

**eTable 2: Review questions, inclusion and exclusion criteria**

PIRO questions	Inclusion criteria	Exclusion criteria
Population	<ul style="list-style-type: none"> <li>has to reflect the real-world referral setting of a specialised care centre, i.e., patients with rapid progressive neurodegeneration who are suspected of sCJD, but have no final diagnosis yet</li> <li>has to be described in sufficient detail to allow for replication, validation, and generalization of the study, i.e., two of the following characteristics are described: age of patients, female to male ratio, or distribution of symptoms</li> </ul>	<p>criterion “<i>inappropriate / not well-defined population</i>” is met if</p> <ul style="list-style-type: none"> <li>the non-CJD group consists of healthy individuals or does not focus on patients representing true differential diagnoses of sCJD</li> <li>the samples are selected from biorepositories based on already known diagnoses</li> <li>the population is not sufficiently described</li> </ul>
Target condition	<ul style="list-style-type: none"> <li>sCJD according to ICD-10<sup>1</sup> and CJD 2010<sup>2,3</sup></li> </ul>	<p>criterion “<i>inappropriate target condition</i>” is met if</p> <ul style="list-style-type: none"> <li>patients represent a mixture of sporadic CJD with genetic or other types of CJD that cannot be disentangled</li> <li>the cases are reported to have CJD without further specification</li> </ul>
Index test	<ul style="list-style-type: none"> <li>has to be performed during the patient's first diagnostic workup for her/his symptoms without a pre-defined diagnosis</li> <li>has to be based on the measurement of biomarkers in blood or CSF</li> <li>has to be described in sufficient detail to allow for replication, validation, and generalization of the study</li> </ul>	<p>criterion “<i>insufficient information on index test</i>” is met if</p> <ul style="list-style-type: none"> <li>the index test is not sufficiently described</li> </ul>
Reference test	<ul style="list-style-type: none"> <li>has to use established diagnostic criteria of sCJD<sup>3,4</sup></li> <li>has to be described in sufficient detail to allow for replication, validation, and generalization of the study</li> </ul>	<p>criterion “<i>insufficient information on reference test</i>” is met if</p> <ul style="list-style-type: none"> <li>the reference test is not sufficiently described</li> </ul>
Outcome	<ul style="list-style-type: none"> <li>numbers of true positives, false negatives, false positives, and true negatives</li> <li>alternatively, sensitivity, specificity and the numbers of patients with and without sCJD to be able to calculate true positives, false negatives, false positives, and true negatives</li> </ul>	<p>criterion “<i>insufficient information on outcome</i>” is met if</p> <ul style="list-style-type: none"> <li>the outcome cannot be calculated from the information in the publication</li> </ul>
Further exclusion criteria to ensure that the included studies adequately answer the review question		<ul style="list-style-type: none"> <li>duplicated data</li> <li>samples not from living humans</li> <li>no diagnostic test accuracy study / study design cannot be determined</li> </ul>

**References:**

- World Health Organization. The ICD-10 Classification of Mental and Behavioural Disorders. 1993.
- World Health Organization. Global surveillance, diagnosis, and therapy of human transmissible spongiform encephalopathies: report of WHO consultation (WHO/EMC/ZDI/98/9). Geneva; 1998.

3. Zerr I, Kallenberg K, Summers DM, et al. Updated clinical diagnostic criteria for sporadic Creutzfeldt-Jakob disease. *Brain*. 2009;132:2659–2668.
4. Mackenzie G, Will R. Creutzfeldt-Jakob disease: recent developments. *F1000Research*. 2017;6:2053.