**Reviewer’s report**

**Title:** Sternal resection and reconstruction for metastasis due to breast cancer: The Marlex sandwich technique and implantation of a pedicled latissimus dorsi musculocutaneous flap

**Version:** 0 **Date:** 11 Feb 2019

**Reviewer:** Atsushi Watanabe

**Reviewer's report:**

The authors presented sternal resection and reconstruction for metastasis due to breast cancer using the Marlex sandwich technique.

This procedure for the reconstruction of the osseous chest wall has been used and reported previously. Therefore, this manuscript does not present novel or difficult issues. I think that a great deal of the material covered in the current paper has been addressed in prior publications and should be condensed.

I have some comments and questions as follows:

# I think that the mass was mainly located in the ICS not in the sternum on the CT and PET scans. The destroyed cortex of bone and osteolytic or osteoplastic changes were not observed on the CT. Why did the authors diagnose it as sternal metastasis? Was percutaneous biopsy for the sternum or 99mTc bone scintigraphy performed?

**Minor revisions:**

# PET revealed the SUV to be 7.30 at the mass in the sternum. Was the value the mean or the maximum? The issue should be described in the Case presentation.

# How long was the length between the surgical margin and the resected edge?

# I think that the tumor did not invade the pectoralis major muscle and the subcutaneous layer was not involved. Was myocutaneous flapping necessary in this case? I think that muscle flapping played the satisfying role of the replacement material.

# What was the presternal skin incision and concomitant resection of the skin made of? These issues should be described.

# Were there malignant cells in the sternum?
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