

Reviewer #1,

Specific Comments To Authors: 1. The operation process is quite complex, and the article does not provide a comparison of surgical time and bleeding volume. 2. In order to increase the pull-out force of the screw during lifting, it is necessary to hit the cortical bone in front of the vertebral body, which increases the risk of accidental injury. 3. The selection of cases is relatively narrow, and they are all mild idiopathic Lenke type I patients with low persuasiveness. 4. Figure 6 is a key image, lacking preoperative X-ray and CT images.

Here are the answers to reviewers.

1. We agree that the operation process is quite complex and we did not measure the surgical time and bleeding volume. In discussion process, we have stated them as the limitation of the study and we hope that future study should address this issue.
2. We agree with the reviewer that any attempt to penetrate the anterior vertebral body wall will increase the risk of accidental injury. Hence in our study, the pedicle screws insertion in both groups are similar. We did not plan for the anterior body penetration. We highlighted this issue in material and methods section.
3. We agree that the case selection is relatively narrow, limited to only mild Lenke type 1 patients. This is the initial study for the tools development and we have addressed this issue in discussion session. We also suggest that future study involving wider range of cases should be performed.
4. We have added the preoperative x-ray and ct images to Figure 6.

Regards,

Phedy

### Journal chief editor's opinion

This paper shows Scoliocorrector Fatma-UI, a new device designed for correction of adolescent idiopathic scoliosis, which can provide good three-dimensional correction. The table 2. the baseline of the RaSag angle is much higher in the control group(preoperation), so the lower postoperative Rasag angle in SCFUI group does not fully support the advantage of the device, this should be analyzed. The format of the language should be uniform.

We agree that the RaSag is higher in the control group than in the interventional group pre and postoperatively and this may result in bias. We have discussed the potential of bias in the discussion section. We also revised the conclusion section that our device may only potentially benefit in rotational correction. For the uniformity of the language, we have revised the RaSag into rotational degree.