



## Words of Wisdom

### Re: Minimally Invasive Versus Abdominal Radical Hysterectomy for Cervical Cancer

Ramirez PT, Frumovitz M, Pareja R, et al

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#### Experts' summary:

In this randomised trial, 631 patients with early-stage cervical cancer were randomised to either open or minimally invasive radical hysterectomy (84.4% laparoscopy and 15.6% robot-assisted surgery). The primary endpoint of this noninferiority trial was disease-free survival at 4.5 yr. The trial recruitment was closed early in June 2017 when an imbalance in deaths between the two groups was observed (3-yr overall survival 93.8% for the minimally invasive group vs 99.0% for the open surgery group). The rate of disease-free survival at 4.5 yr was 86.0% with minimally invasive surgery and 96.5% with open surgery.

The authors discuss that apart from other factors, greater tumour spillage because of routine use of a uterine manipulator or the effect of the insufflation gas (CO<sub>2</sub>) on tumour-cell growth may have contributed to the alarming differences in disease-free and overall survival observed.

#### Experts' comments:

Two previous meta-analyses comparing open versus minimally invasive radical hysterectomy did not reveal a difference in oncological outcomes and therefore the minimally invasive approach was favoured in general practice because of its lower perioperative morbidity. However, the current randomised trial identifies potential harm for laparoscopic and robot-assisted surgery that may also hold true for urological procedures. Robot-assisted urological surgery has gained in popularity for many urological procedures including complex uro-oncological surgery. However, especially with regard to robot-assisted radical cystectomy (RARC), debate is ongoing whether tumour spillage or the effect of CO<sub>2</sub> may account for atypical and/or rapid progressions seen in a subgroup of patients [1,2]. Even though these early oncological failures do not seem to differ in frequency and location compared to open cystectomy [3,4] in retrospective comparisons, we cannot exclude the possibility that prospective randomised trials may end up with similar results as seen for radical hysterectomy. Large patient numbers in retrospective analyses may give a false sense of security that for highly

aggressive cancer types such as urothelial carcinoma the minimally invasive approach does not harm the patient.

In exactly the same approach as taken by our colleagues in gynaecology, we should not rely on these data with low-level evidence and should instead make every effort to conduct prospective randomised trials to gain high levels of evidence so that we do not put our patients at risk of fatal recurrences. The recent RAZOR study [5] provides encouraging and noninferior 2-yr progression-free survival data for RARC among carefully selected patients, but longer follow-up clearly is needed. Furthermore, similar to other trials, RAZOR did not show better perioperative complication rates for RARC with extracorporeal urinary diversion.

**Conflicts of interest:** The authors have nothing to disclose.

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