

【4-9 メタアナリシス】

<b>CQ</b>		予後良好群で全脳転移病巣の最大径が3cm以下であり、脳転移個数が1-4個までの乳癌脳転移に対して、初期治療として定位放射線療法(SRS)を行い全脳照射を省略することは勧められるか。																																																																									
<b>P</b>	乳癌脳転移	<b>I</b>	SRS																																																																								
<b>C</b>	SRS+WBRT	<b>O</b>	全生存期間																																																																								
<b>研究デザイン</b>	RCT	<b>文献数</b>	3	<b>コード</b>	Aoyama 2006, Chang 2009, Brown 2016																																																																						
<b>モデル</b>	ランダム効果モデル	<b>方法</b>	Mantel-Haenszel法																																																																								
<b>効果指標</b>	リスク比	<b>統合値</b>	0.99 ( 0.86 - 1.15 ) P= 0.94																																																																								
<b>Forest plot</b>	<table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="2">SRS alone</th> <th colspan="2">SRS+WBRT</th> <th rowspan="2">Weight</th> <th colspan="2">Risk Ratio</th> </tr> <tr> <th>Events</th> <th>Total</th> <th>Events</th> <th>Total</th> <th>M-H, Random, 95% CI</th> <th>M-H, Random, 95% CI</th> </tr> </thead> <tbody> <tr> <td>AOYAMA 2006</td> <td>62</td> <td>67</td> <td>57</td> <td>65</td> <td>41.4%</td> <td>1.06</td> <td>[0.94, 1.18]</td> </tr> <tr> <td>BROWN 2016</td> <td>96</td> <td>111</td> <td>83</td> <td>102</td> <td>40.5%</td> <td>1.06</td> <td>[0.94, 1.20]</td> </tr> <tr> <td>CHANG 2009</td> <td>20</td> <td>30</td> <td>25</td> <td>28</td> <td>18.0%</td> <td>0.75</td> <td>[0.56, 0.99]</td> </tr> <tr> <td><b>Total (95% CI)</b></td> <td></td> <td><b>208</b></td> <td></td> <td><b>195</b></td> <td><b>100.0%</b></td> <td><b>0.99</b></td> <td><b>[0.86, 1.15]</b></td> </tr> <tr> <td>Total events</td> <td colspan="2">178</td> <td colspan="2">165</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="8">Heterogeneity: Tau<sup>2</sup> = 0.01; Chi<sup>2</sup> = 5.59, df = 2 (P = 0.06); I<sup>2</sup> = 64%</td> </tr> <tr> <td colspan="8">Test for overall effect: Z = 0.08 (P = 0.94)</td> </tr> </tbody> </table>				Study or Subgroup	SRS alone		SRS+WBRT		Weight	Risk Ratio		Events	Total	Events	Total	M-H, Random, 95% CI	M-H, Random, 95% CI	AOYAMA 2006	62	67	57	65	41.4%	1.06	[0.94, 1.18]	BROWN 2016	96	111	83	102	40.5%	1.06	[0.94, 1.20]	CHANG 2009	20	30	25	28	18.0%	0.75	[0.56, 0.99]	<b>Total (95% CI)</b>		<b>208</b>		<b>195</b>	<b>100.0%</b>	<b>0.99</b>	<b>[0.86, 1.15]</b>	Total events	178		165					Heterogeneity: Tau <sup>2</sup> = 0.01; Chi <sup>2</sup> = 5.59, df = 2 (P = 0.06); I <sup>2</sup> = 64%								Test for overall effect: Z = 0.08 (P = 0.94)								
Study or Subgroup	SRS alone		SRS+WBRT			Weight	Risk Ratio																																																																				
	Events	Total	Events	Total	M-H, Random, 95% CI		M-H, Random, 95% CI																																																																				
AOYAMA 2006	62	67	57	65	41.4%	1.06	[0.94, 1.18]																																																																				
BROWN 2016	96	111	83	102	40.5%	1.06	[0.94, 1.20]																																																																				
CHANG 2009	20	30	25	28	18.0%	0.75	[0.56, 0.99]																																																																				
<b>Total (95% CI)</b>		<b>208</b>		<b>195</b>	<b>100.0%</b>	<b>0.99</b>	<b>[0.86, 1.15]</b>																																																																				
Total events	178		165																																																																								
Heterogeneity: Tau <sup>2</sup> = 0.01; Chi <sup>2</sup> = 5.59, df = 2 (P = 0.06); I <sup>2</sup> = 64%																																																																											
Test for overall effect: Z = 0.08 (P = 0.94)																																																																											
	コメント: 有意差なし																																																																										
<b>Funnel plot</b>																																																																											
	コメント:																																																																										
<b>その他の解析</b>					コメント:																																																																						
メタリグレッション																																																																											
感度分析																																																																											

【4-9 メタアナリシス】

<b>CQ</b>		1-4個までの乳癌脳転移に対し初期治療としてSRSを行い全脳照射を省略することは勧められるか																																																																									
<b>P</b>	乳癌脳転移	<b>I</b>	SRS																																																																								
<b>C</b>	SRS+WBRT	<b>O</b>	頭蓋内制御率																																																																								
<b>研究デザイン</b>	RCT	<b>文献数</b>	3	<b>コード</b>	Aoyama 2006, Chang 2009, Brown 2016																																																																						
<b>モデル</b>	ランダム効果モデル	<b>方法</b>	Mantel-Haenszel法																																																																								
<b>効果指標</b>	リスク比	<b>統合値</b>	2.35 ( 1.53 - 3.62 ) P= 0.0001																																																																								
<b>Forest plot</b>	<table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="2">SRS alone</th> <th colspan="2">SRS+WBRT</th> <th rowspan="2">Weight</th> <th colspan="2">Risk Ratio</th> </tr> <tr> <th>Events</th> <th>Total</th> <th>Events</th> <th>Total</th> <th>M-H, Random, 95% CI</th> <th>M-H, Random, 95% CI</th> </tr> </thead> <tbody> <tr> <td>AOYAMA 2006</td> <td>40</td> <td>67</td> <td>23</td> <td>65</td> <td>40.9%</td> <td>1.69</td> <td>[1.15, 2.47]</td> </tr> <tr> <td>BROWN 2016</td> <td>51</td> <td>103</td> <td>14</td> <td>91</td> <td>32.2%</td> <td>3.22</td> <td>[1.91, 5.41]</td> </tr> <tr> <td>CHANG 2009</td> <td>23</td> <td>30</td> <td>8</td> <td>28</td> <td>26.9%</td> <td>2.68</td> <td>[1.45, 4.98]</td> </tr> <tr> <td><b>Total (95% CI)</b></td> <td></td> <td><b>200</b></td> <td></td> <td><b>184</b></td> <td><b>100.0%</b></td> <td><b>2.35</b></td> <td><b>[1.53, 3.62]</b></td> </tr> <tr> <td>Total events</td> <td colspan="2">114</td> <td colspan="2">45</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="8">Heterogeneity: Tau<sup>2</sup> = 0.08; Chi<sup>2</sup> = 4.47, df = 2 (P = 0.11); I<sup>2</sup> = 55%</td> </tr> <tr> <td colspan="8">Test for overall effect: Z = 3.89 (P &lt; 0.0001)</td> </tr> </tbody> </table>				Study or Subgroup	SRS alone		SRS+WBRT		Weight	Risk Ratio		Events	Total	Events	Total	M-H, Random, 95% CI	M-H, Random, 95% CI	AOYAMA 2006	40	67	23	65	40.9%	1.69	[1.15, 2.47]	BROWN 2016	51	103	14	91	32.2%	3.22	[1.91, 5.41]	CHANG 2009	23	30	8	28	26.9%	2.68	[1.45, 4.98]	<b>Total (95% CI)</b>		<b>200</b>		<b>184</b>	<b>100.0%</b>	<b>2.35</b>	<b>[1.53, 3.62]</b>	Total events	114		45					Heterogeneity: Tau <sup>2</sup> = 0.08; Chi <sup>2</sup> = 4.47, df = 2 (P = 0.11); I <sup>2</sup> = 55%								Test for overall effect: Z = 3.89 (P < 0.0001)								<p>コメント: 有意差あり</p>
Study or Subgroup	SRS alone		SRS+WBRT			Weight	Risk Ratio																																																																				
	Events	Total	Events	Total	M-H, Random, 95% CI		M-H, Random, 95% CI																																																																				
AOYAMA 2006	40	67	23	65	40.9%	1.69	[1.15, 2.47]																																																																				
BROWN 2016	51	103	14	91	32.2%	3.22	[1.91, 5.41]																																																																				
CHANG 2009	23	30	8	28	26.9%	2.68	[1.45, 4.98]																																																																				
<b>Total (95% CI)</b>		<b>200</b>		<b>184</b>	<b>100.0%</b>	<b>2.35</b>	<b>[1.53, 3.62]</b>																																																																				
Total events	114		45																																																																								
Heterogeneity: Tau <sup>2</sup> = 0.08; Chi <sup>2</sup> = 4.47, df = 2 (P = 0.11); I <sup>2</sup> = 55%																																																																											
Test for overall effect: Z = 3.89 (P < 0.0001)																																																																											
<b>Funnel plot</b>																																																																											
<b>その他の解析</b>					コメント:																																																																						
メタリグレッション																																																																											
感度分析																																																																											

【4-9 メタアナリシス】

<b>CQ</b>		1-4個までの乳癌脳転移に対し初期治療としてSRSを行い全脳照射を省略することは勧められるか																																																																	
<b>P</b>	乳癌脳転移	<b>I</b>	SRS																																																																
<b>C</b>	SRS+WBRT	<b>O</b>	高次機能障害 (HVLt-R)																																																																
<b>研究デザイン</b>	RCT	<b>文献数</b>	2	<b>コード</b>	Chang 2009, Brown 2016																																																														
<b>モデル</b>	ランダム効果モデル	<b>方法</b>	Mantel-Haenszel法																																																																
<b>効果指標</b>	リスク比	<b>統合値</b>	0.53 ( 0.21 - 1.15 ) P= .11																																																																
<b>Forest plot</b>	<table border="1"> <thead> <tr> <th rowspan="2">Study or Subgroup</th> <th colspan="2">SRS alone</th> <th colspan="2">SRS+WBRT</th> <th rowspan="2">Weight</th> <th colspan="2">Risk Ratio</th> </tr> <tr> <th>Events</th> <th>Total</th> <th>Events</th> <th>Total</th> <th>M-H, Random, 95% CI</th> <th>M-H, Random, 95% CI</th> </tr> </thead> <tbody> <tr> <td>BROWN 2016</td> <td>40</td> <td>63</td> <td>44</td> <td>48</td> <td>67.3%</td> <td>0.69</td> <td>[0.56, 0.85]</td> </tr> <tr> <td>CHANG 2009</td> <td>4</td> <td>20</td> <td>7</td> <td>11</td> <td>32.7%</td> <td>0.31</td> <td>[0.12, 0.84]</td> </tr> <tr> <td><b>Total (95% CI)</b></td> <td></td> <td><b>83</b></td> <td></td> <td><b>59</b></td> <td><b>100.0%</b></td> <td><b>0.53</b></td> <td><b>[0.25, 1.15]</b></td> </tr> <tr> <td colspan="2">Total events</td> <td>44</td> <td>51</td> <td colspan="4"></td> </tr> <tr> <td colspan="8">Heterogeneity: Tau<sup>2</sup> = 0.22; Chi<sup>2</sup> = 2.65, df = 1 (P = 0.10); I<sup>2</sup> = 62%</td> </tr> <tr> <td colspan="8">Test for overall effect: Z = 1.60 (P = 0.11)</td> </tr> </tbody> </table> <p>コメント: SRS群で少ない傾向があるが、有意差なし</p>					Study or Subgroup	SRS alone		SRS+WBRT		Weight	Risk Ratio		Events	Total	Events	Total	M-H, Random, 95% CI	M-H, Random, 95% CI	BROWN 2016	40	63	44	48	67.3%	0.69	[0.56, 0.85]	CHANG 2009	4	20	7	11	32.7%	0.31	[0.12, 0.84]	<b>Total (95% CI)</b>		<b>83</b>		<b>59</b>	<b>100.0%</b>	<b>0.53</b>	<b>[0.25, 1.15]</b>	Total events		44	51					Heterogeneity: Tau <sup>2</sup> = 0.22; Chi <sup>2</sup> = 2.65, df = 1 (P = 0.10); I <sup>2</sup> = 62%								Test for overall effect: Z = 1.60 (P = 0.11)							
Study or Subgroup	SRS alone		SRS+WBRT		Weight		Risk Ratio																																																												
	Events	Total	Events	Total		M-H, Random, 95% CI	M-H, Random, 95% CI																																																												
BROWN 2016	40	63	44	48	67.3%	0.69	[0.56, 0.85]																																																												
CHANG 2009	4	20	7	11	32.7%	0.31	[0.12, 0.84]																																																												
<b>Total (95% CI)</b>		<b>83</b>		<b>59</b>	<b>100.0%</b>	<b>0.53</b>	<b>[0.25, 1.15]</b>																																																												
Total events		44	51																																																																
Heterogeneity: Tau <sup>2</sup> = 0.22; Chi <sup>2</sup> = 2.65, df = 1 (P = 0.10); I <sup>2</sup> = 62%																																																																			
Test for overall effect: Z = 1.60 (P = 0.11)																																																																			
<b>Funnel plot</b>	<p>コメント:</p>																																																																		
<b>その他の解析</b>					コメント:																																																														
メタリグレッション																																																																			
感度分析																																																																			