

**הודעה על החמרה (מידע בטיחות) בעלון לרופא**

**(מעודכן 05.2013)**

**תאריך 01.06.2017**

**שם תכשיר באנגלית ומספר הרישום:**

**RIBOMUSTIN 100 MG (152 40 33966 00 + 152 40 33966 01)** •

**RIBOMUSTIN 25 MG(152 39 33961 00 + 152 39 33961 01)** •

**שם בעל הרישום: \_ASTELLAS PHARMA INTERNATIONAL B.V.**

**טופס זה מיועד לפרוט ההחמרות בלבד !**

ההחמרות המבוקשות		
טקסט חדש	טקסט נוכחי	פרק בעלון
<p>Myelosuppression</p> <p>Patients treated with bendamustine hydrochloride may experience myelosuppression. In the event of treatment-related myelosuppression, leukocytes, platelets, hemoglobin, and neutrophils must be monitored at least weekly. Prior to the initiation of the next cycle of therapy, the following parameters are recommended: Leukocyte and/or platelet values &gt; 4,000/<math>\mu</math>l or &gt; 100,000/<math>\mu</math>l, respectively.</p> <p>Infections</p> <p>Serious and fatal infections have occurred with bendamustine hydrochloride, including bacterial (sepsis, pneumonia) and opportunistic infections such as pneumocystis jirovecii pneumonia (PJP), varicella zoster virus (VZV) and cytomegalovirus (CMV). Treatment with bendamustine hydrochloride may cause prolonged lymphocytopenia (&lt; 600/<math>\mu</math>l) and low CD4-positive T-cell (T-helper cell) counts (&lt; 200/<math>\mu</math>l) for at least 7–9 months after the completion of treatment. Lymphocytopenia and CD4-positive T-cell depletion are more pronounced when</p>	<p>Myelosuppression</p> <p>Patients treated with bendamustine hydrochloride may experience myelosuppression. In the event of treatment-related myelosuppression, leukocytes, platelets, haemoglobin, and neutrophils must be monitored at least weekly. Prior to the initiation of the next cycle of therapy, the following parameters are recommended: Leukocyte and/or platelet values &gt; 4,000/<math>\mu</math>l or &gt; 100,000/<math>\mu</math>l, respectively.</p> <p>Infections</p> <p>Infection, including pneumonia and sepsis, has been reported. In rare cases, infection has been associated with hospitalization, septic shock and death. Patients with neutropenia and/or lymphopenia following treatment with bendamustine hydrochloride are more</p>	<p>4.4 Special warnings and precautions for use</p>

bendamustine is combined with rituximab Patients with lymphopenia and low CD4-positive T-cell count following treatment with bendamustine hydrochloride are more susceptible to (opportunistic) infections.. Therefore, patients should be monitored for respiratory signs and symptoms throughout treatment. Patients should be advised to report new signs of infection, including fever or respiratory symptoms promptly. Discontinuation of bendamustine hydrochloride should be considered if there are signs of (opportunistic) infections.

#### Hepatitis B reactivation

Reactivation of hepatitis B in patients who are chronic carriers of this virus has occurred after these patients received bendamustine hydrochloride. Some cases resulted in acute hepatic failure or a fatal outcome. Patients should be tested for HBV infection before initiating treatment with bendamustine hydrochloride. Experts in liver disease and in the treatment of hepatitis B should be consulted before treatment is initiated in patients with positive hepatitis B tests (including those with active disease) and for patients who test positive for HBV infection during treatment. Carriers of HBV who require treatment with bendamustine hydrochloride should be closely monitored for signs and symptoms of active HBV infection throughout therapy and for several months following termination of therapy (see section 4.8).

~~Infection, including pneumonia and sepsis, has been reported. In rare cases, infection has been associated with hospitalization, septic shock and death. Patients with neutropenia and/or lymphopenia following treatment with bendamustine hydrochloride are more susceptible to infections. Patients with myelosuppression following bendamustine hydrochloride treatment should be advised to contact a physician if they have symptoms or signs of infection, including fever or respiratory symptoms.~~

#### Skin reactions

A number of skin reactions have been reported. These events have included rash, toxic skin reactions and bullous exanthema. Cases of Stevens – Johnson syndrome (SJS) and Toxic Epidermal Necrolysis (TEN), some fatal, have been reported with the use of bendamustine hydrochloride. Some events occurred when bendamustine hydrochloride was given in combination with other anticancer agents, so the precise relationship is uncertain. ~~Where~~ **When** skin reactions occur, they may be progressive and increase in severity with further treatment. If skin reactions are

susceptible to infections. Patients with myelosuppression following bendamustine hydrochloride treatment should be advised to contact a physician if they have symptoms or signs of infection, including fever or respiratory symptoms.

#### Skin reactions

A number of skin reactions have been reported. These events have included rash, toxic skin reactions and bullous exanthema. Some events occurred when bendamustine hydrochloride was given in combination with other anticancer agents, so the precise relationship is uncertain. Where skin reactions occur, they may be progressive and increase in severity with further treatment. If skin reactions are progressive, Ribomustin should be withheld or discontinued. For severe skin reactions where a relationship to bendamustine hydrochloride is suspected, treatment should be discontinued.

#### Patients with cardiac disorders

During treatment with bendamustine hydrochloride the concentration of potassium in the blood must be closely monitored and potassium supplement should be given when  $K^+ < 3,5$  mEq/l, and ECG measurement must be performed.

#### Nausea, vomiting

An antiemetic may be given for the symptomatic treatment of nausea and vomiting.

#### Tumour lysis syndrome

Tumour lysis syndrome associated with Ribomustin treatment has been reported in patients in clinical trials. The onset is expected to be within 48 hours of the first dose of Ribomustin and, without intervention, may lead to acute renal failure and death. Preventive measures include adequate volume status, close monitoring of blood chemistry,

<p>progressive, Ribomustin should be withheld or discontinued. For severe skin reactions <del>where with</del> <del>pected</del> a relationship to bendamustine hydrochloride is <del>is</del> <del>suspected</del>, treatment should be discontinued.</p>	<p>particularly potassium and uric acid levels. The use of allopurinol during the first one to two weeks of Ribomustin therapy can be considered but not necessarily as standard. However, there have been a few cases of Stevens-Johnson Syndrome and Toxic Epidermal Necrolysis reported when bendamustine and allopurinol are administered concomitantly.</p>	
<p><del>Patients with</del> Cardiac disorders</p> <p>During treatment with bendamustine hydrochloride the concentration of potassium in the blood <del>of patients with</del> <del>iac disorders</del> must be closely monitored and potassium supplement must be given when <math>K^+ &lt; 3,5</math> mEq/l, and ECG measurement must be performed.</p>	<p>Anaphylaxis</p>	
<p>Fatal cases of myocardial infarction and cardiac failure have been reported with bendamustine hydrochloride treatment. Patients with concurrent or history of cardiac disease should be observed closely.</p>	<p>Infusion reactions to bendamustine hydrochloride have occurred commonly in clinical trials. Symptoms are generally mild and include fever, chills, pruritus and rash. In rare instances severe anaphylactic and anaphylactoid reactions have occurred. Patients must be asked about symptoms suggestive of infusion reactions after their first cycle of therapy. Measures to prevent severe reactions, including antihistamines, antipyretics and corticosteroids must be considered in subsequent cycles in patients who have previously experienced infusion reactions.</p>	
<p>Nausea, vomiting</p> <p>Antiemetic may be given for the symptomatic treatment of nausea and vomiting.</p>	<p>Patients who experienced Grade 3 or worse allergic-type reactions were typically not re-challenged.</p>	
<p>Tumour lysis syndrome</p> <p>Tumour lysis syndrome (TLS) associated with Ribomustin treatment has been reported in patients in clinical trials. The onset tends to be within 48 hours of the first dose of Ribomustin and, without intervention, may lead to acute renal failure and death. Preventive measures <del>include such</del> <del>s</del> adequate <del>volume status</del> hydration, close monitoring of blood chemistry, particularly potassium and uric acid levels, and the use of hypouricemic agents (allopurinol and rasburicase) should be considered prior to therapy. <del>The use of allopurinol during the first one to two weeks of Ribomustin therapy can be considered but not necessarily as standard. However, there</del> <del>There</del> have been a few cases of Stevens-Johnson Syndrome and Toxic Epidermal Necrolysis reported when bendamustine and allopurinol are administered concomitantly.</p>	<p>Contraception</p> <p>Bendamustine hydrochloride is teratogenic and mutagenic.</p>	
<p>Anaphylaxis</p>	<p>Women should not become pregnant during treatment. Male patients should not father a child during and up to 6 months after treatment. They should seek advice about sperm conservation prior to treatment with bendamustine hydrochloride because of possible irreversible infertility.</p>	
<p>Extravasation</p> <p>Infusion reactions to bendamustine hydrochloride have occurred commonly in clinical trials. Symptoms are generally mild and include fever, chills, pruritus and rash. In rare instances severe anaphylactic and anaphylactoid reactions have occurred. Patients must be asked about</p>	<p>Extravasation</p> <p>An extravasated injection should be removed immediately. The needle should be removed after a short aspiration. Thereafter the affected area of tissue</p>	

<p>ptoms suggestive of infusion reactions after their first cycle of therapy. Measures to prevent severe reactions, including antihistamines, antipyretics and corticosteroids must be considered in subsequent cycles in patients who have previously experienced infusion reactions.</p> <p>Patients who experienced Grade 3 or worse allergic-type reactions were typically not re-challenged.</p> <p style="text-align: center;">Contraception</p> <p>Bendamustine hydrochloride is teratogenic and mutagenic.</p> <p>Women should not become pregnant during treatment. Male patients should not father a child during and up to 6 months after treatment. They should seek advice about sperm conservation prior to treatment with bendamustine hydrochloride because of possible irreversible infertility.</p> <p style="text-align: center;">Extravasation</p> <p>Extravasation should be stopped immediately. The needle should be removed after a short aspiration. Thereafter the affected area of tissue should be cooled. The limb should be elevated. Additional treatments like the use of corticosteroids are not of clear benefit.</p>	<p>should be cooled. The arm should be elevated. Additional treatments like the use of corticosteroids are not of clear benefit.</p>	
<p>Ribomustin has major influence on the ability to drive and use machines. Ataxia. <del>No studies on the effects on the ability to drive and use machines have been performed. However, ataxia,</del> peripheral neuropathy and somnolence have been reported during treatment with Ribomustin (see section 4.8). Patients should be instructed that if they experience these symptoms they should avoid potentially hazardous tasks such as driving and using machines.</p>	<p><del>La,</del>No studies on the effects on the ability to drive and use machines have been performed. However, ataxia, peripheral neuropathy and somnolence have been reported during treatment with Ribomustin (see section 4.8). Patients should be instructed that if they experience these symptoms they should avoid potentially hazardous tasks such as driving and using machines.</p>	<p><b>4.7 Effects on ability to drive and use machines</b></p>
<p><u>Infections and infestations:</u>  <b>Very common <math>\geq 1/10</math></b>  Infection NOS*  Including Opportunistic infection (e.g. Herpes zoster, cytomegalovirus, hepatitis B)  <b>Uncommon <math>\geq 1/1,000</math> to <math>&lt; 1/100</math></b>  <b>Pneumocystis jirovecii pneumonia</b>  <b>Rare <math>\geq 1/10,000</math> to <math>&lt; 1/1,000</math></b>  Sepsis  <b>Very rare <math>&lt; 1/10,000</math></b>  Pneumonia primary atypical</p> <p><u>Neoplasma benign, malignant:</u>  <b>Common <math>\geq 1/100</math> to <math>&lt; 1/10</math></b>  Tumour lysis syndrome  <b>Uncommon <math>\geq 1/1,000</math> to <math>&lt; 1/100</math></b></p>	<p><u>Infections and infestations:</u>  <b>Very common <math>\geq 1/10</math></b>  Infection NOS*  <b>Rare <math>\geq 1/10,000</math> to <math>&lt; 1/1,000</math></b>  Sepsis  <b>Very rare <math>&lt; 1/10,000</math></b>  Pneumonia primary atypical</p> <p><u>Neoplasma benign, malignant:</u>  <b>Common <math>\geq 1/100</math> to <math>&lt; 1/10</math></b>  Tumour lysis syndrome</p> <p><u>Blood and lymphatic system disorders:</u>  <b>Very common <math>\geq 1/10</math></b>  Leukopenia NOS*,  Thrombocytopenia</p>	<p><b>4.8 Undesirable effects</b></p>

<p><b>Myelodysplastic syndrome, acute myeloid leukemia</b></p> <p><u>Blood and lymphatic system disorders:</u>  <b>Very common</b> <math>\geq 1/10</math>  Leukopenia NOS*, Thrombocytopenia</p> <p><b>Lymphopenia</b>  <b>Common</b> <math>\geq 1/100</math> to <math>&lt; 1/10</math>  Haemorrhage, Anaemia, Neutropenia  <b>Uncommon</b> <math>\geq 1/1,000</math> to <math>&lt; 1/100</math></p> <p><b>Pancytopenia</b>  <b>Rare</b> <math>\geq 1/10,000</math> to <math>&lt; 1/1,000</math>  <b>Bone marrow failure</b>  <b>Very rare</b> <math>&lt; 1/10,000</math>  Haemolysis</p> <p><u>Nervous system disorders:</u>  <b>Very common</b> <math>\geq 1/10</math>  <b>Headache</b>  <b>Common</b> <math>\geq 1/100</math> to <math>&lt; 1/10</math>  Insomnia, <b>Dizziness</b>  <b>Rare</b> <math>\geq 1/10,000</math> to <math>&lt; 1/1,000</math>  Somnolence, Aphonia  <b>Very rare</b> <math>&lt; 1/10,000</math>  Dysgeusia, Paraesthesia, Peripheral sensory neuropathy, Anticholinergic syndrome, Neurological disorders, Ataxia, Encephalitis</p> <p><u>Cardiac disorders:</u>  <b>Common</b> <math>\geq 1/100</math> to <math>&lt; 1/10</math>  Cardiac dysfunction, such as palpitations, angina pectoris, Arrhythmia  <b>Uncommon</b> <math>\geq 1/1,000</math> to <math>&lt; 1/100</math>  Pericardial effusion,  <b>Myocardial infarction, Cardiac failure</b>  <b>Very rare</b> <math>&lt; 1/10,000</math>  Tachycardia, <del>Myocardial infarction, Cardiac failure</del>  <b>Not known (cannot be estimated from the available data)</b>  <b>Atrial fibrillation</b></p> <p><u>Skin and subcutaneous tissue disorders:</u>  <b>Common</b> <math>\geq 1/100</math> to <math>&lt; 1/10</math>  Alopecia, Skin disorders NOS*  <b>Rare</b> <math>\geq 1/10,000</math> to <math>&lt; 1/1,000</math>  Erythema, Dermatitis, Pruritus, <b>Maculopapular Rash,</b>  <del>makular papular rash,</del> Hyperhidrosis  <b>Not known (cannot be estimated from the available data)</b>  <b>Stevens – Johnson syndrome, Toxic Epidermal Necrolysis (TEN)</b></p> <p><u>Renal and urinary disorders:</u>  <b>Not known (cannot be estimated from the available data)</b>  <b>Renal failure</b></p>	<p><b>Common</b> <math>\geq 1/100</math> to <math>&lt; 1/10</math>  Haemorrhage, Anaemia, Neutropenia  <b>Very rare</b> <math>&lt; 1/10,000</math>  Haemolysis</p> <p><u>Nervous system disorders:</u>  <b>Common</b> <math>\geq 1/100</math> to <math>&lt; 1/10</math>  Insomnia  <b>Rare</b> <math>\geq 1/10,000</math> to <math>&lt; 1/1,000</math>  Somnolence, Aphonia  <b>Very rare</b> <math>&lt; 1/10,000</math>  Dysgeusia, Paraesthesia, Peripheral sensory neuropathy, Anticholinergic syndrome, Neurological disorders, Ataxia, Encephalitis</p> <p><u>Cardiac disorders:</u>  <b>Common</b> <math>\geq 1/100</math> to <math>&lt; 1/10</math>  Cardiac dysfunction, such as palpitations, angina pectoris, Arrhythmia  <b>Uncommon</b> <math>\geq 1/1,000</math> to <math>&lt; 1/100</math>  Pericardial effusion  <b>Very rare</b> <math>&lt; 1/10,000</math>  Tachycardia, Myocardial infarction, Cardiac failure</p> <p><u>Skin and subcutaneous tissue disorders:</u>  <b>Common</b> <math>\geq 1/100</math> to <math>&lt; 1/10</math>  Alopecia, Skin disorders NOS*  <b>Rare</b> <math>\geq 1/10,000</math> to <math>&lt; 1/1,000</math>  Erythema, Dermatitis, Pruritus, makular-papular rash, Hyperhidrosis</p> <p><del>A small number of cases of Stevens Johnson Syndrome and Toxic Epidermal Necrolysis have been reported in patients using bendamustine in combination with allopurinol or in combination with allopurinol and rituximab.</del></p> <p><del>The CD4/CD8 ratio may be reduced and reduction of the lymphocyte count may be seen. In immunosuppressed patients the risk of infection (e.g. with herpes zoster) may be increased.</del></p> <p>There have been isolated reports of necrosis after accidental extra-vascular administration and toxic epidermal necrosis, tumour lysis syndrome, and anaphylaxis.</p>	
<p><b>Description of selected adverse reactions</b></p> <p><del>A small number of cases of Stevens Johnson Syndrome and Toxic Epidermal Necrolysis have been reported in patients using bendamustine in combination with allopurinol or</del></p>	<p>There are reports of secondary tumours, including myelodysplastic syndrome, myeloproliferative disorders,</p>	

<p><del>combination with allopurinol and rituximab.</del></p> <p><del>The CD4/CD8 ratio may be reduced. A reduction of the lymphocyte count was seen. In immunosuppressed patients, the risk of infection (e.g. with herpes zoster) may be increased.</del></p> <p>There have been isolated reports of necrosis after accidental extra-vascular administration and <del>toxic epidermal necrolysis</del>, tumour lysis syndrome, and anaphylaxis.</p> <p>The risk of myelodysplastic syndrome and acute myeloid leukaemias is increased in patients treated with alkylating agents (including bendamustine). The secondary malignancy may develop several years after chemotherapy has been discontinued.</p> <p><del>There are reports of secondary tumours, including myelodysplastic syndrome, myeloproliferative disorders, acute myeloid leukaemia and bronchial carcinoma. The association with Ribomustin therapy has not been determined.</del></p>	<p>acute myeloid leukaemia and bronchial carcinoma. The association with Ribomustin therapy has not been determined.</p>	
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מצ"ב העלון, שבו מסומנות החמרות המבוקשות על רקע זהוב.

שינויים שאינם בגדר החמרות סומנו (בעלון) בצבע שונה. יש לסמן רק תוכן מהותי ולא שינויים במיקום הטקסט.