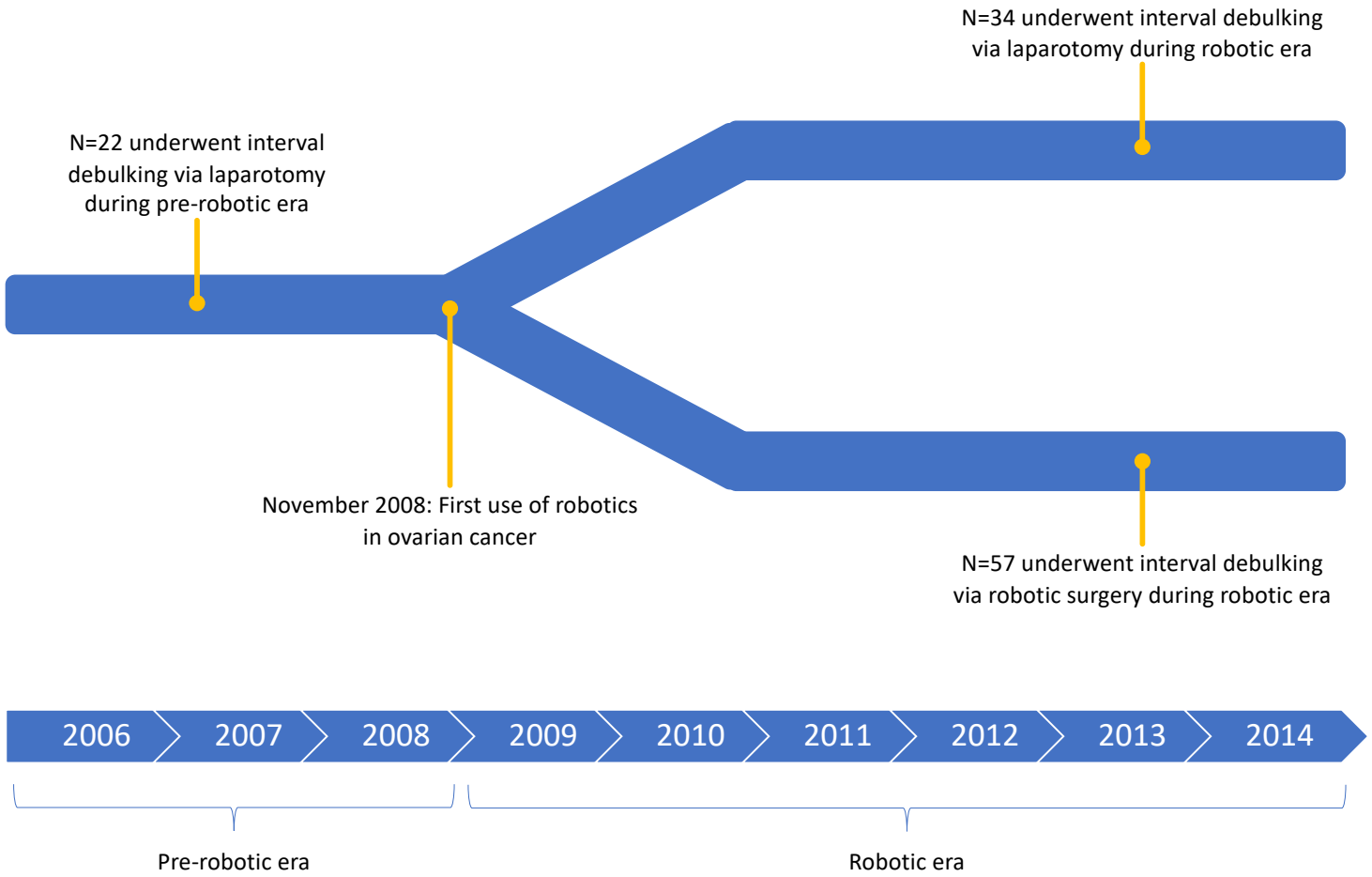
Appendix I. Timeline chart illustrating surgical approach for stage III–IV ovarian cancer after neoadjuvant chemotherapy over time



Appendix II. Description of robotic procedure

Patients were informed about the evaluation of the robotic approach for the surgical treatment of their disease. An information booklet was provided to each patient and all patients who were offered robotic surgery signed an informed consent for the evaluation of outcomes in addition to the regular surgical consent form.

All procedures were performed by one of four gynecologic oncologists with experience in robotic surgery. Robotic-assisted surgery was performed using the da Vinci® Surgical System, introduced in December 2007 in the Division of Gynecologic Oncology.

Robotic surgery followed established oncological standards and included careful evaluation of the abdomino-pelvic cavity, peritoneal washings, hysterectomy, bilateral salpingo-oophorectomy, bilateral pelvic/paraaortic lymphadenectomy for staging or presence of enlarged lymph nodes, omentectomy, and removal of all visible peritoneal disease including upper abdominal implants in order to attempt to achieve complete cytoreduction.

The patient was placed on an egg crate mattress with the lower extremities in padded lithotomy stirrups. The entire upper extremities were wrapped in foam padding. Shoulder braces covered with gel foam pads were used as additional safety devices. This prevented the patient from sliding and avoided injury to the brachial and ulnar nerves. All patients were monitored with an arterial line and were maintained in steep (almost 30 degrees) Trendelenburg position throughout the procedure, with insufflation pressures between 8 to 15 mmHg. Patients received standard antibiotherapy with cefazolin, subcutaneous heparin, and pneumatic compression stockings to the lower extremities. The robot was positioned at

a 30-degree angle at the right side of the patient's bed to allow easy repositioning of the robot (double docking) and better access to the perineum to extract specimens. Repositioning of the robot was performed for upper abdominal and diaphragmatic surgery. Specimens were extracted in endobags through the vaginal opening unless a hysterectomy had been performed in the past, in which case a port site was slightly enlarged to allow for the removal of specimens within endobags.

Appendix III. Description of robotic surgery population

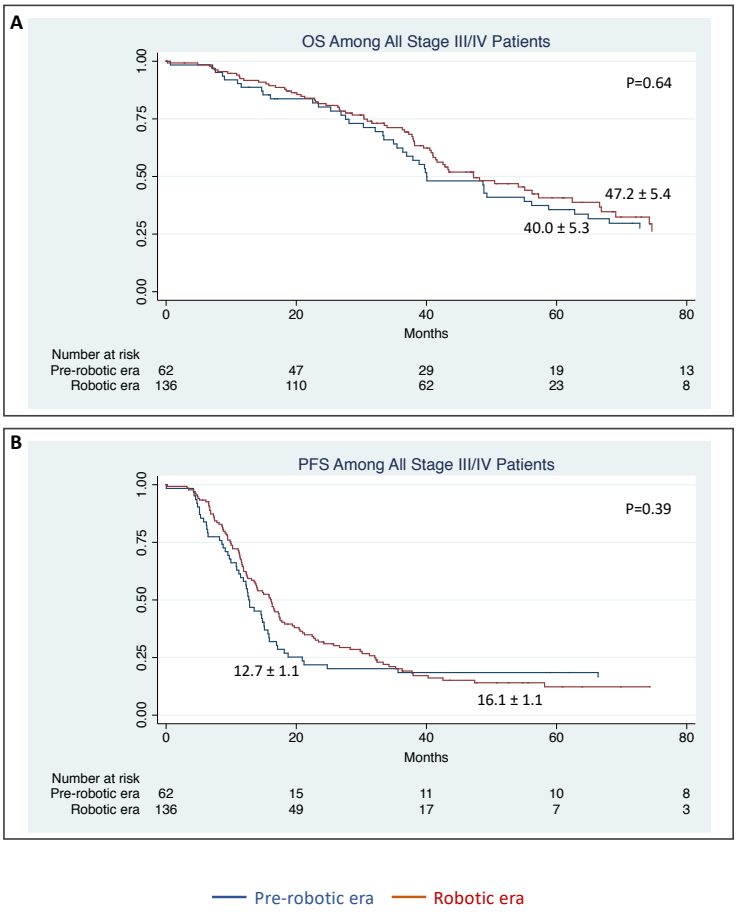
	Robotic surgery cohort (n=57)
Age, mean (SD)	63.5 (14.2)
BMI, mean (SD)	26.6 (6.0)
ASA	
1	3 (5.3%)
2	36 (63.2%)
3	17 (29.8%)
Unknown	1 (1.8%)
Stage	
III	43 (75.4%)
IV	14 (24.6%)
Grade	
1	1 (1.8%)
2	1 (1.8%)
3	55 (96.5%)
Histology	
Serous	51 (89.5%)
Endometrioid	2 (3.5%)
Clear cell	2 (3.5%)
Carcinosarcoma	0 (0%)
Adenosquamous	0 (0%)
Not defined	2 (3.5%)
Follow-up time (months)	
Mean (SD)	41.6 (19.1)
Median (range)	41.0 (6.5–85.5)

Data is presented as n (%) unless stated otherwise

BMI: Body Mass Index (m/kg^2)

ASA: American Society of Anesthesiologists physical status classification system

Appendix IV. Overall survival (OS) and progression-free survival (PFS) before and after the use of robotic surgery for ovarian cancer – sensitivity analysis including interval and primary debulking surgeries



Overall survival (OS, figure A) and progression-free survival (PFS, figure B) were compared between patients in the pre-robotic era (laparotomy only) and the robotic era (combination of laparotomy and robotics in selected cases). Data includes all patients who underwent cytoreductive surgery for stage III or IV ovarian cancer, i.e., interval debulking surgery after neoadjuvant chemotherapy as well as primary debulking surgery upfront.