Frequently Asked Questions

Answers to common questions about Obsidio Embolic, including mechanism of action, indications for use, and differences compared to other embolics.

Isn’t Obsidio Embolic the next-gen liquid?
No, Obsidio is not a liquid embolic. It’s a new kind of embolic device called a Conformable Embolic. Conformable means that it conforms to the anatomy (like a liquid) but it also conforms to the user input (e.g. based on the injection forces you’re able to create different embolic effects).

What makes Obsidio different from other technologies?
Obsidio is a shear-thinning embolic that allows an injectable solid to be delivered via microcatheter.

What’s a shear-thinning embolic?
It means that when the embolic is in a nominal (or normal) state, it’s semi-solid. However, when a shear force is applied, its viscosity (or thickness) decreases, allowing it to be deliverable via microcatheter. This occurs because electrostatic bonds within the gel temporarily break when shear is applied, and reform (near instantaneously) when shear is removed. This is what makes Obsidio conformable.

How does Obsidio stop flowing?
When force is removed, the electrostatic bonds are re-formed, and it returns to a semi-solid (near instantaneously). This creates a mechanical cast to occlude the vessel.

How does Obsidio stay in place?
Obsidio creates a mechanical embolization and is aided by endothelial interactions, which help to “lock” Obsidio into place in the vessel.

Is the occlusion permanent?
Yes. Obsidio induces a very localized immune reaction. This immune reaction works to break down the components of Obsidio (except for tantalum), remodels the vessel structure, and replaces Obsidio with fibrous tissue. A preclinical chronic study showed complete vessel occlusion at 180 days.

What’s Obsidio indicated for?
Obsidio is indicated for use in the embolization of hypervascular tumors and blood vessels to occlude blood flow for controlling bleeding/hemorrhaging in the peripheral vasculature.

Can I embolize large, high-flow vessels with Obsidio?
Due to the shear-thinning nature of Obsidio, the product is indicated for vessels 3 mm or smaller.

What are Obsidio’s main differences from other embolic devices?
- Obsidio provides very rapid occlusion (.2 to .3 mL of material embolizes a vessel in Obsidio’s indicated size range) compared to mechanical embolic devices, which may require multiple coils or adjunctive embolic devices in the case of plugs.
- Obsidio has a much higher safety profile versus glue (you don’t run the risk of gluing your catheter in place), and you have more control due to the shear-thinning nature of Obsidio.
- Obsidio is imageable under multiple imaging modalities and provides the ability to visualize in real-time. Obsidio can also be visualized in follow-up CT without streak artifact.
- Obsidio requires no prep (no mixing or shaking).
OBSDIO™ CONFORMABLE EMBOLIC

CAUTION: Federal (USA) law restricts this device to use by or on the order of a licensed physician.

INTENDED USE / INDICATIONS FOR USE: Obsidio Conformable Embolic is indicated for use in the embolization of: • Hypervascular tumors, • Blood vessels to occlude blood flow for controlling bleeding/hemorrhaging in the peripheral vasculature. CONTRAINDICATIONS: • Patients with a known hypersensitivity to porcine products • Patients intolerant to occlusion procedures • Vascular anatomy or blood flow that precludes catheter placement or embolic agent injection, such as: • Presence or likely onset of vasospasm • Presence of severe atheromatous disease • Presence of collateral vessel pathways potentially endangering non-target vascular territories during embolization • Presence of arteries supplying the lesion not large enough to accept the selected device • Vascular resistance peripheral to the feeding arteries precluding passage of the product • Arteriovenous shunts (i.e., where the blood does not pass through an arterial/capillary/ venous transition but directly from an artery to a vein) • Presence of patent extra-to-intracranial anastomoses or shunts • Presence of end arteries leading directly to cranial nerves • Use in the pulmonary, coronary, and intracranial vasculature • Use in any vasculature where the product could pass directly into the internal carotid artery, vertebral artery, intracranial vasculature.

WARNINGS: • Performing therapeutic embolization to occlude blood vessels is a high-risk procedure. Perform the procedure only under the direction of personnel with vascular embolization experience and thorough knowledge of angiographic techniques. • Obsidio Embolic contains gelatin of porcine origin, and therefore, could cause an immune reaction in patients who are hypersensitive to collagen or gelatin. Careful consideration should be given prior to using this product in patients who are suspected to be allergic to injections containing gelates.

• As with any embolization device, non-target embolization such as due to arterial-venous shunting, or undesirable reflux or passage of Obsidio Embolic into non-target arteries adjacent to the targeted lesion or through the lesion into other arteries or arterial beds of systemic, pulmonary, or coronary circulations, may potentially lead to significant complications. • Extreme caution should be used for any procedures involving the extracranial circulation encompassing the head and neck. The physician should carefully weigh the potential benefits of using embolization against the risks and potential complications of this procedure, which may include blindness, hearing loss, loss of smell, paralysis and death. • Avoid embolization near branch points as this may increase the risk of non-target embolization. • Pay careful attention for signs of non-targeted embolization. During injection carefully monitor patient vital signs to include SpO2 (e.g., hypoxia, central nervous system changes). Consider terminating the procedure and investigating for possible shunting if non-target embolization is suspected or patient symptoms develop. • Postembolization swelling may result in ischemia to tissue adjacent to target area. Care must be given to avoid ischemia intolerant, nontargeted tissue such as nervous tissue.

PRECAUTIONS: • Additional evaluations or precautions may be necessary in managing periprocedural care for patients with conditions such as, but not limited to bleeding diathesis or hypercoagulative state and immunocompromise. • Potential complications: Vascular embolization is a high-risk procedure. Complications may occur at any time during or after the procedure, and may include, but are not limited to, the following: • Paralysis resulting from non-targeted embolization • Ischemic injury from adjacent tissue edema • Undesirable reflux or passage of Obsidio Embolic into non-target arteries adjacent to the targeted lesion or through the lesion into other arteries or arterial beds of systemic circulation or, pulmonary, or coronary circulations, resulting in non-target embolization • Pulmonary embolism and/or stroke due to arterial-venous shunting, for example from a patent-foramen ovale • Ischemia at an undersirable location including ischemic stroke, ischemic infarction (including myocardial infarction), and tissue necrosis • Capillary bed occlusion and tissue damage, which may lead to abscess formation and sepsis • Vessel or lesion rupture and hemorrhage • Recanalization • Foreign body reactions necessitating medical intervention • Infection necessitating medical intervention • Complications related to catheterization (e.g., hematomata at the site of entry, clot formation at the tip of the catheter and subsequent dislodgment, and nerve and/or circulatory injuries, which may result in leg injury) • Allergic reaction to medications (e.g., anagliesis), contrast media or embolic material • Pain and/or rash, possibly delayed from the time of embolization • Death • Neurological deficits, including cranial nerve palsies/injury (e.g., blindness, hearing loss, loss of smell and/or paralysis) • Additional information is found in the Warnings section PI-1473303-AA

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