Supplemental Materials and Methods

PET/CT scanning procedure

The patients were instructed to avoid strenuous exercise for 24 h before the ¹⁸F-FDG PET/CT study was performed, to minimize the uptake of the radiotracer by the muscles. They were also instructed to fast for at least 6 hours prior to the injection of ¹⁸F-FDG, which was produced in the radio-pharmacy of our institution using the standard synthetic technique. Venous blood glucose levels were maintained at <140 mg/dL. The patients were injected with 370–555 MBq (10–15 mCi) of ¹⁸F-FDG and allowed to rest in a sitting or supine position for an average of 59.89±8.62 minutes prior to scanning. Thereafter, the patients were positioned in the scanner with their arms above their heads. Skull base-to-mid-thigh PET/CT scans from both the upper thighs to the head were performed using a Discovery STE (GE Healthcare, Waukesha, WI; n=53), a Biograph Truepoint 16 (Siemens/CTI, Knoxville, TN; n=72) or a Biograph Truepoint 40 (Siemens/CTI, Knoxville, TN; n=34) scanner. The machines combined multi-slice CTs with PET tomographs. The CT data were used for attenuation correction. Five or six bed positions were acquired for 2–3 min per bed position. Calibration of each scanner against the dose calibrators and well counters was routinely performed. The measured standardized uptake value (SUV) for the phantom was within the acceptable range of
90–110%. The SUV of the liver was also calculated by drawing a three-dimensional region of interest 3 cm in diameter on the normal inferior right lobe.

**Neoadjuvant chemotherapy**

At our institution, neoadjuvant chemotherapy is considered for patients with a borderline performance status (Eastern Cooperative Oncology Group performance status of 3 or 4), a compromising medical condition, or extensive pleural effusion, and for patients with extensive abdominal disease that is unlikely to be optimally cytoreduced. The decision to perform primary debulking surgery rather than to administer neoadjuvant chemotherapy was based on the attending physician's judgment. Prior to initiating neoadjuvant chemotherapy, ascitic or pleural fluid tapping was performed for cytologic confirmation. During the study period, a total of 21 patients received three cycles of a 24-hour infusion of intravenous paclitaxel (175 mg/m²) followed by intravenous carboplatin (AUC = 5) tri-weekly prior to surgery. Interval debulking surgery was performed by board-eligible/board-certified gynecologic oncologists as soon as possible after hematological recovery, but within 6 weeks after the completion of the third chemotherapy cycle. After surgery, patients received the additional three to six, or nine, cycles of paclitaxel/carboplatin. The first cycle of chemotherapy was administered as soon as possible after surgery, but no more than 6
weeks later.