

Evaluation Questionnaire Exoscope (Zeiss Kinevo 900s) vs. Standard Practice

Name of the surgeon:

Type of surgery conducted:

- 1) Compared to your usual practice (microscope or magnification surgical loupes) with the exoscope and concerning the **identification of anatomical structures/pathological tissues**, the performance of the exoscope was: (select one answer)
 - Much worse
 - Worse
 - Similar
 - Better
 - Much better
- 2) Compared to your usual practice (microscope or magnification surgical loupes), concerning the **depth of the surgical field**, the performance of the exoscope was: (select one answer)
 - Much worse
 - Worse
 - Similar
 - Better
 - Much better
- 3) Compared to your usual practice (microscope or magnification surgical loupes) concerning the **illumination of the surgical field**, the performance of the exoscope was: (select one answer)
 - Much worse
 - Worse
 - Similar
 - Better
 - Much better
- 4) Compared to your usual practice (microscope or magnification surgical loupes), concerning the **magnification of the surgical field**, the performance of the exoscope was: (select one answer)
 - Much worse
 - Worse
 - Similar
 - Better
 - Much better
- 5) Compared to your usual practice (microscope or magnification surgical loupes), concerning the **handling of the camera/device during the surgery**, the performance of the exoscope was: (select one answer)

- Much worse
 - Worse
 - Similar
 - Better
 - Much better
- 6) Compared to your usual practice (microscope or magnification surgical loupes), concerning the **preoperative setup** (position, mobility, installation of sterile fields) the performance of the exoscope was ...: (select one answer)
- Much worse
 - Worse
 - Similar
 - Better
 - Much better

Please answer the following questions using a 1-5 Scale, 0 for no answer:

5 very good/strongly agree

4 good /agree

3 neutral

2 poor/disagree

1 very poor/strongly disagree

0 not applicable / no answer

- 1) Were the 3D-glasses comfortable to wear?
- 2) Was the head mounted display (HMDmd) comfortable to wear?
- 3) Was the surgical operation comfortable as a surgeon?
- 4) Was the surgical operation comfortable as an assistant?
- 5) Was the exoscope useful as an educational tool?
- 6) Was a comfortable surgical working distance secured?
- 7) Was it easy to focus the surgical field with the exoscope?
- 8) Did the exoscope need more space in the operating room than your usual device (microscope/surgical loupes)?
- 9) Was there a reduction of the surgical field because of the positioning of the exoscope?

10) Was a modification of the surgical technique necessary because of the exoscope ?

11) Will exoscopes replace conventional binocular microscopes in cochlea implant/
middle ear surgery?

12) Will exoscopes replace conventional binocular microscopes in microvascular surgery /
parotidectomy?