Cancer In Iraqi Patients Presenting to AUBMC

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Outline

- Retrospective cohort data – epidemiology
- Initial results from prospective survey of Iraqi patients with cancer treated at AUBMC

Background

- Patients from Iraq make up a significant proportion of the patients seen at the Naef K. Basile Cancer Institute (NKBCI) in the American University of Beirut Medical Center (AUBMC).
- We have observed that many of these patients present with advanced stages of disease, however, we do not have data regarding the epidemiology of cancer in Iraqi patients presenting to AUBMC for diagnosis, treatment or consultation.
- The aim of this study was to review the diagnoses of the patients presenting with solid tumors from Iraq to AUBMC and describe the differences in stage at diagnosis between Iraqi and Lebanese patients in a sub-set for whom these data are available.

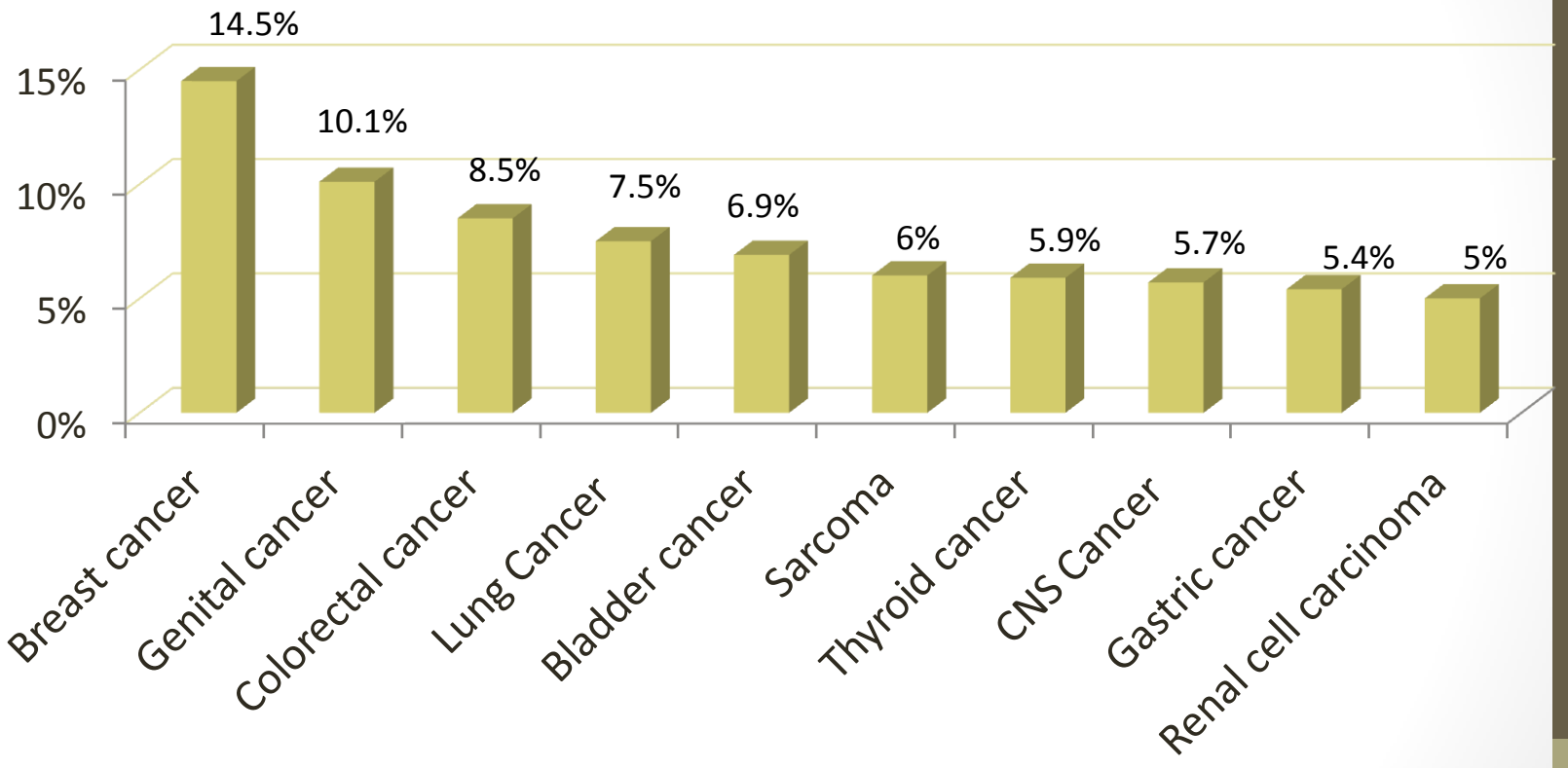
Methods

- After IRB approval, patients were identified through medical records from January 2013 to December 2016.
- Adult patients with Iraqi nationality and solid tumor diagnosis were included in the analysis
- Data were compared to data from Lebanese patients enrolled in other IRB approved studies at AUBMC.

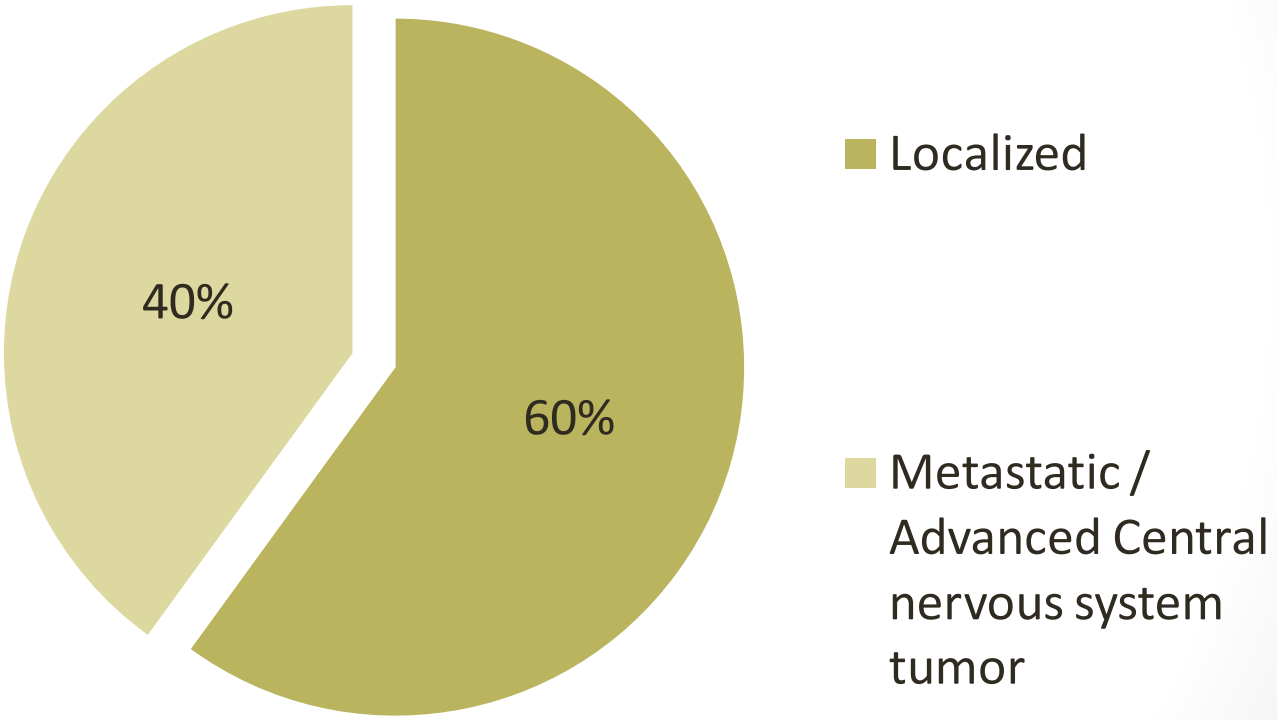
Results

Demographics	
Sample Size	958
Males	52.1%
Females	47.8%
Median Age	56
Treatment of Iraqi cancer patients presenting to AUBMC	
Surgery and / or Chemotherapy	46%
Consultations only	54%

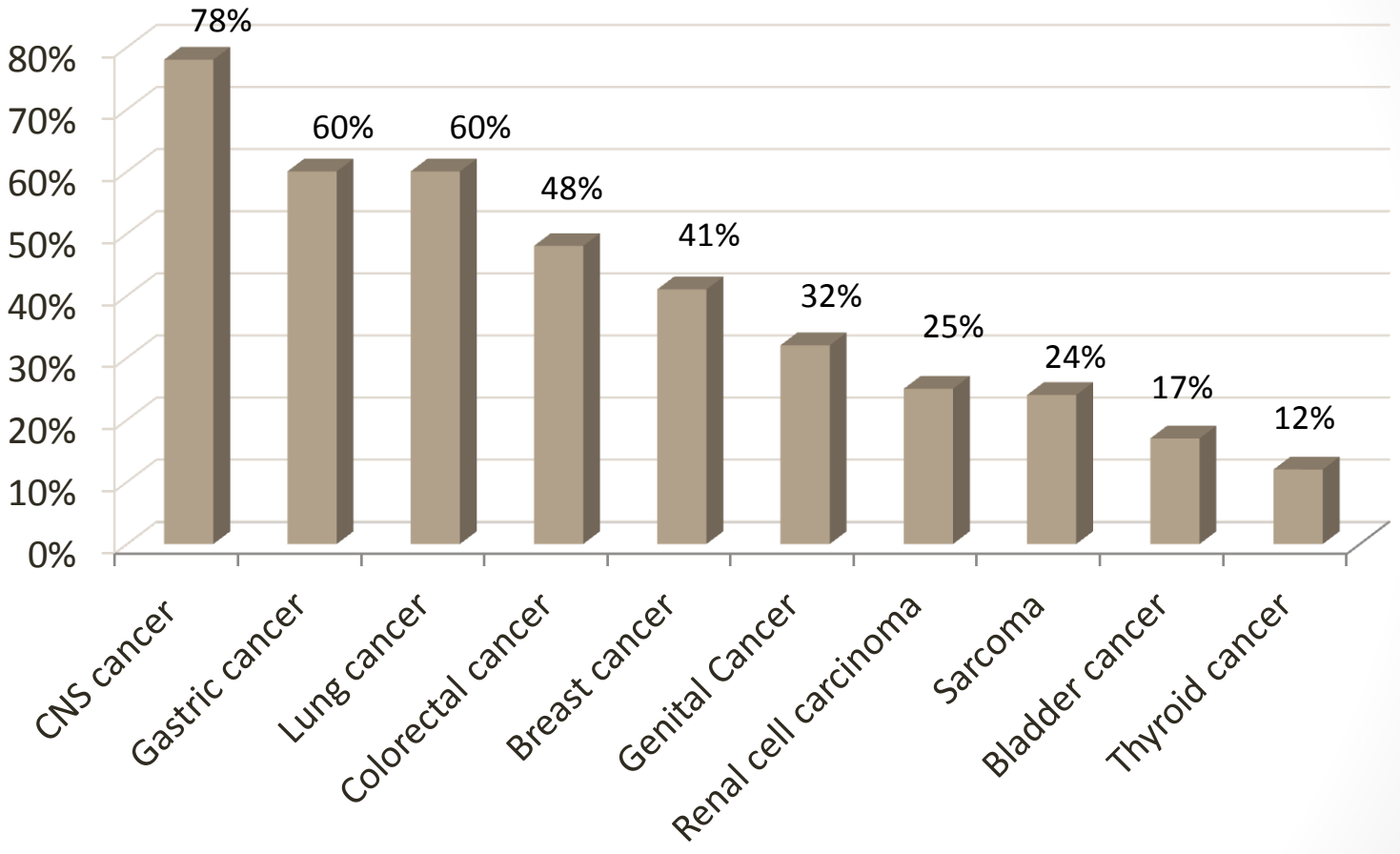
The 10 most common cancer types in Iraqi Patients presenting to AUBMC



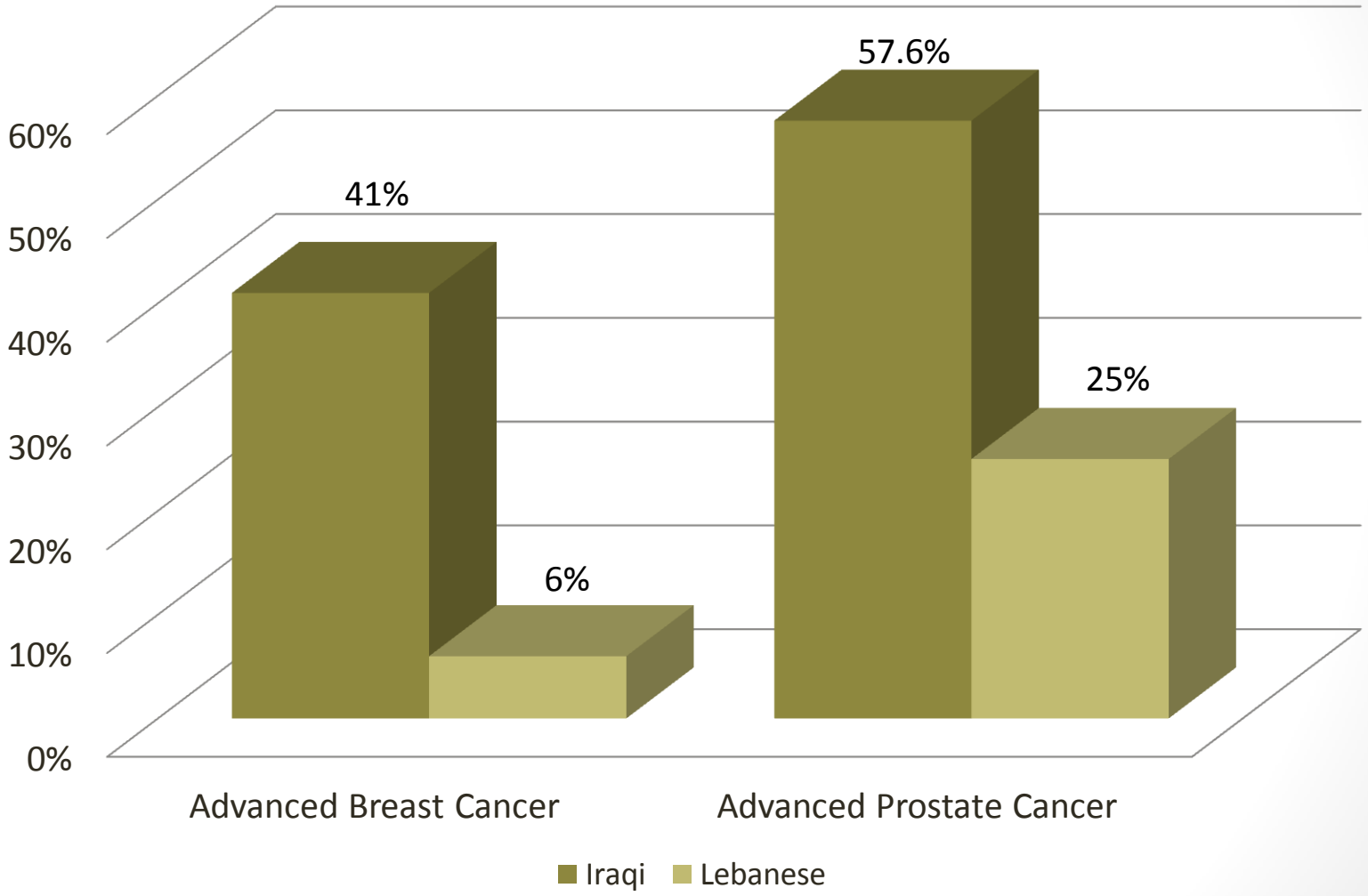
Stage at Presentation



Frequency of advanced stage by cancer type



Comparison between the percentage of the Lebanese and the Iraqi patients presenting to AUBMC and diagnosed with advanced breast or prostate cancer

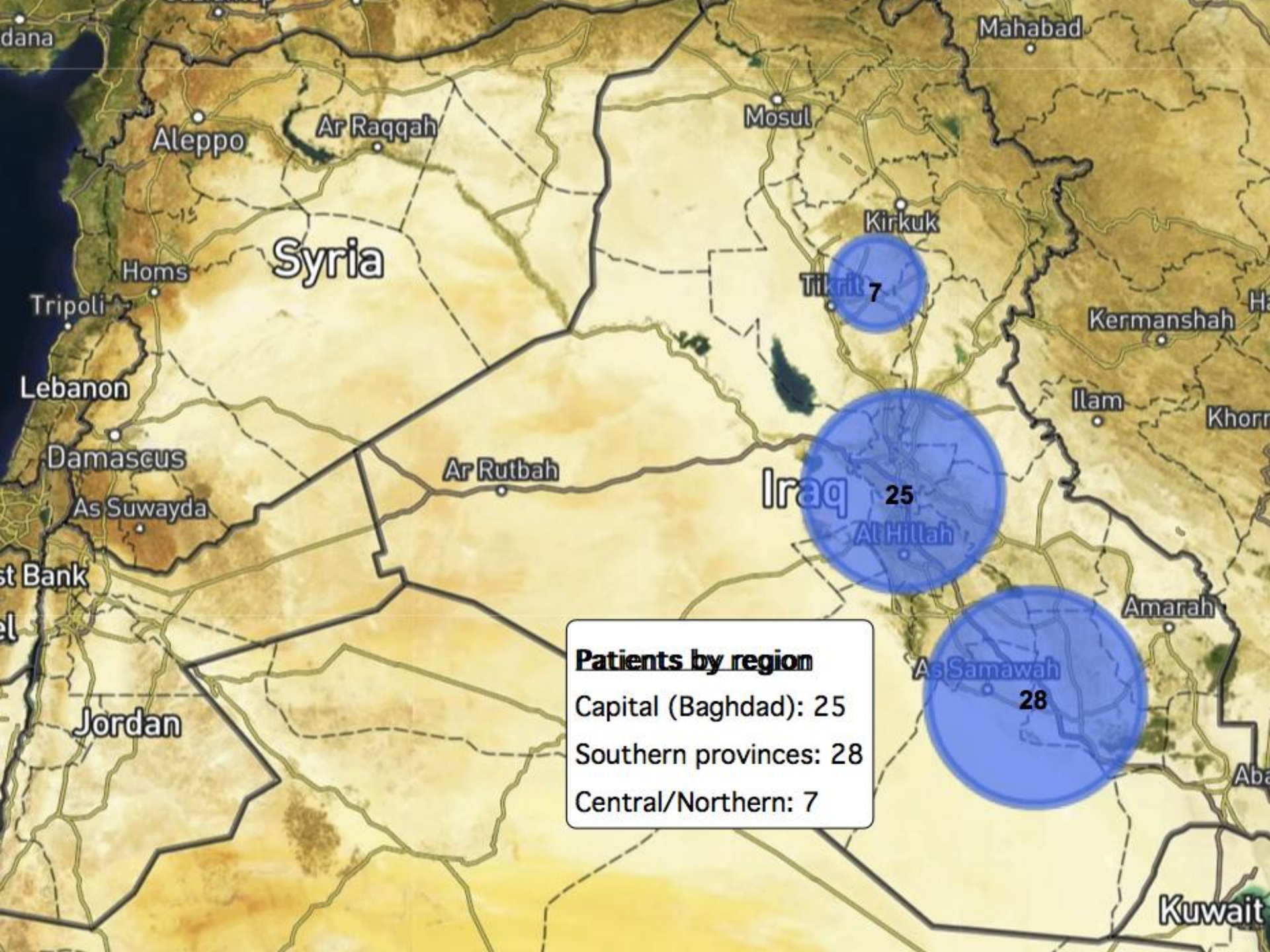


Conclusions

- AUBMC is a tertiary referral center so no conclusions can be made regarding the epidemiology of cancer in general in Iraqi patients however these data reflect the mix of complex cases that present to AUBMC with 40% of patients having advanced disease.

- The presence of this patient population at AUBMC and Lebanon in general calls for further study given the conflict-related deficiencies in the Iraqi healthcare system noted in recent studies.

Dynamics and experiences of cancer care among Iraqis in Lebanon


Mahabad
Mosul
Aleppo
Ar Raqqah
Kirkuk
Syria
Homs
Tripoli
Tikrit
7
Kermanshah
Lebanon
Ilam
Damascus
Ar Rutbah
Iraq
25
As Suwayda
At Hillah
Amarah
As Samawah
28
Jordan
Kuwait
Patients by region
Capital (Baghdad): 25
Southern provinces: 28
Central/Northern: 7

Demographics*

General

- Mean age: 49
- Female: 36
- Male: 24

Education

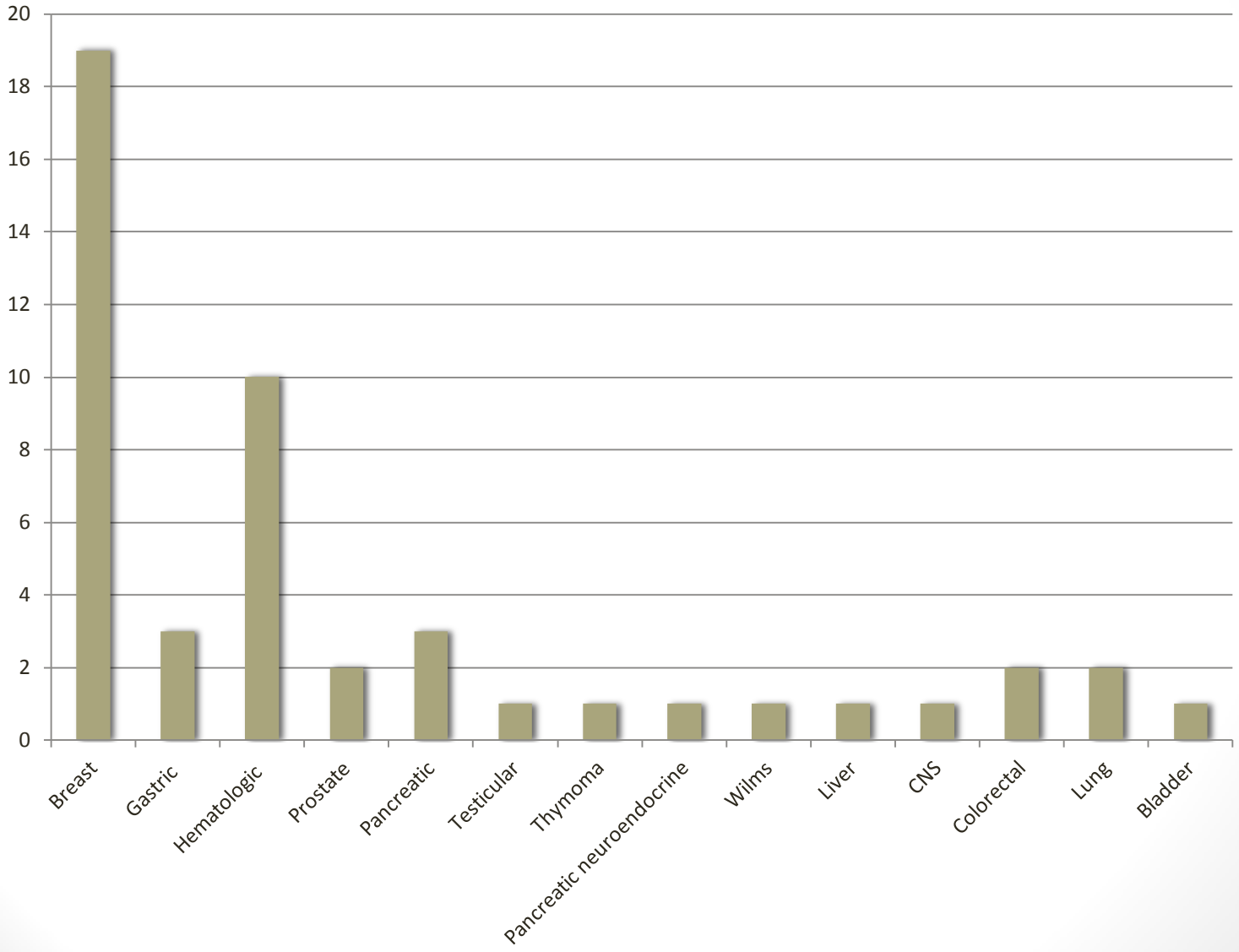
- University, teacher's degree, or higher: 35

Household Income Levels

- $0 – $1000 USD: 35
- $1001 – 2000 USD: 12
- $2001 + USD: 9

*60 total respondents

Patient diagnoses



Treatment finances

Total average expenditures (Treatment, board, tickets, etc.)

- 1 – 4 visits to Lebanon: $20,531 USD
- 5+ visits to Lebanon: $98,852 USD

Income / Cost

- Household income insufficient for treatment costs: 54
- Household income sufficient for treatment costs: 6

Financial strategies (60 respondents marked all that applied)

- Loans or gifts from relatives, friends: 43
- Sold possessions: 29
- Sold house: 18
- Sold car: 19

At 2/3 of respondents, the most widely practiced strategy for raising funds was seeking out loans or gifts from family, friends, and neighbors (43/60). Nearly one half (29/60) reported selling major possessions such as jewelry. Nearly 1/3 of the sample reported selling a house for treatments (18/60), and again nearly 1/3 reported selling a car (19/60).

Reasons for travel

Responses to the question*: "In general, why have you come to Lebanon for treatment? What are the medical and social services available in Lebanon that are not available in Iraq?"*

- **Human resources**: All respondents saw the conflict-driven exodus of Iraqi doctors since 2003 as a hugely significant event, leading to overworked and under-resourced medical staff.
- **Pharmaceuticals, equipment**: Respondents frequently referred to the fact that, while technically free in public hospitals, chemotherapy agents in Iraq were often either expired or only sporadically available. They also referred to the lack of "modern machines", particularly linacs (scarce), PET scans (unavailable), etc.
- **Informal referrals to AUBMC**: Respondents repeatedly mentioned the "reputation" of AUBMC in Iraq. Networks of family and friends with previous experience at AUBMC served as referrals.
- **Visa regulations**: Respondents understood Lebanon's visa regulations to be more lax than Jordan, Turkey, and India.
- **Conditions related to ISIS**: Oncology centers were damaged or destroyed in the central/north, or access to them was cut off.

Conclusions

- Conflict-related deficiencies of cancer care in Iraq have contributed to the emergence of Beirut as a hub for Iraqis seeking oncology care.
- Most respondents reported an inability to pay for treatments on household incomes (54/60), and a significant portion drew on extended networks (43/60) and the sales of homes (18/60) to fund treatment trips.