

VISUDYNE (verteporfin)

Effective Date: 1/28/14 Date Developed: 1/28/14 by Robert Sterling, MD Last Approval Date: 1/26/16, 1/24/17, 1/23/18, 1/22/19, 2/18/20, 2/2/21, 8/3/21, 2/1/22, 1/31/23, 2/13/24, 2/18/25

Visudyne is a light-activated drug used in photodynamic therapy-

Following intravenous administration, verteporfin is transported by lipoproteins to the neovascular endothelium in the affected eye(s), including choroidal neovasculature and the retina. Verteporfin then needs to be activated by nonthermal red light, which results in local damage to the endothelium, leading to temporary choroidal vessel occlusion.

Authorization:

Subfoveal choroidal neovascularization: Treatment of predominantly classic subfoveal choroidal neovascularization due to age-related macular degeneration, pathologic myopia, or presumed ocular histoplasmosis.

Dosing: A course of Visudyne therapy is a two-step process requiring IV administration of drug (6 mg/m2 BSA) followed in 15 minutes by 689 nm non-thermal diode laser. Each step requires specific and accurate measurements. Please refer to product information May repeat at 3-month intervals (if evidence of choroidal neovascular leakage)

PRECAUTIONS: extravasation causes intense inflammation and pain (If extravasation occurs, stop the infusion immediately and protect area from direct light until swelling and discoloration have faded; use cold compresses and oral pain medications, if necessary); visual disturbances; avoid direct sunlight for five days (photosensitivity) but encourage exposure to indoor light, which will slowly inactivate the drug

Dosage Forms:

Solution, Intravenous: 15 mL (15 mg)

DRUG INTERACTIONS: thromboxane A2 inhibitors (aspirin, dipyridamole) could decrease efficacy; other photosensitizing agents (tetracyclines, sulfonamides, hypoglycemic agents,

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thiazides) potentiate skin sensitivity; free radical scavengers (DMSO, beta carotene, etc) could decrease activity

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Michels S, Hansmann F, Geitzenauer W, Schmidt-Erfurth U. Influence of treatment parameters on selectivity of verteporfin therapy. Invest Ophthalmol Vis Sci. 2006;47(1):371–376.

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Revision History:

Date Reviewed/No Updates: 1/13/15 by C. Sanders, MD Date Approved by P&T Committee: 1/27/15 Date Reviewed/No Updates: 1/26/16 by C. Sanders, MD; R. Sterling, MD Date Approved by P&T Committee: 1/26/16 Date Reviewed/No Updates: 1/24/17 by C. Sanders, MD; R. Sterling, MD Date Approved by P&T Committee: 1/24/17 Date Reviewed/No Updates: 1/23/18 by C. Sanders, MD; R. Sterling, MD Date Approved by P&T Committee: 1/23/18 Date Reviewed/No Updates: 1/22/19 by C. Sanders, MD; R. Sterling, MD Date Approved by P&T Committee: 1/22/19 Date Reviewed/No Updates: 2/18/20 by H. Taekman, MD; R. Sterling, MD Date Approved by P&T Committee: 2/18/20 Date Reviewed/No Updates: 2/2/21 by H. Taekman, MD; R. Sterling, MD Date Approved by P&T Committee: 2/2/21 Date Reviewed/Updated: 8/3/21 by H. Taekman, MD; R. Sterling, MD Date Approved by P&T Committee: 8/3/21 Date Reviewed/No Updates: 2/1/22 by H. Taekman, MD; R. Sterling, MD Date Approved by P&T Committee: 2/1/22 Date Reviewed/No Updates: 1/31/23 by H. Taekman, MD; R. Sterling, MD Date Approved by P&T Committee: 1/31/23 Date Reviewed/No Updates: 2/13/24 by H. Taekman, MD; R. Sterling, MD Date Approved by P&T Committee: 2/13/24

Date Reviewed/Updated: 2/18/25 by H. Taekman, MD; R. Sterling, MD

Date Approved by P&T Committee: 2/18/25

Revision Date	Content Revised (Yes/No)	Contributors	Review/Revision Notes
1/24/17	No	Catherine Sanders, MD; Robert Sterling, MD	Annual review
1/23/18	No	Catherine Sanders, MD; Robert Sterling, MD	Annual review
1/22/19	No	Catherine Sanders, MD; Robert Sterling, MD	Annual review
2/18/20	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
2/2/21	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
8/3/21	Yes	Howard Taekman, MD; Robert Sterling, MD	Minor changes
2/1/22	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
1/31/23	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
2/13/24	No	Howard Taekman, MD; Robert Sterling, MD	Annual review
2/18/25	Yes	Howard Taekman, MD; Robert Sterling, MD	Updated description.
			Added "(6 mg/m2
			BSA) "in the dosing
			section. Added "(If
			extravasation occurs,
			stop the infusion

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	immediately and
	protect area from
	direct light until
	swelling and
	discoloration have
	faded; use cold
	compresses and oral
	pain medications, if
	necessary); "under
	precaution.
	Reference updated