

Materials List for:

Tissue-simulating Phantoms for Assessing Potential Near-infrared Fluorescence Imaging Applications in Breast Cancer Surgery

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URL: <https://www.jove.com/video/51776>

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Materials

Name	Company	Catalog Number	Comments
Bovine hemoglobin	Sigma-Aldrich, Zwijndrecht, The Netherlands	H2500	Simulates absorption of photons in tissue
Intralipid 20%	Sigma-Aldrich, Zwijndrecht, The Netherlands	I141	Simulates scattering of photons in tissue
Silicone A translucent 40 (2-components poly-addition silicone)	NedForm, Geleen, The Netherlands		Package consists of components A and B, that should be mixed one on one (A:B=10:1). Link to manufacturers page: http://tinyurl.com/ncjq7jx
Gelatine 250 Bloom	Sigma-Aldrich, Zwijndrecht, The Netherlands	48724	Construction of breast-shaped phantoms
Agarose	Hispanagar, Burgos, Spain		Construction of tumor-simulating inclusions
Tris	Sigma-Aldrich, Zwijndrecht, The Netherlands	T1503	
HCl	Sigma-Aldrich, Zwijndrecht, The Netherlands	258148	
NaCl	Sigma-Aldrich, Zwijndrecht, The Netherlands	S9888	
NaN ₃	Merck, Darmstadt, Germany	822335	CAUTION: severe poison. The toxicity of this compound is comparable to that of soluble alkali cyanides and the lethal dose for an adult human is about 0.7 grams.
Examples of NIRF imaging devices for intraoperative application:			
T2 NIRF imaging platform	SurgVision BV, Heerenveen, The Netherlands		Customized NIRF imaging system used in the current study. More details available at www.surgvision.com
Photodynamic Eye	Hamamatsu Photonics Deutschland GmbH, Herrsching am Ammersee, Germany	PC6100	www.iht-ltd.com
FLARE imaging system kit	The FLARE Foundation Inc, Wayland, MA, USA		www.theflarefoundation.org
Fluobeam	Fluoptics, Grenoble, France		www.fluoptics.com
Artemis handheld camera	Quest Medical Imaging BV, Middenmeer, the Netherlands		www.quest-mi.com
Examples of NIRF fluorescent dyes for intraoperative application:			
Indocyanine green	ICG-PULSION, Feldkirchen, Germany	PICG0025DE	Clinical grade fluorescent dye for NIRF imaging used in the current

			study. More details available at www.pulsion.com
IRDye 800CW NHS Ester	LI-COR Biosciences, Lincoln, NE, USA	929-70021	www.licor.com