

### 1.3 PHARMACOLOGICAL INTERVENTIONS FOR ACUTE DEPRESSION IN ADULTS WITH BIPOLAR DISORDER

*Reference to included study:*

Ekman M, Lindgren P, Miltenburger C, Meier G, Locklear JC, Chatterton ML. Cost effectiveness of quetiapine in patients with acute bipolar depression and in maintenance treatment after an acute depressive episode. *PharmacoEconomics*. 2012;30:513-30.

Study ID Country Study type	Intervention details	Study population Study design Data sources	Costs: description and values Outcomes: description and values	Results: Cost-effectiveness	Comments																					
Ekman and colleagues (2012)  UK  Cost-utility analysis	<p><u>Interventions:</u></p> <p>Quetiapine (Que)</p> <p>Quetiapine and mood stabiliser (lithium [Li] or divalproex) (Que and MS)</p> <p>Olanzapine (Olz)</p> <p>Olz and Li, Olz replaced by venlafaxine (Ven) in acute depression (Olz and Li 1)</p> <p>Olz and Li, Olz replaced by paroxetine in acute depression (Olz and Li 2)</p> <p>Aripiprazole, replaced by Olz and Ven in acute depression (Ari)</p>	<p><u>Population:</u></p> <p>Adults aged 40 years with bipolar disorder (I or II) experiencing an acute depressive episode or being in remission</p> <p><u>Study design:</u></p> <p>Decision analytic modelling (discrete event simulation)</p> <p><u>Source of effectiveness data:</u> RCTs and meta-analyses</p> <p><u>Source of resource use data:</u> Published data based on expert opinion</p> <p><u>Source of unit cost data:</u> National sources</p>	<p><u>Costs: Direct medical:</u> hospitalisation, outpatient care, crisis teams, staff costs including senior house officer (SHO), general practitioner (GP), community psychiatric nurse (CPN), practice nurse and dietician, drug acquisition, laboratory tests, costs of adverse events included; indirect costs considered in sensitivity analysis</p> <p><u>Primary outcome:</u> QALY</p> <p><u>Costs and QALYs per 1000 people starting in acute depression:</u></p> <table border="0"> <tr> <td><i>Que:</i></td> <td>£21,874;</td> <td>3.497</td> </tr> <tr> <td><i>Que and MS:</i></td> <td>£21,324;</td> <td>3.524</td> </tr> <tr> <td><i>Olz:</i></td> <td>£21,551;</td> <td>3.460</td> </tr> <tr> <td><i>Olz and Li 1:</i></td> <td>£22,425;</td> <td>3.495</td> </tr> <tr> <td><i>Olz and Li 2:</i></td> <td>£22,073;</td> <td>3.489</td> </tr> <tr> <td><i>Ari:</i></td> <td>£24,657;</td> <td>3.472</td> </tr> <tr> <td><i>Mixed:</i></td> <td>£21,618;</td> <td>3.484</td> </tr> </table>	<i>Que:</i>	£21,874;	3.497	<i>Que and MS:</i>	£21,324;	3.524	<i>Olz:</i>	£21,551;	3.460	<i>Olz and Li 1:</i>	£22,425;	3.495	<i>Olz and Li 2:</i>	£22,073;	3.489	<i>Ari:</i>	£24,657;	3.472	<i>Mixed:</i>	£21,618;	3.484	<p><u>Start in acute depression:</u> Que and MS dominates all; Que dominates all except Olz and Mixed</p> <p><u>ICER of Que versus Olz:</u> 8,591/QALY</p> <p><u>ICER of Que versus Mixed:</u> £18,570/QALY</p> <p><u>Compared with Olz, probability of Que being cost-effective at WTP 0 and £30,000/QALY:</u> 21%; 90%</p> <p>Results (quetiapine versus olanzapine) robust under several alternative scenarios but moderately sensitive to inclusion of indirect costs, time horizon, treatment duration and dosages</p>	<p><u>Perspective:</u> NHS <u>Currency:</u> UK£ <u>Cost year:</u> 2011 <u>Time horizon:</u> 5 years <u>Discounting:</u> 3.5% <u>Applicability:</u> Directly applicable <u>Quality:</u> Very serious limitations; evidence synthesis methods inappropriate as populations, phase of disorder and outcome measures differed across RCTs used for indirect comparisons</p> <p>Quetiapine and olanzapine are now available in generic form</p>
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	Mixed scenario: risperidone in mania, Ven and Li in depression, Olz in maintenance (Mixed)				
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