The St. Gallen Model of Cooperative Management of Ovarian Cancer Patients

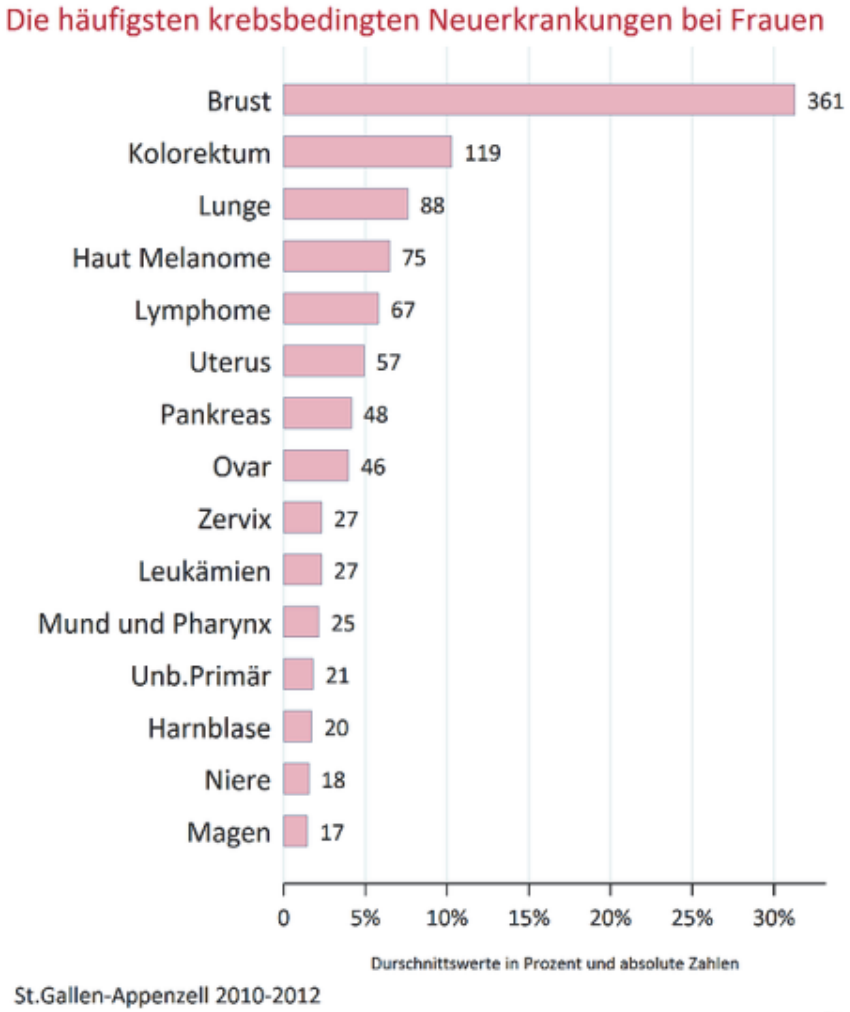
R. Hornung, St. Gallen

Epidemiology

Ovarian cancer incidence:

Cancer Registry St. Gallen – Appenzell (2010-2012):

- 46 Ovarian cancers/ year
- ~2/3 stage III+IV (~ 30 pats)



Diagnostics

Referring Gynecologist

1. Gynecologic examination
2. Transvaginal + transabdominal sonography
3. Suspicion for ovarian cancer → Admission to a tertiary hospital specialized for gynecologic oncology

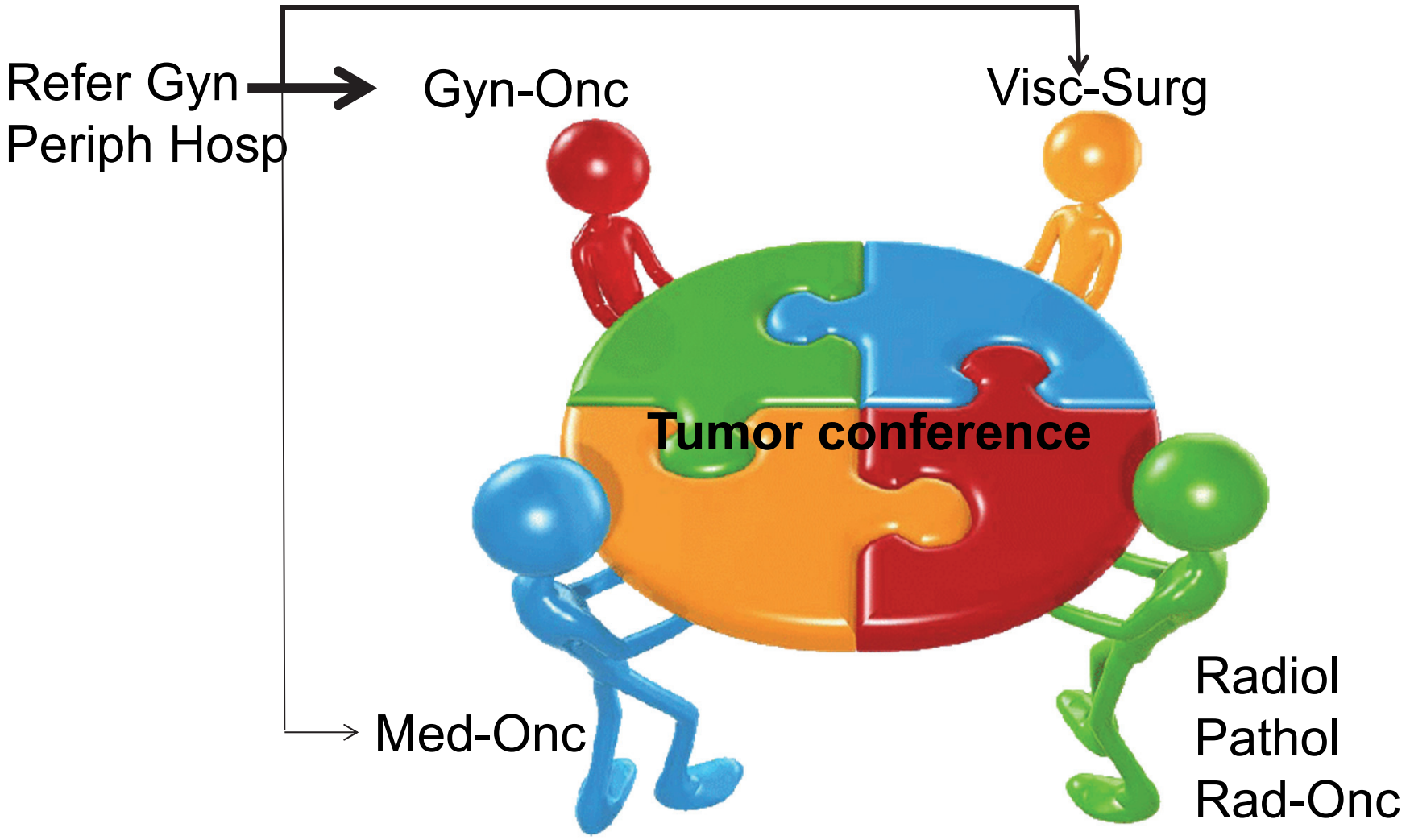
*

Gynecologic Cancer Center

1. General checkup
2. Laboratory: Routine hematology and blood chemistry, Ca 125, CEA (in special cases HCG, AFP and other markers)
3. CAT-scan abdomen (chest)
4. Colonoscopy (the day before surgery)

*S3 Guidelines 2013

Patient's path, decision making



Decision making

Primary surgical debulking

1. Tumor conference

Primary neoadjuvant chemotherapy

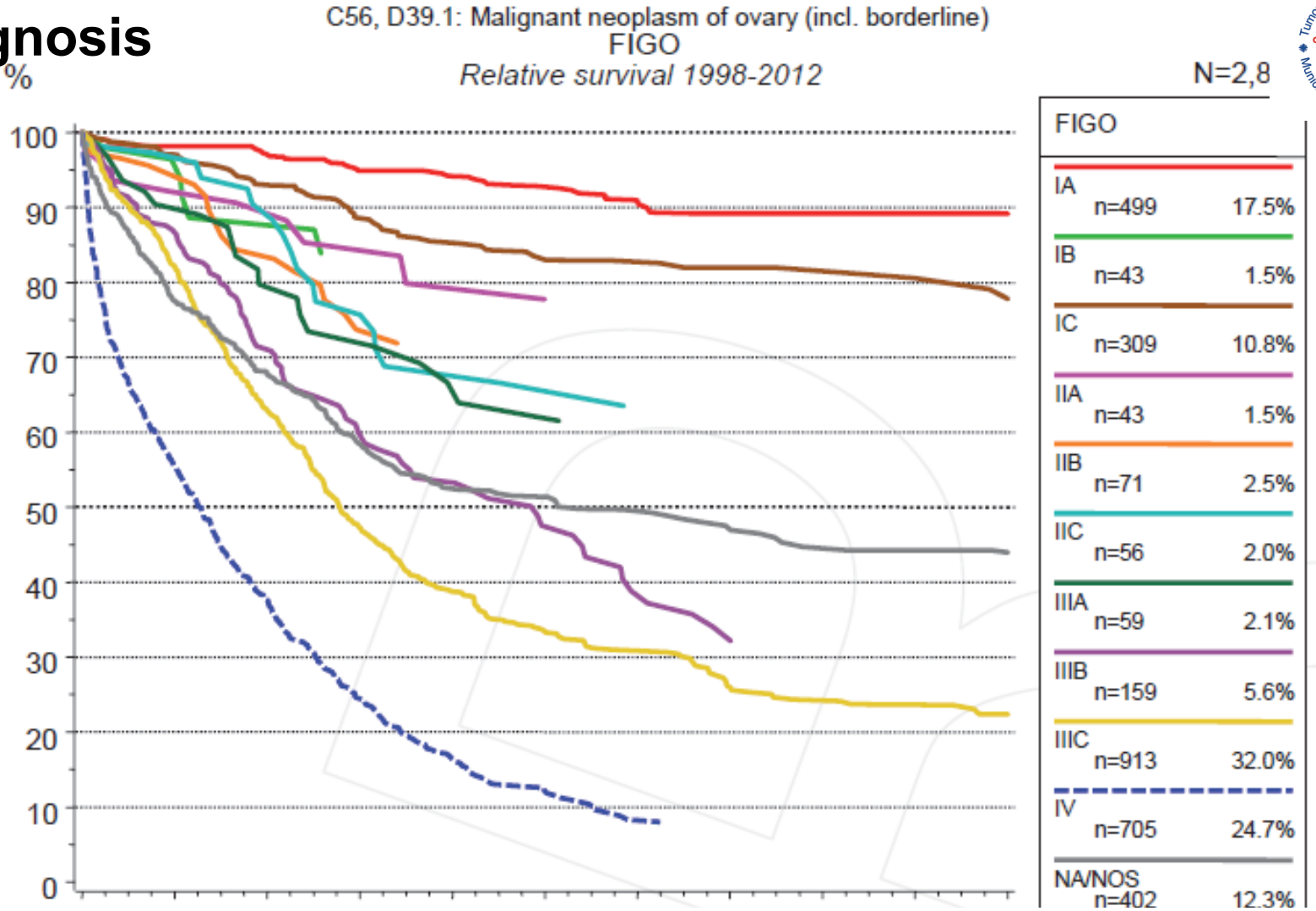
Decision making

Additive chemotherapy

2. Tumor conference

Interval debulking

Prognosis

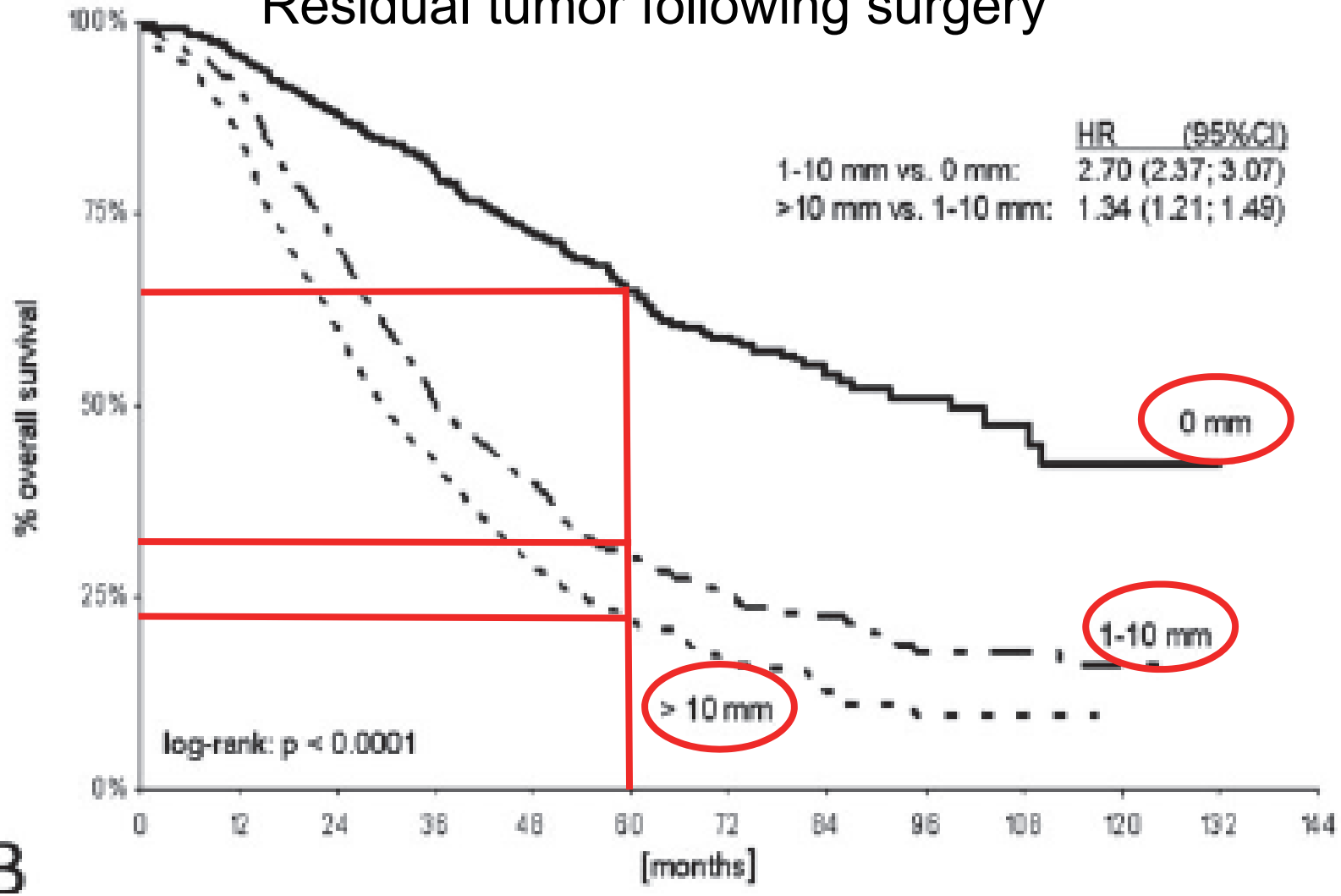


The higher the FIGO stage, the poorer the prognosis

Prognosis

Cancer 2009;115:1234–44.

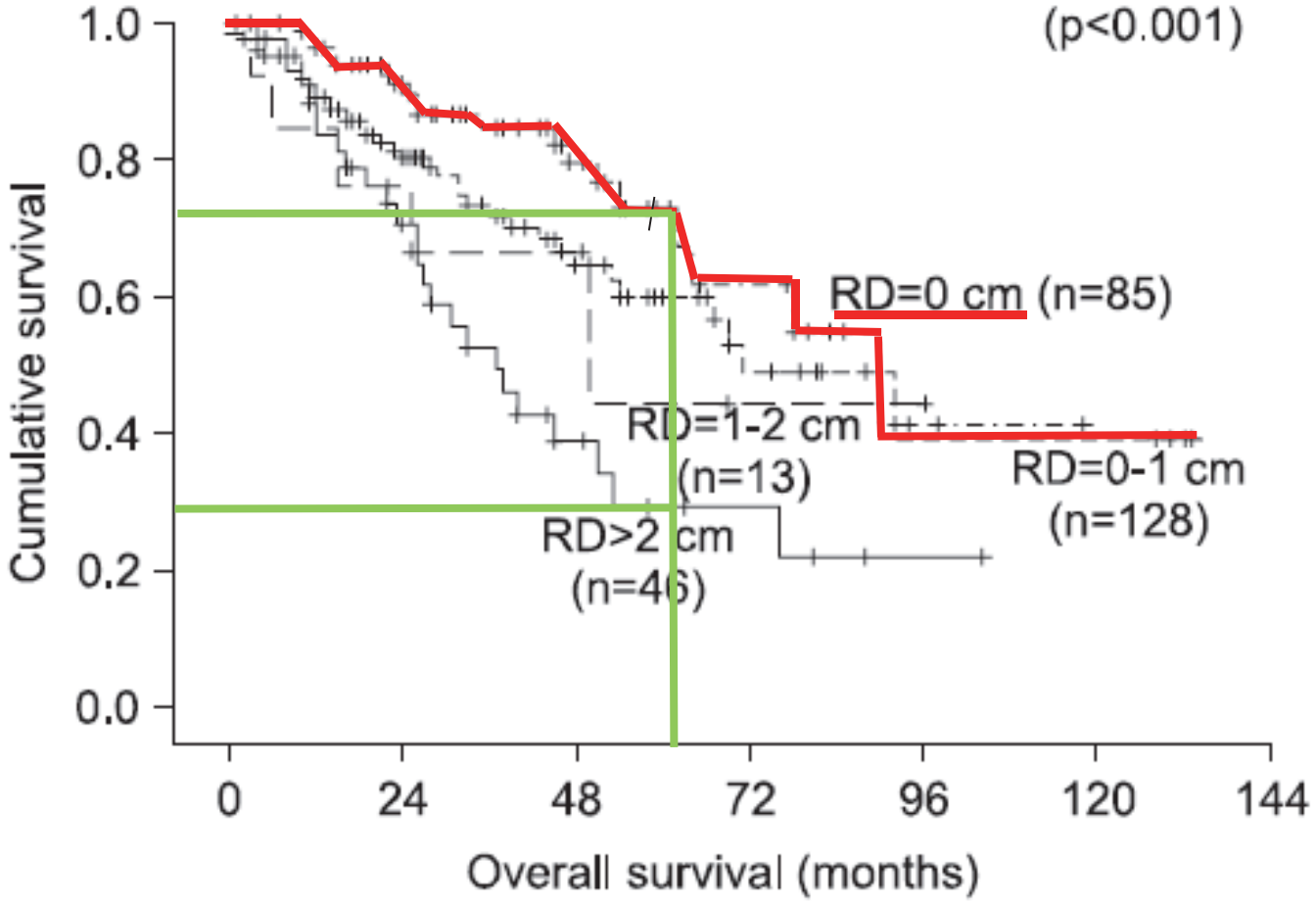
Residual tumor following surgery



Prognosis

J Gynecol Oncol Vol. 19, No. 4:223-228, 2008

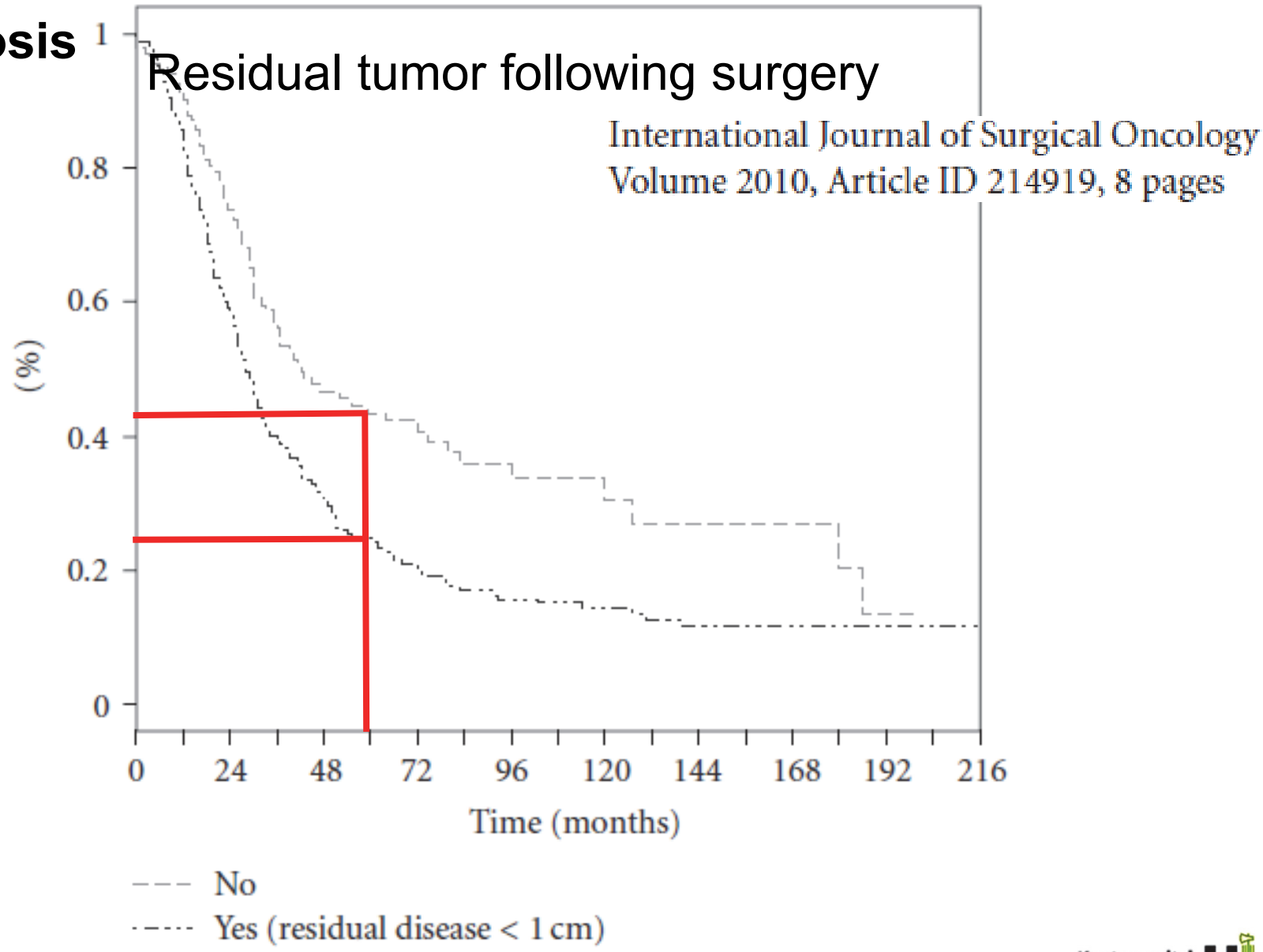
Residual tumor following surgery



Prognosis

Residual tumor following surgery

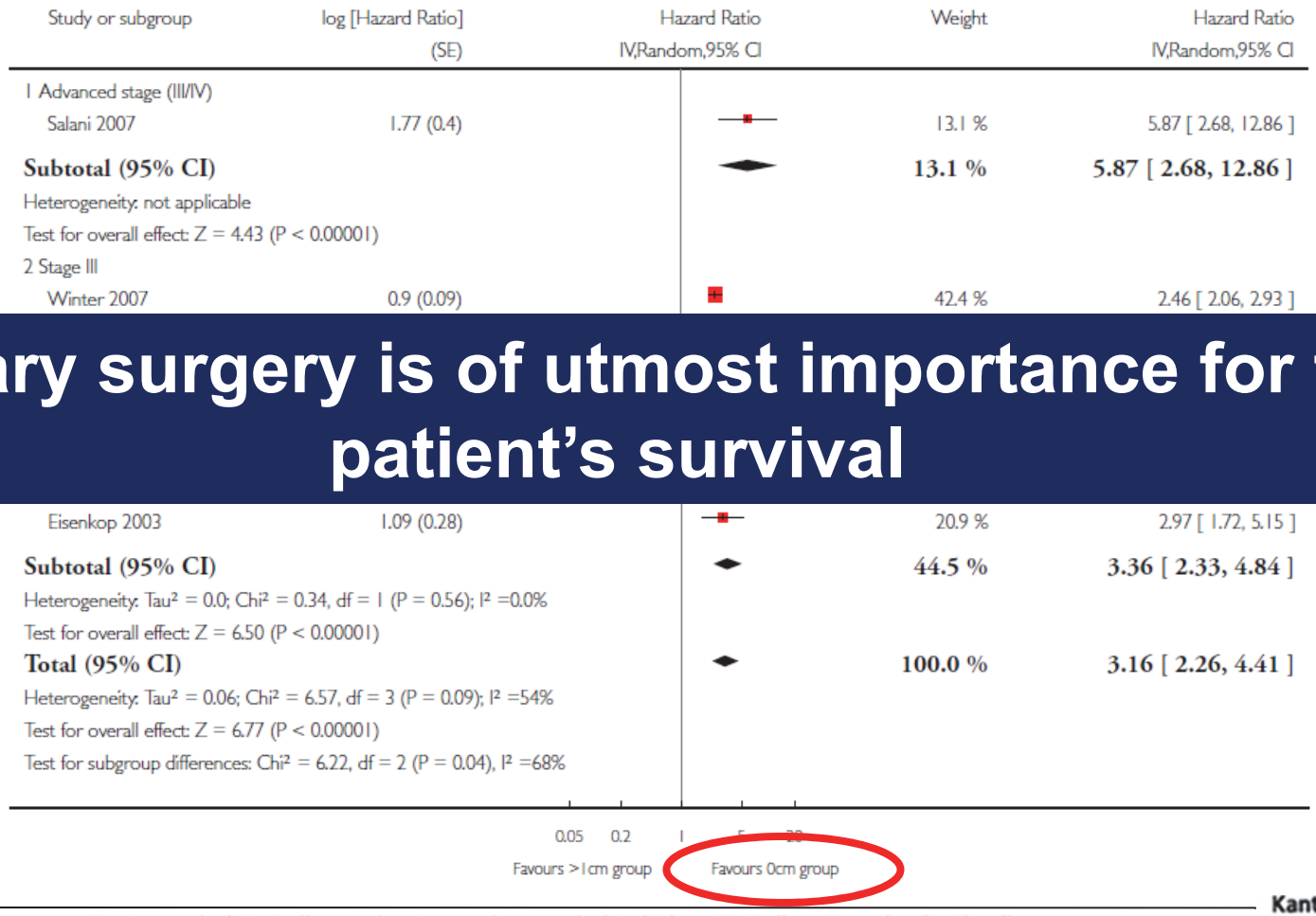
International Journal of Surgical Oncology
Volume 2010, Article ID 214919, 8 pages



Therapy

THE COCHRANE COLLABORATION®

Cytoreduction
Residual disease > 1cm versus microscopic disease



Primary surgery is of utmost importance for the patient's survival

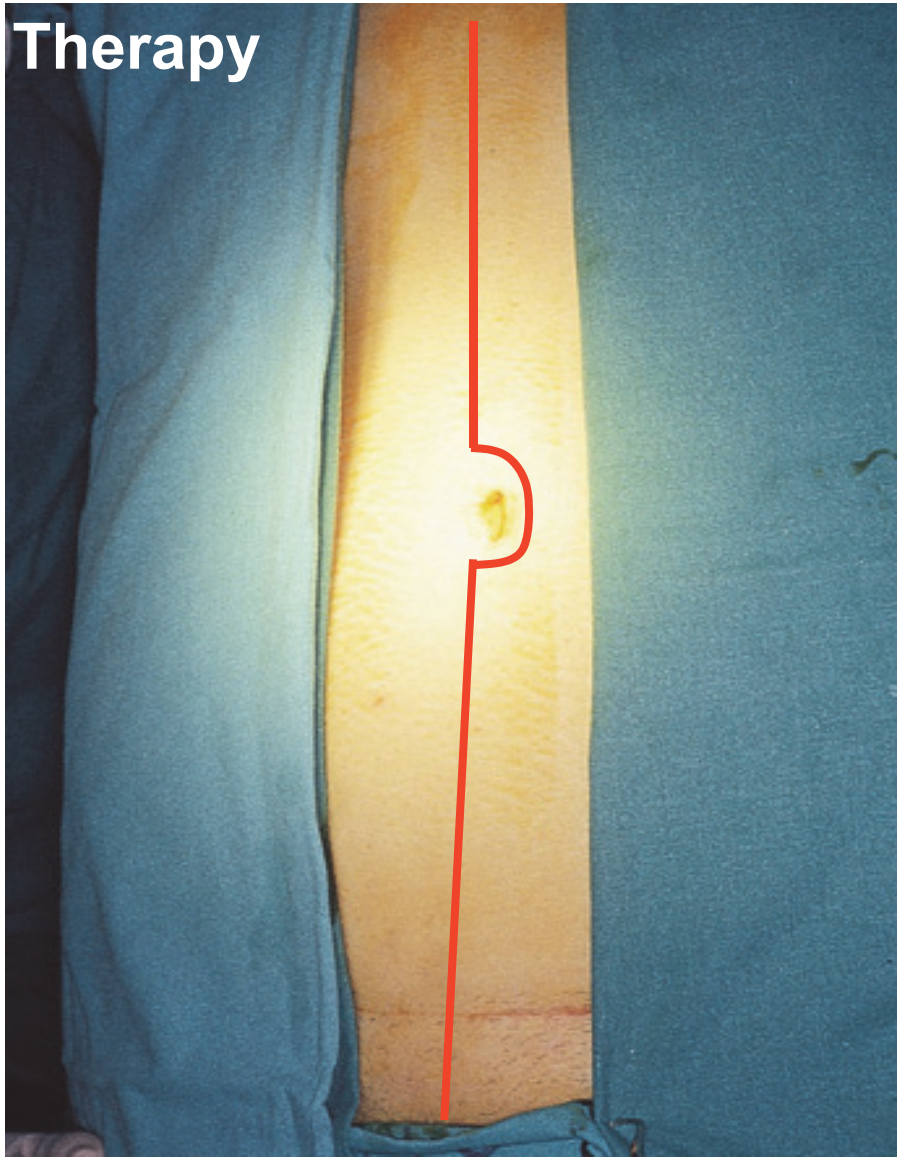
Therapy

Surgery of ovarian cancer

Hysterectomy
Bilateral salpingo-oophorectomy
Omentectomy
Pelvine and paraaortal lymphadenectomy
Appendectomy (mucinous ovarian cancer)
Bowel resection (rectum, colon, small intestine) with anastomosis
Splenectomy
Peritonectomy

Cooperative Management of Ovarian Cancer in St. Gallen

Therapy



Cooperative Management of Ovarian Cancer in St. Gallen

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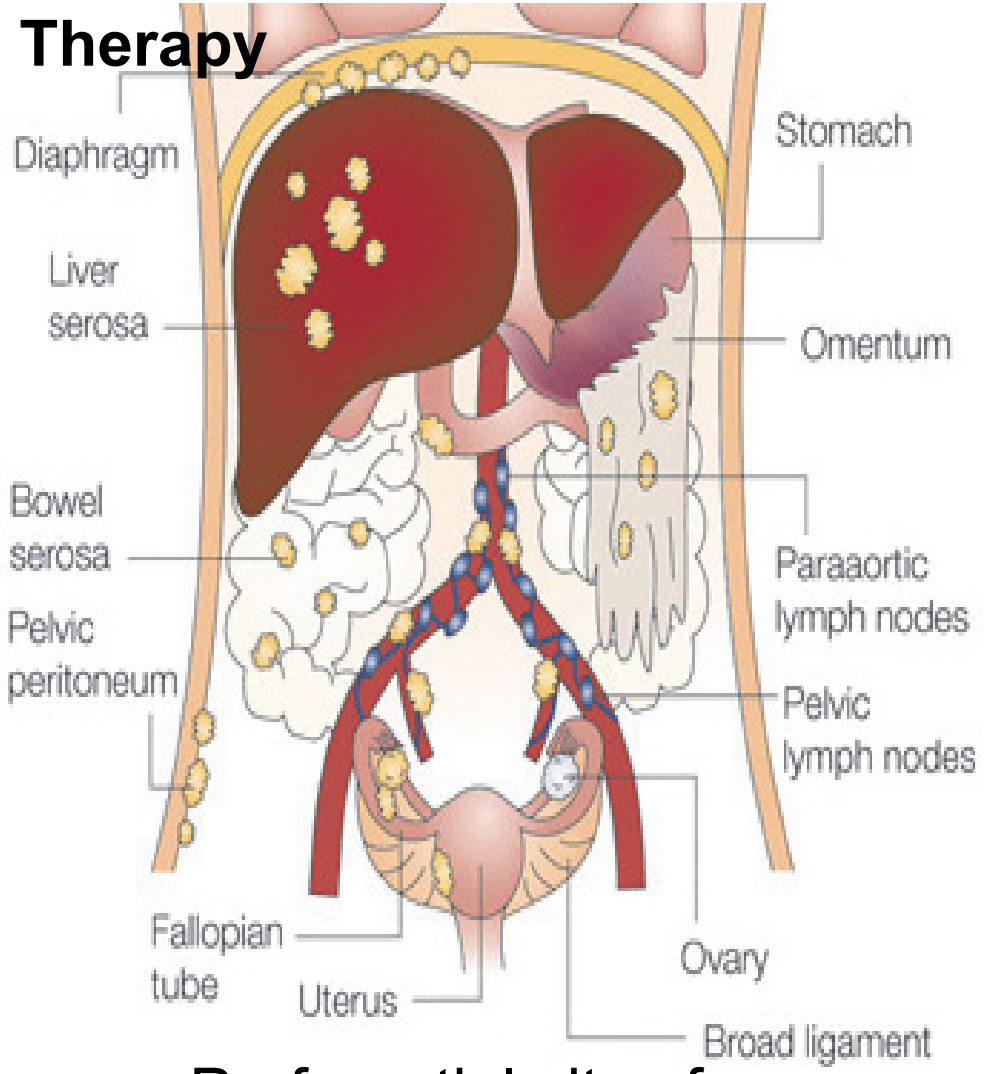
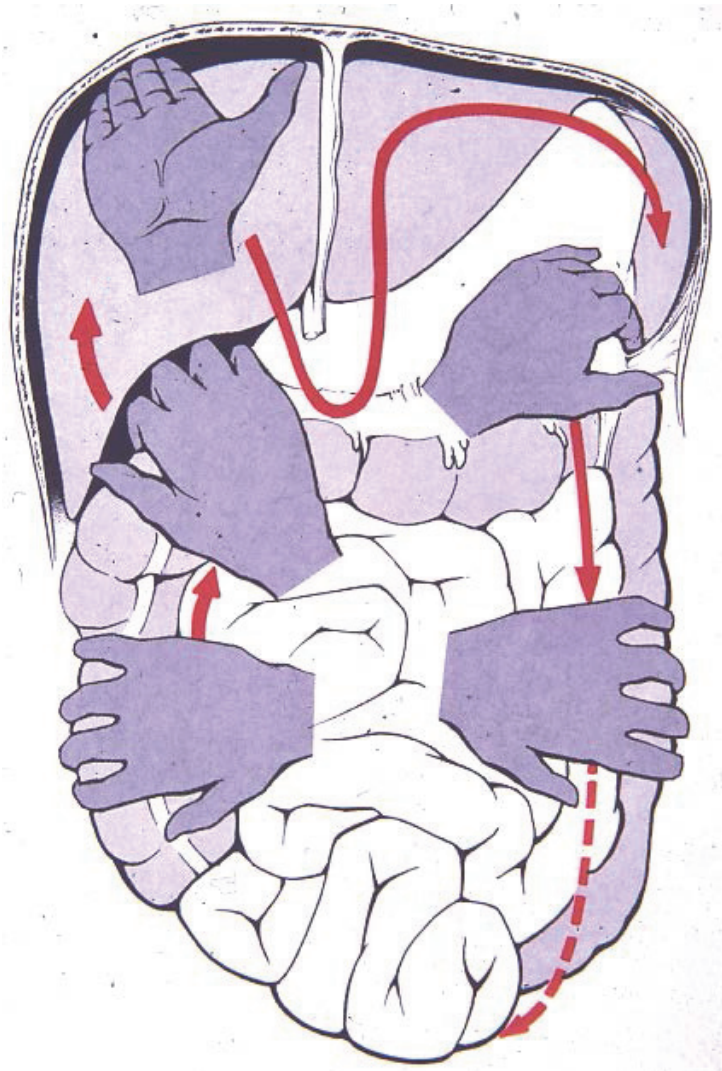
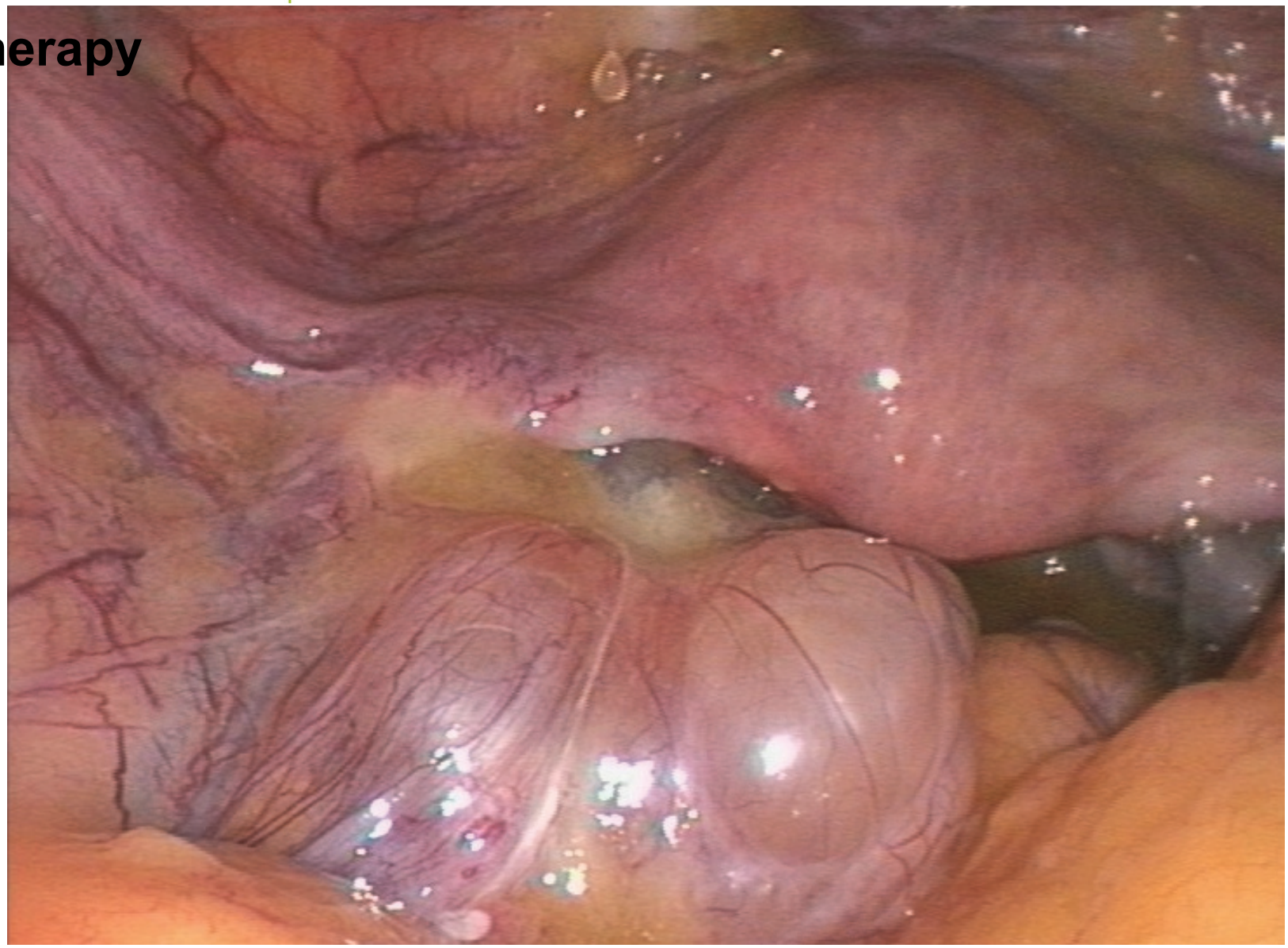




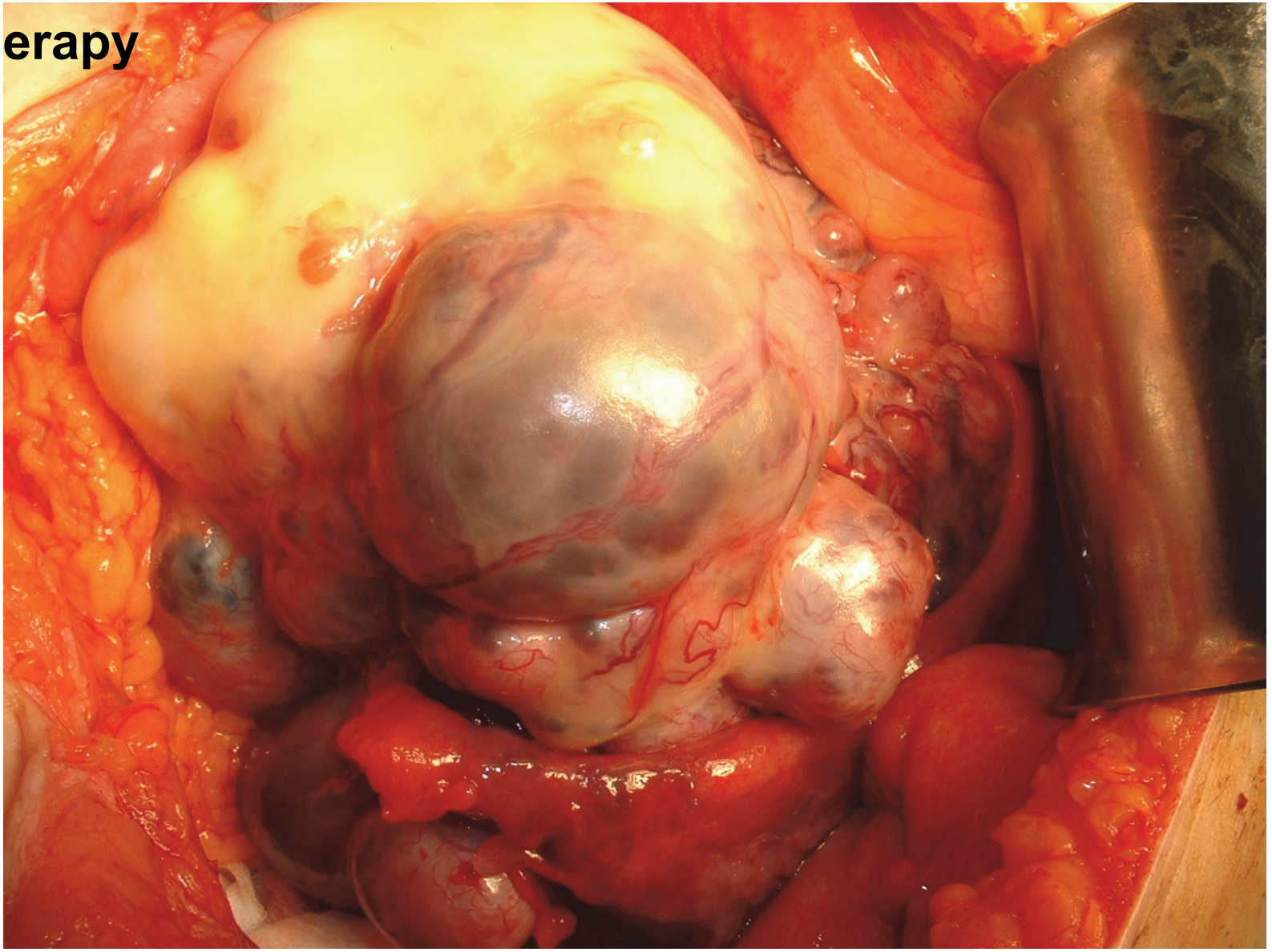
Preferential sites for metastasis → Systematic inspection of the abdominal cavity

Cooperative Management of Ovarian Cancer in St. Gallen

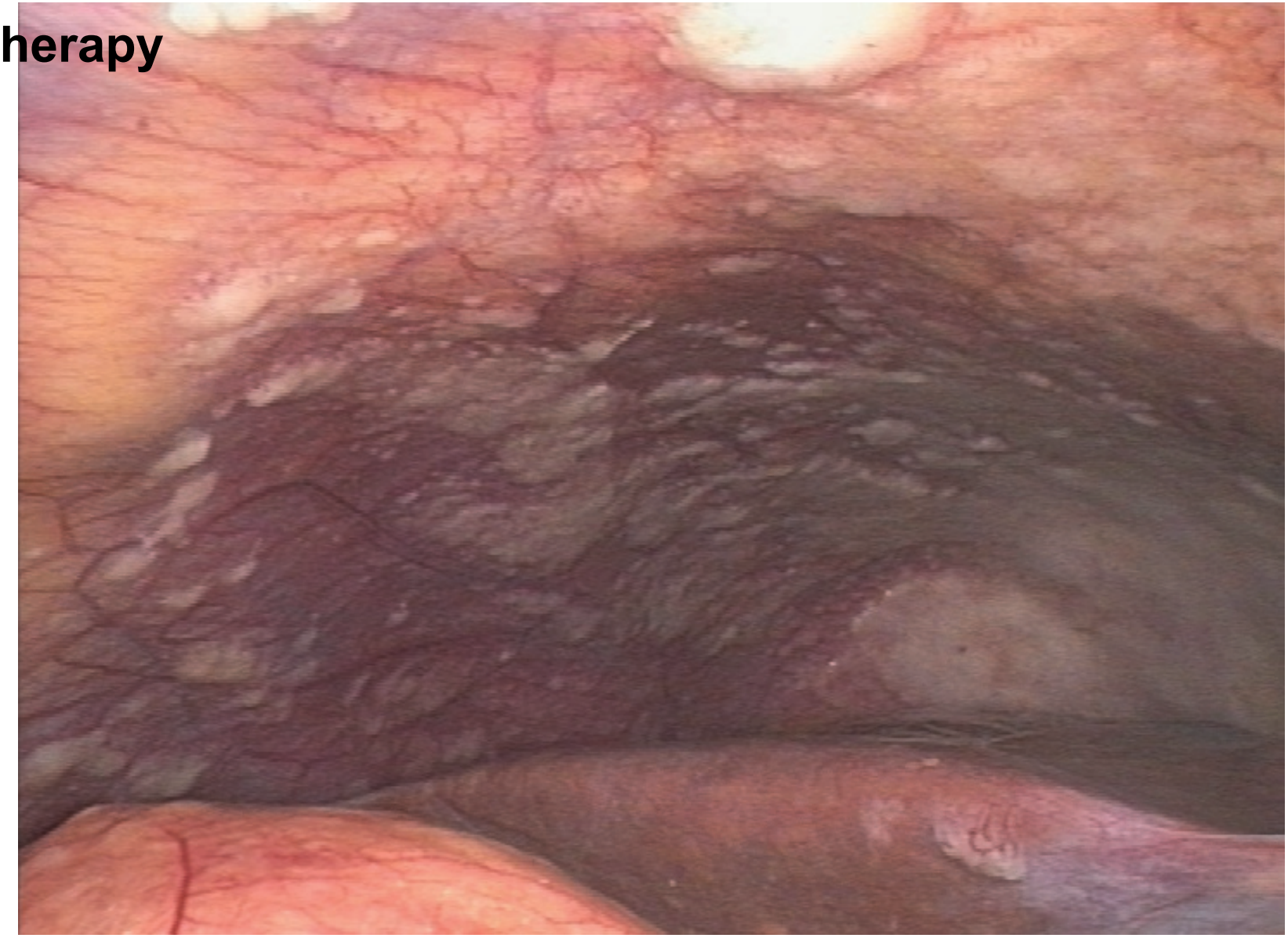
Therapy



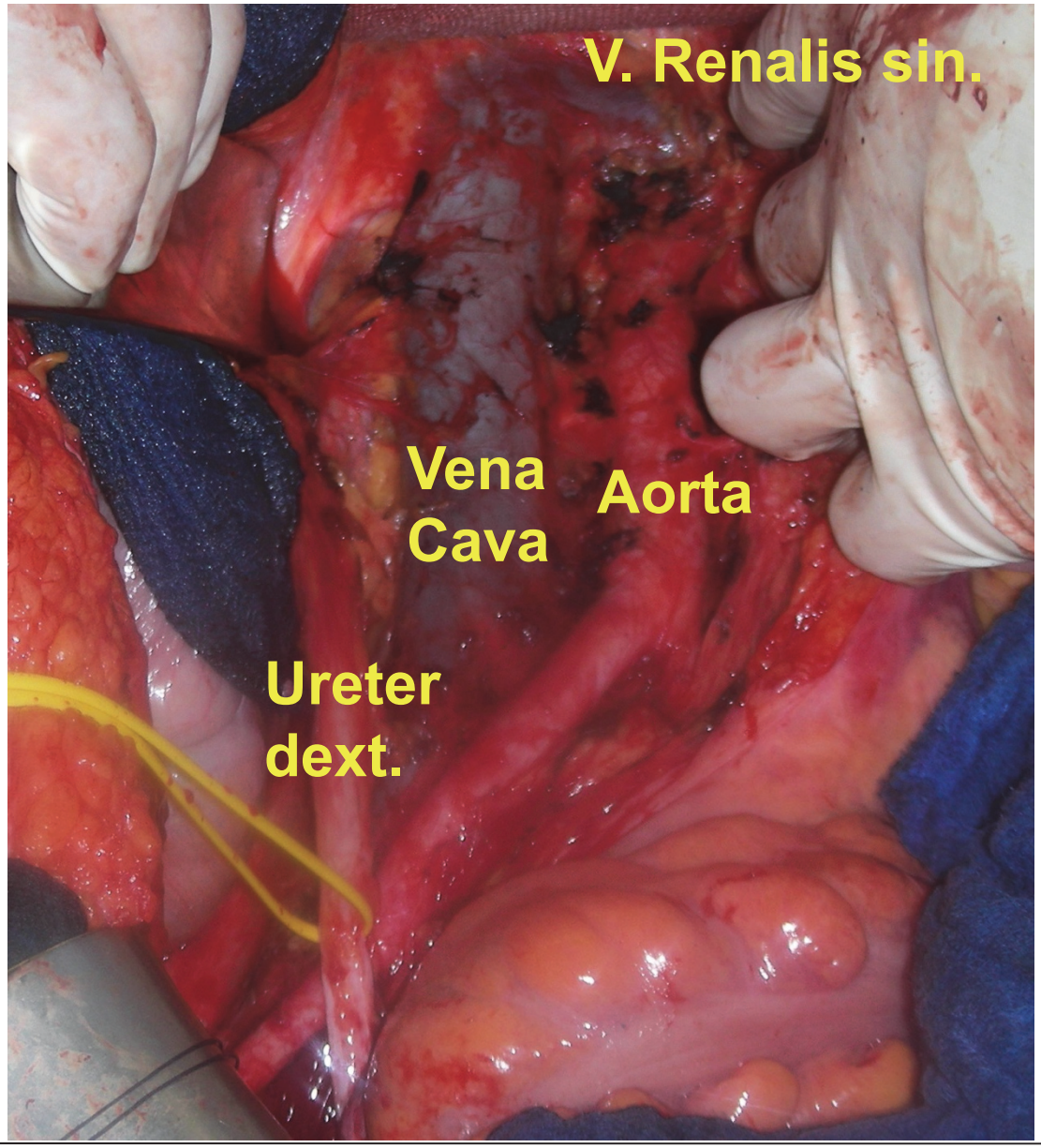
Therapy



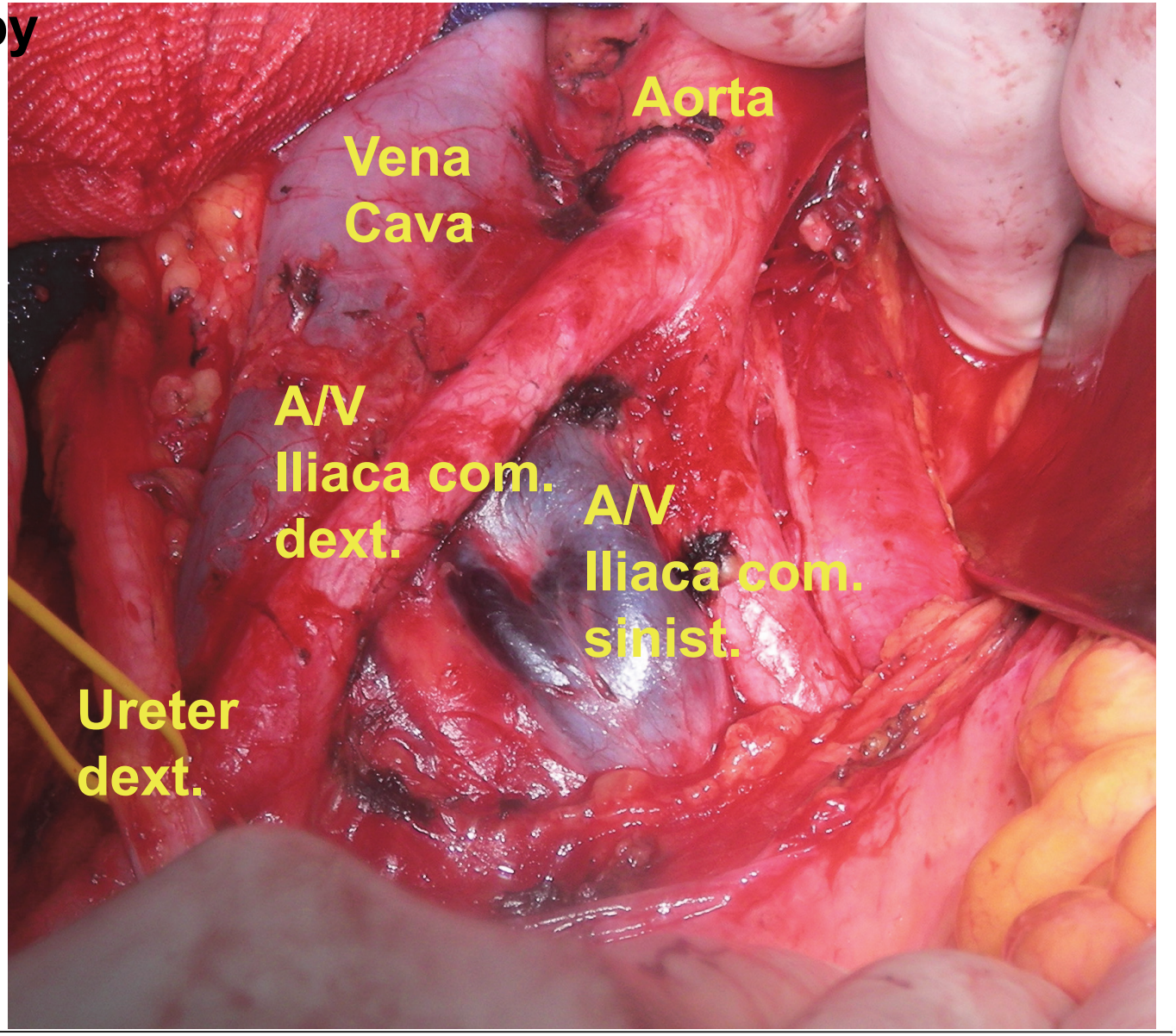
Therapy



Therapy

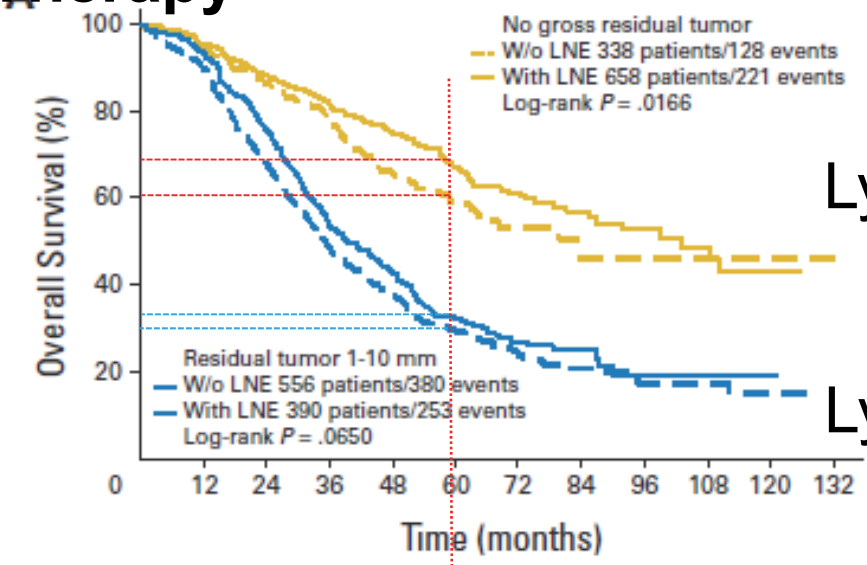


Therapy


Aorta
Vena Cava
A/V Iliaca com. dext.
A/V Iliaca com. sinist.
Ureter dext.

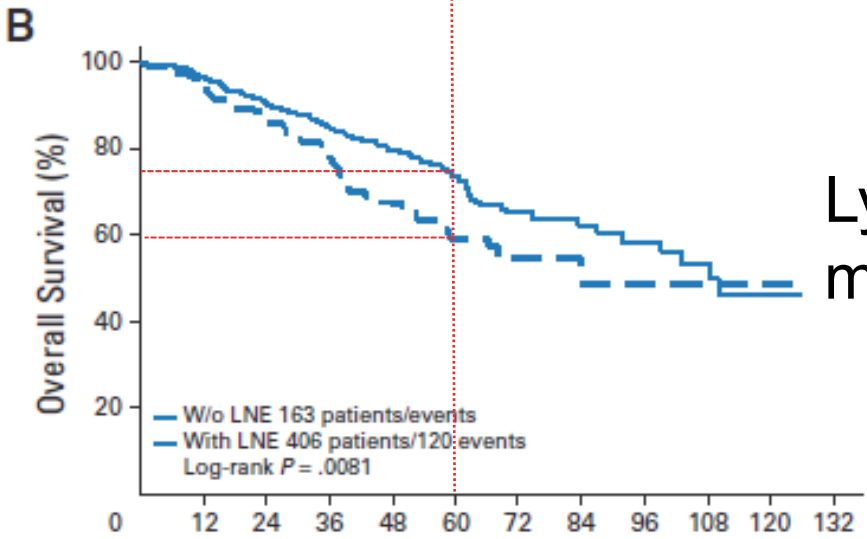
Therapy

J Clin Oncol 28:1733-1739. © 2010



Lymphadenectomy R0

Lymphadenectomy R1



Lymphadenectomy R0 and no macroscopic suspicious LN

Cooperative Management of Ovarian Cancer in St. Gallen

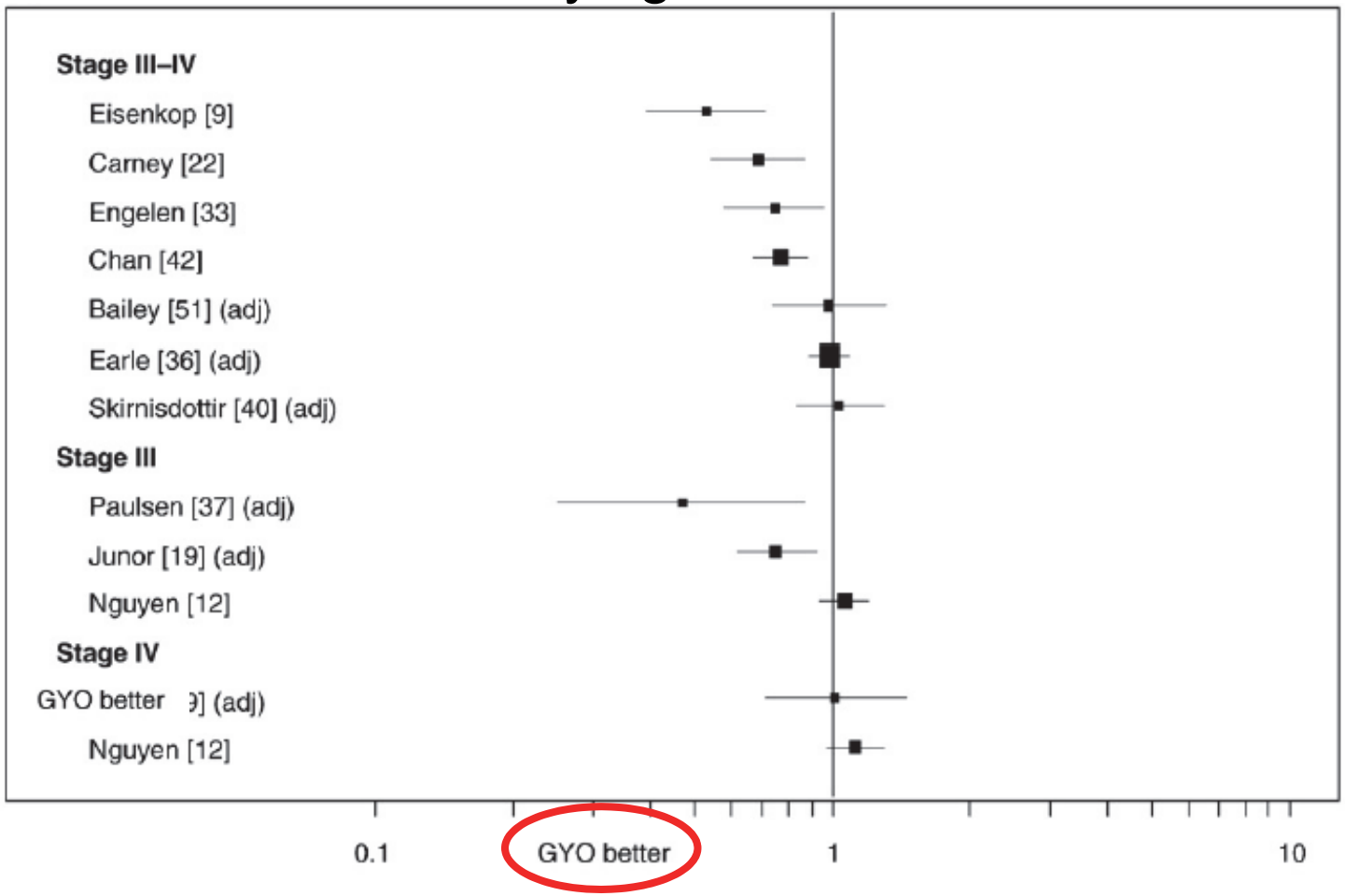
Therapy

Journal of Ovarian Research 2014, Giorda *et al.* .

Bowel Resection	116/301	38.5%
Rectosigmoidectomy Only	81/116	69,8%
Upper Bowel Surgery Only	17/116	14,7%
Rectosigmoidectomy and Upper Bowel Surgery	18/116	15,5%
Pelvic Peritonectomy Only	133/301	44,2%
Upper Abdominal Procedurs Only	13/301	4,3%
Pelvic Peritonectomy and Upper Abdominal Procedures	69/301	22,9%
Upper Abdominal Procedures	82/301	27.2%
Diaphragmatic Peritoneum Stripping	45/82	54,9%
Splenectomy	31/82	37,8%
Colecystectomy	16/82	19,5%
Liver Metastasectomy	5/82	6,1%
Partial Gastrectomy	3/82	3,6%
Distal Pancreatectomy	3/82	3,6%
Diaphragmatic Full-Thickness Resection	2/82	2.4%
Hepatic Hilum Lymphadenectomy	1/82	1.4%
Celiac Lymphadenectomy	1/82	1.4%
Retroperitoneal Lymphadenectomy	196/301	65.1%
Pelvic Lymphadenectomy	188/196	95.9%
Aortic Lymphadenectomy	149/196	74.5%

Therapy

Hazzard ratio for dying due to ovarian cancer



Gynecologic Oncology 112 (2009) 422–436

Gyn-oncologist Ob / Gyn

Therapy

Ovarian cancer incidence:

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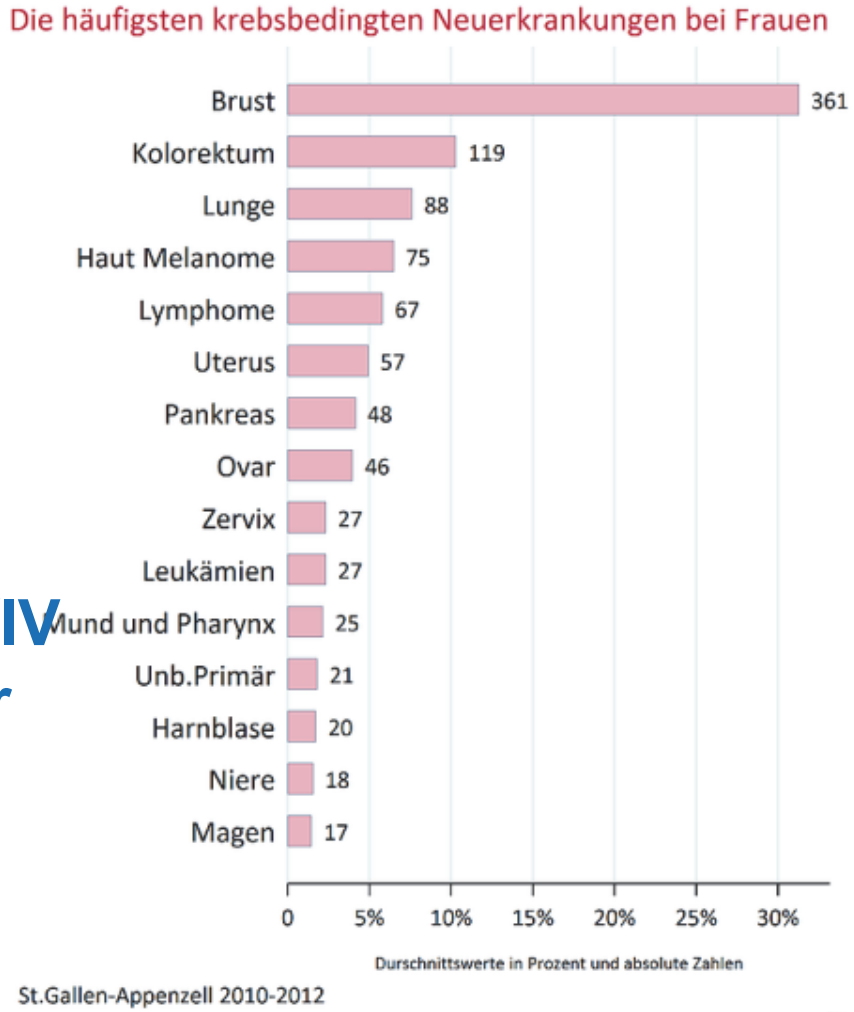
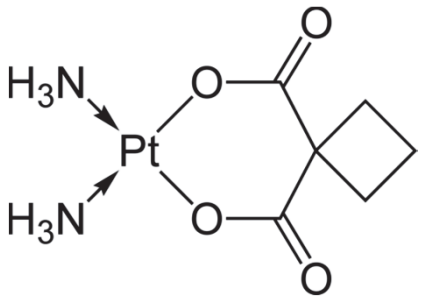
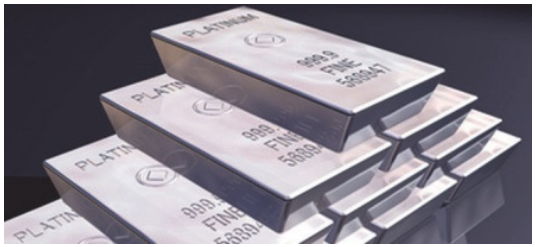


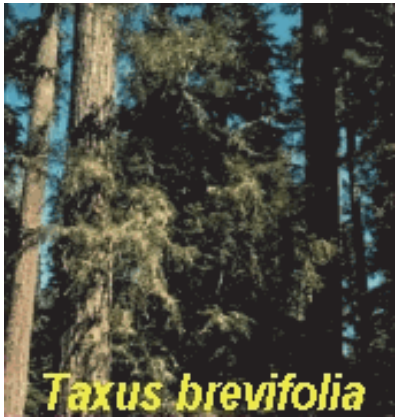
About 20 surgeries for stage III/IV ovarian cancer / y requested for adequate quality of care

→ In east of Switzerland only 1 center possible / reasonable

Additive Chemotherapy







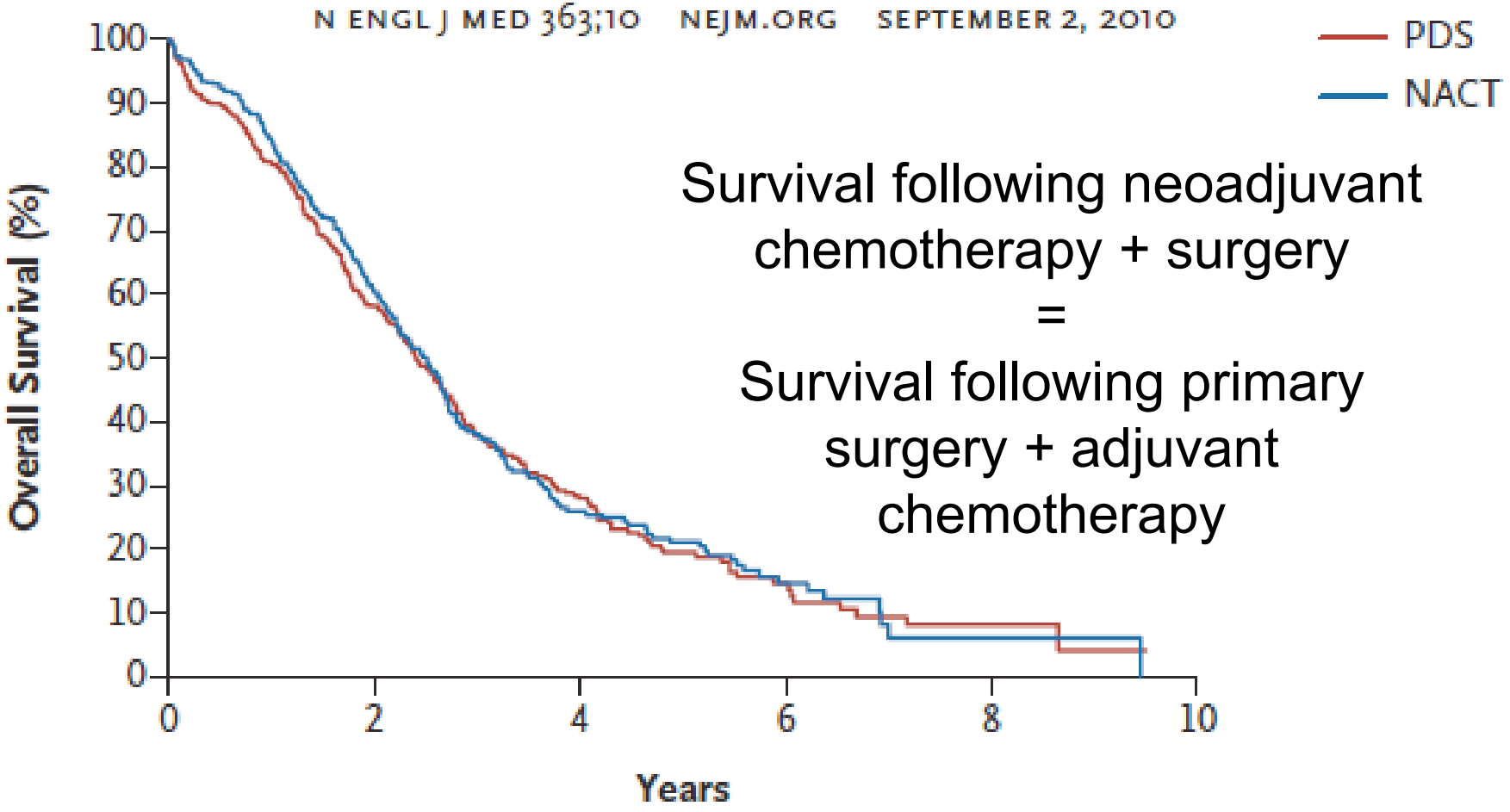
6 cycles of Carboplatin 5AUC + 175 mg/m^2 **Paclitaxel** every 3 weeks (Paclitaxel weekly)

Some indications: + Bevacizumab

Therapy

Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer

N ENGL J MED 363;10 NEJM.ORG SEPTEMBER 2, 2010



Survival following neoadjuvant chemotherapy + surgery

=

Survival following primary surgery + adjuvant chemotherapy

Therapy

Quality of life of advanced ovarian cancer patients in the randomized phase III study comparing primary debulking surgery versus neo-adjuvant chemotherapy

Gynecologic Oncology 131 (2013) 437–444

Survival and **quality of life** of patients with ovarian cancer III / IV

neoadjuvant chemotherapy + secondary debulking

=

primary surgery + adjuvant chemotherapy

→ Survival and quality of life are significantly better when the patient is treated in a gyn-onc center

Therapy

Patients profiting from **primary debulking surgery**

- Stage IIIA/B
- Stage IIIC radical operable (R0 very likely to be achieved)

Patients profiting from neoadjuvant chemotherapy followed by interval debulking

- Stage IIIC R0 very likely not to be achieved (small bowel)
- Stage IV (probability for R0 resection < 10%)
- Poor general condition
- Logistic problems

→ **Individual decision (team, experience)**