CEUS Around the World Where, Which Agents and How They're Used

COUNTRY	PRODUCT	APPROVED USES	NOTES
Australia	DEFINITY ®	LVO / EBD, liver, kidney	
Austria	SONO VICE Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD]
Belgium	Solo Vile Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	
Bulgaria	Sono Vice* Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	1
Canada	DEFINITY®	LVO / EBD, liver, kidney	Abdominal imaging including gynecological applications; some off-label studies including bowel and the carotid artery.
	SONO VICE*	LVO / EBD and diagnostic assessment of vessels	Not marketed in Canada
Cyprus	Sono Vue Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	

Sono Vue°	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	Used especially for liver and kidney
SONO VILE®	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
Optison™	Left ventricular pacification / endocardial border definition (LVO / EDB)	
SONOVILE® Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
Optison™	LVO / EBD	
	No approval policy	Situation may change soon.
SONO VUE®	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
Optison™	LVO / EBD	
SONO VICE* Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
Optison™	Left ventricular opacification / endocardial border definition (LVO / EDB)	
Sono Vile* Sulphur Hexafluoride		EU
Optison™	Left ventricular opacification / endocardial border definition (LVO / EDB)	
SONO VICE*	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
Optison™	LVO / EBD	
	SONO DE SUIPHUR HEXASSUORE SONO DE SUIPHUR HEXASSUORE SUIPHUR SUIPHUR SUIPHUR SUIPHUR SUIPHUR SUIPHUR SUIPHUR SUIPHUR SUIPHUR S	extracranial carotid, peripheral arteries (macrovascular and microvascular) LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular) OptisonTM Left ventricular pacification / endocardial border definition (LVO / EDB) LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular) OptisonTM LVO / EBD No approval policy LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular) OptisonTM LVO / EBD LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular) Left ventricular opacification / endocardial border definition (LVO / EDB) LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular) Left ventricular opacification / endocardial border definition (LVO / EDB) LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular) Left ventricular opacification / endocardial border definition (LVO / EDB) LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular) Left ventricular opacification / endocardial border definition (LVO / EDB) LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)

sono Vue	LVO / EBD, breast, liver, portal vein,	
Sulphur Hexafluoride	extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
Optison™	LVO / EBD	
SONO VICE*	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	
SONO VICE*	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	DU
Optison ™	LVO / EBD	
SONO VICE*	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	
SONO VILE®	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	
DEFINITY ®	LVO / EBD, liver, kidney	
SONO VIC®	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
Optison™	LVO / EBD	
DEFINITY ®	LVO / EBD, liver, kidney	
SONO VILE® Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU; Used widely to enhance diagnostic performance whenever appropriate, except where contraindicated (liver, spleen, pancreas, gallbladder, kidneys, gut, bladder, vessels, soft tissues)
SONAZOID	Focal liver lesions; Focal breast lesions	
	OptisonTM SONO VICE Sulphur Hexafluoride SONO VICE Sulphur Hexafluoride OptisonTM SONO VICE Sulphur Hexafluoride DEFINITY® SONO VICE Sulphur Hexafluoride DEFINITY® DEFINITY® SONO VICE Sulphur Hexafluoride OptisonTM DEFINITY®	Extracranial carotid, peripheral arteries (macrovascular and microvascular)

Latvia	Sono Vue Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	1
Lithuania	Sono Vie Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	
Luxembourg	SONO VICE*	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	
Malta	Sono Vue°	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	
Mexico	DEFINITY ®	LVO / EBD, liver, kidney	
Netherlands	SONO VILE* Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU; used in - Anesthesiology and Cardiology (every procedure except within 7 days of an Acute coronary syndrome, mostly used in Stress echo); Hepatology: suspicion of liver tumors and/or hemangiomas; Vascular medicine: improvement of 2D B -mode imaging. vascularity in approval phase e.g. vasa vasorum.
	Optison™	LVO / EBD	
New Zealand	DEFINITY ®	LVO / EBD, liver, kidney	
Norway	Solo Vice*	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	

Poland	SONO VICE* Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD]
Portugal	Sono Vue°	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	
Romania	Solo Vice Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	
Singapore	Solo Vice Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	
	DEFINITY ®	LVO / EBD.	
Slovakia	Sono Vice* Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	
Slovenia	Sono Vice* Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	
South Korea	Sono Vice Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	
	DEFINITY ®	LVO / EBD.	
	Optison TM Sono Vice Sulphur Hexafluoride	(macrovascular and microvascular) LVO / EBD LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	

Spain	SONO VICE* Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU; Approved for liver diseases but being used also in biliary tract diseases, in pancreas disorders and in liver or pancreatic transplant. Also for kidney, bladder and vascular pathology.
	Optison™	LVO / EBD	
Sweden	Sono Vice* Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	
Switzerland	Sono Vice* Sulphur Hexafluoride	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EFSUMB CEUS guidelines
United Arab Emirates	DEFINITY ®	LVO / EBD.	
United Kingdom	SONO VILE®	LVO / EBD, breast, liver, portal vein, extracranial carotid, peripheral arteries (macrovascular and microvascular)	EU
	Optison™	LVO / EBD	
USA	Optison™	LVO / EBD	
	DEFINITY ®	LVO / EDB	