

## Use of microscopes with Gleolan (aminolevulinic acid HCl)

- During glioma surgery, Gleolan is used with an operating microscope adapted with a blue emitting light source (power density 40-80 mW/cm<sup>2</sup>) and filters for excitation light of wavelength 375 to 440 nm, and observation at wavelengths of 620 to 710 nm. This allows tumor tissue to be visualized as red fluorescence. Tissue lacking sufficient PpIX concentrations appears blue<sup>1</sup>
- All major manufacturers of microscopes offer versions of their microscope equipped with the blue light filter<sup>2</sup>
- The intensity of fluorescence depends on the distance from the microscope to the tumor, which is governed by the inverse square law for light. Reducing the working distance by one-half results in 16 times the fluorescence intensity.



1. Gleolan [(aminolevulinic acid HCl) for oral solution] Prescribing Information  
2. Stummer W, Suero Molina E. *Neurosurg Clin North Am.* 2017;28:569-583.