

NCCP Guidance on Bevacizumab Rapid Infusion Rate

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1 Background

The licensed infusion rate of bevacizumab in the treatment of cancer can take between 30 to 90 minutes. To improve efficiency and convenience for patients and carers, many hospitals have moved to an unlicensed rapid infusion rate where appropriate¹. The use of a rapid infusion rate is a feasible and well tolerated option to reduce the amount of time to infuse each dose of bevacizumab.

The information contained within this guidance is the most accurate and up to date, at date of approval. This document is intended as a template for local adoption and approval at Drugs and Therapeutics Committee, or equivalent, in line with hospital policy.

2 Infusion Rates

The licensed administration rate of bevacizumab for the treatment of patients with cancer is:

- **Initial Infusion:** The initial dose should be delivered over 90 minutes as an IV infusion.
- **Second Infusion:** If the first infusion is well tolerated the second infusion may be administered over 60 minutes
- **Subsequent Infusions:** If the 60 minute infusion is well tolerated then all subsequent infusions may be administered over 30 minutes

The unlicensed rapid infusion rate for bevacizumab is detailed in Table 1. (1-6)

Table 1 Unlicensed Rapid Infusion Rates for bevacizumab according to dose

Bevacizumab Dose (mg/kg)	*Duration of Infusion (min)
5	10
7.5	10
10	20
15	30

***NOTE: Bevacizumab should not be administered undiluted as an intravenous push or bolus**

3 Patient selection for rapid infusion rate

Not all patients will be deemed clinically suitable to have bevacizumab administered at a rapid rate.

3.1 Suitable patients

The rapid infusion rate is only to be used in patients who have received at least one full dose of the specific brand of bevacizumab to be administered and who did not experience any serious infusion – related reactions (IRRs).

¹ This is an unlicensed rate of administration for bevacizumab in Ireland. Patient's should be informed of this and consented to treatment in line with the hospital's policy on the use of unlicensed medication and unlicensed or "off label" indications. Prescribers should be fully aware of their responsibility in communicating any relevant information to the patient and also ensuring that the unlicensed or "off label" indication has been acknowledged by the hospital's Drugs and Therapeutics Committee, or equivalent, in line with hospital policy.

3.2 Patients unsuitable for rapid rate infusion

- Patients due to receive their first infusion of bevacizumab.
- Patients who have experienced a previous serious infusion-related reaction to any prior biologic therapy.
- Patients deemed unsuitable by their treating clinician.

4 Use of pre-medications to prevent IRRs

There is no requirement for pre-medications to prevent IRRs unless the patient has had a previous hypersensitivity.

5 Bevacizumab rapid infusion rate

If a patient does not experience a serious infusion related reaction with their first or subsequent infusions of a dose of bevacizumab administered as per the standard infusion schedule, a more rapid infusion can be administered for second and subsequent infusions using the same dose as in previous infusions for those patients as deemed suitable per 3.1 above. The duration of infusion according to bevacizumab dose is detailed in Table 1 above.

6 References

1. Reidy, DL, Chung KY, Timoney JP, Park VJ, Hollywood E, et al. Bevacizumab 5 mg/kg Can Be Infused Safely Over 10 Minutes. 2007;25(19):2691-5.
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3. Dohn LH, BV J, FO L. Short time infusion of bevacizumab in combination with 5FU-based chemotherapy as first-line therapy in a non-selective patient group with metastatic colorectal cancer. 2010;49(3):395-6.
4. Saltz LB et al. Simplification of bevacizumab (bev) administration: Do we need 90, 60, or even 30 minute infusion times? Journal of Clinical Oncology. 2006;24:3542-.
5. Mir O, Alexandre J, et al. Safety of bevacizumab 7.5 mg/kg infusion over 10 minutes in NSCLC patients. Invest New Drugs 2012;30(4):1756-60.
6. Coriat R MO, Chaussade S, Goldwasser F. Safety of 10 min infusion of bevacizumab in combination with 5FU-based chemotherapy in non-selected metastatic colorectal cancer patients. Digest Liver Dis 2011;43:248-9.