MEDICATION GUIDE

RITUXAN® (ri tuk san) (rituximab) injection

What is the most important information I should know about RITUXAN?

RITUXAN can cause serious side effects that can lead to death, including:

• Infusion-related reactions. Infusion-related reactions are very common side effects of RITUXAN treatment. Serious infusion-related reactions can happen during your infusion or within 24 hours after your infusion of RITUXAN. Your healthcare provider should give you medicines before your infusion of RITUXAN to decrease your chance of having a severe infusion-related reaction.

Tell your healthcare provider or get medical help right away if you get any of these symptoms during or after an infusion of RITUXAN:

o hives (red itchy welts) or rash

o itching

swelling of your lips, tongue, throat or face

o sudden cough

o shortness of breath, difficulty breathing, or wheezing

o weakness

o dizziness or feel faint

o palpitations (feel like your heart is racing or fluttering)

o chest pain

- Severe skin and mouth reactions. Tell your healthcare provider or get medical help right away if you get any of these symptoms at any time during your treatment with RITUXAN:
 - o painful sores or ulcers on your skin, lips or in your mouth
 - o blisters
 - o peeling skin
 - o rash
 - o pustules
- Hepatitis B virus (HBV) reactivation. Before you receive your RITUXAN treatment, your healthcare provider will do blood tests to check for HBV infection. If you have had hepatitis B or are a carrier of hepatitis B virus, receiving RITUXAN could cause the virus to become an active infection again. Hepatitis B reactivation may cause serious liver problems including liver failure, and death. You should not receive RITUXAN if you have active hepatitis B liver disease. Your healthcare provider will monitor you for hepatitis B infection during and for several months after you stop receiving RITUXAN. Tell your healthcare provider right away if you get worsening tiredness, or yellowing of your skin or white part of your eyes, during treatment with RITUXAN.
- Progressive Multifocal Leukoencephalopathy (PML). PML is a rare, serious brain infection caused by a virus that can happen in people who receive RITUXAN. People with weakened immune systems can get PML. PML can result in death or severe disability. There is no known treatment, prevention, or cure for PML.

Tell your healthcare provider right away if you have any new or worsening symptoms or if anyone close to you notices these symptoms:

o confusion

o dizziness or loss of balance

o difficulty walking or talking

- decreased strength or weakness on one side of your body
- o vision problems

See "What are the possible side effects of RITUXAN?" for more information about side effects.

What is RITUXAN?

RITUXAN is a prescription medicine used to treat adults with:

- Non-Hodgkin's Lymphoma (NHL): alone or with other chemotherapy medicines.
- Chronic Lymphocytic Leukemia (CLL): with the chemotherapy medicines fludarabine and cyclophosphamide.
- Rheumatoid Arthritis (RA): with another prescription medicine called methotrexate, to reduce the signs
 and symptoms of moderate to severe active RA in adults, after treatment with at least one other
 medicine called a Tumor Necrosis Factor (TNF) antagonist has been used and did not work well
 enough.
- Granulomatosis with Polyangiitis (GPA) (Wegener's Granulomatosis) and Microscopic Polyangiitis (MPA): with glucocorticoids, to treat GPA and MPA.
- Pemphigus Vulgaris (PV): to treat moderate to severe PV.

It is not known if RITUXAN is safe and effective in children.

Before you receive RITUXAN, tell your healthcare provider about all of your medical conditions, including if you:

- have had a severe reaction to RITUXAN or a rituximab product
- have a history of heart problems, irregular heart beat or chest pain
- have lung or kidney problems
- have an infection or weakened immune system.
- have or have had any severe infections including:
 - o Hepatitis B virus (HBV)

Parvovirus B19

o Hepatitis C virus (HCV)

o Varicella zoster virus (chickenpox or shingles)

o Cytomegalovirus (CMV)

West Nile Virus

- Herpes simplex virus (HSV)
- have had a recent vaccination or are scheduled to receive vaccinations. You should not receive certain vaccines before or during treatment with RITUXAN.
- are pregnant or plan to become pregnant. Talk to your healthcare provider about the risks to your unborn baby if you receive RITUXAN during pregnancy.

Females who are able to become pregnant should use effective birth control (contraception) during treatment with RITUXAN and for **12 months** after the last dose of RITUXAN. Talk to your healthcare provider about effective birth control.

Tell your healthcare provider right away if you become pregnant or think that you are pregnant during treatment with RITUXAN.

• are breastfeeding or plan to breastfeed. It is not known if RITUXAN passes into your breast milk. Do not breastfeed during treatment and for **at least 6 months** after your last dose of RITUXAN.

Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. Especially tell your doctor if you take or have taken:

- · a Tumor Necrosis Factor (TNF) inhibitor medicine
- a Disease Modifying Anti-Rheumatic Drug (DMARD)

If you are not sure if your medicine is one listed above, ask your healthcare provider.

How will I receive RITUXAN?

- RITUXAN is given by infusion through a needle placed in a vein (intravenous infusion), in your arm. Talk to your healthcare provider about how you will receive RITUXAN.
- Your healthcare provider may prescribe medicines before each infusion of RITUXAN to reduce infusion side effects such as fever and chills.
- · Your healthcare provider should do blood tests regularly to check for side effects to RITUXAN.
- Before each RITUXAN treatment, your healthcare provider or nurse will ask you questions about your general health. Tell your healthcare provider or nurse about any new symptoms.

What are the possible side effects of RITUXAN?

RITUXAN can cause serious side effects, including:

- See "What is the most important information I should know about RITUXAN?"
- Tumor Lysis Syndrome (TLS). TLS is caused by the fast breakdown of cancer cells. TLS can cause you
 to have:
 - o kidney failure and the need for dialysis treatment
 - o abnormal heart rhythm

TLS can happen within 12 to 24 hours after an infusion of RITUXAN. Your healthcare provider may do blood tests to check you for TLS. Your healthcare provider may give you medicine to help prevent TLS. Tell your healthcare provider right away if you have any of the following signs or symptoms of TLS:

o nausea o diarrhea

o vomiting o lack of energy

- Serious infections. Serious infections can happen during and after treatment with RITUXAN, and can lead to death. RITUXAN can increase your risk of getting infections and can lower the ability of your immune system to fight infections. Types of serious infections that can happen with RITUXAN include bacterial, fungal, and viral infections. After receiving RITUXAN, some people have developed low levels of certain antibodies in their blood for a long period of time (longer than 11 months). Some of these people with low antibody levels developed infections. People with serious infections should not receive RITUXAN. Tell your healthcare provider right away if you have any symptoms of infection:
 - o fever
 - o cold symptoms, such as runny nose or sore throat that do not go away

- o flu symptoms, such as cough, tiredness, and body aches
- o earache or headache
- o pain during urination
- o cold sores in the mouth or throat
- o cuts, scrapes or incisions that are red, warm, swollen or painful
- Heart problems. RITUXAN may cause chest pain, irregular heartbeats, and heart attack. Your
 healthcare provider may monitor your heart during and after treatment with RITUXAN if you have
 symptoms of heart problems or have a history of heart problems. Tell your healthcare provider right
 away if you have chest pain or irregular heartbeats during treatment with RITUXAN.
- **Kidney problems**, especially if you are receiving RITUXAN for NHL. RITUXAN can cause severe kidney problems that lead to death. Your healthcare provider should do blood tests to check how well your kidneys are working.
- Stomach and Serious bowel problems that can sometimes lead to death. Bowel problems, including blockage or tears in the bowel can happen if you receive RITUXAN with chemotherapy medicines. Tell your healthcare provider right away if you have any severe stomach-area (abdomen) pain or repeated vomiting during treatment with RITUXAN.

Your healthcare provider will stop treatment with RITUXAN if you have severe, serious or life-threatening side effects.

The most common side effects of RITUXAN include:

- infusion-related reactions (see "What is the most important information I should know about RITUXAN?")
- o infections (may include fever, chills)
- o body aches
- o tiredness
- o nausea

In patients with GPA or MPA the most common side effects of RITUXAN also include:

- o low white and red blood cells
- o swelling
- o diarrhea
- o muscle spasms

Other side effects with RITUXAN include:

- o aching joints during or within hours of receiving an infusion
- more frequent upper respiratory tract infection

These are not all of the possible side effects with RITUXAN.

Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

General information about the safe and effective use of RITUXAN.

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. You can ask your pharmacist or healthcare provider for information about Rituxan that is written for healthcare professionals.

What are the ingredients in RITUXAN?

Active ingredient: rituximab

Inactive ingredients: polysorbate 80, sodium chloride, sodium citrate dihydrate, and Water for Injection, USP.

Manufactured by: Genentech, Inc., A Member of the Roche Group, 1 DNA Way, South San Francisco, CA 94080-4990 Jointly Marketed by Biogen and Genentech USA, Inc.

US License Number 1048

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For more information, go to www.RITUXAN.com or call 1-877-474-8892

This Medication Guide has been approved by the U.S. Food and Drug Administration

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