

GUIDELINES FOR USING GLUBRAN[®] 2



1. Careful preliminary angiographic examination

Identification of the afferent and collateral vessels and any eventual AV fistulas, with oblique and cranio-caudal projections



2. Selective and superselective catheterisation of the area to be embolised



3. Careful hemodynamic evaluation



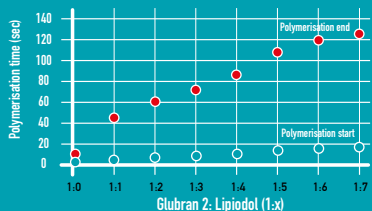
4. Dilute with Lipiodol[®]:

- To delay the Glubran[®]2 to polymerisation start time
- To make it radiopaque



5. Mix the two compounds uniformly

Immediately before injection (with a 3-way resistant stopcock or in a steel bowl)



6. Wash the catheter with glucose or dextrose solution



7. Inject slowly

- A single injection continuously



- Multi-shot or "sandwich" technique: push the mixture with glucose/dextrose



8. Remove the catheter

(quickly and immediately after the injection, if it was not performed the "sandwich technique" with glucose)



9. Eventual check with contrast medium at least two minutes later

WARNING: DO NOT USE GLUBRAN[®] 2 WITH POLYCARBONATE OR SILICONE MATERIALS

Advised products & materials

- Glubran[®] 2/Lipiodol[®] Ultra-Fluid
- Glucose or dextrose 5%-33%
- Polyethylene (PE) or polypropylene (PP) syringes with luer lock
- 3-way-stopcocks
- Standard 4F catheter
- Coaxial microcatheter

Glubran[®] 2/Lipiodol[®] dilution ratios⁸⁴

	MICROCATHETER POSITION	CATHETER TIP	INJECTION OF THE MIXTURE	FLOW SPEED	OCCUSION	EXAMPLES OF APPLICATIONS
GLUBRAN [®] 2/LIPIODOL [®] 84 Dilution ratio 1:1 to 1:3 ¹⁷	Close to lesion	Wedged	Continuous	High	Proximal	Varicocele, Hypervascularized tumors, Gastro-intestinal bleedings, Peripheral bleedings, Pseudoaneurysms, High-flow AVM
GLUBRAN [®] 2/LIPIODOL [®] 84 Dilution ratio 1:4 to 1:9 ¹⁸⁻¹⁴	Far from lesion	Free	Drop by drop	Low	Distal	Organ-end artery, Portal vein embolization, Low-flow AVM, Tumor devascularization, Venous malformations, Lymphatic leakage