

Evidence review: prevention and management of neutropenic sepsis in cancer patients

Reference and country	Study type and period	Study quality	Number of patients	Patient characteristics	Intervention	Comparison	Length of follow-up	Outcomes	Source of funding	Additional comments																						
Maiche 1993 Eur J Cancer. 1993;29A(10):1403-5.	RCT.	No mention of allocation concealment or blinding	59 (92 courses of chemotherapy)	Adult patients with lymphoma or solid tumours who had earlier developed an infection following antineoplastic chemotherapy	G-CSF plus quinolone (ofloxacin or ciprofloxacin)	G-CSF alone	Not reported – outcomes were assessed over the course of chemotherapy.	<p>Documented infection rate (per course of chemotherapy)</p> <table border="1"> <thead> <tr> <th></th> <th>n</th> <th>N</th> </tr> </thead> <tbody> <tr> <td>G-CSF + ABX</td> <td>6</td> <td>44</td> </tr> <tr> <td>G-GCSF</td> <td>15</td> <td>48</td> </tr> </tbody> </table> <p>Microbiologically documented infection rate (per course of chemotherapy)</p> <table border="1"> <thead> <tr> <th></th> <th>n</th> <th>N</th> </tr> </thead> <tbody> <tr> <td>G-CSF + ABX</td> <td>2</td> <td>44</td> </tr> <tr> <td>G-GCSF</td> <td>9</td> <td>48</td> </tr> </tbody> </table> <p>Duration of leukopenia (<1.0 X 10⁹/l)</p> <table border="1"> <thead> <tr> <th></th> <th>Median (range)</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>		n	N	G-CSF + ABX	6	44	G-GCSF	15	48		n	N	G-CSF + ABX	2	44	G-GCSF	9	48		Median (range)			Not reported	Inconsistency between numbers in the text and tables 1. Figures from tables 1 used
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Leonard et al (2009)	RCT. 2001 to 2007	Allocation concealment adequate (according to protocol). No blinding	407	Adult patients with breast cancer and neutropenia (ANC < 1.5 X 10 ⁹ /l) or hospitalisation due to neutropenia	G-CSF (filgrastim or pegfilgrastim) as secondary prophylaxis	No G-CSF (chemotherapy dose reduction or delay)	Outcomes measured after each cycle and at the end of chemotherapy.. Long term follow up for overall survival (10 years).	<p>Neutropenia proportion of patients with neutropenic events – hospitalization due to neutropenia (ANC < 1.5 X 10⁹/l) or ANC low enough to require treatment delay or ≥15% dose reduction</p> <table border="1"> <thead> <tr> <th></th> <th>n</th> <th>N</th> </tr> </thead> <tbody> <tr> <td>G-CSF</td> <td>36</td> <td>204</td> </tr> <tr> <td>No G-GCSF</td> <td>132</td> <td>203</td> </tr> </tbody> </table> <p>Relative dose intensity proportion of patients who received at least 85% of the planned RDI.</p>		n	N	G-CSF	36	204	No G-GCSF	132	203	Amgen	Abstract only, trial protocol also used.
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