PERIOPERATIVE TREATMENT IN MUSCLE INVASIVE BLADDER CANCER: A RAPIDLY EVOLVING FIELD

Clinical Vignette

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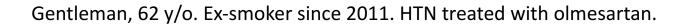
*Adjuvant

- ChT?
- IT: Nivolumab, Pembrolizumab

*Neoadjuvant

- Cisplatin-based chemo

2003





First symptom (November 2019): urinary symptoms treated as BPH. Due to lack of clinical response, further studies were performed.

- Urinary sediment: microhematuria
- Urinary citology: atypical cells

First diagnostic (January 2020):

- **US**: no abnormal findings in the bladder but agenesia of left kidney.
- **TURBT:** solid urothelial carcinoma, grade 3, poorly differentiated (WHO 1973) and high grade (WHO 2004), with 10% of papillary differentiation and invasion of the muscle layer. CIS present.
- Body CT: no distant disease.

Final diagnosis: muscle-invasive urothelial carcinoma of the bladder, cT2 cN0 cM0.





Would you recommend any other diagnostic imaging tests?

- 1. MRI
- 2. PET CT
- 3. NO, body CT is enough



What treatment would you offer the patient?

- 1. Cisplatin based NA chemotherapy
- 2. Surgery directly
- 3. Clinical trial
- 4. TMT

March 2020: patient starts treatment in clinical trial with cisplatin-gemcitabine + perioperative IT.

June 2020: completed 4 cycles with good tolerance. AEs: neutropenia g3, rash g1.

July 2020: radical cystoprostatectomy + lymphadenectomy + Bricker procedure.

Poor postoperative outcome:

- Candidemia (day +7)
- Pulmonary thromboembolism (day +20)
- Urinary septic shock requiring admission to ICU (day +45)

September 2020:

Pathological anatomy report: No residual tumor, ypT0 and ypN0, pCR

But... ECOG 2, asthenia, sarcopenia and Cr 3 mg/dl and GF (CKD-EPI) 21 ml/min/1,73 m2.

Ureterohydronephrosis secondary to ureteroiliac anastomosis stenosis



Nephrostomy, UTI... Surgery



After achieving a **pathological complete response**, do you find necessary **adjuvant treatment**?

- 1. Yes, data from other studies support it
- 2. No, no convinced about the additional benefit of adjuvant treatment for these patients
- 3. Doesn't know, doesn't answer ©

NOVEMBER 2020 (almost 4 months after surgery):

- Good performance status.
- Cr 1.44 mg/dl, GF (CKD-EPI) 51 ml/min/1,73m2

Patient starts adjuvant treatment with IT (8 cycles planned)



After C4:

- Grade 2 renal impairment → immune-mediated nephritis
- Rash g2, pruritus g1



Patient starts corticosteroids recovering renal function and tapering regimen.

APRIL 2021

After recovering renal function, treatment is resumed and C5 is conducted.



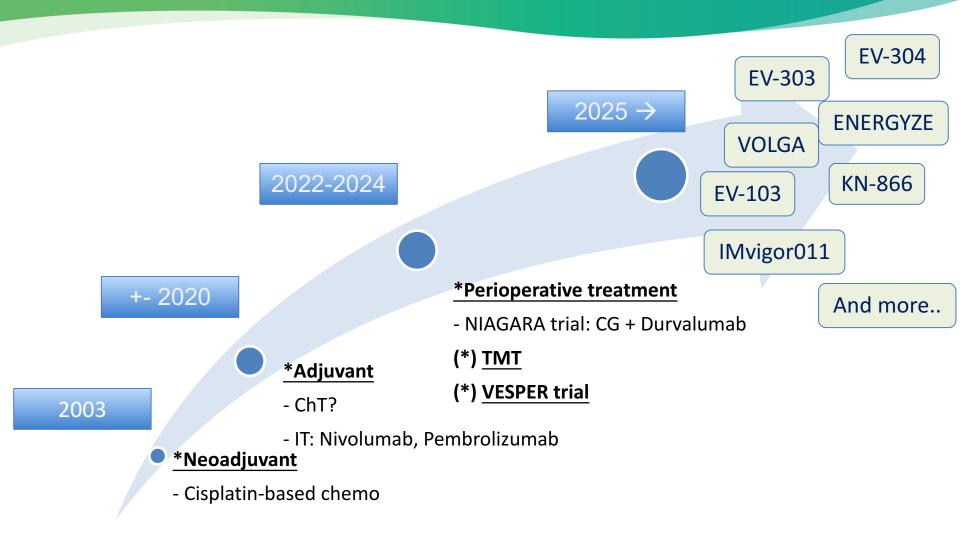
New kidney function impairment

STOP IT. Patient starts follow-up.

NOVEMBER 2021: diagnosed of ampollous pemphigoid confirmed by biopsy and followed by dermatology.

SEPTEMBER 2025: Last appointment in September 2025. Patient asymptomatic and without evidence of disease.





- Is sandwich approach **always** a valid one? What is the role of **adjuvant** therapy after **a complete pathological response**?
- Is diagnosis and reevaluation with CT enough or do MRI and/or PET scans have an additional role to play in muscle invasive staging and response evaluation?
- Is **surgery always necessary**? Are we going to be operating less bladders in 5 years from now?
- What toxicity/morbidity/mortality can we assume in the perioperative setting?
- Biomarkers?

Let's get started with the talks to help us answer these questions...



Thank you!