# Recommended Perfusion Diagnostic Literature

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*** Very highly recommended  
** Highly recommended  
* Recommended
1. Top Recommended Literature

Visceral Surgery
Image-guided liver mapping using fluorescence navigation system with indocyanine green for anatomical hepatic resection

Oncology
Breast
Hirche C, Murawa D, Mohr Z, Kneif S, Hunerbein M.
ICG fluorescence-guided sentinel node biopsy for axillary nodal staging in breast cancer.
Breast Cancer Res Treat 2010; 121(2): 373-8

Murawa D, Hirche C, Dresel S, Hunerbein M.
Sentinel lymph node biopsy in breast cancer guided by indocyanine green fluorescence

Liver
Real-time identification of liver cancers by using indocyanine green fluorescent imaging
Cancer 2009; 115(811): 2491-504

Plastic Surgery
Mothes H, Dinkelaker T, Dönicke T, Friedel R, Hofmann GO, Bach O
Outcome prediction in microsurgery by quantitative evaluation of perfusion using ICG fluorescence angiography

Detection of skin perforators by indocyanine green fluorescence nearly infrared angiography

Holm C, Tegeler J, Mayr M, Becker A, Pfeiffer UJ, Mühlbauer W
Laser-induced fluorescence of indocyanine green: plastic surgical applications.
Eur J Plast Surg 2003 Feb 26:19-25,

Neuro Surgery
Intraoperative indocyanine green angiography in intracranial aneurysm surgery: Microsurgical clipping and revascularization.
Clin Neurol Neurosurg 2009; 111(10): 840-6

Woitzik J, Horn P, Vajkoczy P, Schmiedek P
Intraoperative control of extracranial-intracranial bypass patency by near-infrared indocyanine green videoangiography.
J Neurosurg 2005 Apr;102(4):692-8

Burns
Indocyanine green video angiographies help to identify burns requiring operation
Burns 2003 Dec;29(8):785-91
2. VISCERAL SURGERY

Ishizawa T, Bandai Y, Ijichi M, Kaneko J, Hasegawa K, Kokudo N. 
**Fluorescent cholangiography illuminating the biliary tree during laparoscopic cholecystectomy.**
Br J Surg. 2010; 97(9): 1369-77

**Intraoperative fluorescent imaging using indocyanine green for liver mapping and cholangiography**
J Hepatobiliary Pancreat Surg 2010; 17(5): 590-4

Kai K, Satoh S, Awatanabe T, Eno Y
**Evaluation of cholecystic venous flow using indocyanine green fluorescence angiography.**
J Hepatobiliary Pancreat Surg 2010; 17(2): 147-51

**A novel image-guided surgery of hepatocellular carcinoma by indocyanine green fluorescence imaging navigation**
J Surg Oncol 2009; 100 75-9

**Quantitative evaluation of abdominal wall perfusion after different types of laparotomy closure using laser-fluorescence videography**
Hernia 2002;6(1):11-6

3. ONCOLOGY

3.1 BREAST

Sugie T, Kassim KA, Takeuchi M, Hashimoto T, Yamagami K, Masai Y, Toi M.
**A novel method for sentinel lymph node biopsy by indocyanine green fluorescence technique in breast cancer**
Cancers 2010; 2: 713-20

Hirche C, Murawa D, Mohr Z, Kneif S, Hunerbein M.
**ICG fluorescence-guided sentinel node biopsy for axillary nodal staging in breast cancer.**
Breast Cancer Res Treat 2010; 121(2): 373-8

Noguchi M, Yokoi M, Nakano Y.
**Axillary reverse mapping with indocyanine fluorescence imaging in patients with breast cancer**
J Surg Oncol 2010; 101(3); 217-21

Murawa D, Hirche C, Dresel S, Hunerbein M
**Sentinel lymph node biopsy in breast cancer guided by indocyanine green fluorescence**
Ann Surg Oncol 2009; 16(10): 2943-52  
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**Intraoperative identification of sentinel lymph nodes by near-infrared fluorescence imaging in patients with breast cancer.**  
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**Imaging of lymph flow in breast cancer patients after microdose administration of a near-infrared fluorophore: feasibility study**  
Radiology 2008; 246(3): 734-41  
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### 3.2 GASTRIC

Kudszus S, Roesel C, Schachtrupp A, Hoer JJ.  
**Intraoperative laser fluorescence angiography in colorectal surgery: a noninvasive analysis to reduce the rate of anastomotic leakage.**  
Langenbecks Arch Surg 2010; 395(8): 1025-30  
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Uchiyama K, Ueno M, Ozawa S, Kiriyama S, Shigekawa Y, Yamaue H.  
**Combined Use of Contrast-Enhanced Intraoperative Ultrasonography and a Fluorescence Navigation System for Identifying Hepatic Metastases.**  
World J Surg 2010; 34(12): 2953-9  
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**Feasibility of a Lateral Region Sentinel Node Biopsy of Lower Rectal Cancer Guided by Indocyanine Green Using a Near-Infrared Camera System**  
Ann Surg Oncol 2010; 17(1): 144-51  
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Ohdaira H, Nimura H, Takahashi N, Mitsumori N, Kashiwagi H, Narimiya N, Yanaga K.  
**The possibility of performing a limited resection and a lymphadenectomy for proximal gastric carcinoma based on sentinel node navigation**  
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**Tailoring Treatment for Early Gastric Cancer after Endoscopic Resection Using Sentinel Node Navigation with Infrared Ray Electronic Endoscopy Combined with Indocyanine Green Injection**  
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**Sentinel node mapping guided by indocyanine green fluorescence imaging in gastric cancer**  
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Detection of sentinel node in gastric cancer surgery by indocyanine green fluorescence imaging: comparison with infrared imaging

Sentinel node mapping guided by indocyanine green fluorescence imaging: a new method for sentinel node navigation surgery in gastrointestinal cancer
Dig Surg 2008;25(2):103-8

3.3 LIVER

Bile leak test by indocyanine green fluorescence images after hepatectomy

Fluorescence navigation hepatectomy by visualization of localized cholestasis from bile duct tumor infiltration

Real-time identification of liver cancers by using indocyanine green fluorescent imaging
Cancer 2009; 115811): 2491-504

A novel image-guided surgery of hepatocellular carcinoma by indocyanine green fluorescence imaging navigation
J Surg Oncol 2009; 100: 75-9

3.4 LYMPH

A novel method of measuring human lymphatic pumping using indocyanine green fluorescence lymphography

Narushima M, Mihara M, Yamamoto Y, Iida T, Koshima I, Mundinger GS
The intravascular stenting method for treatment of extremity lymphedema with multiconfiguration lymphaticovenous anastomoses

"Lymphatic imaging in humans with near-infrared fluorescence."
3.5 SKIN

Tsujino Y, Mizumoto K, Matsuzaka Y, Niihara H, Morita E
Fluorescence navigation with indocyanine green for detecting sentinel nodes in extramammary Paget’s disease and squamous cell carcinoma
J Dermatol 2009;36(2):90-4

4. PERFUSION

Sawada T, Solly M, Kita J, Shimoda M, Kubota K.
An alternative tool for intraoperative assessment of renal vasculature after revascularization of a transplanted kidney

Kikuchi M and Hosokawa K
Visualized sclerotherapy of varicose veins

Newman MI, Samson MC, Tamburrino JF, Swartz KA.
J Reconstr Microsurg 2010; 26(7): 487-92

Zimmermann A, Roenneberg C, Wendorff H, Holzbach T, Giunta RE, Eckstein HH
Early Postoperative Detection of Tissue Necrosis in Amputation Stumps With Indocyanine Green Fluorescence Angiography
Vasc Endovascular Surg 2010; 44(4): 269-73

Lee BT, Matsui A, Hutteman M, Lin SJ, Winer JH, Laurence RG, Frangioni JV.
Intraoperative Near-infrared Fluorescence Imaging in Perforator Flap Reconstruction: Current Research and Early Clinical Experience
J Reconstr Microsurg 2010; 26(1): 59-65

Matsui A, Lee BT, Winer JH, Kianzad V, Frangioni JV.
Quantitative assessment of perfusion and vascular compromise in perforator flaps using a near-infrared fluorescence-guided imaging system

Holm C, Dornseifer U, Dornseifer U, Sturtz G, Basso G, Schuster T, Ninkovic M.
The intrinsic transit time of free microvascular flaps: Clinical and prognostic implications
Microsurgery 2010; 30(2): 91-6

Zoch G
Zentralbl Chir 2004;129 Suppl 1:S80-1 (Article in German)
5. PLASTIC SURGERY

Murray JD, Jones GE, Elwood ET, Whitty LA, Garcia C.
Fluorescent intraoperative tissue angiography with indocyanine green: evaluation of nipple-areola vascularity during breast reduction surgery
Plast Reconstr Surg 2010; 126(1): 33e-34e.

Holm C, Dornseifer U, Sturtz G, Ninkovic M
Sensitivity and Specificity of ICG Angiography in Free Flap Reexploration
J Reconstr Microsurg 2010; 26(5): 311-6

Komorowska-Timek E and Gurtner GC
Intraoperative perfusion mapping with laser-assisted indocyanine green imaging can predict and prevent complications in immediate breast reconstruction

Mohebali J, Gottlieb LJ, Agarwal JP.
Further Validation for Use of the Retrograde Limb of the Internal Mammary Vein in Deep Inferior Epigastric Perforator Flap Breast Reconstruction Using Laser-Assisted Indocyanine Green Angiography
J Reconstr Microsurg 2010; 26(2): 131-5

Mothes H, Dinkelaker T, Dönicke T, Friedel R, Hofmann GO, Bach O
Outcome prediction in microsurgery by quantitative evaluation of perfusion using ICG fluorescence angiography

Detection of skin perforators by indocyanine green fluorescence nearly infrared angiography
Plast Reconstr Surg 2008;122(4):1062-7

Holm C, Mayr M, Hofter E, Ninkovic M
Perfusion zones of the DIEP flap revisited: a clinical study.
Plast Reconstr Surg 2006;117(1):37-43

Holzbach T, Taskov C, Henke J, Busch R, Gansbacher B, Biemer E, Giunta RE

Indocyanine-green fluorescence video angiography used clinically to evaluate tissue perfusion in microsurgery,
J Trauma 2004 Nov;57(5):1018-24

The "perfusion map" of the unipedicled TRAM flap to reduce postoperative partial necrosis
Holm C, Tegeler J, Mayr M, Becker A, Pfeiffer UJ, Mühlbauer W  
*Laser-induced fluorescence of indocyanine green: plastic surgical applications.*  
Eur J Plast Surg 2003 26:19-25,  
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Holm C, Tegeler J, Mayr M, Becker A, Pfeiffer UJ, Mühlbauer W  
Microsurgery 2002;22(7):278-87  
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Holm C, Mayr M, Hofter E, Becker A, Pfeiffer UJ, Mühlbauer W  
*Intraoperative evaluation of skin-flap viability using laser-induced fluorescence of indocyanine green.*  
Br J Plast Surg 2002;55(8):635-44  
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*Assessment of microcirculation of an axial skin flap using indocyanine green fluorescence angiography.*  
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6. **BURNS**

Devgan L, Bhat S, Aylward S, Spence RJ  
*Modalities for the assessment of burn wound depth*  
J Burns Wounds 2006 15:5:e2  
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*Ergebnisse der Vakuumtherapie (V.A.C.®-Therapie) von oberflächlichen und tiefdermalen Verbrennungen*  
[Results of vacuum therapy (V.A.C.) of superficial and deep dermal burns]  
Zentralbl Chir 2004;129 Suppl 1:S59-61 (article in German)  
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*Use of sub-atmospheric pressure therapy to prevent burn wound progression in human: first experiences.*  
Burns 2004;30(3):253-8  
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*The influence of dressings and ointments on the qualitative and quantitative evaluation of burn wounds by ICG video-angiography: an experimental setup*  
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*Indocyanine green video angiographies help to identify burns requiring operation*  
Burns 2003;29(8):785-91  
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Still JM, Law EJ, Klawuhn KG, Island TC, Holtz JZ  
*Diagnosis of burn depth using laser-induced indocyanine green fluorescence: a preliminary clinical trial.*  
Burns 2001;27(4):364-71  
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Jerath MR, Schomacker KT, Sheridan RL, Nishioka NS
Burn wound assessment in porcine skin using indocyanine green fluorescence
J Trauma 1999;46(6):1085-8

Burn depth estimation by use of indocyanine green fluorescence: initial human trial.
J Burn Care Rehabil 1995;16(6):602-4

Green HA, Bua D, Anderson RR, Nishioka NS
Burn depth estimation using indocyanine green fluorescence.

7. NEURO SURGERY
Application of Intraoperative Indocyanine Green Angiography for CNS tumors: results on the first 100 cases.
ACTA Neurosurgical Suppliments 2010; 251-8.

Dashti R, Laakso A, Niemela M, Porras M, Hernesniemi J.
Microscope integrated indocyanine green video-angiography in cerebrovascular surgery.
Acta Neurochir Supplement 2010; 247-251

Schuette AJ, Cawley CM, Barrow DL.
Indocyanine green videoangiography in the management of dural arteriovenous fistulae
Neurosurgery 2010; 67(3): 658-62

Hanel RA, Nakaji P, Spetzler RF.
Use of microscope-integrated near-infrared indocyanine green videoangiography in the surgical treatment of spinal dural arteriovenous fistulae.
Neurosurgery 2010; 66(5): 978-84

Preliminary personal experiences with the application of near-infrared indocyanine green videoangiography in extracranial vertebral artery surgery
Neurosurgery 2010; 66(2): 305-11

Khurana VG, Seow K, Duke D.
Intuitiveness, quality and utility of intraoperative fluorescence videoangiography: Australian Neurosurgical Experience.
Br J Neurosurg 2010; 24(2): 163-72

Jing Z, Ou S, Ban Y, Tong Z, Wang Y
Intraoperative assessment of anterior circulation aneurysms using the indocyanine green video angiography technique
J Clin Neurosci 2010; 17(1); 26-8
Siedek V, Waggershauser T, Berghaus A, Matthias C
Intraoperative monitoring of intraarterial paraganglioma embolization by Indocyanine green fluorescence angiography
Eur Arch Otorhinolaryngol 2009; 266(9): 1449-54

Dashti R, Laakso A, Niemela M, Porras M, Hernesniemi J
Microscope-integrated near-infrared indocyanine green videoangiography during surgery of intracranial aneurysms: the Helsinki experience

Terborg C, Groschel K, Petrovitch A, Ringer T, Schnaudigel S, Witte OW, Kastrup A.
Noninvasive Assessment of Cerebral Perfusion and Oxygenation in Acute Ischemic Stroke by Near-Infrared Spectroscopy
Eur Neurol 2009; 62(6): 338-343

Intraoperative indocyanine green angiography in intracranial aneurysm surgery: Microsurgical clipping and revascularization.
Clin Neurol Neurosurg 2009; 111(10): 840-6

Peña-Tapia PG, Kemmling A, Czabanka M, Vajkoczy P, Schmiedek P
Identification of the optimal cortical target point for extracranial-intracranial bypass surgery in patients with hemodynamic cerebrovascular insufficiency

Woitzik J, Horn P, Vajkoczy P, Schmiedek P
Intraoperative control of extracranial-intracranial bypass patency by near-infrared indocyanine green videoangiography.

8. CARDIAC SURGERY

Hosono M, Sasaki Y, Sakaguchi M, Suehiro S.
Intraoperative fluorescence imaging during surgery for coronary artery fistula

Handa T, Sasaguri S, Sato T
Preliminary experience for the evaluation of the intraoperative graft patency with real color charge-coupled device camera system: an advanced device for simultaneous capturing of color and near-infrared images during coronary artery bypass graft.

9. VALIDATION

Validation of IC-VIEW fluorescence videography in a rabbit model of mesenteric ischaemia and reperfusion.
Int J Colorectal Dis 2005 19:1-7

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