



WASHINGTON STATE

Newborn Screening Technical Advisory Committee (TAC)

Meeting to Review Branch-Chain Ketoacid Dehydrogenase Kinase (BCKDK) Deficiency for the Newborn Screening Panel

TAC Member Voting Summaries and Comments

The following is a compilation of comments from TAC members provided when voting on each individual criteria, and an overall recommendation. Comments have been summarized and are organized by each criterion and then overall comments provided.

Criteria		Major themes
1. Available Screening Technology		• Tests and technology are available for measuring BCA serum levels,
Yes, meets criterion.	6	but their performance, sensitivity, and specificity are unclear.
No, does not meet criterion.	7	• While the upper limits of normal BCA levels are defined, lower limits can be estimated from population norms, and tandem mass spectrometry is already used to directly measure BCA plasma levels.
Unsure.	4	spectrometry is already used to directly measure DCA plasma levels.

2. Diagnostic Testing and Treatment Available		•	There is very limited evidence available for this disorder, making it
Yes, meets criterion.	6		unclear whether diagnostic criteria are met.
No, does not meet criterion.	6	•	• The data on prevalence, long-term outcomes, false positives/negatives, and treatment effectiveness is insufficient, and the small sample size makes it difficult to verify the disorder's validity.
Unsure.	5		
3. Prevention Potential and Medical Rationale		•	• There is a lack of sufficient data on the prevalence, long-term outcomes with early treatment, and the number of patients in the
Yes, meets criterion.	7		literature, making it difficult to assess the relevant criteria.
No, does not meet criterion.	3		
Unsure.	7		

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4. Public Health Rationale	• Not enough information to assess this criterion. Rarity gives pause, but true prevalence is unknown.
Yes, meets criterion. 2	
No, does not meet criterion. 12	
Unsure. 3	
5. Cost Benefit / Cost Effectiveness Yes, meets criterion. 0	There is insufficient data available to evaluate the condition, including the lack of BCA testing, limited prevalence information, and
No, does not meet criterion. 13	only 21 patients reported in the literature.Screening is not being conducted, and there are concerns about
Unsure. 4	unintended consequences for conditions on the newborn screening panel.

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