Online Supplementary Material:

**Title:** Identifying clinical criteria to predict Type 1 diabetes, as defined by absolute insulin deficiency: a systematic review protocol

**Authors:** Beverley M Shields¹, Jaime L Peters²,³, Chris Cooper², Roy Powell⁴, Bridget Knight⁴, Christopher Hyde², Andrew T Hattersley¹

1. NIHR Exeter Clinical Research Facility, University of Exeter Medical School, University of Exeter, Exeter, UK
2. Peninsula Technology Assessment Group, University of Exeter Medical School, University of Exeter, Exeter, UK
3. Peninsula Collaborations for Leadership in Applied Health Research and Care, University of Exeter Medical School, University of Exeter, Exeter, UK
4. Royal Devon and Exeter NHS Foundation Trust, Exeter, UK
1. **Proposed Search Strategy**

*Electronic databases:*
- Allied and Complementary Medicine Database (AMED) via Ebsco host
- Assia via ProQuest
- BL Direct via [http://direct.bl.uk/bld/Home.do](http://direct.bl.uk/bld/Home.do)
- British Nursing Index (BNI)* via Proquest
- Centre for Reviews and Dissemination (all) [http://www.york.ac.uk/inst/crd/](http://www.york.ac.uk/inst/crd/)
- Cinahl (Cumulative Index to Nursing and Allied Health Literature) via Ebsco
- Embase via OVID
- Health Management Information Consortium (HMIC)* via OVID
- Medline in Process via OVID
- Medline via OVID
- PsycINFO via OVID
- Social Policy and Practice (SPP)* via OVID
- Sociological Abstracts via ProQuest
- Web of Science (including conference proceedings citations index) via ISI°

Further electronic resources for grey literature

- British Library Integrated Catalogue via [http://tinyurl.com/3e3xeqf](http://tinyurl.com/3e3xeqf)
- British Library Ethos via [http://ethos.bl.uk/Home.do](http://ethos.bl.uk/Home.do)
- European Association for the Study of Diabetes (EASD) meeting abstracts and posters
- Diabetes UK meeting abstracts and posters
- Google

Additional websites for grey literature

National and International Health Organisations

- National Institute for Clinical Excellence (NICE) [http://www.nice.org.uk/](http://www.nice.org.uk/)
- Scottish Intercollegiate Guidelines Network [http://www.sign.ac.uk/](http://www.sign.ac.uk/)
Diabetes Specific Associations

- European Association for the study of Diabetes (EASD) via  [http://www.easd.org/](http://www.easd.org/)
- International Society for Paediatric and Adolescent Diabetes(ISPAD)  [http://www.ispad.org/](http://www.ispad.org/)

Notes

* indicates a resource which is noted for grey literature content
° The Web of Science search will use: Science Citation Index Expanded (SCI-EXPANDED); Social Sciences Citation Index (SSCI); Arts & Humanities Citation Index (A&HCI); Conference Proceedings Citation Index- Science (CPCI-S); Conference Proceedings Citation Index- Social Science & Humanities (CPCI-SSH)

The Cochrane Library will include: Cochrane Reviews, DARE, Central, Methods Studies, Health Technology Assessments, and NHS EED. We propose searching both CRD and Cochrane as CRD is updated more frequently.

Medline in Process and BL (British Library) Direct will be searched to re-affirm the currency of our search. These resources update more quickly than the standard databases meaning our evidence base for this review is as up-to-date as possible.
2. Proposed search syntax

Below is the search syntax we have tested in our scoping searches. It is written for the database Medline (via OVID) and makes use of controlled syntax (MeSH, in this case) and free-text, which is used to cross-check the indexing terms and ensure all viable references are retrieved.

The controlled indexing will be translated for each resource. Any individual variation in indexing will be accounted for in the notes field of each search.

All searching will be recorded to PRISMA standards, an example is below.

Sample Search for Medline:
**Database:** Medline
**Host:** OVID
**Data Parameters:** 1946 to October Week 2 2012
**Date Searched:** Tuesday, 23rd October 2012
**Hits:** 5804

**Strategy:**

<table>
<thead>
<tr>
<th>#</th>
<th>Searches</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>exp Diabetes Mellitus, Type 1/</td>
<td>57591</td>
</tr>
<tr>
<td>2</td>
<td>((typ$ 1 or typ$ I or type 1) adj3 diabet$).ti,ab.</td>
<td>29301</td>
</tr>
<tr>
<td>3</td>
<td>(T1DM or dm1).ti,ab.</td>
<td>2338</td>
</tr>
<tr>
<td>4</td>
<td>diabet$.ti,ab.</td>
<td>348751</td>
</tr>
<tr>
<td>5</td>
<td>1 or 2 or 3 or 4</td>
<td>355909</td>
</tr>
<tr>
<td>6</td>
<td>C-Peptide/</td>
<td>6951</td>
</tr>
<tr>
<td>7</td>
<td>(c-peptide$ or c peptide$).ti,ab.</td>
<td>8707</td>
</tr>
<tr>
<td>8</td>
<td>&quot;Connecting Peptide$&quot;.ti,ab.</td>
<td>292</td>
</tr>
<tr>
<td>9</td>
<td>6 or 7 or 8</td>
<td>11014</td>
</tr>
<tr>
<td>10</td>
<td>5 and 9</td>
<td>6230</td>
</tr>
<tr>
<td>11</td>
<td>exp animals/ not humans.sh.</td>
<td>3795620</td>
</tr>
<tr>
<td>12</td>
<td>10 not 11</td>
<td>5897</td>
</tr>
<tr>
<td>13</td>
<td>limit 12 to yr=&quot;1979 -Current&quot;</td>
<td>5804</td>
</tr>
</tbody>
</table>

**Notes on the Search Syntax**

The search operationalises the population and intervention for this review. We have left the search free of outcome measures, as these may bias the scope of the
retrieval to those we know to exist. The search will also not use any methodological filters. This means we will retrieve a variety of literature including, but not limited to, randomised controlled trials, observational studies, quality of life utilities and grey literature. It is a highly sensitive search strategy which reflects the broadness of our search approach. It also follows current thinking about restrictions to studies of diagnostic test accuracy, which is that the filters currently published are not completely reliable[1-4].

3. References

2. Doust JA, Pietrzak E, Sanders S, Glasziou PP. Identifying studies for systematic reviews of diagnostic tests was difficult due to the poor sensitivity and precision of methodologic filters and the lack of information in the abstract. Journal of Clinical Epidemiology 2005;58(5):444-9
4. Leeflang MMG, Scholten RJPM, Rutjes AWS, Reitsma JB, Bossuyt PMM. Use of methodological search filters to identify diagnostic accuracy studies can lead to the omission of relevant studies. Journal of Clinical Epidemiology 2006;59(3):234-40