Detailed Cancer Specific Analytics in the Remote OHDSI Network Settings

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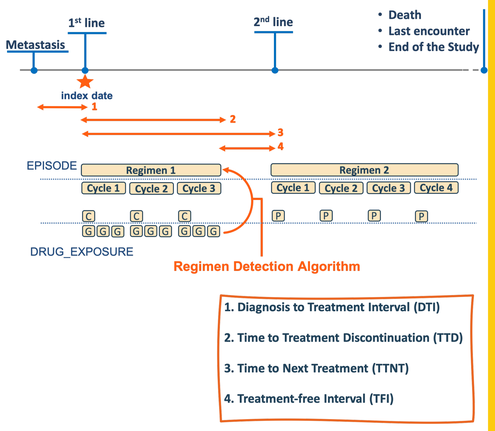
INTRO:

- Observational research in oncology is more challenging than other conditions
- The OMOP CDM does not adequately cover cancer diagnoses, treatments and episodes
- The OMOP Oncology Module extends the OMOP CDM and Standardized Vocabularies to support the comprehensive representation of cancer conditions, treatments, and disease abstraction
- In this work, the utility of the Oncology Module to generate real-world evidence in a distributed network was assessed

METHODS

- **Setting**
  - ✓**US Academic EHR linked to tumor registry:**
    1. Memorial Sloan Kettering (MSK)
    2. Tufts University Medical Center
    3. Columbia University Medical Center
  - ✓**US Nationwide commercial claims:** OpenClaims
  - ✓**US Nationwide oncology specific EHR:** OncoEMR
  - ✓**SK Academic EHR:** Ajou University

- **Schematic Study Design**



1. Diagnosis to Treatment Interval (DTI)
2. Time to Treatment Discontinuation (TTD)
3. Time to Next Treatment (TTNT)
4. Treatment-free Interval (TFI)

RESULTS

- 11,525 metastatic bladder cancer patients treated with systemic anti-neoplastic agents:
  - Median age: 52 (OpenClaims)- 69 (Columbia)
  - 61%-84% of patients were men

  *In line with the known epidemiology of the disease

- Median follow-up time (days): 340 (OpenClaims)-474 (Ajou)
- Distribution of top treatment regimens:
  - ✓ Similar in the US databases irrespective of type of data and setting
  - ✓ Different between US and SK: potentially due to differences in treatment guidelines and practice pattern

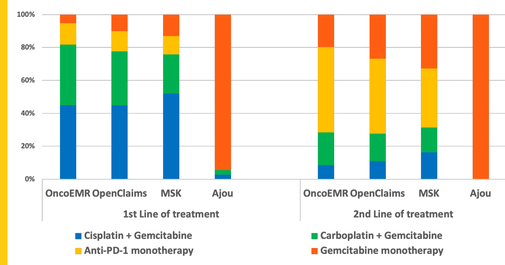
Observational Cancer Studies in OMOP Oncology Module:

The Oncology Module supports comprehensive representation of cancer conditions, treatments, and disease necessary to address key research questions

SCAN ME

Take a picture to download the full paper

Distribution of Top Treatment Regimens in the First and Second Lines of treatment

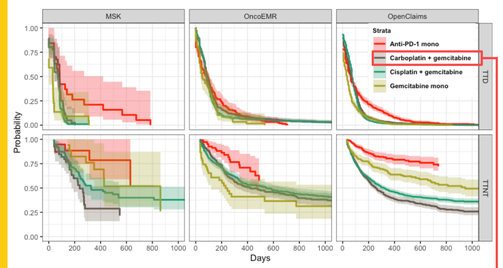


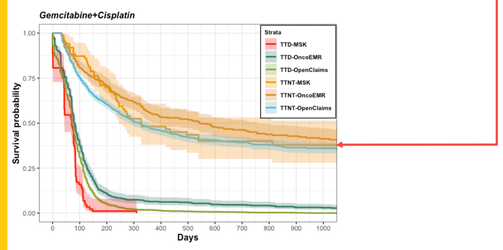
Key treatment related events in 1L (Median days)

	N	DTI	TFI	TTNT	TTD
MSK	294	52	62	153	44
Tufts	9	41	NA	NA	40
Columbia	70	48	28	147	30
Ajou	50	41	NA	NA	121
OncoEMR	1,965	35	43	157	71
OpenClaims	9,137	34	37	121	56

NA: Data not available

Selected KM analysis of TTD and TTNT in the Fist line of Treatment





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