

#633

### SURVIVAL NOMOGRAMS NEOADJUVANT CHEMOTHERAPY RADICAL SURGERY CERVICAL CANCER : THE UNDERSEA APP

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**Introduction/Background** Cervical cancer (CC) is one of the leading cancer by incidence/mortality in women worldwide. Highest incidence/mortality rates are recorded in low-income countries, including sub-Saharan-Africa, Melanesia, South-America and South-Eastern-Asia. This disproportionately in incidence/mortality rates compared to transitioned countries reflects the effective global cancer services variation.

Surgery, radiotherapy and chemotherapy in an integrated approach are necessary to treat CC as part of a management of evidenced-based effective care. These approaches aren't interchangeable, but complementary and an increasing number of patients is best treated with at least two modalities. Around the world, there are still severe limitations in access to cancer care and especially radiotherapy services are scarce. To overcome regional and global large disparity, ASCO includes i) definitive radiotherapy with concurrent cisplatin-based chemotherapy and ii) neoadjuvant chemotherapy followed by radical surgery (NACT+S) as evidence-based resource-stratified recommendations on invasive CC management.

We have created the sUrvival Nomograms neoaDjuvant chEmotherapy Radical Surgery cErvical cAnCER (UNDERSEA) application (app), an user-friendly app specifically designed for invasive CC patients candidate to NACT+S (<http://undersea.app>).

The screenshot shows the UNDERSEA app interface with the following input fields and options:

- BMI:** Range from < 25 to > 25.
- Age:** Range from < 50 to > 50.
- Tumor size:** Range from < 4 cm to > 4 cm.
- Tumor histology:** Radio buttons for "squamous cell carcinoma" (selected) and "other histologies".
- Tumor grade:** Radio buttons for G1, G2, and G3.
- FIGO disease stage:** Radio buttons for IB2-IB4, IB3, and IB1.
- LVSI:** Radio buttons for "absence" (selected) and "presence".

At the bottom, there are three buttons: "Calculate", "Results", and "About".

Abstract #633 Figure 1 Undersea app

**Methodology** UNDERSEA app is a visualization tool of the results of an observational study of locally advanced CC patients treated with NACT+S. Statistical analysis was performed with R-Studio0.98.1091-software and web-app using Angular15.

**Results** UNDERSEA app is free, clean and quick to use. It estimates 2-year progression-free survival and 5-year overall

survival rates, according to patient's relevant clinical and pathological prognostic factors, including age, tumor histology, lymphovascular space invasion, pathological locoregional lymph-nodes and pathological parametria status (figure 1).

**Conclusion** Thanks to its functionality and portability, UNDERSEA app offers an adequate web-based instrument able to estimate survival outcomes for cancer control. UNDERSEA app should be an example of successful efficient and effective care delivery around the world. The hope is to help clinicians in daily clinical practice to build an evidenced-based critical care and derive the best benefit for patients.

**Disclosures** Prof Scambia and Marchetti have potential conflict (s) of interest. Prof Palaia and De Felice have no potential conflict of interest to report.

#639

### RADICAL HYSTERECTOMY USING WATER JET TISSUE DISSECTION: FUNCTIONAL RESULTS

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**Introduction/Background** Radical hysterectomy is often associated with several significant complications such as urinary, anorectal and sexual dysfunction due to pelvic nerve injuries. The risk of nerve fibers damage remains high because of difficulties in recognition of elements of the autonomic nervous system. One of approaches for precise nerve dissection is tissue-selective dissection with a water-jet. This study was aimed to evaluate functional results after nerve sparing radical hysterectomy (RH type C1) in patients with stage IB1-IIA cervical cancer according to the International Federation of Gynecology and Obstetrics (FIGO 2018) staging system.

**Methodology** The study included 193 patients with morphologically verified cervical cancer IB1-IIIB stages. The main group consisted of 62 patients who underwent nerve-sparing radical hysterectomy (type C1) with pelvic and para-aortic lymphadenectomy using the water jet dissection. Control group A consisted of 79 patients who underwent nerve-sparing radical hysterectomy (type C1) with pelvic and para-aortic lymphadenectomy. Control group B consisted of 52 patients who underwent radical hysterectomy (type C2) with pelvic and para-aortic lymphadenectomy.

**Results** The use of the water jet dissection method in the main group made possible to reduce the time to removal of the urethral catheter (4.5 days vs. 6.9 and 12.1 days), as well as to minimize the time for restoring urination according to the residual urine volume criterion less than 100 ml (5,6 day vs 10.2 and 21.2 days) (<0.001). In the main group none of the patients in the postoperative period showed clinical signs of neurogenic bladder dysfunction.

**Conclusion** The results suggest that using the water-jet technique in tissue incision contributes to the most atraumatic dissection of the autonomic nervous system. Thus, the proposed method makes it possible to avoid thermal degeneration of the nerves and preserve the functional integrity of the nerve plexus.