



<b>Title</b>	<b>Antibiotic Therapy in Hospital, Oral versus Intravenous Treatment</b>
<b>Agency</b>	NOKC, Norwegian Knowledge Centre for the Health Services PO Box 7004 St Olavs plass, NO-0130 Oslo, Norway; Tel: +47 23 25 50 00, Fax: +47 23 25 50 10; post@nokc.no, www.nokc.no
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## Aim

To determine if efficacy differs between oral and intravenous antibiotic treatment of infectious diseases in large and important groups of patients.

## Conclusions and results

The documentation provides no basis for determining whether a difference exists in the efficacy and side effects of oral versus intravenous administration of antibiotics. This does not mean that there are no differences in the administration route, but that the results are too uncertain to draw conclusions.

We included 6 systematic reviews that evaluated the effect of oral versus intravenous administration of antibiotics for pneumonia, urinary tract infection, osteomyelitis, spontaneous bacterial peritonitis, and febrile neutropenia in cancer patients. In addition, we included 10 randomized controlled trials. On the whole, we found no significant differences between oral and intravenous administration of antibiotics. The quality of this documentation is low, and the estimates are therefore uncertain.

## Methods

We based this systematic review on a search for other systematic reviews in relevant bibliographic databases. For pneumonia and urinary tract infections, we also searched for randomized controlled trials. We compiled, analyzed, and graded the quality of the documentation and summarized the results for 6 main outcomes; total mortality, cure rates, treatment failure, readmissions, length of stay in hospital, and serious side effects.

## Further research/reviews required

The report reveals a lack of high-quality documentation addressing oral versus intravenous antibiotic use. We need more and better research on large patient groups. Since the use of antibiotics and resistance conditions in Norway still differ somewhat from countries outside the Nordic region, studies carried out in Norway or Scandinavia are needed.