



Global Action. Local Change.

KDIGO Controversies Conference on Onco-Nephrology Breakout Group Questions

Breakout Group 1: Kidney Problems in Hematology

1. How do we recognize and prevent tumor lysis syndrome? What renal testing/investigations should patients scheduled to initiate chemotherapy have?
2. Is there a role for total plasma exchange in the management of multiple myeloma cast nephropathy? How do we manage MM-related bone disease? How does one decide on bisphosphonate or denosumab therapy? How do we minimize risk of ESRD in MM?
3. How do we optimally manage calcineurin inhibitors in the recipients of allogeneic stem cell transplant?
4. Is a renal biopsy required to initiate chemotherapy in suspect immunoglobulin cast nephropathy?
5. Which patients with monoclonal gammopathy of renal significance should be offered treatment?
6. When are patients with myeloma and amyloidosis on dialysis candidates for kidney transplantation?
7. What is the appropriate chemotherapy selection for treatment of monoclonal gammopathy of renal significance?
8. What is the optimal dosing of cytotoxic agents in patients with CKD G3b-G5D?



9. What are the roles of high cutoff membranes and new sorbent devices (CytoSorb) in HSCT patients?
10. In patients with cancer related pain what analgesics are appropriate for long term management?
11. Which hematological cancer patients with CKD can be treated with erythropoietin-stimulating agents (ESAs)?
12. To dialyse or not: Is withholding dialysis a valid treatment option for hematological cancer patients and when is it the optimal time to initiate dialysis?

Breakout Group 2: Kidney Impairment and Solid-Organ Malignancies

Assessment of kidney function

1. What is the epidemiology of CKD in solid-organ tumors?
2. Which are the main pathophysiologic causes and mechanisms of kidney impairment in solid-organ tumors?
3. How is kidney impairment (GFR and biomarkers of cell damage) best measured in cancer patients?

Applicability & efficacy of various diagnostics

4. What are the key renal investigations for patients with solid-organ malignancy?
Consider:
 - a. At cancer diagnosis
 - b. During oncological treatment
 - c. During follow-up



5. Cancer screening in dialysis patients: Under which circumstances is it indicated? When it is, which exams should be done and how often?
6. Cancer screening in patients with glomerulopathies: When and how should it be done? (Consider membranous nephropathy and other possible paraneoplastic glomerulopathies)
7. When is a kidney biopsy indicated in cancer patients with urinary abnormalities?

Prevention of AKI & CKD or their progression

8. Should ACE inhibitors/ARBs be used for slowing kidney disease progression in CKD and/or nephrectomized cancer patients?
9. Is prevention of post-surgical AKI different in cancer patients compared to non-cancer surgery?
10. Is contrast-induced AKI a relevant issue in cancer patients? Should CKD patients with cancer receive fewer contrast media CT scans? How can contrast induced AKI be prevented in CKD patients with cancer?

Managing renal toxicities from treatments

11. What are the nephrotoxicities of various oncological treatments (e.g., chemotherapy, radiotherapy, targeted therapies, immunotherapy, bone targeting agents)?
12. ESA and iron therapy in CKD patients with solid-organ malignancies: Are the indications for treatment any different than those of CKD patients without malignancy? What is the appropriate hemoglobin target? What ESA dose should be considered? Which are the effects of iron and ESA treatments on survival in cancer patients?



13. Which are the optimal timing and the necessary dose adjustments of anticancer drugs in patients with CKD stage 3 to 5D? Does the dialysis regimen affect dosing of anti-cancer drugs?

Ethics

14. To dialyse or not: Is withholding dialysis a valid treatment option for solid-organ cancer patients and when is it the optimal time to initiate dialysis?

Breakout Group 3: Management and Treatment of Kidney Cancer

Epidemiology, prevalence, type of renal cell carcinoma (RCC)

1. Has the epidemiology of RCC changed in recent years?
2. What are the histological subtypes of RCC and underlying molecular characteristics?

Kidney function in RCC

3. What are the risk factors for impaired kidney function in RCC?
4. Is CKD as a risk factor and/or prognostic factor for RCC? If CKD is a risk factor, at what stage of CKD is a risk factor (e.g., ESKD)?
5. How can we optimize treatment of cancer patients on dialysis and renal dysfunction with tyrosine kinase and checkpoint inhibitor therapies?

Type of surgery (e.g., nephron sparing, nephrectomy) and its effect on kidney outcomes

6. Who are candidates for nephron-sparing surgery?



7. What is the role of cytoreductive nephrectomy in metastatic RCC (mRCC)?

New targeted therapies and renal side effects

8. What are the classes of targeting agents in the treatment of mRCC and their impact on the outcome of RCC?
9. What are the most frequent side effects of targeting agents in the context of renal toxicity and how can one ameliorate them?
10. Can we overcome underrepresentation of patients with CKD in cancer trials? What is the real-world evidence on efficacy and toxicity in these populations?

Follow-up after surgery (urologist, oncologist, nephrologist or dedicated team)

11. What is the role of adjuvant systemic therapy in high-risk localized RCC?
12. Can we predict and prevent changes in renal function-CKD following surgery?

Breakout Group 4: Malignancy and Kidney Transplantation

Epidemiology

1. What is the incidence, cancer risk factors and mortality rates of cancers in kidney transplant recipients compared with the general population?

Donor-derived cancers

2. What is the incidence of donor-derived malignancy in kidney transplant recipients and how may these risks differ by cancer types?
3. In what circumstances can a donor with active or historical neoplasia be accepted for donation?



4. What are the current strategies for reporting, screening, management, of those at risk and had acquired the disease after donor transmission of cancer has occurred?
5. What are the short- and longer-term outcomes of recipients who developed a donor-derived cancer?

Recipients with a prior cancer history

6. In patients with a prior cancer history, what are the eligibility criteria for transplantation?
7. What is the risk of cancer recurrence and the prognosis of those with recurrence?
8. What are some of the methods we could use to predict and prognosticate cancer recurrence in at risk patients?

Cancer screening in kidney transplant recipients

9. Should cancer screening in kidney transplant recipients differ from that implemented in the general population?
10. In addition to the standard population cancer screening tests suggested in the general (for breast, colorectal and cervical cancer), should routine screening/monitoring be suggested for other cancers such as renal cell carcinoma, PTLD and lung cancer?
11. What is the role of education in cancer protection?

Management of cancer after kidney transplantation

12. Are there any differences and limitation in diagnostics of cancer in kidney transplant recipients (e.g., role of biomarkers, imaging, biopsies, etc.)?
13. What are the methods to assess graft function and prevent AKI/progression of CKD in kidney transplant recipients when on anticancer therapy (chemo, radio,



targeted/immunomodulatory therapies)? For example, the risk of acute rejection in the context of CTL4 and PD1 inhibitors.

14. What are the limitations in cancer therapy in kidney transplant recipients?
15. What are the optimal strategies for managing a transplant recipient with cancer before and after transplantation as far as the doses and types of immunosuppression are concerned? How do cancer treatments (e.g., chemotherapy, radiation, targeted therapies) impact immunosuppression strategies?