

# Breast metastatic vinORELBine (IV)

ID: 38 v.5 **Endorsed** [Essential Medicine List](#)

Check for clinical trials in this patient group. Link to [Australian Clinical Trials](#) website

The anticancer drug(s) in this protocol may have been included in the ADDIKD guideline. Dose recommendations in kidney dysfunction have yet to be updated to align with the ADDIKD guideline. Recommendations will be updated once the individual protocol has been evaluated by the reference committee. For further information refer to the ADDIKD guideline. To assist with calculations, use the [eviQ Estimated Glomerular Filtration Rate \(eGFR\) calculator](#).

## International Consensus Guideline for Anticancer Drug Dosing in Kidney Dysfunction (ADDIKD)

2022

[Click here](#)



### Related pages:

- [Breast metastatic vinORELBine \(oral\)](#)

## Treatment schedule - Overview

### Cycle 1 and further cycles

| Drug        | Dose                 | Route       | Day     |
|-------------|----------------------|-------------|---------|
| vinORELBine | 30 mg/m <sup>2</sup> | IV infusion | 1 and 8 |

**Frequency:** 21 days

**Cycles:** Continuous until disease progression or unacceptable toxicity

**Drug status:** Vinorelbine is on the [PBS general schedule](#)

**Cost:** ~ \$230 per cycle

## Treatment schedule - Detail

*The supportive therapies (e.g. antiemetics, premedications, etc.), infusion times, diluents, volumes and routes of administration, if included, are listed as defaults. They may vary between institutions and can be substituted to reflect individual institutional policy.*

*Antiemetics if included in the treatment schedule are based upon recommendations from national and international guidelines. These are **defaults only** and may be substituted to reflect individual institutional policy. [Select here for recommended doses of alternative antiemetics.](#)*

### Cycle 1 and further cycles

| Day 1 and 8 |                                    |  |
|-------------|------------------------------------|--|
| vinORELBine | 30 mg/m <sup>2</sup> (IV infusion) | in 50 mL sodium chloride 0.9% over 6 to 10 minutes |

**Frequency:** 21 days

**Cycles:** Continuous until disease progression or unacceptable toxicity

## Indications and patient population

- Advanced breast cancer after failure of prior therapy which included anthracyclines and taxanes

## Clinical information

|  |  |
|--|--|
| <b>Venous access required</b>                | IV cannula (IVC) or central venous access device (CVAD) is required to administer this treatment.<br>Read more about <a href="#">central venous access device line selection</a>   |
| <b>Emetogenicity MINIMAL</b>                 | No antiemetics should be routinely administered before treatment in patients without a history of nausea and vomiting. If patients experience nausea and/or vomiting, consider using the low antiemetic prophylaxis regimen.<br>Read more about <a href="#">preventing anti-cancer therapy induced nausea and vomiting</a>   |
| <b>Constipation</b>                          | Prescribe prophylactic laxatives to prevent constipation related to the use of vinca alkaloids.  |
| <b>Peripheral neuropathy</b>                 | Assess prior to each treatment. Based on clinical findings, temporary omission, dose reduction or cessation of the vinca alkaloid may be indicated; review by medical officer before commencing treatment.<br>Read more about <a href="#">peripheral neuropathy</a><br>Link to <a href="#">chemotherapy-induced peripheral neuropathy screening tool</a>   |
| <b>Pulmonary toxicity</b>                    | There have been infrequent reports (less than 5% of patients) of pulmonary toxicity associated with vinorelbine.<br>Read more about <a href="#">pulmonary toxicity associated with anti-cancer drugs</a> .   |
| <b>Blood tests</b>                           | FBC, EUC and LFTs at baseline and prior to each treatment.   |
| <b>Hepatitis B screening and prophylaxis</b> | Routine screening for HBsAg and anti-HBc is NOT usually recommended for patients receiving this treatment.<br>Read more about <a href="#">hepatitis B screening and prophylaxis in cancer patients requiring cytotoxic and/or immunosuppressive therapy</a>  |
| <b>Vaccinations</b>                          | Live vaccines are contraindicated in cancer patients receiving immunosuppressive therapy and/or who have poorly controlled malignant disease.<br>Refer to the recommended schedule of vaccination for immunocompromised patients, as outlined in the <a href="#">Australian Immunisation Handbook</a> .<br>Read more about <a href="#">COVID-19 vaccines and cancer</a> .  |
| <b>Fertility, pregnancy and lactation</b>    | Cancer treatment can have harmful effects on fertility and this should be discussed with all patients of reproductive potential prior to commencing treatment. There is a risk of foetal harm in pregnant women. A pregnancy test should be considered prior to initiating treatment in females of reproductive potential if sexually active. It is important that all patients of reproductive potential use effective contraception whilst on therapy and after treatment finishes. Effective contraception methods and adequate contraception timeframe should be discussed with all patients of reproductive potential. Possibility of infant risk should be discussed with breastfeeding patients.<br>Read more about the <a href="#">effect of cancer treatment on fertility</a> |

## Dose modifications

*Evidence for dose modifications is limited, and the recommendations made on eviQ are intended as a guide only. They are generally conservative with an emphasis on safety. Any dose modification should be based on clinical judgement, and the individual patient's situation including but not limited to treatment intent (curative vs palliative), the anti-cancer regimen (single versus combination therapy versus chemotherapy versus immunotherapy), biology of the cancer (site, size, mutations, metastases), other treatment related side effects, additional co-morbidities, performance status and patient preferences. Suggested dose modifications are based on clinical trial findings, product information, published*

guidelines and reference committee consensus. The dose reduction applies to each individual dose and not to the total number of days or duration of treatment cycle unless stated otherwise. Non-haematological gradings are based on [Common Terminology Criteria for Adverse Events \(CTCAE\)](#) unless otherwise specified. Renal and hepatic dose modifications have been standardised where possible. For more information see dosing considerations & disclaimer.

The dose recommendations in kidney dysfunction (i.e. renal impairment) displayed may not reflect those in the ADDIKD guideline and have been included for historical reference only. Recommendations will be updated once the individual protocol has been evaluated by the reference committee, with this version of the protocol then being archived. Clinicians are expected to refer to the ADDIKD guideline prior to prescribing in kidney dysfunction.

[International Consensus Guideline for Anticancer Drug Dosing in Kidney Dysfunction \(ADDIKD\)](#).

**Note:** all dose reductions are calculated as a percentage of the starting dose

| Haematological toxicity   |   |
|---|---|
| ANC x 10 <sup>9</sup> /L (pre-treatment blood test)   |   |
| 1.0 to less than 1.5  | Refer to local institutional guidelines; it is the view of the expert clinicians that treatment should continue if patient is clinically well   |
| 0.5 to less than 1.0  | Delay treatment until recovery  |
| less than 0.5   | Delay treatment until recovery and reduce vinorelbine by 25% for subsequent cycles  |
| Febrile neutropenia or previous delay for myelosuppression                                    | Delay treatment until recovery and reduce vinorelbine by 25% for subsequent cycles  |
| Prolonged recovery greater than two weeks delay or 3 <sup>rd</sup> delay for myelosuppression | Delay treatment until recovery and reduce vinorelbine by 50% for subsequent cycles or cease   |
| Platelets x 10 <sup>9</sup> /L (pre-treatment blood test)                                     |   |
| 75 to less than 100   | The general recommendation is to delay, however if the patient is clinically well it may be appropriate to continue treatment; refer to treating team and/or local institutional guidelines |
| 50 to less than 75  | Delay treatment until recovery  |
| less than 50  | Delay treatment until recovery and reduce vinorelbine by 25% for subsequent cycles  |

*If treatment cannot be delivered on Day 8, then that treatment should be omitted rather than delayed. Treatment for the next cycle should proceed on the date originally scheduled and should incorporate dose modifications as appropriate.*

| Renal impairment                |
|---------------------------------|
| No dose modifications necessary |

| Hepatic impairment  |                           |
|---------------------|---------------------------|
| Hepatic dysfunction |                           |
| Mild                | Reduce vinorelbine by 25% |
| Moderate            | Reduce vinorelbine by 50% |
| Severe              | Omit vinorelbine          |

| Peripheral neuropathy                                   |  |
|---|--|
| Grade 2 which is present at the start of the next cycle | Reduce vinorelbine by 25%;<br>If persistent, reduce vinorelbine by 50% |
| Grade 3 or Grade 4                                      | Omit vinorelbine   |

## Interactions

Drug interactions in eviQ protocols are under review and being updated to align with current literature. Further site-wide updates and changes will occur in due course. [References & Disclaimer](#)

The drug interactions shown below are not an exhaustive list. For a more comprehensive list and for detailed information on specific drug interactions and clinical management, please refer to the specific drug product information and the following key resources:

- [MIMS - interactions tab](#) (includes link to a CYP-450 table) (login required)
- [Australian Medicines Handbook \(AMH\) – interactions tab](#) (login required)
- [Micromedex Drug Interactions](#) (login required)
- [Cancer Drug Interactions](#)
- [Cytochrome P450 Drug Interactions](#)

| <b>Vinorelbine</b>   |  |   |
|--|--|---|
|  | <b>Interaction</b>   | <b>Clinical management</b>  |
| <b>CYP3A4 and P-gp inhibitors (e.g. amiodarone, aprepitant, azole-antifungals, ritonavir, lapatinib, nilotinib, sorafenib, macrolides, ciclosporin, grapefruit juice etc.)</b> | Increased toxicity of vinorelbine possible due to reduced clearance  | Monitor for vinorelbine toxicity (esp. neurotoxicity, myelosuppression)   |
| <b>CYP3A4 inducers (e.g. carbamazepine, phenytoin, phenobarbitone, rifampicin, St John's wort etc.)</b>  | Reduced efficacy of vinorelbine possible due to increased clearance  | Monitor for decreased clinical response to vinorelbine  |
| <b>Mitomycin</b>   | Increased risk of pulmonary toxicity when vinorelbine administered following or concomitantly with mitomycin | Avoid combination or monitor closely for pulmonary toxicity (i.e. interstitial infiltrates, pleural effusion resulting in respiratory distress and cough) |

| General   |  |   |
|---|--|---|
|   | Interaction  | Clinical management   |
| <b>Warfarin</b>   | Anti-cancer drugs may alter the anticoagulant effect of warfarin.  | Monitor INR regularly and adjust warfarin dosage as appropriate; consider alternative anticoagulant.  |
| <b>Direct oral anticoagulants (DOACs) e.g. apixaban, rivaroxaban, dabigatran</b>  | Interaction with both CYP3A4 and P-gp inhibitors /inducers.<br><br>DOAC and anti-cancer drug levels may both be altered, possibly leading to loss of efficacy or toxicity (i.e. increased bleeding). | Apixaban: avoid concurrent use with strong CYP3A4 and P-gp inhibitors. If treating VTE, avoid use with strong CYP3A4 and P-gp inducers.<br><br>Rivaroxaban: avoid concurrent use with strong CYP3A4 and P-gp inhibitors.<br><br>Dabigatran: avoid combination with strong P-gp inducers and inhibitors.<br><br>If concurrent use is unavoidable, monitor closely for efficacy/toxicity of both drugs. |
| <b>Digoxin</b>  | Anti-cancer drugs can damage the lining of the intestine; affecting the absorption of digoxin.   | Monitor digoxin serum levels; adjust digoxin dosage as appropriate.   |
| <b>Antiepileptics</b>   | Both altered antiepileptic and anti-cancer drug levels may occur, possibly leading to loss of efficacy or toxicity.  | Where concurrent use of an enzyme-inducing antiepileptic cannot be avoided, monitor antiepileptic serum levels for toxicity, as well as seizure frequency for efficacy; adjust dosage as appropriate. Also monitor closely for efficacy of the anti-cancer therapy.   |
| <b>Antiplatelet agents and NSAIDs</b>   | Increased risk of bleeding due to treatment related thrombocytopenia.  | Avoid or minimise combination. If combination deemed essential, (e.g. low dose aspirin for ischaemic heart disease) monitor for signs of bleeding.  |
| <b>Serotonergic drugs, including selective serotonin reuptake inhibitors (SSRIs e.g. paroxetine) and serotonin noradrenaline reuptake inhibitors (SNRIs e.g. venlafaxine)</b> | Increased risk of serotonin syndrome with concurrent use of 5-HT3 receptor antagonists (e.g. palonosetron, ondansetron, granisetron, tropisetron, dolasetron, etc.)                                  | Avoid combination. If combination is clinically warranted, monitor for signs and symptoms of serotonin syndrome (e.g. confusion, agitation, tachycardia, hyperreflexia). For more information link to <a href="#">TGA Medicines Safety Update</a>   |
| <b>Vaccines</b>   | Diminished response to vaccines and increased risk of infection with live vaccines.  | Live vaccines (e.g. BCG, MMR, zoster and varicella) are contraindicated in patients on immunosuppressive therapy. Use with caution in patients on non-immunosuppressive therapy. For more information; refer to the recommended schedule of vaccination for cancer patients, as outlined in the <a href="#">Australian Immunisation Handbook</a>  |

## Administration

*eviQ provides safe and effective instructions on how to administer cancer treatments. However, eviQ does not provide every treatment delivery option, and is unable to provide a comprehensive list of cancer treatment agents and their required IV line giving set/filter. There may be alternative methods of treatment administration, and alternative supportive treatments that are also appropriate. Please refer to the individual*

## Day 1 and 8

**Approximate treatment time: 30 minutes**

[Safe handling and waste management](#)

[Safe administration](#)

[General patient assessment](#) prior to each day of treatment.

[Peripheral neuropathy assessment tool](#)

Any toxicity grade 2 or greater may require dose reduction, delay or omission of treatment and review by medical officer before commencing treatment.

Prime IV line(s).

Insert IV cannula or access [TIVAD](#) or [CVAD](#).

### **Chemotherapy - Time out**

#### **Vinorelbine**

**Administer vinorelbine (vesicant):**

- over 6 to 10 minutes via a minibag
- ensure vein is patent and monitor for signs of extravasation throughout administration
- flush with ~250 mL of sodium chloride 0.9%.

Remove IV cannula and/or deaccess [TIVAD](#) or [CVAD](#).

**Continue [safe handling](#) precautions until 7 days after completion of drug(s)**

## Discharge information

### Laxatives

- Ensure patient has prophylactic laxatives.

### Patient information

- Ensure patient receives patient information sheet.

## Side effects

*The side effects listed below are not a complete list of all possible side effects for this treatment. Side effects are categorised into the approximate onset of presentation and should only be used as a guide.*

### Immediate (onset hours to days)

#### **Extravasation, tissue or vein injury**

The unintentional instillation or leakage of a drug or substance out of a blood vessel into surrounding tissue. This has the potential to cause damage to affected tissue.

Read more about [extravasation management](#)

#### **Nausea and vomiting**

Read more about [prevention of treatment induced nausea and vomiting](#)

| Early (onset days to weeks)   |   |
|-------------------------------|---|
| <b>Neutropenia</b>            | Abnormally low levels of neutrophils in the blood. This increases the risk of infection. Any fever or suspicion of infection should be investigated immediately and managed aggressively.<br>Read more about <a href="#">immediate management of neutropenic fever</a>  |
| <b>Oral mucositis</b>         | Erythematous and ulcerative lesions of the gastrointestinal tract (GIT). It commonly develops following chemotherapy, radiation therapy to the head, neck or oesophagus, and high dose chemotherapy followed by a blood and marrow transplant (BMT).<br>Read more about <a href="#">oral mucositis</a>  |
| <b>Constipation</b>           |   |
| <b>Arthralgia and myalgia</b> | Generalised joint pain or and/or stiffness and muscle aches, often worse upon waking or after long periods of inactivity. Can improve with movement. May be mild or severe, intermittent or constant and accompanied by inflammation.<br>Read more about <a href="#">arthralgia and myalgia</a>   |
| <b>Fatigue</b>                | Read more about <a href="#">fatigue</a>   |
| <b>Peripheral neuropathy</b>  | Typically symmetrical sensory neuropathy, affecting the fingers and toes, sometimes progressing to the hands and feet. It is associated with several classes of anti-cancer drugs. These include taxanes, platinum-based compounds, vinca alkaloids and some drugs used to treat multiple myeloma.<br>Read more about <a href="#">peripheral neuropathy</a> |

| Late (onset weeks to months) |  |
|------------------------------|--|
| <b>Anaemia</b>               | Abnormally low levels of red blood cells (RBCs) or haemoglobin in the blood.<br>Read more about <a href="#">anaemia</a>  |
| <b>Alopecia - partial</b>    | Hair thinning and/or patchy hair loss. Patients can also experience mild to moderate discomfort of the hair follicles, and rarely pain as the hair is falling out.<br>Read more about <a href="#">alopecia</a> |
| <b>Pulmonary toxicity</b>    | Pulmonary toxicity may include damage to the lungs, airways, pleura and pulmonary circulation.<br>Read more about <a href="#">pulmonary toxicity associated with anti-cancer drugs</a>                         |

## Evidence

A phase II open-label, non-randomised, multicentre study was conducted to determine the efficacy and safety of single agent vinorelbine as first- and second- line therapy in advanced breast cancer (ABC).

A total of 107 patients were enrolled and were stratified into first- and second-line treatment groups. Vinorelbine was initiated at 30 mg/m<sup>2</sup> per week and continued until disease progression or unacceptable toxicity.<sup>1</sup>

### Efficacy

The objective response rate for all patients was 34% (35% for first-line and 32% for second-line patients).

The median duration of objective response was 34 weeks in both groups and the overall survival in first- and second- line patients were 67 weeks and 62 weeks respectively.

### Summary of efficacy <sup>1</sup>

Table 3. Summary of Efficacy Data

| Variable                                   | All Patients<br>(N = 107) |    | First-Line<br>Patients<br>(n = 60) |    | Second-Line<br>Patients<br>(n = 47) |    |
|--|---------------------------|----|------------------------------------|----|-------------------------------------|----|
|  | No.                       | %  | No.                                | %  | No.                                 | %  |
| <b>Response rates</b>                      |                           |    |                                    |    |                                     |    |
| CR   | 12                        | 11 | 9                                  | 15 | 3                                   | 6  |
| PR   | 24                        | 22 | 12                                 | 20 | 12                                  | 25 |
| CRs + PRs                                  | 36                        | 34 | 21                                 | 35 | 15                                  | 32 |
| SD   | 33                        | 31 | 18                                 | 30 | 15                                  | 32 |
| <b>Median duration of response (weeks)</b> |                           |    |                                    |    |                                     |    |
| CR   | 60                        |    | 60                                 |    | N/A*                                |    |
| CRs + PRs†                                 | 34                        |    | 34                                 |    | 34                                  |    |
| Median TDP‡                                | 18                        |    | 17                                 |    | 18                                  |    |
| Median TTF (weeks)                         | 18                        |    | 17                                 |    | 18                                  |    |
| Median survival (weeks)                    | 67                        |    | 67                                 |    | 62                                  |    |

Abbreviation: N/A, not available.

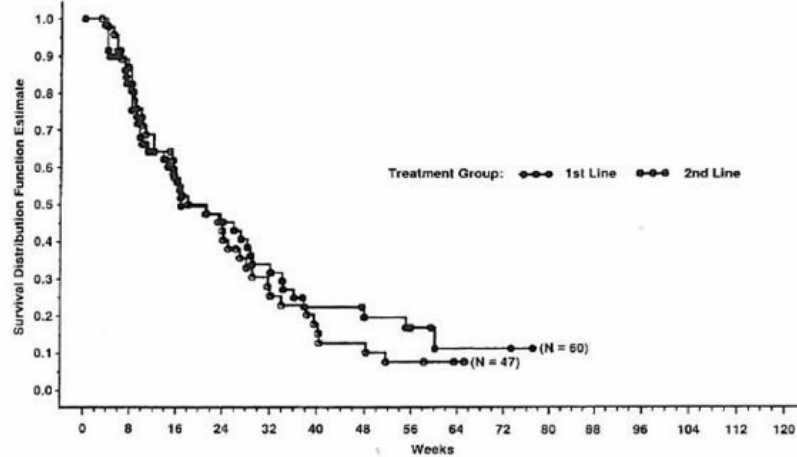
\*Median was unavailable for second-line patients due to large amount of censoring and small sample size. n = 9 for first-line patients; n = 3 for second-line patients. The median estimate is based on the point at which > 50% of patients have relapsed. Of 12 patients who achieved a CR, an estimated 35% had relapsed after 55 weeks and an estimated 68% had relapsed after 60 weeks.

†n = 21 for first-line patients; n = 15 for second-line patients.

‡n = 59 for first-line patients.

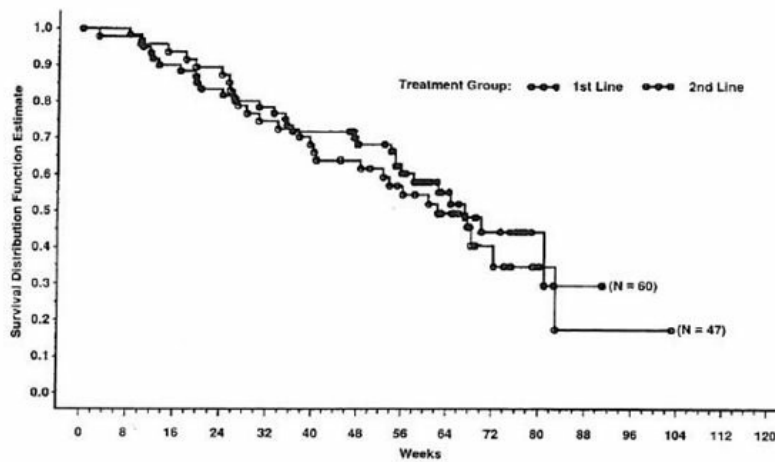
© Journal of Clinical Oncology 1995

### Kaplan-Meier estimates of time to disease progression<sup>1</sup>



© Journal of Clinical Oncology 1995

### Kaplan-Meier estimates of survival<sup>1</sup>



© J Clin Oncol 1995

### Toxicity

Granulocytopenia was the predominant dose-limiting toxicity with 2 patients who died as a result of granulocytopenic sepsis.<sup>1</sup>



## Summary of haematological toxicities and non-haematological toxicities<sup>1</sup>

**Table 4. Summary of Hematologic Toxicities**

| Toxicity  | First-Line Patients<br>(n = 59) <sup>*</sup> |     | Second-Line Patients<br>(n = 47) |    |
|---|--|-----|----------------------------------|----|
|   | No.  | %   | No.                              | %  |
| Hemoglobin (g/dL)                                   |  |     |                                  |    |
| Grade 3 (6.5-7.9)                                   | 7  | 12  | 8                                | 17 |
| Grade 4 (< 6.5)                                     | 1  | 2   | 0                                | 0  |
| All grades  | 48   | 81  | 45                               | 96 |
| WBCs (10 <sup>3</sup> cells/ $\mu$ L)               |  |     |                                  |    |
| Grade 3 (1.0-1.9)                                   | 25   | 42  | 23                               | 49 |
| Grade 4 (< 1.0)                                     | 7  | 12  | 9                                | 19 |
| All grades  | 59   | 100 | 46                               | 98 |
| Granulocytes (10 <sup>3</sup> cells/ $\mu$ L)       |  |     |                                  |    |
| Grade 3 (0.5-0.9)                                   | 18   | 31  | 19                               | 40 |
| Grade 4 (< 0.5)                                     | 30   | 51  | 18                               | 38 |
| All grades  | 57   | 97  | 45                               | 96 |
| Platelets† (10 <sup>3</sup> cells/mm <sup>3</sup> ) |  |     |                                  |    |
| Grade 3 (25-49.9)                                   | 0  | 0   | 1                                | 2  |
| Grade 4 (< 25)                                      | 0  | 0   | 0                                | 0  |
| All grades  | 2  | 3   | 6                                | 13 |

<sup>\*</sup>No data collected for 1 patient with CNS metastasis who was withdrawn from the study immediately after screening.

†n = 58 first-line patients.

**Table 5. Summary of Nonhematologic Toxicities**

| Adverse Experience (%)       | First-Line Patients<br>(n = 60) |         |         | Second-Line Patients<br>(n = 47) |         |         |
|------------------------------|---------------------------------|---------|---------|----------------------------------|---------|---------|
|                              | All Grades                      | Grade 3 | Grade 4 | All Grades                       | Grade 3 | Grade 4 |
| <b>General</b>               |                                 |         |         |                                  |         |         |
| Asthenia                     | 55                              | 10      | 0       | 43                               | 13      | 0       |
| Injection-site reaction      | 35                              | 0       | 0       | 19                               | 2       | 0       |
| Injection-site pain          | 27                              | 3       | 0       | 17                               | 4       | 0       |
| Pain                         | 22                              | 3       | 0       | 15                               | 4       | 0       |
| Fever                        | 20                              | 2       | 0       | 21                               | 0       | 0       |
| Abdominal pain               | 15                              | 2       | 0       | 15                               | 0       | 0       |
| Alopecia                     | 20                              | 0       | 0       | 9                                | 0       | 0       |
| Dyspnea                      | 10                              | 3       | 0       | 4                                | 0       | 0       |
| Sepsis                       | 5                               | 2       | 3       | 2                                | 0       | 0       |
| <b>Digestive</b>             |                                 |         |         |                                  |         |         |
| Nausea                       | 53                              | 2       | 0       | 60                               | 2       | 0       |
| Constipation                 | 38                              | 3       | 0       | 38                               | 6       | 0       |
| Anorexia                     | 25                              | 0       | 0       | 26                               | 0       | 0       |
| Diarrhea                     | 25                              | 0       | 0       | 17                               | 2       | 0       |
| Vomiting                     | 20                              | 2       | 0       | 21                               | 2       | 0       |
| Stomatitis                   | 18                              | 0       | 0       | 6                                | 0       | 0       |
| <b>Peripheral neuropathy</b> |                                 |         |         |                                  |         |         |
| Paresthesia                  | 13                              | 0       | 0       | 23                               | 0       | 0       |
| Hypesthesia                  | 13                              | 0       | 0       | 15                               | 0       | 0       |
| Reflexes decreased           | 10                              | 0       | 0       | 13                               | 2       | 0       |

© Journal of Clinical Oncology 1995

## References

- 1 Weber, B.,L., Vogel, C., Jones, S., et al. 1995. "Intravenous vinorelbine as first-line and second-line therapy in advanced breast cancer." J.Clin.Oncol. 13(11):2722-2730

## History

### Version 5

| Date       | Summary of changes  |
|------------|---|
| 17/08/2007 | Updated patient information.  |
| 26/06/2008 | Rewording of administration of vesicants to the standardised format.  |
| 29/06/2010 | Haematological dose modifications updated ( 20% changed to 25% dose reduction).   |
| 26/10/2010 | Dose modifications updated: "consider reducing" changed to " reduce".   |
| 12/1/2011  | New format to allow for export of protocol information.<br>Protocol version number changed to V.2.<br>Antiemetics and premedications added to the treatment schedule.<br>Additional Clinical Information, Key Prescribing table and Key Administration table combined into new section titled Clinical Considerations.<br>Drug specific information placed behind the drug name link. |
| 27/04/2012 | Protocol reviewed at Medical Oncology Reference Committee meeting. No changes and next review in 2 years.   |
| 09/05/2014 | Protocol reviewed by email survey. No change and next review in 2 years. PHC view removed.  |
| 18/02/2016 | Discussion with Medical Oncology Reference Committee Chairs and protocol to be reviewed every 5 years. Next review due in 3 years.  |
| 19/09/2016 | In treatment schedule: updated/added volume to vinorelbine (50 mL sodium chloride 0.9%) and changed infusion time from 5-10 mins to 6-10 mins as per literature.  |
| 31/05/2017 | Transferred to new eviQ website. Version number change to V.4.  |

| Date       | Summary of changes   |
|------------|--|
|            | Hepatitis B screening changed to NOT recommended.  |
| 10/05/2018 | Haematological dose modifications updated as per consensus of the expert clinician group. Version number changed to V.5. |
| 23/09/2019 | Protocol reviewed at Medical Oncology Reference Committee meeting on 30/08/2019. No changes. Next review in 5 years.     |

The information contained in this protocol is based on the highest level of available evidence and consensus of the eviQ reference committee regarding their views of currently accepted approaches to treatment. Any clinician (medical oncologist, haematologist, radiation oncologist, medical physicist, radiation therapist, pharmacist or nurse) seeking to apply or consult this protocol is expected to use independent clinical judgement in the context of individual clinical circumstances to determine any patient's care or treatment. While eviQ endeavours to link to reliable sources that provide accurate information, eviQ and the Cancer Institute NSW do not endorse or accept responsibility for the accuracy, currency, reliability or correctness of the content of linked external information sources. Use is subject to eviQ's disclaimer available at [www.eviQ.org.au](http://www.eviQ.org.au)

**First approved:** 12 August 2005  
**Last reviewed:** 30 August 2019  
**Review due:** 31 December 2024

***The currency of this information is guaranteed only up until the date of printing, for any updates please check:***

<https://www.eviq.org.au/p/38>

08 Jun 2023

# Patient information - Breast cancer metastatic - Vinorelbine (intravenous)

Patient's name:

---


## Your treatment

The treatment schedule below explains how the drug for this treatment is given.

| Vinorelbine  |  |                       |                   |
|--|--|-----------------------|-------------------|
| This treatment cycle is repeated every 21 days. Your doctor will advise you of the number of treatments you will have. |  |                       |                   |
| Day  | Treatment                                    | How it is given       | How long it takes |
| 1 and 8  | <b>Vinorelbine</b> ( <i>vi-NOR-el-been</i> ) | By a drip into a vein | About 30 minutes  |

## When to get help

Anticancer drugs (drugs used to treat cancer) can sometimes cause serious problems. It is important to get medical help immediately if you become unwell.

|  |   |
|--|---|
|  <p><b>IMMEDIATELY go to your nearest hospital Emergency Department, or contact your doctor or nurse if you have any of the following at any time:</b></p>  | <b>Emergency contact details</b><br>Ask your doctor or nurse from your treating team who to contact if you have a problem |
| <ul style="list-style-type: none"><li>• a temperature of 38°C or higher</li><li>• chills, sweats, shivers or shakes</li><li>• shortness of breath</li><li>• uncontrolled vomiting or diarrhoea</li><li>• pain, tingling or discomfort in your chest or arms</li><li>• you become unwell.</li></ul> | Daytime:.....<br>Night/weekend:.....<br>Other instructions:.....<br>.....<br>.....  |

**During your treatment immediately** tell the doctor or nurse looking after you if you get any of the following problems:

- leaking from the area where the drugs are being given
- pain, stinging, swelling or redness in the area where the drugs are being given or at any injection sites
- a skin rash, itching, feeling short of breath, wheezing, fever, shivers, or feeling dizzy or unwell in any way (allergic reaction).

## Other information about your treatment

### Changes to your dose or treatment delays

Sometimes a treatment may be started at a lower dose or the dose needs to be changed during treatment. There may also be times when your treatment is delayed. This can happen if your doctor thinks you are likely to have severe side effects, if you get severe side effects, if your blood counts are affected and causing delays in treatment, or if you are finding it hard to cope with the treatment. This is called a dose reduction, dose change or treatment delay. Your doctor will explain if you need any changes or delays to your treatment and the reason why.

## Blood tests and monitoring

Anti-cancer drugs can reduce the number of blood cells in your body. You will need to have regular blood tests to check that your blood cell count has returned to normal. If your blood count is low, your treatment may be delayed until it has returned to normal. Your doctor or nurse will tell you when to have these blood tests.

## Other medications given during this treatment

- **Laxatives:** you may be given some medication to prevent or treat constipation. Your doctor or nurse will tell you how and when to take the laxatives.

## Side effects

Cancer treatments can cause damage to normal cells in your body, which can cause side effects. Everyone gets different side effects, and some people will have more problems than others.

The table below shows some of the side effects you may get with this treatment. You are unlikely to get all of those listed and you may also get some side effects that have not been listed.

Tell your doctor or nurse about any side effects that worry you. Follow the instructions below and those given to you by your doctor or nurse.

| Immediate (onset hours to days)                           |   |
|---|---|
| <b>Pain or swelling at injection site (extravasation)</b> | <ul style="list-style-type: none"><li>• This treatment can cause serious injury if it leaks from the area where it is going into the vein.</li><li>• This can cause pain, stinging, swelling or redness at or near the site where the drug enters the vein.</li><li>• If not treated correctly, you may get blistering and ulceration.</li><li>• <b>Tell your doctor or nurse immediately if you get any of the symptoms listed above during or after treatment.</b></li></ul>  |
| <b>Nausea and vomiting</b>                                | <ul style="list-style-type: none"><li>• You may feel sick (nausea) or be sick (vomit).</li><li>• Drink plenty of fluids (unless you are fluid restricted).</li><li>• Eat small meals more frequently.</li><li>• Try food that does not require much preparation.</li><li>• Try bland foods like dry biscuits or toast.</li><li>• Gentle exercise may help with nausea.</li><li>• Anti-sickness medication is usually not needed but may help in some people.</li><li>• Ask your doctor or nurse for eviQ patient information - <a href="#">Nausea and vomiting during cancer treatment</a>.</li><li>• <b>Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you have uncontrolled vomiting or feel dizzy or light-headed.</b></li></ul> |

## Early (onset days to weeks)

|  |   |
|--|---|
| <b>Infection risk (neutropenia)</b>        | <ul style="list-style-type: none"> <li>• This treatment lowers the amount of white blood cells in your body. The type of white blood cells that help to fight infection are called neutrophils. Having low level of neutrophils is called neutropenia. If you have neutropenia, you are at greater risk of getting an infection. It also means that your body can't fight infections as well as usual. This is a serious side effect, and can be life threatening.</li> <li>• Wash your hands often.</li> <li>• Keep a thermometer at home and take your temperature regularly, and if you feel unwell.</li> <li>• Do your mouth care regularly.</li> <li>• Inspect your central line site (if you have one) daily for any redness, pus or swelling.</li> <li>• Limit contact with people who are sick.</li> <li>• Learn how to recognise the signs of infection.</li> <li>• Ask your doctor or nurse for eviQ patient information - <a href="#">Infection during cancer treatment</a>.</li> <li>• <b>Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you get any of the following signs or symptoms:</b> <ul style="list-style-type: none"> <li>◦ a temperature of 38°C or higher</li> <li>◦ chills, shivers, sweats or shakes</li> <li>◦ a sore throat or cough</li> <li>◦ uncontrolled diarrhoea</li> <li>◦ shortness of breath</li> <li>◦ a fast heartbeat</li> <li>◦ become unwell even without a temperature.</li> </ul> </li> </ul> |
| <b>Mouth pain and soreness (mucositis)</b> | <ul style="list-style-type: none"> <li>• You may have: <ul style="list-style-type: none"> <li>◦ bleeding gums</li> <li>◦ mouth ulcers</li> <li>◦ a white coating on your tongue</li> <li>◦ pain in the mouth or throat</li> <li>◦ difficulty eating or swallowing.</li> </ul> </li> <li>• Avoid spicy, acidic or crunchy foods and very hot or cold food and drinks.</li> <li>• Try bland and soft foods.</li> <li>• Brush your teeth gently with a soft toothbrush after each meal and at bedtime. If you normally floss continue to do so.</li> <li>• Rinse your mouth after you eat and brush your teeth, using either: <ul style="list-style-type: none"> <li>◦ 1/4 teaspoon of salt in 1 cup of warm water, or</li> <li>◦ 1/4 teaspoon of bicarbonate of soda in 1 cup of warm water</li> </ul> </li> <li>• Ask your doctor or nurse for eviQ patient information - <a href="#">Mouth problems during cancer treatment</a>.</li> <li>• <b>Tell your doctor or nurse if you get any of the symptoms listed above.</b></li> </ul>  |
| <b>Constipation</b>                        | <ul style="list-style-type: none"> <li>• You may have bowel motions (stools, poo) that are less frequent, harder, smaller, painful or difficult to pass.</li> <li>• You may also get: <ul style="list-style-type: none"> <li>◦ bloating, cramping or pain</li> <li>◦ a loss of appetite</li> <li>◦ nausea or vomiting.</li> </ul> </li> <li>• Drink plenty of fluids (unless you are fluid restricted).</li> <li>• Eat plenty of fibre-containing foods such as fruit, vegetables and bran.</li> <li>• Take laxatives as directed by your doctor.</li> <li>• Try some gentle exercise daily.</li> <li>• <b>Tell your doctor or nurse if you have not opened your bowels for more than 3 days.</b></li> </ul>  |
| <b>Joint and muscle pain and stiffness</b> | <ul style="list-style-type: none"> <li>• You may get muscle, joint or general body pain and stiffness.</li> <li>• Applying a heat pack to affected areas may help.</li> <li>• Talk to your doctor or nurse about other ways to manage these symptoms. You may need medication to help with any pain.</li> </ul>   |

|   |   |
|---|---|
| <b>Tiredness and lack of energy (fatigue)</b> | <ul style="list-style-type: none"> <li>• You may feel very tired, have no energy, sleep a lot, and not be able to do normal activities or things you enjoy.</li> <li>• Do not drive or operate machinery if you are feeling tired.</li> <li>• Nap for short periods (only 1 hour at a time)</li> <li>• Prioritise your tasks to ensure the best use of your energy.</li> <li>• Eat a well balanced diet and drink plenty of fluids (unless you are fluid restricted).</li> <li>• Try some gentle exercise daily.</li> <li>• Allow your friends and family to help.</li> <li>• <b>Tell your doctor or nurse if you get any of the symptoms listed above.</b></li> </ul>  |
| <b>Nerve damage (peripheral neuropathy)</b>   | <ul style="list-style-type: none"> <li>• You may notice a change in the sensations in your hands and feet, including: <ul style="list-style-type: none"> <li>◦ tingling or pins and needles</li> <li>◦ numbness or loss of feeling</li> <li>◦ pain.</li> </ul> </li> <li>• You may find it difficult to do everyday activities, such as doing up buttons or picking up small objects.</li> <li>• Test water temperature with your elbow when bathing to avoid burns.</li> <li>• Use rubber gloves, pot holders and oven mitts in the kitchen.</li> <li>• Wear rubber shoes or boots when working in the garden or garage.</li> <li>• Keep rooms well lit and uncluttered.</li> <li>• Ask your doctor or nurse for eviQ patient information – <a href="#">Nerve problems during cancer treatment</a>.</li> <li>• Tell your doctor or nurse if you get any of the symptoms listed above.</li> </ul> |

| <b>Late (onset weeks to months)</b>  |  |
|--------------------------------------|--|
| <b>Low red blood cells (anaemia)</b> | <ul style="list-style-type: none"> <li>• You may feel dizzy, light-headed, tired and appear more pale than usual.</li> <li>• Tell your doctor or nurse if you have any of these signs or symptoms. You might need a blood transfusion.</li> <li>• <b>Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you have any chest pain, trouble breathing, or feel like your heart is racing.</b></li> </ul>  |
| <b>Hair thinning</b>                 | <ul style="list-style-type: none"> <li>• Your hair may become dry and may break easily.</li> <li>• You may lose some of your hair.</li> <li>• Use a gentle shampoo and a soft hairbrush.</li> <li>• Take care with hair products like hairspray, hair dye, bleaches and perms.</li> <li>• Protect your scalp from the cold with a hat or scarf.</li> <li>• Protect your scalp from the sun with a hat and sunscreen of SPF 50 or higher.</li> <li>• Ask your doctor or nurse about the <a href="#">Look Good Feel Better</a> program (<a href="http://www.lgfb.org.au">www.lgfb.org.au</a>)</li> </ul>   |
| <b>Lung problems</b>                 | <ul style="list-style-type: none"> <li>• Lung problems are rare, but can be serious. They may occur throughout treatment or after the completion of treatment.</li> <li>• You may get: <ul style="list-style-type: none"> <li>◦ shortness of breath</li> <li>◦ fever</li> <li>◦ dry cough</li> <li>◦ wheezing</li> <li>◦ fast heartbeat</li> <li>◦ chest pain.</li> </ul> </li> <li>• Your doctor will monitor how well your lungs are working during your treatment.</li> <li>• <b>Tell your doctor or nurse immediately, or go to the nearest hospital Emergency Department if you have chest pain or become short of breath.</b></li> </ul> |

## General advice for people having cancer treatment

### Chemotherapy safety

- Learn how to keep you and your family safe while you are having anticancer drugs.
- See our patient information sheet - [Chemotherapy safety at home](#).

### **Blood clot risk**

- Cancer and anticancer drugs can increase the risk of a blood clot (thrombosis).
- Tell your doctor if you have a family history of blood clots.
- A blood clot can cause pain, redness, swelling in your arms or legs, shortness of breath or chest pain.
- If you have any of these symptoms go to your nearest hospital Emergency Department.

### **Medications and vaccinations**

- Before you start treatment, tell your doctor about any medications you are taking, including vitamins or herbal supplements.
- Don't stop or start any medications during treatment without talking to your doctor and pharmacist first.
- Paracetamol is safe to take if you have a headache or other mild aches and pains. It is recommended that you avoid taking aspirin, ibuprofen and other anti-inflammatory type medications for pain while you are having treatment. However, if these medications have been prescribed by your doctor, do not stop taking them without speaking with your doctor.
- Vaccinations such as flu and tetanus vaccines are safe to receive while having treatment. Do not have any live vaccines during your treatment or for 6 months after it finishes. If you are unsure, check with your doctor before you have any vaccinations.
- People you live with should be fully vaccinated, including having live vaccines according to the current vaccination schedule. Extra care needs to be taken with hand washing and careful disposal of soiled nappies for infants who have recently received the rotavirus vaccine.

### **Other medical and dental treatment**

- If you go to hospital or any other medical appointment (including dental appointments), always tell the person treating you that you are receiving anticancer drugs.
- Before you have any dental treatment, talk to your doctor.

### **Diet**

- While you are receiving this treatment it is important that you try to maintain a healthy diet.
- Grapefruit and grapefruit juice can interact with your medication and should be avoided while you are on this treatment.
- Speak to your doctor or nurse about whether drinking alcohol is safe with your treatment.
- If you have any concerns about recent weight loss or weight gain or questions about your diet, ask to speak to a dietitian.

### **Fertility**

- Some cancer treatments can reduce your fertility. This can make it difficult or impossible to get pregnant or father a child.
- Talk to your doctor or nurse before you start any treatment. Depending on your situation there may be fertility sparing options available to you and/or your partner, discuss these with your doctor or nurse.

### **Pregnancy and breastfeeding**

- Some cancer treatments can be dangerous to unborn babies. Talk to your doctor or nurse if you think there is any chance that you could be pregnant.
- Do not try to get pregnant or father a child during this treatment. Contraception should be used during treatment and after stopping treatment. Ask your doctor or nurse about what type of contraception you should use.
- If you are planning pregnancy/fatherhood after completing this treatment, talk to your doctor. Some doctors advise waiting between 6 months and 2 years after treatment.
- Do not breastfeed if you are on this treatment, as anti-cancer medications can also pass into breast milk.

### **Sex life and sexuality**

- The desire to have sex may decrease as a result of this treatment or its side effects.
- Your emotions and the way you feel about yourself may also be affected by this treatment.
- It may help to discuss your concerns with your partner and doctor or nurse.

### **Quitting smoking**

- It is never too late to quit smoking. Quitting smoking is one of the best things you can do to help your treatment work better.
- There are many effective tools to improve your chances of quitting.
- Talk to your treating team for more information and referral to a smoking cessation support service.

### **Staying active**

- Research shows that exercise, no matter how small, has many benefits for people during and after cancer treatment.
- Talk to your doctor before starting an exercise program. Your doctor can advise whether you need a modified exercise program.

## Where to get more information

### Telephone support

- Call Cancer Council on 13 11 20 for cancer information and support.

### Breast cancer information

- Australasian Lymphology Association – [lymphoedema.org.au](http://lymphoedema.org.au)
- Australasian Menopause Society – [menopause.org.au](http://menopause.org.au)
- Breast Cancer Network Australia – [bcna.org.au](http://bcna.org.au)
- National Breast Cancer Foundation – [nbcf.org.au](http://nbcf.org.au)
- YWCA Encore breast cancer exercise program – [ywcaencore.org.au](http://ywcaencore.org.au)

### General cancer information and support

- Australian Rare Cancer (ARC) Portal – [arcportal.org.au/](http://arcportal.org.au/)
- Beyondblue – [beyondblue.org.au](http://beyondblue.org.au)
- Cancer Australia – [canceraustralia.gov.au](http://canceraustralia.gov.au)
- Cancer Council Australia – [cancer.org.au](http://cancer.org.au)
- Cancer Voices Australia – [cancervoicesaustralia.org](http://cancervoicesaustralia.org)
- CanTeen – [canteen.org.au](http://canteen.org.au)
- Carers Australia – [carersaustralia.com.au](http://carersaustralia.com.au)
- CHILL Cancer related hair loss – [scalpcooling.org](http://scalpcooling.org)
- eviQ Cancer Treatments Online – [eviQ.org.au](http://eviQ.org.au)
- LGBTQI+ People and Cancer - [cancercouncil.com.au/cancer-information/lgbtqi](http://cancercouncil.com.au/cancer-information/lgbtqi)
- Look Good Feel Better – [lgfb.org.au](http://lgfb.org.au)
- Patient Information – [patients.cancer.nsw.gov.au](http://patients.cancer.nsw.gov.au)
- Radiation Oncology Targeting Cancer – [targetingcancer.com.au](http://targetingcancer.com.au)
- Redkite – [redkite.org.au](http://redkite.org.au)
- Return Unwanted Medicines – [returnmed.com.au](http://returnmed.com.au)
- Staying active during cancer treatment – [patients.cancer.nsw.gov.au/coping-with-cancer/physical-wellbeing/staying-active](http://patients.cancer.nsw.gov.au/coping-with-cancer/physical-wellbeing/staying-active)

### Quit smoking information and support

Quitting smoking is helpful even after you have been diagnosed with cancer. The following resources provide useful information and support to help you quit smoking. Talk to your treating team about any other questions you may have.

- Call Quitline on 13 QUIT (13 78 48)
- iCanQuit – [iCanQuit.com.au](http://iCanQuit.com.au)
- Patient Information – [patients.cancer.nsw.gov.au/coping-with-cancer/physical-wellbeing/quitting-smoking](http://patients.cancer.nsw.gov.au/coping-with-cancer/physical-wellbeing/quitting-smoking)
- Quitnow – [quitnow.gov.au](http://quitnow.gov.au)

### Additional notes:

---

---

---

---

---

---

---

---



---

---

This document is a guide only and cannot cover every possible situation. The health professionals caring for you should always consider your individual situation when making decisions about your care. Contact your cancer clinic staff or doctor if you have any questions or concerns about your treatment, or you are having problems coping with side effects. While eviQ endeavours to link to reliable sources that provide accurate information, eviQ and the Cancer Institute NSW do not endorse or accept responsibility for the accuracy, currency, reliability or correctness of the content of linked external information sources. Use of this document is subject to eviQ's disclaimer available at [www.eviQ.org.au](http://www.eviQ.org.au)

---

**First approved:** 12 August 2005  
**Last reviewed:** 30 August 2019  
**Review due:** 31 December 2024

***The currency of this information is guaranteed only up until the date of printing, for any updates please check:***

<https://www.eviq.org.au/pi/38>

08 Jun 2023