

# Remission of a Negative Her2/Neu Over Expressive Metastatic Ovarian Cancer

## Patient by the Single Agent of Trastuzumab as Salvage Therapy

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### Introduction

We generally believe that those tumors without specific receptors will not respond to target medication such as cetuximab、bevacizumab or trastuzumab. Nonetheless, we have a surprising treatment experience of using trastuzumab on an ovarian cancer patient whose Her2/Neu FISH (Fluorescence In Situ Hybridization) study was negative.

### Case Report

A 75-year-old female was referred to my clinic in June 2004 for heavy vaginal and anal bleeding due to tumor invasion. She was first diagnosed as having stage II ovarian cancer in 1999 but the disease progressed even after using many regimens including high-dose cyclophosphamide, paclitaxel plus cisplatin, and topotecan. Her physical status deteriorated under heavy chemotherapy, and the metastasis was shown to have become much worse. Concerned about her poor health situation, we then recommended using weekly single-agent trastuzumab with an initial dosage of 200 mg and followed with maintenance dosage of 100 mg. One month later, the bleeding had stopped, and 2 months later, the CT scan showed that the liver metastasis had resolved (Fig 1). After the 3rd month, we added 100 mg cyclophosphamide every 2 weeks together with trastuzumab, while the latter continued to be given by weekly regimen. Her overall condition continued to dramatically improve. We later checked

the Her2/Neu status of her previously sectioned tumor by FISH study , and were surprised that the result was negative. The PET scans were done before treatment and in the 6th month (Fig 2). Presently, the patient is still in a good status with no evidence of new lesions.

### Discussion

It is interesting that targeted medication should exert an extraneous effect beyond those tumors possessing receptors of the target. A previous phase II study published in 2003 by Bookman et al. on metastatic ovarian cancer with trastuzumab showed distressing results<sup>2</sup>. We suppose that targeted medications such as cetuximab and trastuzumab may have alternative pathways for initiating their drug effects besides the direct targeting of their receptors. However, this remains for further investigation and research.

### REFERENCES

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