Background
People presenting with agitated or violent behaviour thought to be due to severe mental illness may require urgent pharmacological tranquillisation.

Clinicians are now being encouraged to use preparations of olanzapine for management of such agitation.

Objectives
To estimate the effects of intramuscular olanzapine or oral ‘velotab’ olanzapine compared with other treatments for controlling aggressive behaviour or agitation secondary to mental illness.

Search strategy
Cochrane Schizophrenia Group's Register (December 2003)
References of all included studies
Eli-illy & Co
Authors of included studies

Criteria
Study methods
Randomised trials

Participants
People with sever mental illness, diagnosed by any criteria

Interventions
• Olanzapine: oral-velotab or IM
• Placebo or no treatment
• Any other drugs, administered orally or by IM injection

Data collection & analysis
We independently inspected citations and extracted data.

We calculated relative risk (RR), 95% confidence interval (CI) and the number needed to treat (NNT) on an intention-to-treat basis.

Results
We found four randomised studies comparing olanzapine IM with either placebo, or the active comparators of haloperidol or lorazepam.
We identified no studies of olanzapine velotab.

Study | Methods | Participants | Interventions | Outcomes
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Einer 2001 | Olanzapine IM or velotab for acutely disturbed/agitated people with suspected serious mental illnesses: a Cochrane review
 | Olanzapine IM or velotab for acutely disturbed/agitated people with suspected serious mental illnesses: a Cochrane review | Olanzapine IM or velotab for acutely disturbed/agitated people with suspected serious mental illnesses: a Cochrane review | Olanzapine IM or velotab for acutely disturbed/agitated people with suspected serious mental illnesses: a Cochrane review | Olanzapine IM or velotab for acutely disturbed/agitated people with suspected serious mental illnesses: a Cochrane review

Results
Olanzapine vs placebo

More people given IM olanzapine respond (= reduction in PANSS-EC by 40%) by 2 hours, compared with placebo (NNT 4 CI 3 to 5).

Outcome: No response by 2 hours

Results
Olanzapine vs haloperidol or lorazepam

Compared with active control drugs (haloperidol or lorazepam), olanzapine IM is no more effective by two hours.

Outcome: No response by 2 hours

Results
Olanzapine vs haloperidol or lorazepam

Those given IM olanzapine did not need any less injections than people on other treatments.

Outcome: Requiring further injection

Results
Olanzapine vs haloperidol or lorazepam

Fewer people given olanzapine IM required anticholinergics compared with 7.5 mg haloperidol (NNT 8 CI 7 to 11).

Outcome: Requiring anticholinergic drugs

Discussion
• The design of the studies did not reflect real-world conditions.
• IM olanzapine is a costly under-researched alternative to haloperidol or lorazepam, but there probably are more effective, less expensive alternatives.