

CONSERVATIVE MANAGEMENT OF EARLY CERVICAL CANCER

Philippe MORICE
Sebastien GOUY
Gregoire MIALHE
Amandine MAULARD
Enrica BENTIVEGNA



→ HISTORY

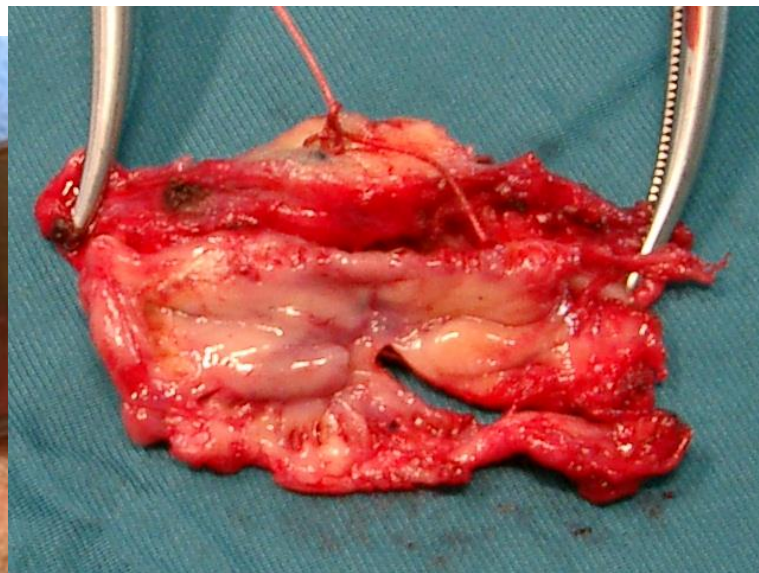
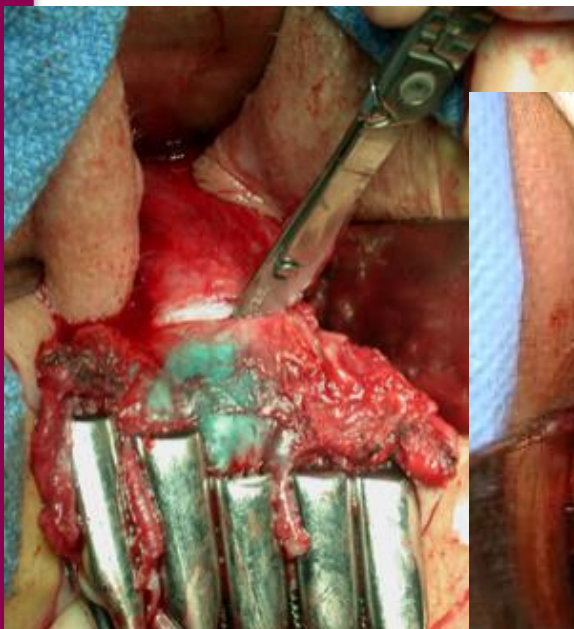
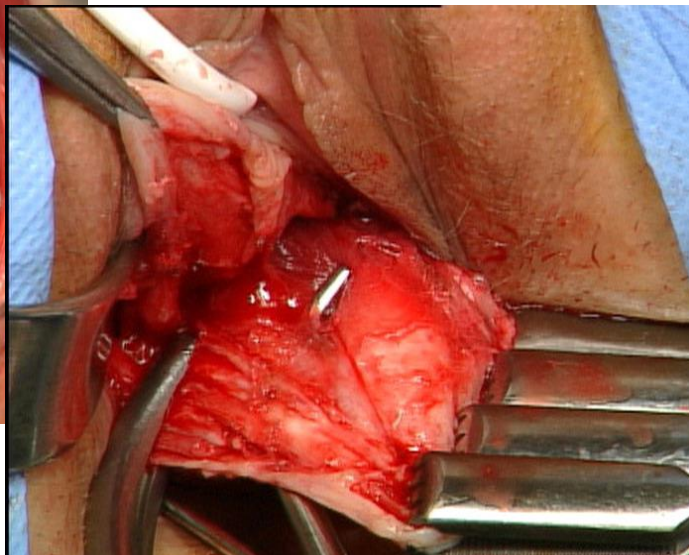
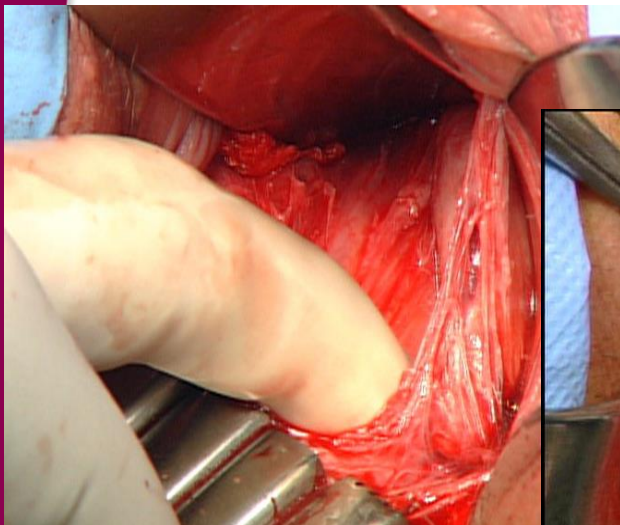
- **Nowak 1952**
- **Aburel 1957**
- **Daniel Dargent 1987**



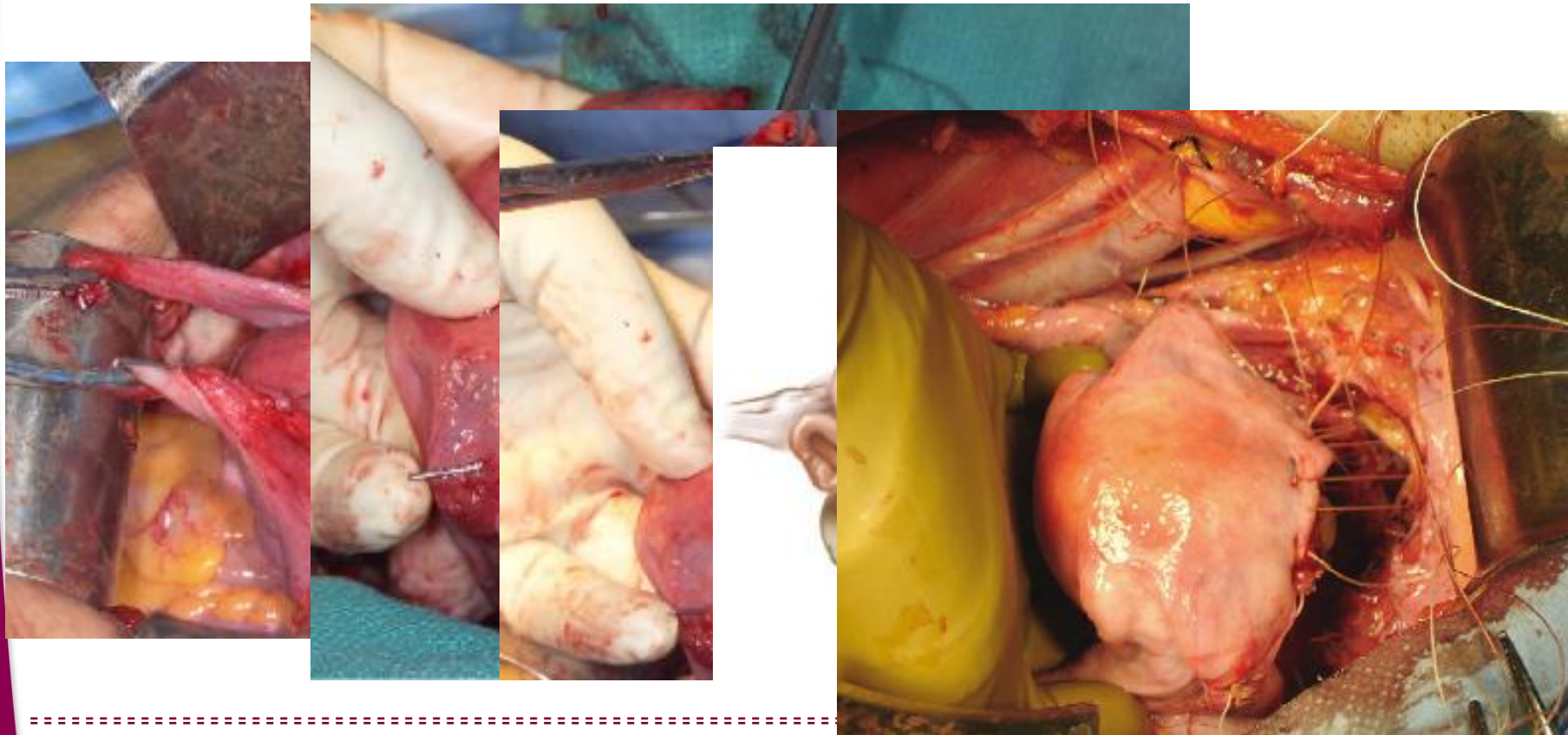
Conservative treatment of stage IB cervical cancer

6 types of strategies

- Simple cone resection/trachelectomy
- RT by vaginal approach (Dargent procedure)
- Abdominal RT (ART)
 - Laparotomy
 - Pure laparoscopy
 - Robotic approach
- NACT followed by conservative treatment
 - Simple cone
 - RT



ART by LAPAROTOMY



→ 2 Main questions

- **Oncologic issues**

- Lancet Oncology June 2016

- **Fertility results**

- Fertility & Sterility August 2016

- **Exclusively « Cervical » management**

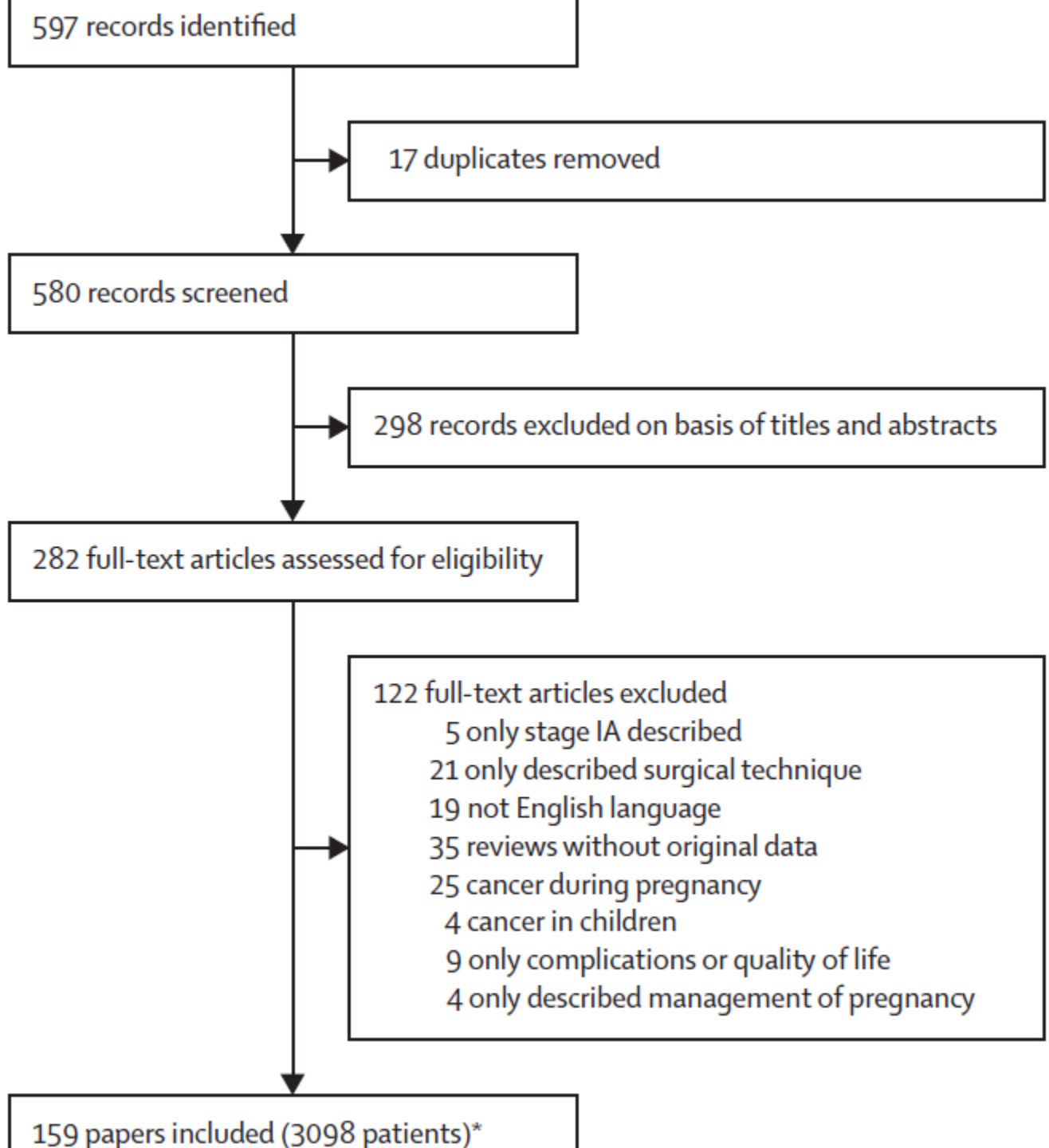
- **Nodal strategies (SLN/Full lympho) will not be covered**

- **Ovarian transposition not covered**

ONCOLOGICAL ISSUES

→ Literature review

- From 1987 (1st paper of D. Dargent about RT)
 - To 1st Feb 2016
 - 597 records/papers/abstracts reviewed
 - 580 records screened
 - 282 papers retained for a complete analysis
 - 122 excluded (not in english; stage IA; only technical description...)
 - **159 papers 3098 patients**
-



159 papers included (3098 patients)*

42 papers on
Dargent's
procedure

18 papers on simple
trachelectomy or
cone resection

24 papers on NACT
followed by
conservative
management

42 papers on
laparotomic
abdominal RT

21 papers on
laparoscopic RT

13 papers on
robot-assisted RT

→ VRT Dargent procedure

- 42 papers; 21 series/teams
 - 1523 cases
 - 159 excluded (N+, margins +...)
 - IA 316
 - IB1 1065
 - IB1 > 2 cm at least 84
 - \geq IB2 12
 - SCC 892/AC 432
 - LVSI at least + 401
 - Recurrences 58
 - DOD 24
-

→ Dargent procedure

- Positive or close margins in 41 cases (3%)
- Tumor size
 - > 2 cm: 14/84 recurrences **17%**
 - < 2 cm: 26/617 recurrences **4% p=.001**
- LVSI status (detailed in 473 cases)
 - < 2 cm LVSI -: 14/311 recurrences **5%**
 - < 2 cm LVSI + (some IA included): 11/162 recurrences **7% p=.15**

→ ART Laparotomy

- 42 papers; 28 series/teams
- 866 cases reported in 206 excluded (N+, margins +...)
- IA 153
- IB1 559
 - IB1 > 2 cm at least 167
- \geq IB2 23
- SCC 549/AC 168
- LVSI + at least 198
- Recurrences 31 (5%)
- DOD 9
- Among 167 stage IB1 between 2-4 cm; 8 recurrences (5%)

→ ART Laparotomy

- Uterine ligation 13 teams
 - Uterine preservation 13 teams
 - Uterine ligation and re-anastomosis 2 teams

 - **Morbidities:**
 - 13 deep abscesses/peritonitis some of them requiring iterative laparotomy
 - Uterine necrosis requiring hysterectomy
 - 3 ureteral injury

 - Cerclage:
 - 13 cerclage erosions
 - 52 cervical stenosis
-

→ ART Laparoscopic pure

- 21 papers; 18 series/teams
- 252 cases reported
- 14 excluded (N+, margins +...)
- IA 55
- IB1 215
 - IB1 > 2 cm at least 42
- \geq IB2 3
- SCC 167/AC 50
- LVSI + at least 52
- Recurrences 15
 - 7 among 42 (17%) stage IB1 > 2 cm
- DOD 3

→ ART Robotic

- 13 papers; 9 series/teams
- 101 cases reported
- 12 excluded (N+, margins +...)
- IA 25
- IB1 54
 - IB1 > 2 cm ?
- \geq IB2 1
- SCC 37/AC 29
- LVSI + at least 5
- Recurrences 2
- DOD 0

→ Cone resection/simple trachelectomy

- **18 papers; 13 series/teams**
 - **242 cases**
 - **12 excluded (N+, margins +...)**
 - **All IB1 < 2 cm**
 - **SCC 60/AC 25/Unknown 157**
 - **LVSI + at least 71**
 - **Recurrent 4**
 - **DOD 0**
-

→ **NACT**

- **21 papers; 17 series/teams**
- **114 cases**
- **15 excluded (N+, margins +...)**
- **IB1 85**
 - **> 2 cm at least 52**
- **> IB1 28**
- **SCC 70/AC 41/Unknown 3**
- **LVSI ?**
- **Recurrent 6 or 7 ?**
 - **2 Stage IB2**
 - **3 stage IB1 > 2 cm**
 - **1 stage IB1 < 2 cm**

-
- **DOD 2**

→ NACT

- Majority of teams used 3 drugs
- 3 teams used intra-arterial (uterine or femoral arteries)
- 1 progression converted to CRT
- 3 teams used initial lympho to select N- pts
- 42 RT and 51 Simple trachelectomy/conisation
- 45 CR; 31 RD \geq 3 mm
- 19 Required adjuvant treatment
- 15 required hysterectomy
- 8 margins +
 - 7 after simple conization/trachelectomy
 - 1 after RT

≤2 cm

LVSI-

Simple trachelectomy
or cone resection

227 cases
1 (<1%) recurrent
disease†
3 (1%) positive
margins‡

LVSI+

Vaginal RT*

162 cases
11 (6%) recurrent
disease
41 (3%) positive
margins‡

>2-4 cm

NACT

Abdominal RT

52 cases

3 (6%) recurrent
disease

3 (8%) positive
margins‡

209 cases

15 (7%) recurrent
disease

37 (4%) positive
margins‡

→ Oncological results

- **Stage IB1 < 2 cm LVSI –**
 - **Simple cone/trachelectomy**
 - Recurrence < 1 %
 - Margins + 1 %
 - Main aim: compromise between sufficient length of clear margins and length of the uterine corpus to promote subsequent fertility
- **Stage IB1 < 2 cm LVSI +**
 - Theoretical contra-indication to a conservative approach
 - VRT: **Recurrence rate 6%**
 - Margins + 3%
- **Stage IB1 > 2 cm**
 - Similar rates of recurrence between NACT and ART (6% and 7%)
 - Margins + 8% NACT and 4% ART
 - **Underestimation of the « real » recurrences rate after NACT....**

	Dargent's procedure	Simple trachelectomy or cone resection	Neoadjuvant chemotherapy plus conservative treatment	Abdominal radical trachelectomy		
				Laparotomic	Laparoscopic	Robot-assisted
Stage IB1 <2 cm LVSI negative	No benefit	Indicated; safety being assessed	No benefit	No benefit	No benefit	No benefit
Stage IB1 <2 cm LVSI positive	Indicated	Feasible; safety needs to be assessed	Feasible; specific outcomes unknown	Feasible; post-operative surgical site infection	Feasible; oncological issues undetermined	Feasible; oncological issues undetermined
Stage IB1 >2 cm	Contraindicated (unsafe)	Contraindicated (unsafe)	Possibly indicated or feasible; safety being assessed	Possibly indicated or feasible; oncological issues should be assessed	Possibly indicated or feasible; oncological issues need to be assessed	No data
Stage IB2	Contraindicated (unsafe)	Contraindicated (unsafe)	Feasible; safety needs to be assessed	Feasible; safety needs to be assessed	Contraindicated (unsafe)	Contraindicated (unsafe)
Histological subtypes with poorest prognosis	Contraindicated (unsafe)	Contraindicated (unsafe)	Contraindicated (unsafe)	Contraindicated (unsafe)	Contraindicated (unsafe)	Contraindicated (unsafe)
Nodal involvement	Contraindicated (unsafe)	Contraindicated (unsafe)	Contraindicated (unsafe)	Contraindicated (unsafe)	Contraindicated (unsafe)	Contraindicated (unsafe)

LVSI=lymphovascular space involvement.

Table 2: Indications and contraindications for six different fertility-sparing surgical strategies for patients with cervical cancer

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FERTILITY RESULTS

	Simple trach./cone	Dargent Procedure	ART Laparot.	ART lapasc/robot	NACT
Patients	212	1355	735	314	161
Number Pregnancies	103	499	175	74	93
Foetal loss 1 st trim.	9	67	18	15	12
Foetal loss 2 nd trim.	5	34	8	2	5
Foet. loss 1 st or 2 nd tri?	0	0	11	0	0
Preterm delivery (< 36 WG)	8	120	59	25	11
Pregnancy rate	56%	57%	44%	65%	77%
Live Birth rate	74%	67%	68%	78%	76%
Prematurity rate	15%	39%	57%	50%	15%

- **No impact of uterine arteries ligation on fertility**
 - ART: Pregnancy Rates 45% versus 44%

- **No impact of cervical cerclage on Live Birth Rates:**
 - ART : 61% versus 70%

→ Conclusions

- **Stage IB1 < 2 cm LVSI -**
 - Simple cone/trachelectomy
 - 2 trials : ConCerv TRIAL & GOG 278
- **Stage IB1 < 2 cm LVSI –**
 - VRT preferred (less morbidity than abdominal approach and increased fertility results).
 - But « safety ».... 6% recurrence rate
- **Stage IB1 > 2 cm**
 - Discussion between NACT and ART
 - Similar recurrence rates
 - Higher margins + after NACT
 - Higher severe morbidity rates after ART
 - **Better fertility results after NACT**
 - Long terms safety after NACT....