



# EinsteinVision® 3.0

See Better  
Summary of Perier's study



# EinsteinVision® 3.0 Full HD in 3D

## The solution for minimally invasive valve surgery patients

### The results of Perier's study

A study by Perier et al.<sup>1</sup> compared the results from 128 MIVS patients who were operated in 2D and 135 who were operated with EinsteinVision® showing clear benefits when operating in 3D.

- Work more efficiently and quicker in 3D. The study showed a significant reduction in ischemic time of 10 minutes when using EinsteinVision®. There were also significant reductions in heart lung machine time and operation time when using 3D (see the table below).
- In 2015, the hospital total operation time for MIVS procedures was reduced by 2835 minutes. The authors calculated that this meant at least a saving of €70.875 for their hospital in one year.
- Perier et al. argue that the reduction in time with EinsteinVision® was caused by better perception of depth and spatial resolution.



	Group I n=128	Group II n=135	Difference (mn)	P
Cross clamping time (mn)	89.71 ± 26.12	78.56 ± 22.81	-11.21 ± 3.02	P<0.001
Bypass time (mn)	172.67 ± 41.87	156.03 ± 38.87	-16.61 ± 4.98	P<0.001
Operation time (mn)	233.55 ± 55.90	211.9 ± 49.15	-21.85 ± 6.48	P<0.001

Group I = 2D, Group 2 = 3D with EinsteinVision 3.0

<sup>1</sup>Patrick Perier, Wolfgang Hohenberger, Fitsum Lakew, Gerhard Batz, Michael Zacher, Anno Diegeler. 3D video assistance: a giant leap for totally endoscopic minimally invasive mitral valve repair. Meeting Presentation: EACTS 2016 Barcelona - Sunday October 2 2016

### Visual systems and safety – is your system defibrillator proof?

According to norm EN60601 there are four levels that determine whether a medical device provides any protection against electrical shocks. The lowest level is BF (Body Floating), which means that a device can be used in cardiothoracic surgery, but may not be placed directly on the heart. A higher safety level is CF (Cardiac Floating), which does allow placement of the device on the heart. CF defibrillator proof is the highest level.

EinsteinVision® is one of the few visual systems on the market that has this highest rating, which means that if a defibrillator is used, the endoscopes do not need to be removed. This makes it particularly useful and safe for cardiothoracic surgery.



Type BF Applied Part



Type CF Applied Part



Defibrillation proof type BF Applied Part



Defibrillation proof type CF Applied Part

---

#### A different sterile handling concept

- No reprocessing
  - Consistent 3D image quality
  - Fewer interfaces during the product handling process
  - Cost transparency
- 



B. Braun Medical B.V. | +31 (0)412 67 24 11 | [customer care.nl@bbraun.com](mailto:customer care.nl@bbraun.com) | [www.bbraun.nl](http://www.bbraun.nl)

