J Gynecol Oncol. 2024 Mar;35(2):e14
https://doi.org/10.3802/jgo.2024.35.e14
pISSN 2005-0380·eISSN 2005-0399

JOURNAL OF GYNECOLOGIC ONCOLOGY

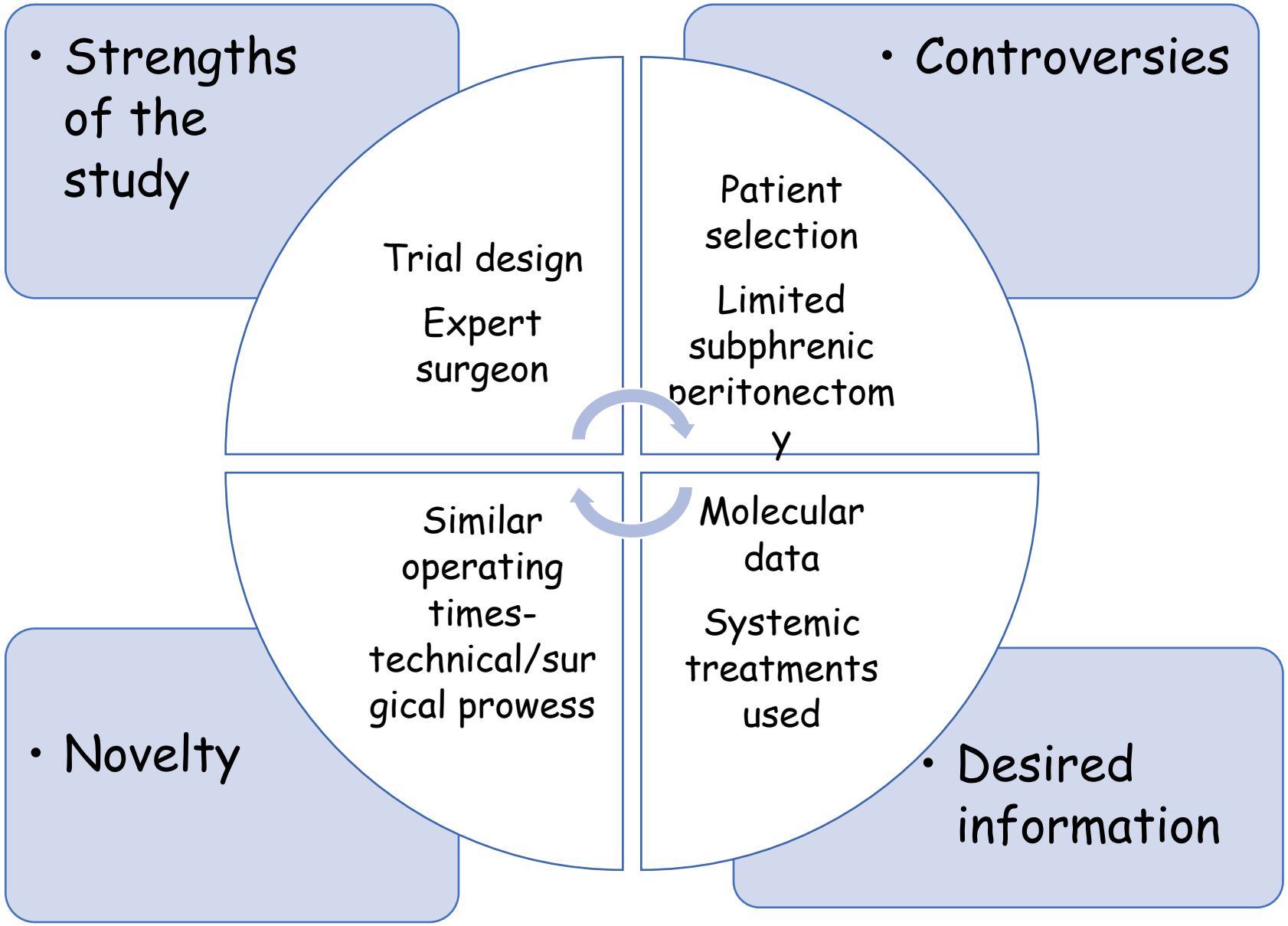
Original Article

Feasibility of laparoscopic Visceral-Peritoneal Debulking (L-VPD) in patients with stage III–IV ovarian cancer: the ULTRA-LAP trial pilot study

Roberto Tozzi, Marco Noventa, Carlo Saccardi, Giulia Spagnol, Orazio De Tommasi, Davide Coldebella, Matteo Marchetti

Division of Women's and Children Health, Department of Gynecology and Obstetrics, Padova University Hospital, Padova, Italy

Comments from: Aditi Bhatt, MS, MCh.,
Dept of Surgical Oncology,
KD Hospital, Ahmedabad, India


• Strengths of the study
• Controversies
Trial design
Expert surgeon
Patient selection
Limited subphrenic peritonectomy
Similar operating times-technical/surgical prowess
Molecular data
Systemic treatments used
• Novelty
• Desired information

Strengths of the study

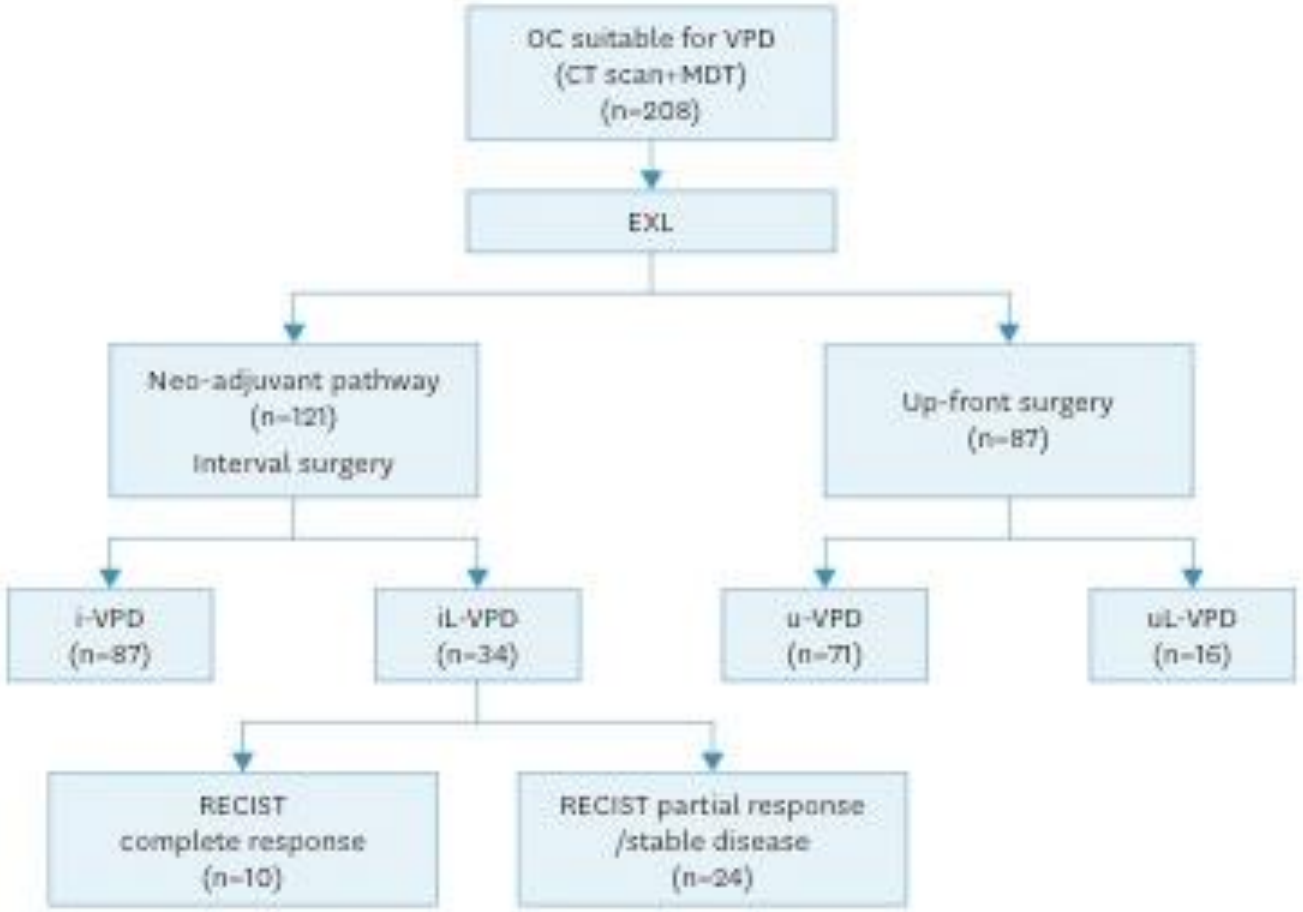


Fig. 1. Patient's flow-chart of the ULTRA-LAP trial pilot study.
CT, computed tomography; EXL, exploratory laparoscopy; iL-VPD, interval laparoscopic visceral-peritoneal debulking; i-VPD, interval visceral-peritoneal debulking; MDT, multidisciplinary team; uL-VPD, up-front laparoscopic visceral-pentoneal debulking; u-VPD, up-front visceral-peritoneal debulking; VPD, visceral-peritoneal debulking.

Good approach- to evaluate all patients laparoscopically and start with laparoscopy

Builds the surgeon's experience/ thorough staging

- Skilled surgeon
- Vast experience with all kinds of complex cytoreductive surgeries for ovarian cancer
- Well designed prospective study with pre defined sample size
- Pre-defined criteria for conversion to open surgery

Published in final edited form as:
Int J Gynecol Cancer. 2020 September ; 30(9): 1450–1454. doi:10.1136/ijgc-2020-001584.

Laparoscopic cytoreduction After Neoadjuvant ChEmotherapy (LANCE)

Roni Nitecki, MD[1], **J. Alejandro Rauh-Hain, MD, MPH**[1], **Alexander Melamed, MD, MPH**[2], **Giovanni Scambia, MD**[3,4], **Rene Pareja, MD**[5], **Robert L. Coleman, MD**[1,6], **Pedro T. Ramirez, MD**[1], **Anna Fagotti, MD**[3,4]

[1]Department of Gynecologic Oncology and Reproductive Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX, USA.

[2]Department of Obstetrics and Gynecology, Division of Gynecologic Oncology, Columbia University Vagelos College of Physicians and Surgeons, New York, NY.

[3]Department of Women's and Children's Health, Policlinico A Gemelli, Rome, Italy.

[4]Catholic University Sacred Heart, Rome, Italy.

[5]Instituto Nacional de Cancerología, Bogotá, and Clínica de Oncología Astorga, Medellin, Colombia

[6]Current Affiliation: US Oncology Research, The Woodlands, TX USA

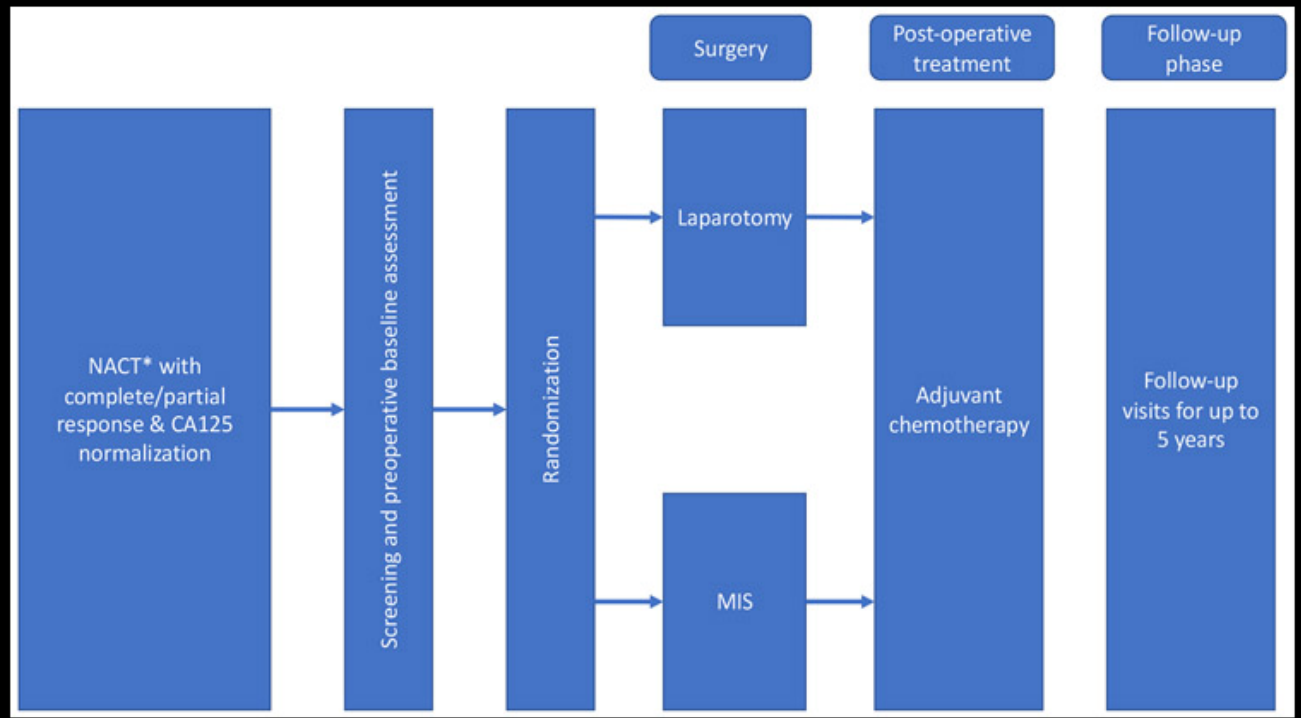


Figure 1.. Study Schema *Chemotherapy regimen & enrollment on other first-line therapeutic clinical trials will be allowed but will be pre-specified before random assignment.
NACT: Neoadjuvant chemotherapy; MIS: Minimally invasive surgery

Novelty

- Equal operative times between the two groups
- Median LOS- 4 days in l-VPD

> Eur J Surg Oncol. 2023 Oct;49(10):107001. doi: 10.1016/j.ejso.2023.107001. Epub 2023 Aug 3.

Laparoscopic cytoreductive surgery and hyperthermic intraperitoneal chemotherapy: Long term oncologic outcomes from the international PSOGI registry

A Arjona-Sanchez [1], O Aziz [2], G Passot [3], G Salti [4], A Serrano [5], J Esquivel [6], K Van der Speeten [7], A Sommariva [8], M Kazi [9], U Shariff [10], F Martínez-Regueira [11], P Piso [12], Y Yonemura [13], K Turaga [14], O Sgarbura [15], A Avanish Saklani [9], M Tonello [8], L Rodriguez-Ortiz [16], M C Vazquez-Borrego [16], A Romero-Ruiz [16], O Glehen [3]; International Laparoscopic PSOGI Registry

Collaborators, Affiliations + expand

PMID: 37579618 DOI: 10.1016/j.ejso.2023.107001

- Median LOS- 7 days for CRS with median PCI of 3
- Median LOS-5 days for risk-reducing surgery

Debatable issues

Tozzi classification of diaphragmatic surgery in patients with stage IIIC–IV ovarian cancer based on surgical findings and complexity

J Gynecol Oncol. 2020 Mar;31(2):e14
https://doi.org/10.3802/jgo.2020.31.e14
pISSN 2005-0380·eISSN 2005-0399

JOURNAL OF GYNECOLOGIC ONCOLOGY

Roberto Tozzi, Federico Ferrari, Joost Nieuwstad, Riccardo Garruto Campanile, Hooman Soleymani Majd

Table 2. Eleven steps of diaphragmatic surgery in patients with stage IIIC–IV ovarian cancer according to Tozzi classification

Step	Description	Type I	Type II	Type III
1	Resection of the falciform ligament 3–4 cm ventral to the out spring from the liver	R	R	R
2	Resection of the membranous part of the falciform ligament towards the insertion in the diaphragm	R	R	R
3	Resection of anterior part of the right coronary ligament until the suprarenal impression of the liver		R	R
4	Resection of the posterior part of the right coronary, right triangular and hepato-renal ligament		R	R
5	Resection of the dorsal ligament (hepato-caval) until the inset of the hepatic vein			R
6	Exposure of right and middle hepatic veins +/– encirclement with vessel loop			R
7	Marking the peritoneal disease below the ribs to start ventral peritonectomy	R	R	R
8	Marking the peritoneal disease from the upper part of the paracolic gutter and over the right kidney to start dorsal peritonectomy	R	R	R
9	Incision of the muscle tailored to the extent of the disease			R
10	Repair of the defect with or without a mesh, with a Foley catheter and a Valsalva manoeuvre to restore the negative pressure			R
11	Test to prove the integrity of the diaphragm			R

R, required; VPD, Visceral-Peritoneal debulking.

Patient selection	-Not include patients with PS-2 for any kind of surgery -Not include patients with Fagotti score 8 or more for l-VPD; for upfront open or lap surgery I would be cautious -Judge portal involvement on preoperative CT scan
During surgery	-Perform a mini -laparotomy and palpation of the colon and small bowel -Use PCI to document the extent of disease -Use the surgical complexity score (SCS) -Complete diaphragmatic peritonectomy even if only the anterior part was involved (Tozzi type 2 or 3) -Use HIPEC after interval cytoreductive surgery
Confirmation of complete tumor removal	-Perform systematic laparotomy in all patients after l-VPD and confirm the adequacy of surgery
Evaluation of recurrence	-Report biochemical recurrence -Use systematic laparoscopy to document the presence and sites of recurrence (in the operated regions versus elsewhere)

Additional (missing information)

Table 3. Reasons for conversion to laparotomy (n=158)

Reasons	Value
Diaphragmatic disease extended dorsally	66 (41.8)
Matted spleno-pancreatic disease	27 (17.1)
Gastro-splenic omental disease	22 (13.9)
Multiple bowel segments involvement	19 (12.0)
Omental disease invading/inseparable from the transverse colon	16 (10.1)
Others	8 (5.1)

Values are presented as number (%).

- Patients with large ovarian masses? Difficult pelvis – pelvic side wall involvement
- What about lesser sac involvement, Glisson's capsule involvement, need for mesocolic or small bowel mesenteric peritonectomy?

- Molecular markers
- What about maintenance treatments used
- What prehabilitation and rehabilitation measures do you use
- QOL and survival data

3 questions

- Why did all patients undergoing uVPD have a Fagotti score of 8 or more?
- No patient undergoing l-VPD had recurrence in one year- how do you explain that? What was the rate of pCR?
- What is the learning curve for performing such laparoscopic procedures- how did you evolve as a surgeon: from open to laparoscopic procedures?

Thank you for your attention