

# Immunotherapy in PD-L1 Negative Advanced Vulvar Squamous Cell Carcinoma: A Case Report

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## Introduction

Nowadays, no standard systemic therapy regimens exist for treating advanced or recurrent/metastatic Vulvar squamous cell carcinoma (VSCC) disease. It was widely accepted that programmed death-ligand 1 (PD-L1) positive are prone to have better treatment response to immune checkpoint blockade. The value of immunotherapy in PD-L1 negative VSCC patients has been questioned.

## Case report

A 23-year-old woman presented at our hospital complaining about a painful vulvar lesion in March 2024. Physical examination revealed an ulcerative vulvar mass, approximately 10cm in diameter, localized on the right labium majus with extension to the urethra, lower one-third of the vagina and the anus. Enlarged fixed bilateral inguinal nodes can be palpated with the largest one located in the left area. The patient underwent evaluation after the initial 4 cycles therapy and showed tumor progression. The immunohistochemistry of PD-L1 showed a Combined Positive Score with less than 1. Our multidisciplinary team gave treatment using bevacizumab and sintilimab with chemotherapy. Surprisingly, the patient reported that painful vulvar lesion relieved around 2 weeks after the first cycle. Another 5 cycles of therapy were conducted and the efficacy was assessed as sustained PR since MR shows the vulvar tumor as a non-target lesion.

## Highlights

- Nowadays, no standard systemic therapy regimens exist for treating advanced or recurrent/metastatic vulvar squamous cell carcinoma (VSCC).
- Patients who have PD-L1 negative tumors frequently do not respond to immune checkpoint inhibitors.
- Our patient with a PD-L1 negative and MSS advanced VSCC was highly sensitive to immunotherapy and had a long response.



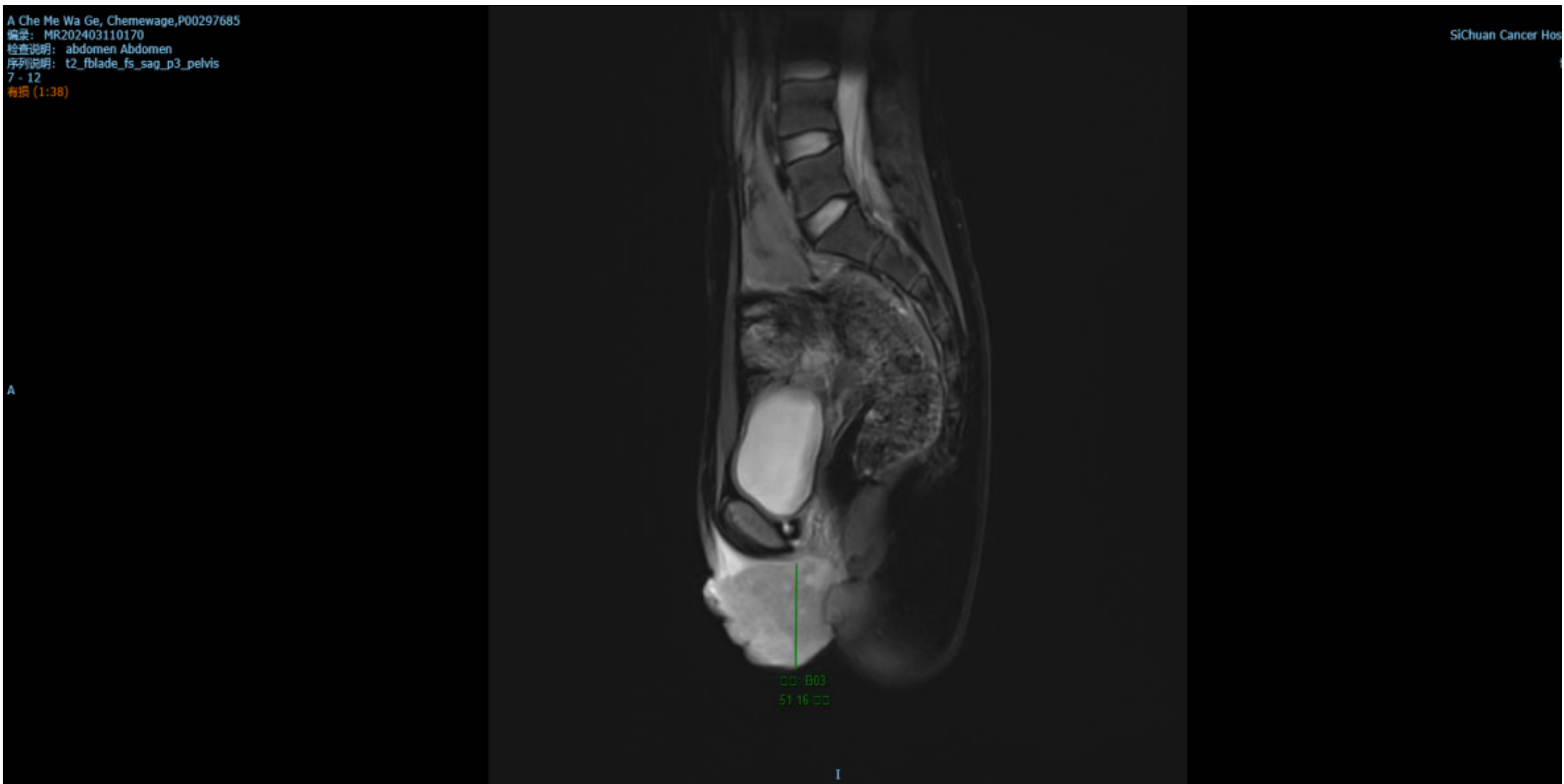
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A



B

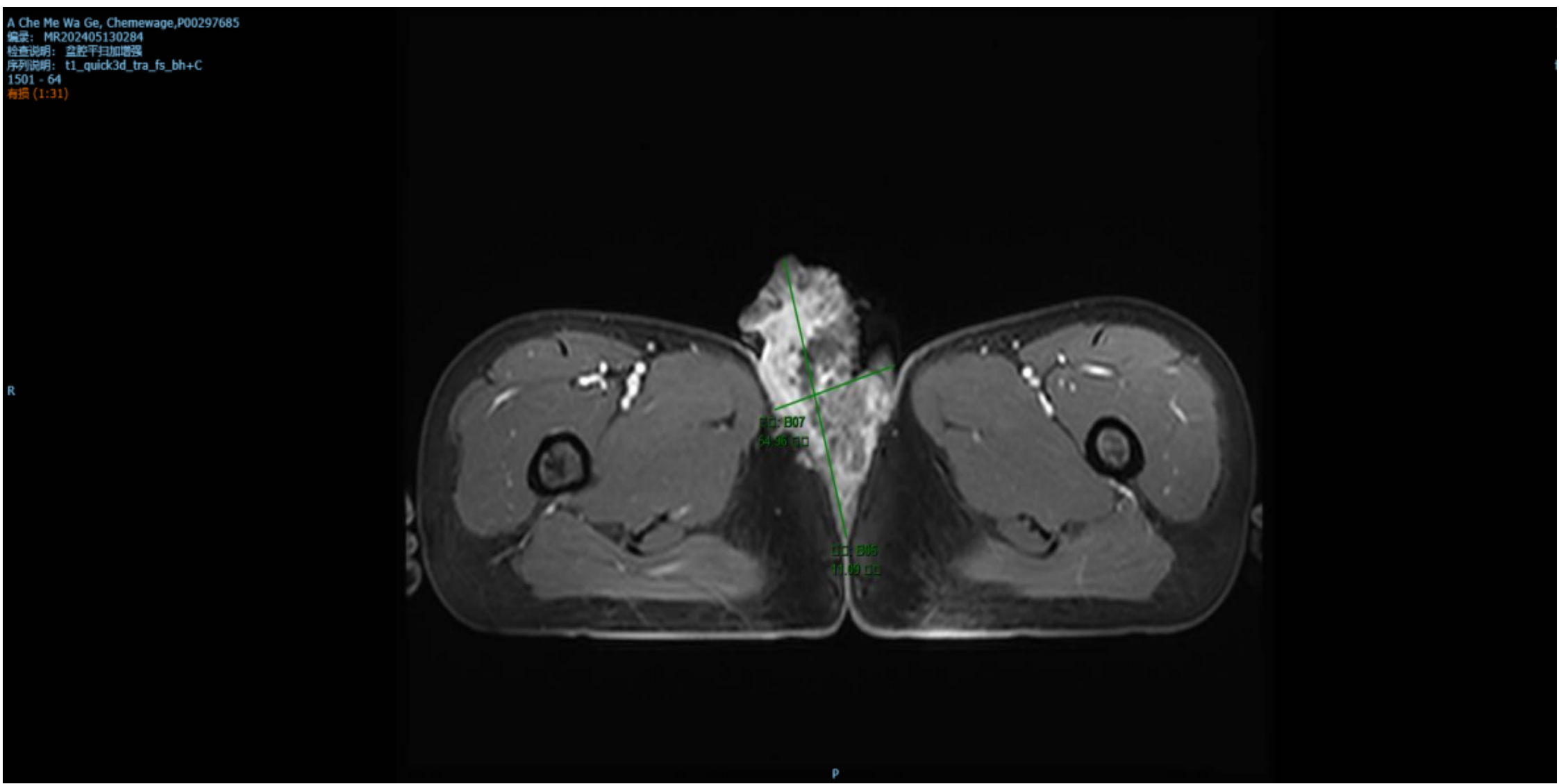


Figure 1 Enhanced MRI of the abdomen showed enlarged retroperitoneal vulvar mass after first-line systematic treatment (A, B).

A



B

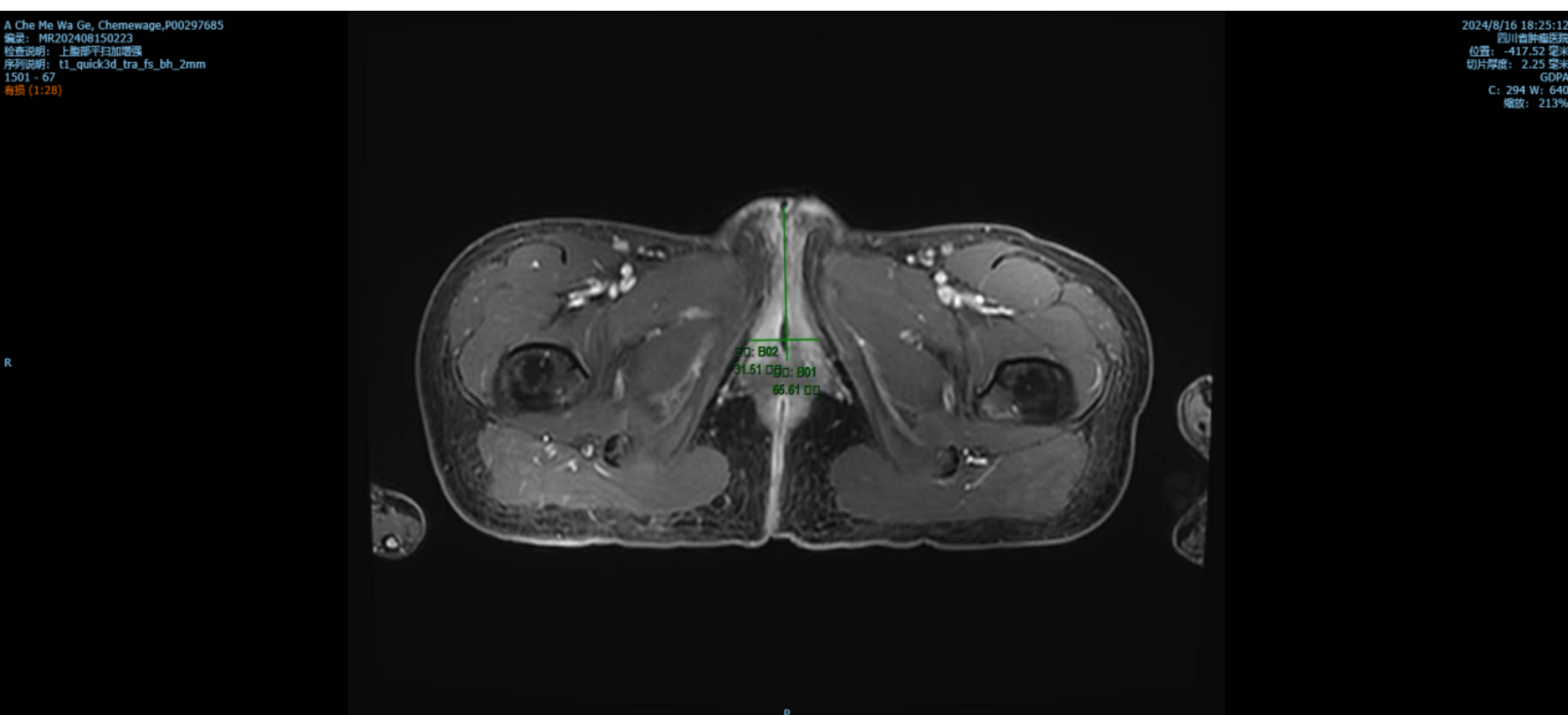


Figure 2 Radiological imaging of the tumors after (A, B) 6 cycles of PD-1 blockade.

## Contact

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