>
<td>Control arm of randomized trial</td>
<td>Case series</td>
<td>Mechanism-based reasoning</td>
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<tr>
<td>Therapeutic—Investigating the results of a treatment</td>
<td>Does this treatment help? What are the harms?</td>
<td>Randomized controlled trial</td>
<td>Prospective cohort study</td>
<td>Retrospective cohort study</td>
<td>Case series</td>
<td>Mechanism-based reasoning</td>
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<tr>
<td>Economic</td>
<td>Does the intervention offer good value for dollars spent?</td>
<td>Computer simulation model (Monte Carlo simulation, Markov model) with inputs derived from Level II studies, lifetime time duration, outcomes expressed in dollars per QALYs and uncertainty examined using probabilistic sensitivity analyses</td>
<td>Computer simulation model (Monte Carlo simulation, Markov model) with inputs derived from Level I studies, lifetime time duration, outcomes expressed in dollars per QALYs and uncertainty examined using probabilistic sensitivity analyses</td>
<td>Computer simulation model (Markov model) with inputs derived from Level II studies, relevant time horizon, less than lifetime, outcomes expressed in dollars per QALYs and stochastic multilevel sensitivity analyses</td>
<td>Decision tree over the short time horizon with input data from original Level II and III studies and uncertainty is examined by univariate sensitivity analyses</td>
<td>Decision tree over the short time horizon with input data informed by prior economic evaluation and uncertainty is examined by univariate sensitivity analyses</td>
</tr>
</tbody>
</table>