

# An Open-label, Single Arm, Phase II Trial of Niraparib in Combination With Anti-PD1 Antibody in Recurrent/ Advanced Stage Endometrial Cancer Patients (SINI)

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## Background

- Endometrial carcinoma is the most common malignancy of the female reproductive tract. The anti-tumor activity of second-line chemotherapy for recurrent or advanced endometrial cancer is poor, with an objective response rate of about 15%.
- PD-1 antibody was approved for the treatment of MSI-H/dMMR unresectable or metastatic solid tumors, including endometrial cancer. Sintilimab is a high-affinity antibody against PD1 that was approved in China.
- Niraparib was approved for the maintenance treatment of ovarian cancer, and back-line rescue treatment for BRCA/HRD-positive advanced ovarian cancer.
- Recent studies demonstrated that PARP inhibitors might alleviate resistance and enhance the efficacy of immune checkpoint blockade therapy.

## Table 1. Brief Inclusion and Exclusion Criteria

Inclusion Criteria:	Main Exclusion Criteria:
<ol style="list-style-type: none"><li>1. Patients volunteered to participate in this study, signed informed consent, good compliance, and cooperated with follow-up;</li><li>2. Recurrent or advanced endometrial cancer patients who were incurable via local therapies, and progressed after at least one line of platinum-based chemotherapy.</li><li>3. 18-70 years of age and female;</li><li>4. ECOG performance status of 0-1;</li><li>5. Expected survival longer than three months;</li><li>6. Histologically confirmed endometrial epithelial carcinoma;</li><li>7. At least one measurable lesion by irRECIST;</li><li>8. Pathologically confirmed epithelial endometrial cancer ;</li><li>9. Subjects provide formalin-fixed and paraffin-embedded tumor tissue samples for pathological consultation;</li><li>10. Life expectancy <math>\geq 16</math> weeks;</li><li>11. Good organ function, including:</li><li>12. Previous hormonal or immunotherapy was permitted.</li><li>13. The adverse effects of any previous treatment have returned to <math>\leq</math> CTCAE grade 1 or baseline, except for symptomatically stable sensory neuropathy, hair loss, and anemia.</li></ol>	<ul style="list-style-type: none"><li>1. History of any PARP inhibitors;</li><li>2. Patients with other invasive cancers within 5 years of enrollment, with the exceptions of cancers in situ within 2 years, such as squamous cell skin cancer, breast cancer, etc.</li><li>3. The last systemic or radical anti-tumor therapies were completed within 4 weeks before the first dose</li><li>4. Received immunomodulatory drugs or agents with anti-tumor effects within 2 weeks before enrollment.</li><li>5. Had major surgery within 4 weeks before the start of the study or was expected to undergo major surgery during the study period.</li><li>6. Uncontrollable pleural and ascites.</li><li>7. Any active autoimmune disease or a history of autoimmune diseases;</li><li>8. Known hypersensitivity to niraparib/PD-1 antibody or active or inactive ingredients of drugs with a similar chemical structure to niraparib/PD-1 antibody.</li><li>9. Subjects who have severe or uncontrolled diseases</li><li>10. Treatment with systemic corticosteroids (<math>\geq 10</math> mg/day prednisone or equivalent) or other immunosuppressive drugs within 14 days prior to the initiation of the study treatment.</li><li>11. Untreated or symptomatic brain metastases or leptomeningeal metastases.</li></ul>

## Current status

- This study is currently enrolling patients.
- The estimated primary completion date is Sep 1st, 2022
- Clinical trial information: NCT04885413

## Trial design

- The trial aims to evaluate the activity and safety of Niraparib plus Sintilimab in patients with recurrent/ advanced endometrial cancer.
- 37 patients were scheduled to be enrolled.
- Key eligibility criteria included: patients aged 18–70 years; measurable lesions per irRECIST; history of at least one line of chemotherapy and ECOG performance status of 0-1.
- Patients received niraparib 200 mg orally QD and intravenous sintilimab 200 mg d1 every 3 weeks until disease progression, intolerable toxicity, or withdrawal of consent.
- The primary endpoint was the objective response rate (ORR) assessed by irRECIST. Secondary endpoints included disease control rate (DCR), duration of response (DOR), PFS, and safety.

## Study design

The aim of this study is to investigate the efficacy and safety Niraparib and Sintilimab dual therapy in Recurrent/ Advanced Stage Endometrial Cancer.

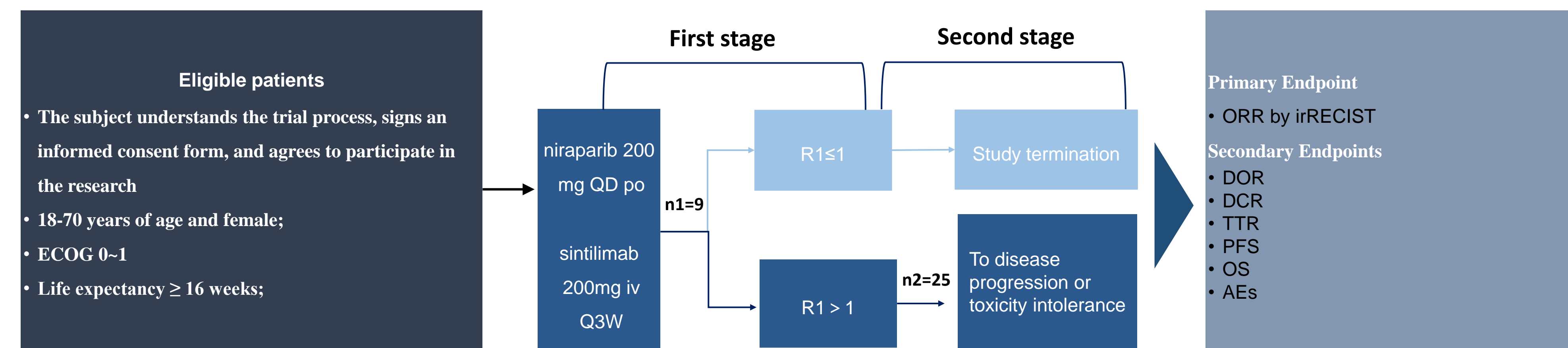


Figure 1. Study Design