

Best Evidence Summaries of Topics in Mental Healthcare

BEST *in* **MH** *clinical question-answering service*

Question

“For patients with learning disabilities and refractory epilepsy suffering from low white blood cell count (neutropenia), how effective is Zolamide, compared to Topiramate or any other anticonvulsant/anti-epileptic medication, for improving patient outcomes?”

Clarification of question using *PICO* structure

Patients: Patients with learning disabilities and refractory epilepsy suffering from low white blood cell count (neutropenia)
Intervention: Zolamide (Acetazolamide)
Comparator: Topiramate or any other anticonvulsant
Outcome: Improving any patient-related outcomes

Clinical and research implications

No relevant systematic reviews or randomised controlled trials could be found to answer this question.

What does the evidence say?

Number of included studies/reviews (number of participants)

N/A

Main findings

N/A

Authors conclusions

N/A

Reliability of conclusions/Strength of evidence

N/A

What do guidelines say?

Neither National Institute for Health and Care Excellence (NICE) nor Scottish Intercollegiate Guidelines Network (SIGN) guidelines comment upon patients with learning disabilities and refractory epilepsy who suffer from low white blood cell count (neutropenia). In addition, no guidelines were found to comment on the effectiveness of Zolamide compared to Topiramate or any other anticonvulsant/anti-epileptic medication, for improving patient outcomes.

Date question received: 05/03/2015

Date searches conducted: 19/03/2015

Date answer completed: 20/03/2015

Search details

Source	Search Strategy	Number of hits	Relevant evidence identified
<i>SRs and Guidelines</i>			
NICE	Neutropenia anticonvulsant learning disability	4	0
DARE	1 MeSH DESCRIPTOR Epilepsy EXPLODE ALL TREES 336 Delete 2 (epilep*) IN DARE 306 Delete 3 (refractory adj3 epilep*) IN DARE 43 Delete 4 (learn* adj3 disab*) IN DARE 54 Delete 5 (disab*) IN DARE 1335 Delete 6 MeSH DESCRIPTOR Developmental Disabilities EXPLODE ALL TREES 86 Delete 7 MeSH DESCRIPTOR Disabled Persons EXPLODE ALL TREES 187 Delete 8 MeSH DESCRIPTOR Intellectual Disability EXPLODE ALL TREES 202 Delete 9 MeSH DESCRIPTOR Learning Disorders EXPLODE ALL TREES 30 Delete 10 MeSH DESCRIPTOR Leukocytes EXPLODE ALL TREES 118 Delete 11 MeSH DESCRIPTOR Leukocyte Count EXPLODE ALL TREES 172 Delete 12 (neutropenia) IN DARE 276 Delete 13 MeSH DESCRIPTOR Neutrophils EXPLODE ALL TREES 23 Delete 14 (neutrop*) IN DARE 370 Delete 15 (white blood) IN DARE 52 Delete 16 (leukocyt*) IN DARE 101 Delete 17 MeSH DESCRIPTOR Acetazolamide EXPLODE ALL TREES 6 Delete 18 (Zolamide) IN DARE 0 Delete 19 (Acetazolamide) IN DARE 16 Delete 20 MeSH DESCRIPTOR Anticonvulsants EXPLODE ALL TREES 399 Delete 21 (anti?convulsant*) IN DARE 231 Delete	15	0

	<p>22 (anti?epilep**) IN DARE 143 Delete</p> <p>23 (Topiramate) IN DARE 61 Delete</p> <p>24 (Topamax) IN DARE 0 Delete</p> <p>25 #1 OR #2 OR #3 499 Delete</p> <p>26 #4 OR #5 OR #6 OR #7 OR #8 OR #9 1605 Delete</p> <p>27 #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 711 Delete</p> <p>28 #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 597 Delete</p> <p>29 #25 AND #26 AND #27 AND #28 0 Delete</p> <p>30 #25 AND #26 AND #28 15 Delete</p>		
Primary studies			
CENTRAL	<p>#1 acetazolamide or zolamide 601</p> <p>#2 Topiramate 851</p> <p>#3 #1 and #2 19</p> <p>#4 epilepsy or refractory epilepsy 5078</p> <p>#5 MeSH descriptor: [Learning Disorders] explode all trees 458</p> <p>#6 MeSH descriptor: [Intellectual Disability] explode all trees 1047</p> <p>#7 "learning dis*" 871</p> <p>#8 #5 or #6 or #7 2018</p> <p>#9 MeSH descriptor: [Anticonvulsants] explode all trees 2108</p> <p>#10 #2 or #9 2742</p> <p>#11 #1 and #10 and #4 and #8 6</p> <p>Central only 0</p>	0	0
PsycINFO	<p>33. PsycINFO; exp LEARNING DISORDERS/; 30476 results.</p> <p>34. PsycINFO; "learning dis*".ti,ab; 21189 results.</p> <p>35. PsycINFO; exp INTELLECTUAL DEVELOPMENT DISORDER/; 39817 results.</p> <p>36. PsycINFO; 33 OR 34 OR 35; 72833 results.</p> <p>37. PsycINFO; exp EPILEPSY/; 20442 results.</p> <p>38. PsycINFO; "refractory epilepsy".ti,ab; 640 results.</p> <p>39. PsycINFO; 37 OR 38; 20517 results.</p> <p>40. PsycINFO; 36 AND 39; 799 results.</p>	1	0

	<p>41. PsycINFO; Zolamide.ti,ab; 0 results.</p> <p>42. PsycINFO; acetazolamide.ti,ab; 227 results.</p> <p>43. PsycINFO; 41 OR 42; 227 results.</p> <p>44. PsycINFO; Topiramate.ti,ab; 1340 results.</p> <p>45. PsycINFO; 40 AND 43 AND 44; 0 results.</p> <p>46. PsycINFO; exp ANTICONVULSIVE AGENT/; 0 results.</p> <p>47. PsycINFO; 44 OR 46; 1340 results.</p> <p>48. PsycINFO; 40 AND 43 AND 47; 0 results.</p> <p>49. PsycINFO; exp ANTICONVULSIVE DRUGS/; 9745 results.</p> <p>50. PsycINFO; 44 OR 49; 10360 results.</p> <p>51. PsycINFO; 40 AND 43 AND 50; 1 results.</p>		
Embase	<p>16. EMBASE; exp LEARNING DISORDERS/; 26188 results.</p> <p>17. EMBASE; "learning dis*".ti,ab; 10020 results.</p> <p>18. EMBASE; exp INTELLECTUAL DEVELOPMENT DISORDER/; 0 results.</p> <p>19. EMBASE; 16 OR 17 OR 18; 28582 results.</p> <p>20. EMBASE; exp EPILEPSY/; 172736 results.</p> <p>21. EMBASE; "refractory epilepsy".ti,ab; 3975 results.</p> <p>22. EMBASE; 20 OR 21; 172914 results.</p> <p>23. EMBASE; 19 AND 22; 2051 results.</p> <p>24. EMBASE; Zolamide.ti,ab; 3 results.</p> <p>25. EMBASE; acetazolamide.ti,ab; 5548 results.</p> <p>26. EMBASE; 24 OR 25; 5549 results.</p> <p>28. EMBASE; Topiramate.ti,ab; 5327 results.</p> <p>29. EMBASE; 23 AND 26 AND 28; 0 results.</p> <p>30. EMBASE; exp ANTICONVULSIVE AGENT/; 276186 results.</p> <p>31. EMBASE; 28 OR 30; 276371 results.</p> <p>32. EMBASE; 23 AND 26 AND 31; 2 results.</p>	2	0
Medline	<p>30. MEDLINE; exp LEARNING DISORDERS/; 19215 results.</p> <p>31. MEDLINE; "learning dis*".ti,ab; 8229 results.</p>	0	0

	<p>32. MEDLINE; exp INTELLECTUAL DEVELOPMENT DISORDER/; 0 results.</p> <p>33. MEDLINE; 30 OR 31 OR 32; 22417 results.</p> <p>34. MEDLINE; exp EPILEPSY/; 131866 results.</p> <p>35. MEDLINE; "refractory epilepsy".ti,ab; 2322 results.</p> <p>36. MEDLINE; 34 OR 35; 132234 results.</p> <p>37. MEDLINE; 33 AND 36; 769 results.</p> <p>38. MEDLINE; Zolamide.ti,ab; 1 results.</p> <p>39. MEDLINE; acetazolamide.ti,ab; 5079 results.</p> <p>40. MEDLINE; 38 OR 39; 5079 results.</p> <p>41. MEDLINE; Topiramate.ti,ab; 3375 results.</p> <p>42. MEDLINE; 37 AND 40 AND 41; 0 results.</p> <p>43. MEDLINE; exp ANTICONVULSANTS/; 119109 results.</p> <p>44. MEDLINE; 41 OR 43; 120494 results.</p> <p>45. MEDLINE; 37 AND 40 AND 44; 0 results.</p>		
Summary	NA	NA	

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