Response letter

Thank you for your kind comments.

We have made revision according to reviewer's comments.

Revised parts of manuscript are highlighted as red color in the revised manuscript.

Reviewer #1

1. Reviewer commented as 'Page 4, last line 9-12 1【CASE PRESENTATION Chief complaints A 48-year-old woman visited the clinic for an ultrasonographic abnormality detected on a routine check-up. 】 Lack of hospital ethics proof '

→ I thank the reviewer for this comment.

The study was approved by the Itiutional Review Boards of Chungbuk National University Hospital, Cheongju, South Korea.

I changed the part of case presentation as follows. 'A 48-year-old woman visited the breast clinic of Chungbuk National University Hospital for an ultrasonographic abnormality detected on a routine check-up.' (Case Presentation, line 18-19, page 4)

2. Reviewer also commented as 'last line 2-3 2【The patient was diagnosed with invasive ductal carcinoma following an ultrasound (USG) core needle biopsy.】 Lack of pathological pictures of the core needle biopsy.'

→ I thank the reviewer for this comment. We have added the pathologic pictures of the core needle biopsy on Figure 1B (Figure 1B)

Reviewer #2

1. Reviewer commented as '1 Title. Does the title reflect the main subject/hypothesis of the manuscript? Yes. 2 Abstract. Does the abstract summarize and reflect the work described in the manuscript? Yes. 3 Key words. Do the key words reflect the focus of the manuscript? Yes. 4 Background. Does the manuscript adequately describe the

background, present status and significance of the study? Yes. 5 Methods. Does the manuscript describe methods (e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail? Yes. 6 Results. Are the research objectives achieved by the experiments used in this study? What are the contributions that the study has made for research progress in this field? Yes. 7 Discussion. Does the manuscript interpret the findings adequately and appropriately, highlighting the key points concisely, clearly and logically? Are the findings and their applicability/relevance to the literature stated in a clear and definite manner? Is the discussion accurate and does it discuss the paper's scientific significance and/or relevance to clinical practice sufficiently? Yes. 8 Illustrations and tables. Are the figures, diagrams and tables sufficient, good quality and appropriately illustrative of the paper contents? Do figures require labeling with arrows, asterisks etc., better legends? Yes. 9 Biostatistics. Does the manuscript meet the requirements of biostatistics? No biostatistics was used in this manuscript. 10 Units. Does the manuscript meet the requirements of use of SI units? Yes. 11 References. Does the manuscript cite appropriately the latest, important and authoritative references in the introduction and discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references? Yes. 12 Quality of manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate? Yes. 13 Research methods and reporting. Authors should have prepared their manuscripts according to manuscript type and the appropriate categories, as follows: (1) CARE Checklist (2013) - Case report; (2) CONSORT 2010 Statement - Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial; (3) PRISMA 2009 Checklist - Evidence-Based Medicine, Systematic review, Meta-Analysis; (4) STROBE Statement - Case Control study, Observational study, Retrospective Cohort study; and (5) The ARRIVE Guidelines - Basic study. Did the author prepare the manuscript according to the appropriate research methods and reporting? Yes. 14 Ethics statements. For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by

their local ethical review committee. Did the manuscript meet the requirements of ethics? Yes.

→ I thank the reviewer for this kind and descriptive reviews.

Reviewer #3

1. Reviewer commented as 'I believe that the authors should analyze the possible reasons and present the verification result in the manuscript.'

→ I thank the reviewer for this comment.

I have highlighted the potential risk and possible reason of the wire migration on the part of discussion. Highlighted text is 'To minimize the incidence of these complications and their sequelae, various precautions can be taken. First, during the localization procedure, the wire's hook should be placed inside the main mass. Otherwise, the wire can migrate when the patient moves because of the fat that accounts for a large portion of the breast. In this case, the wire went through the tumor, and the hooked tip of the wire might be located within the prepectoral fatty space. The wire migrated along the prepectoral space due to the patient's respiratory movements and operation procedure. It may have moved along with soft tissue to the subcutaneous tissue of the back. Fortunately, it did not cause major blood vessel or nerve damage. A wire in this location can produce severe complications if the vascular structures or brachial plexus are injured. Although migration of breast wire is unusual, physicians should consider the possibility of its occurrence. Second, the wire should be bent at an angle of 90° at the skin surface following localization. Third, the time between localization and surgery should be reduced. It is recommended to localize immediately before breast surgery. Surgeons must account for the entire length of wire following the procedure to avoid having retained wires or wire fragments. (Discussion, line 16-29, page8 and line 1-2, page 9)

Additionally, I have added the potential risk and possible reason of the wire migration on the part of discussion. Added text is 'Fourth, it would better to use a wire from a pre-made medical product. Because we use a 23-gauze needle with

hooked monofilament wire that was made by surgeon, it can move freely without resistance and is vulnerable to migration. Fifth, more recently, the available options for performing preoperative localization have expanded greatly and they include non-wire devices such as radioguided occult lesion localization, radioactive seed localization, intraoperative ultrasonography, and radiofrequency identification tags. Non-wire localization devices can be placed days in advance of the surgery, at the patient's convenience, to avoid wire-related challenges and complications [12].' (Discussion, line 2-10, page 9)

I also present the verification result in the part of OUTCOME AND FOLLOW UP. Added text is 'Three months after surgery, a chest PA x-ray and chest CT revealed no evidence of remnant wire or pneumothorax and other abnormalities.'(Outcome and Follow up, lines 16-17, page 7) Additionally, I added the Figure 4 as verification result images. (Figure 4)

Young Jin Choi, MD, PhD,
Department of Surgery, Chungbuk National University Hospital, Chungbuk National University College of Medicine, 1 Chungdae-ro, Seowon-gu, Cheongju 28644, South Korea.
choiyj@chungbuk.ac.kr
Telephone: +82-43-269-6361
Fax: +82-43-266-6037