## Human Rabies Immune Globulin (Rablg) HyperRAB® Supplier: Grifols Canada Inc.

## INDICATIONS: A

- Human Rabies Immune Globulin (Rablg) is used for Rabies Post-Exposure Prophylaxis (RPEP) as determined by the Medical Health Officer. Consultation is available to Medical Health Officers with Communicable Diseases and Immunization Service (CDIS), BCCDC.
- Rablg should be given in conjunction with the 1<sup>st</sup> dose of rabies vaccine. Rabies vaccine and Rablg must be administered with separate needles and syringes at separate anatomical sites.
- If a rabies vaccine series has been started or completed elsewhere, and it was not given in accordance with the current WHO standards, administer Rablg (on day 0) in conjunction with the 1<sup>st</sup> dose of another full series of rabies vaccine. See <u>Communicable Disease</u> <u>Control Manual, Chapter 1: Rabies, section 4.2.1</u>.

## DOSES AND SCHEDULE: B

- The recommended dosage for children and adults is the same: 20 IU/kg of body weight.
- The dose of HyperRAB® is calculated as:

 $\frac{[20 \text{ IU/kg x weight in kg}]}{300 \text{ IU/mL}} = \underline{\qquad} \text{ mL}.$ 

Do not exceed the recommended dose due to interference with active antibody production.

## **ADMINISTRATION:**

- HyperRAB® is supplied in 1 mL vials at a concentration of 300 IU/mL. Infiltrate as much
   Rablg as possible deep into and around the wound(s) in order to neutralize the virus.
  - When more than one wound site exists, each site should be infiltrated with a portion of the Rablg, using a separate syringe and needle for each infiltration.
  - o If there are extensive wounds, where the calculated dose of Rablg (by weight) is **not** adequate in volume to infiltrate all wounds, the HyperRAB® dose may be diluted with an equal volume of dextrose, 5% (D5W) in water to create an adequate volume to infiltrate all wounds. Do not dilute with normal saline.
  - Infiltration of wounds in some anatomical sites (finger tips) must be carried out with care in order to avoid increased pressure in the tissue compartment (compartment syndrome).
  - Any remaining volume should be injected intramuscularly at a site distant from vaccine administration. The deltoid should not be used for Rablg administration. Both deltoid sites should be reserved for administration of rabies vaccine.
- When there is no wound site, the site of administration of Rablg is age specific. See <a href="Immune Globulin Preparations">Immune Globulin Preparations (HBIg, Ig, TIg, VarIg, Rablg)</a> for administration information and maximum volume to be administered per site according to age.
- Rablg contains no preservatives. Vials are single dose use. Once entered, discard any unused contents.

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<sup>&</sup>lt;sup>A</sup> Since vaccine induced antibodies begin to appear within 1 week, there is no value in administering Rablg more than 7 days after initiation of vaccine.

When notification of an exposure is delayed, RPEP may be started as late as 6 or more months after an exposure.

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#### **BOOSTER DOSES:**

None.

#### **SEROLOGICAL TESTING:**

Serological testing is not recommended before or after immunization.

## **CONTRAINDICATIONS:**

None.

## **PRODUCT COMPONENTS:**

Potential allergens: none. Other components: glycine.

## PRECAUTIONS:

- Give Rablg with caution (i.e., in an emergency room setting) if the client has a history of anaphylactic reaction following receipt of any immune globulin product or a history of anaphylactic reaction to any component of HyperRAB® (assess risks versus benefits).
- Human Ig products are among the safest blood-derived products available. The method of
  preparation includes one or more steps that exclude or inactivate hepatitis B, C and HIV;
  therefore the risk of transmission is extremely low. However, it is possible, that unknown
  infectious agents may be present in such products. The benefits of use of rabies
  immunoglobulin after exposure to rabies far outweigh the theoretical risk of receipt of a
  blood product.
- Persons with IgA deficiency have the potential for developing antibodies to IgA and could have an anaphylactic reaction to subsequent blood products that contain IgA. Therefore, Rablg should only be given to such persons if the expected benefits outweigh the risks, and should be administered in an emergency room setting.
- Special measures should be considered when administering IM injections to people with bleeding disorders. A smaller gauge needle (23 gauge or smaller) should be used and steady, firm pressure should be applied to the injection site for 5 minutes. If there is concern that the injection may stimulate bleeding, the client should connect with their medical specialist.

## **SPECIAL CONSIDERATIONS:**

- Document receipt of Rablg in the client's electronic record (e.g., Panorama, PARIS) and/or chart. The following information must be recorded: trade name of product, date, lot number, dosage, route, and site(s).
- Provide a written record to individuals who receive any immune globulin product.
- Regarding Rablg and the administration of live vaccines see <u>Immune Globulin Preparations</u> or <u>Blood: Timing Intervals for Vaccines Containing Live Measles, Mumps, Rubella or</u> Varicella Virus.

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**ADVERSE EVENTS:** 

**Local:** soreness. **Systemic:** fever.

A potential increased risk of thrombosis (blood clots) has been observed within 24 hours of receipt of immune globulin products, especially when given in large doses (i.e., more than 10 mL). Additional risk factors include: age 45 years and older, history of thrombosis or those with risk factors for thrombosis (e.g., obesity, high blood pressure, diabetes, prolonged periods of immobilization, use of estrogens, a history of heart disease, blood clotting disorders, indwelling central vascular catheters, or diseases that thicken the blood). A, B

<sup>&</sup>lt;sup>A</sup> Daniel GW, Menis M, Sridhar G, et al. Immune globulins and thrombotic events as recorded in a large administrative database in 2008 through 2010. Transfusion. 2012; 52:2113-2121.

<sup>&</sup>lt;sup>B</sup> Menis M, Sridhar G, Selvam N, et al. Hyperimmune globulins and same-day thrombotic adverse events as recorded in a large healthcare database during 2008-2011. Am. J. Hematol. 2013; 88:1035-1040.