RANIBIZUMAB

CLASS: Angiogenesis Inhibitor; Monoclonal Antibody; Ophthalmic Agent; Vascular Endothelial Growth Factor (VEGF) Inhibitor

INDICATIONS: Treatment of neovascular (wet) age-related macular degeneration (AMD); treatment of macular edema following retinal vein occlusion (RVO); diabetic macular edema (DME)

AVAILABLE DOSAGE FROM THE HOSPITAL:

RANIBIZUMAB 1.0MG/0.1ML SYRINGE, RANIBIZUMAB 2.3MG/0.23ML VIAL, RANIBIZUMAB 3MG/0.3ML VIAL, RANIBIZUMAB 10MG/0.3ML VIAL

DOSAGE:

-Age-related macular degeneration (AMD): Intravitreal:

-*U.S. labeling:* 0.5 mg once a month. Frequency may be reduced (eg, 4-5 injections over 9 months) after the first 3 injections or may be reduced after the first 4 injections to once every 3 months if monthly injections are not feasible.

-*Canadian labeling:* 0.5 mg once a month. Frequency may be reduced after the first 3 injections to once every 3 months if monthly injections are not feasible.

Note: A regimen averaging 4-5 doses over 9 months is expected to maintain visual acuity and an every-3-month dosing regimen has reportedly resulted in a ~5 letter (1 line) loss of visual acuity over 9 months, as compared to monthly dosing which may result in an additional ~1-2 letter gain.

-Diabetic macular edema (DME): Intravitreal:

-*U.S. labeling:* 0.3 mg once a month

-*Canadian labeling:* 0.5 mg once a month until achievement of stable visual acuity for 3 consecutive months. Upon discontinuation, may resume monthly therapy if monitoring identifies a loss of visual acuity.

-Macular edema following retinal vein occlusion (RVO): Intravitreal: 0.5 mg once a month. **Note:** Canadian labeling recommends continuing therapy until achievement of stable visual acuity for 3 consecutive months; upon discontinuation, may resume monthly therapy if monitoring identifies a loss of visual acuity.

Geriatric

Refer to adult dosing.

Renal Impairment

No dosage adjustment necessary.

Hepatic Impairment

No dosage adjustment necessary.

COMMON SIDE EFFECT:

- Cardiovascular: Arterial thromboembolic events (AMD trials during first year: 2%; control: 1%; DME trials at 3 years: 11%; control rate not given)
- Ocular: Conjunctival hemorrhage (48% to 74%; control: 32% to 60%), eye pain (17% to 35%; control 12% to 30%), vitreous floaters (7% to 27%), intraocular pressure increased (7% to 24%), blurred vision/visual disturbance (5% to 18%), intraocular inflammation (1% to 18%; control 3% to 8%), foreign body sensation (7% to 16%; control: 5% to 14%)

Note: Cataract, blepharitis, dry eye, eye irritation, lacrimation increased, maculopathy, ocular hyperemia, pruritus, and vitreous detachment occurred in >10% of patients, but also occurred either in similar percentages to the control or more often in the control in some studies.

PREGNANCY RISK FACTORS: C