

## Merged Near-Infrared Fluorescence and White Light Imaging in Minimally Invasive Surgery

Rutger M. Schols<sup>1</sup> · Niels J. Connell<sup>1</sup> · Laurents P. S. Stassen<sup>1</sup>

Published online: 29 April 2015  
© Société Internationale de Chirurgie 2015

Dear Editor,

We thank the author for his interest in and comment on our manuscript. As we stated in the discussion, merged white light (WL) and near-infrared fluorescence (NIRF) imaging is one of the points that need improvement in the current fluorescence imaging systems for minimally invasive surgery. We admit the omission of not having included the two papers by Sherwinter reporting on the Pinpoint system. Probably these studies, on transanal endoscopic imaging, were not detected by our search as we did not specifically search for endoscopic devices for transanal application. The third study, on robotic fluorescence imaging, mentions “merging” of NIRF imaging with the

“black and white” image (i.e., not the WL image). By “merging” we specifically mean the composite of the NIRF image and the (high-definition) WL anatomical image, which is not widely available in the present commercial systems. Perhaps we should have better defined the term “merging” in our manuscript.

We therefore thank the author for his comment and feel supported by Dr Sherwinter that merging of WL and NIRF images is important to improve the value of NIRF imaging in minimally invasive surgery.

---

✉ Rutger M. Schols  
rutgermschols@hotmail.com

<sup>1</sup> Department of Surgery, Maastricht University Medical Center, Maastricht, The Netherlands