Green Diagnostic

IC-Flow[™] Imaging System

The most competitive hand-held fluorescence camera on the market





IC-Flow™ Imaging System is the most cost-effective hand-held imaging system on the market to help visualise blood and lymphatic flow before, during and after surgical procedures. It is a compact and easy to use camera system to visualise and record tissue fluorescence.

IC-Flow™ Imaging System (IC-Flow) is indicated to visualise the flow, distribution and/or the accumulation of Indocyanine Green (ICG) before, during and after surgery for indications such as:

- visualisation of the blood flow,
- visualisation of the lymphatic flow,
- visualisation of sentinel lymph nodes,
- o visualisation of the bile ducts during hepatobiliary surgery,
- visualisation of primary liver tumors and/or hepatic metastases.



FLUORESCENCE ANGIOGRAPHY AIDED BY THE IC-FLOW ENABLES SURGEONS TO:

- Identify pre-operatively flap perforators
- Assess post-operatively tissue perfusion
- Check vascular anastomoses and flap perfusion
- Detect sentinel lymph nodes

ADVANTAGES OF USING IC-FLOW WITH ICG:

- Easy to implement¹
- Provides perfusion assessment for any open procedure
- Allows for perforator mapping²

- Optimises flap design
- Supports intraoperative flap monitoring
- Gives plastic surgeon tool to facilitate flap planning, disssection and insertion³

COST BENEFITS ON USE OF IC-FLOW WITH ICG DURING RECONSTRUCTIVE SURGERY

Benefit in Reconstruction Surgeries

A comprehensive literature review of complications after breast reconstruction surgery revealed that ICG angiography used to assess perfusion, consistently improved clinical outcomes and reduced costs with up to 81% reduction in breast reconstruction complications and an 84% reduction in skin flap necrosis.^{4,5,9}

Increased costs associated with surgical complications

Necrosis following breast reconstruction - \$11,076 inpatient costs per patient⁶ Potential savings with combined use of ICG and Camera System in surgical procedures

Up to \$610 per patient due to reduced necrosis and reoperation^{7,10}

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COMPARE THE COST OF CAMERA SYSTEMS⁸

	IC- Flow	Mid-Tier Systems	High-End Systems
Product description	Handheld	Tower mounted display	Tower mounted display
Relative price* *Ascending order	1.0x	~1.5x - 3.0x	~3.5x - 7.0x
Portable	✓	×	×
Procedure type	Inpatient and outpatient	Inpatient	Inpatient

Camera system / Company	Relative expense versus IC- Flow (based on list price)	Features
IC-Flow / Diagnostic Green	Least expensive device on the market	Small, compact, hand-held, black & white, raw data export function, wi-fi enabled
SPY PHI / Stryker	x1.5 ⁺ times more expensive	Small, compact, hand-held, colour, data export function
Spectrum / Olympus	x2.8 times more expensive	Endoscope device with hand-held module, colour, data export function
Fluobeam / Getinge	x3 times more expensive	Small, compact, hand-held, colour overlay, raw data export function
EleVision / Medtronic	x6.8 times more expensive	Endoscope device with hand-held module, colour, data export function

IC-FLOW HANDHELD CAMERA AND SYSTEM OPTIONS



IC-FLOW HANDHELD SYSTEM

- Compact and portable
- Integrated display
- Easy to use
- Data transfer to cloud or to a USB stick
- No additional equipment required



IC-FLOW COMPACT TROLLEY SYSTEM

- Compact integrated system
- Convenient and portable
- Flexible configuration available with or without monitor



IC-FLOW CART SYSTEM

- Portable Operating Room System
- Integrated system with monitor
- Extendable arm to hold camera

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UNIQUE BENEFITS

Backed by Diagnostic Green, the global supplier of ICG and 30 years' experience in perfusion imaging, the IC-Flow™ Imaging System, is a small, yet powerful imaging device for you and your surgical team.



Fast

boot-up

time







Flexible configurations to meet surgical needs



Full OR System



Portable Point of Care System



Safe use with the benefit of LED rather than laser light source



Maintenance free



Wi-fi enabled for complete record management



Most cost effective NIR camera system on the market

TESTIMONIALS

"The cost benefit of the IC-FLOW is more than justified. This portable camera is easy to use and provides an efficient fluorescence image."

Prof Jaume Masia - Hospital de la Santa Creu I Sant Pau, Barcelona, Spain

IC Flow is "user friendly, affordable and compact"

Dr Jorge Falco - University of Buenos Aires

For more information please check out https://diagnosticgreen.com/row/ic-flow-imaging-system-lp/
or contact us on info@diagnosticgreen.com

REFERENCES

- ^{1.} Hembd AS, Yan J, Zhu H, Haddock NT, Teotia SS. Intraoperative Assessment of DIEP Flap Breast Reconstruction Using ICG Angiography: Reduction of Fat Necrosis, Resection Volumes and Post-operative Surveillance. Plast Reconstr Surg. 2020 Apr 13
- ² Lauritzen E, Bredgaard R, Laustsen-Kiel CM, Hansen L, Tvedskov T, Damsgaard TE. Indocyanine green angiography in oncoplastic breast surgery, a prospective study. J Plast Reconstr Aesthet Surg. 2023 Oct;85:276-286. doi: 10.1016/j.bjps.2023.07.022. Epub 2023 Jul 17. PMID: 37541044.
- 3. Bigdeli AK, Thomas B, Falkner F, Gazyakan E, Hirche C, Kneser U. The Impact of Indocyanine-Green Fluorescence Angiography on Intraoperative Decision-Making and Postoperative Outcome in Free Flap Surgery. J Reconstr Microsurg. 2020 Oct;36(8):556-566
- ^{4.} Chatterjee A. A comparison of free autologous breast reconstruction with and without the use of laser-assisted indocyanine green angiography: A cost-effectiveness analysis. Plast Reconstr Surg. 2013;131(5):693e-701e
- 5. Harless CA, Jacobson SR. Tailoring through technology: A retrospective review of a single surgeon's experience with implant-based breast reconstruction before and after implementation of laser-assisted indocyanine green angiography. Breast J. 2016;22(3):274-281
- ⁶ Yalanis GC, Nag S, Georgek JR, Cooney CM, Manahan MA, Rosson GD, et al. Mastectomy weight and tissue expander volume predict necrosis and increased costs associated with breast reconstruction. Plast Reconstr Surg Glob Open. 2015 Aug;3(7):e450
- ⁷ Losken A, Schaefer TG, Newell M, Styblo TM. The impact of partial breast reconstruction using reduction techniques on postoperative cancer surveillance. Plast Reconstr Surg 2009 Jul;124(1):9-17.
- E. Third party market research undertaken on cost of camera systems 2019-2021, with all price comparisons based on list price for devices in Europe
- 9. Johnson, Ariel C. BS; Colakoglu, Salih MD; Chong, Tae W. MD; Mathes, David W. MD. Indocyanine Green Angiography in Breast Reconstruction: Utility, Limitations, and Search for Standardization. Plastic and Reconstructive Surgery Global Open 8(3):p e2694, March 2020. | DOI: 10.1097/GOX.000000000002694
- ¹⁰ Vettoretto N, Foglia E, Ferrario L, Gerardi C, Molteni B, Nocco U, Lettieri E, Molfino S, Baiocchi GL, Elmore U, Rosati R, Currò G, Cassinotti E, Boni L, Cirocchi R, Marano A, Petz WL, Arezzo A, Bonino MA, Davini F, Biondi A, Anania G, Agresta F, Silecchia G. Could fluorescence-guided surgery be an efficient and sustainable option? A SICE (Italian Society of Endoscopic Surgery) health technology assessment summary. Surg Endosc. 2020 Jul;34(7):3270-3284. doi: 10.1007/s00464-020-07542-3. PMID: 32274626

IC-Flow™ Imaging System Intended Use

IC-Flow™ Imaging System is a CE marked Medical Device

IC-Flow Imaging System is indicated to visualise on a screen the flow, the distribution and/or the accumulation of Indocyanine Green (ICG) before, during and after surgery for the indications such as: visualisation of the blood flow; visualisation of the lymphatic flow; visualisation of the bile ducts during hepatobiliary surgery; visualisation of primary liver tumors and/or hepatic metastases.

The IC-Flow Imaging System is used as an adjunctive method for visual assessment.

