# How I Treat When I Don't Have the Resources
# Live Chat Summary

## How I Treat Lung Cancer in the Philippines - Dr. Rogelio Velasco Jr.

1. Major Causes of Lung Cancer in the Philippines:
   - Dr. Velasco identified smoking as the leading cause, followed by secondhand smoke exposure and occupational hazards.
   - Around 50% of Filipino patients with lung adenocarcinoma have EGFR mutations, highlighting a strong genetic factor.

2. Familial Lung Cancer Data in the Philippines:
   - There is no local data on hereditary lung cancer.
   - Dr. Velasco noted that this is a potential research opportunity for future investigations.

3. Lung Cancer Screening Programs:
   - The Philippines lacks a national lung cancer screening program using low-dose CT scans.
   - Some institutions conduct opportunistic screening.
   - Collaboration with other low- and middle-income countries (LMICs) was discussed as a way to investigate screening and familial lung cancer data.

4. Key Findings from the KEYNOTE-671 Study (Pembrolizumab in NSCLC):
   - Overall survival (OS): HR = 0.72 [95% CI 0.56–0.93]
   - Event-free survival (EFS): HR = 0.59 [95% CI 0.48–0.72]
   - The benefit of pembrolizumab was emphasized in operable NSCLC patients.

5. Access to Next-Generation Sequencing (NGS) for Targeted Therapy:
   - Main barrier: High cost—patients must pay out of pocket.
   - Some NGS panels are sent to India or Taiwan at a lower cost.
   - Many clinicians prioritize EGFR, ALK, ROS, and PD-L1 testing, as these are widely available.

6. Challenges in Treatment Accessibility:
   - Public patients in the Philippines do not have access to pharma-sponsored NGS programs, unlike in Brazil.
   - Cost barriers remain for both testing and targeted treatments.

7. Dose Reduction Strategies in Immunotherapy:
   - There is no formal study proving lower doses of pembrolizumab are effective in resource-limited settings.
   - However, some oncologists in the Philippines, Hong Kong, and India use lower doses due to financial constraints.

8. Environmental vs. Smoking-Related Lung Cancer Risk:
   - Air pollution and environmental factors may play a role in lung cancer incidence, but data in the Philippines is limited.
   - Further research is needed to quantify the impact of pollution compared to smoking.

9. Strategies to Improve Lung Cancer Care in the Philippines:
   - Enhancing early detection through affordable screening options.
   - Expanding pharma-sponsored NGS programs for patients without financial means.
   - Increasing clinical trial access for advanced treatments.

**Final Notes:**

- Dr. Velasco was recognized for his work on lung cancer in the Philippines, receiving the OncoAlert Catalyst Award for his efforts in addressing treatment gaps.
- This session highlighted the urgent need for better screening, more affordable NGS access, and innovative strategies to provide effective lung cancer treatment in resource-limited settings.

## How I Treat Breast Cancer in Brazil - Dr. José Fernando Prado de Moura

The discussion primarily explored screening practices, healthcare disparities, and access to advanced therapies in the country.

1. Breast Cancer Screening in Brazil

- Institute of Cancer Recommendation: Mammograms for women over 50 years old.
- Medical Society Recommendation: Mammograms starting at age 40.
- Discrepancy in Guidelines: This creates confusion and inconsistencies in screening uptake across different regions.
- Population Behavior: There was no definitive answer on whether most women follow the earlier or later screening recommendation.

2. Disparities Between Public and Private Healthcare Systems

- Public healthcare patients face longer wait times for diagnosis and access to treatment teams.
- Private care patients have faster access and are more likely to receive advanced therapies such as:
  - Neoadjuvant immunotherapy for triple-negative breast cancer (TNBC).
  - Next-generation sequencing (NGS) testing for stage IV breast cancer.
  - Targeted therapies like capivasertib and olaparib.

- Impact on Survival:
  - The Amazona Study showed worse survival rates for patients treated in public hospitals.
  - Bridging the gap in services like genetic testing, SBRT, and reconstructive surgery remains a challenge.

3. Clinical Trials and Access to Novel Therapies

- Pharma-Sponsored Programs: Some companies provide access to NGS and targeted therapies, but only for private patients.
- Early-Phase Trials: Availability remains limited in public hospitals.
- Calls for Policy Changes: Increasing government support for public access to genetic testing and novel treatments could help reduce survival disparities.

**Key Takeaways from the Session:**

- Screening guidelines vary between institutions, potentially leading to delayed detection in certain populations.
- Healthcare inequality significantly impacts breast cancer outcomes, with worse survival in public hospitals.
- Public patients lack access to advanced treatments, making policy reforms and funding crucial.
- Research and international collaboration could provide better strategies for bridging these healthcare gaps.

## How I Treat GI Cancer in Egypt - Dr. Noha Rashad

This session focused on gastrointestinal (GI) cancer treatment in Egypt, covering colorectal cancer (CRC), hepatocellular carcinoma (HCC), and neuroendocrine tumors (NETs). Key topics included access to treatment, availability of systemic therapies, and real-world outcomes compared to global clinical trials.

1. Epidemiology & Common Causes of GI Cancers in Egypt

- The leading cause of hepatocellular carcinoma (HCC) in Egypt is chronic hepatitis C virus (HCV) infection.
- There was discussion on how ethnic variations and underlying disease pathogenesis affect responses to systemic therapies.

2. Healthcare Access & Infrastructure

- 70% of the Egyptian population has access to major cancer treatment institutions.
- Radiation Therapy Access: Egypt has more than 50 radiation centers, which was considered a strong infrastructure for radiochemotherapy access.
- Geographic disparities still exist, as in Brazil and other countries, where rural patients have difficulty reaching specialized centers.

3. Systemic Therapy Selection in HCC

- The choice between Atezolizumab/Bevacizumab (Atezo/Bev) vs. Durvalumab/Tremelimumab (STRIDE protocol) depends on esophageal varices severity and the need for rapid tumor shrinkage.
- STRIDE protocol is preferred for patients who require quick symptom relief.
- Access Challenges: Limited availability of newer systemic therapies affects treatment decisions.

4. Colorectal Cancer (CRC) Treatment & Guidelines

- The selection of Bevacizumab vs. Cetuximab plus chemotherapy in metastatic CRC was addressed, with guidelines available upon request.
- Sorafenib Real-World Data: Compared to global studies like GIDEON, the response in Egypt varies due to genetic and ethnic factors.

5. Challenges in Neuroendocrine Tumor (NET) Diagnosis & Advocacy

- Patient advocacy is not well-developed for NETs in Egypt; most advocacy efforts focus on breast cancer.
- Limited access to biochemical and imaging diagnostics (e.g., 5-HIAA, Chromogranin A, Gallium DOTATATE PET/CT) forces reliance on conventional radiology.
- Alternative Strategies: Patients pay out-of-pocket or seek NGO support for advanced diagnostics.

**Key Takeaways from the Session:**

- HCV remains the primary risk factor for HCC in Egypt.
- Most patients (70%) have access to major cancer institutions, but disparities exist.
- Newer systemic therapies for HCC and CRC are limited, affecting treatment choices.
- Genetic and ethnic factors influence real-world responses to targeted therapies like Sorafenib.
- Patient advocacy for NETs is lacking, with few resources available.
- Innovative funding solutions (NGOs, private pay options) help bridge diagnostic gaps in resource-limited settings.

## How I Treat Cancer When I Don't Have the Drugs - Genitourinary (GU) Cancer - Dr. Natalia Gandur

This segment focused on adapting treatment strategies for GU cancers—including prostate, bladder, and renal cancer—in resource-limited settings where access to essential medications, immunotherapies, and diagnostic tools is restricted.

Key Scientific Discussions:

1. Prostate Cancer Treatment Adaptation

- Use of the PEACE-1 Trial Regimen in Stage IV Prostate Cancer:
    - In high-resource settings, abiraterone + ADT + docetaxel is preferred, especially in high-volume metastatic hormone-sensitive prostate cancer (mHSPC).
    - In resource-limited settings, adaptations include:
        1. ADT + docetaxel alone if abiraterone is unavailable.
        2. ADT + AR inhibitors (enzalutamide, apalutamide) when chemotherapy is not an option.

- What if ARPIs (Abiraterone, Enzalutamide, Darolutamide) Are Unavailable?
  - mHSPC: Prioritize ADT + docetaxel, extending docetaxel up to 9 cycles if well tolerated.
  - mCRPC (metastatic castration-resistant prostate cancer):
    1. If ARPI & immunotherapy are unavailable: Use docetaxel, then cabazitaxel if accessible.
    2. Radionuclide therapy (e.g., Lutetium-177) is an option where available.
    3. If nothing is available, best supportive care becomes critical.
  - Public hospital limitations: Many only offer bicalutamide & flutamide, which are no longer standard but remain last-resort options.

2. Bladder & Renal Cancer Treatment in Low-Resource Settings

- Bladder Cancer:
  - When BCG is scarce, alternative intravesical chemotherapy (e.g., mitomycin) is used.

- Renal Cancer:
  - Surgery remains the cornerstone in cases where targeted therapies (TKIs) and immunotherapy are unavailable.
  - TKIs like pazopanib & sunitinib are used when immune checkpoint inhibitors (ICIs) are inaccessible.

3. Optimizing Treatment When Essential Drugs Are Unavailable

- Risk stratification is key to determine the most effective and feasible approach.
- Repurposing older, cost-effective drugs (e.g., cisplatin-based regimens, generic TKIs) helps bridge treatment gaps.
- NCCN Harmonized Guidelines are used to tailor care in low-resource settings.

4. The Role of Multidisciplinary Teams (MDTs) in Low-Resource Settings

- Oncologists, urologists, radiologists, and pathologists work together to optimize available treatments.
- Virtual tumor boards & telemedicine-based consultations (e.g., Project ECHO) help bridge expertise gaps—especially in rural areas.
- Faster decision-making in MDTs reduces delays in diagnosis & treatment.

5. Addressing the Public vs. Private Healthcare Disparity

- Private clinics have access to new drugs & therapies, while public hospitals struggle with shortages.
- Many patients in Latin America (LATAM) lack insurance and depend on underfunded public healthcare systems.
- Possible solutions:
  - Public-private collaborations.
  - Expanding insurance coverage.
  - Increasing participation in clinical trials to gain access to novel therapies.

6. Expanding Clinical Trial Participation in Latin America

- Trial participation is growing in Brazil, Mexico, and Argentina, but regulatory barriers & infrastructure limitations remain.
- Strategies for expansion:
    - Regional collaborations for research.
    - Streamlining approval processes for clinical trials.
    - Improving patient education & recruitment to ensure broader access.

**Key Takeaways from the Session:**

- PEACE-1 regimen (Abiraterone + ADT + Docetaxel) is adapted in low-resource settings by removing abiraterone or replacing chemotherapy with AR inhibitors when needed.
- In mCRPC, chemotherapy (Docetaxel → Cabazitaxel) is prioritized when ARPIs & immunotherapy are unavailable.
- Bladder & renal cancer treatments rely on surgical approaches & cost-effective systemic therapies like TKIs in the absence of novel drugs.
- Multidisciplinary teams (MDTs) & telemedicine are essential for optimizing limited resources.
- Healthcare disparities between private & public sectors impact treatment accessibility, requiring collaborations & clinical trial expansion to improve options.
- Clinical trial participation in LATAM is increasing but remains uneven, requiring policy changes & investment in infrastructure.