405P Evaluating Medical Oncology Outcomes (EMOO) in Asia Study: Diagnosis, staging, treatment patterns and outcome of patients with lung cancer registered 2017-2019

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Background

- Lung cancer is the second commonest diagnosed cancer worldwide and is the leading cause of cancer deaths annually.
- Of the 2.2 million patients diagnosed with lung cancer yearly, approximately 60% are from Asia, and of the 1.8 million patients who died due to lung cancer annually, 62% were from Asia.
- The Evaluating Medical Oncology Outcomes (EMOO) in Asia study is a clinical annotated population-based cancer registry collaboration established between the European Society of Medical Oncology (ESMO), the International Agency for Research on Cancer (IARC) and partner institutions in Indonesia, Malaysia, Singapore and Thailand.

Objectives

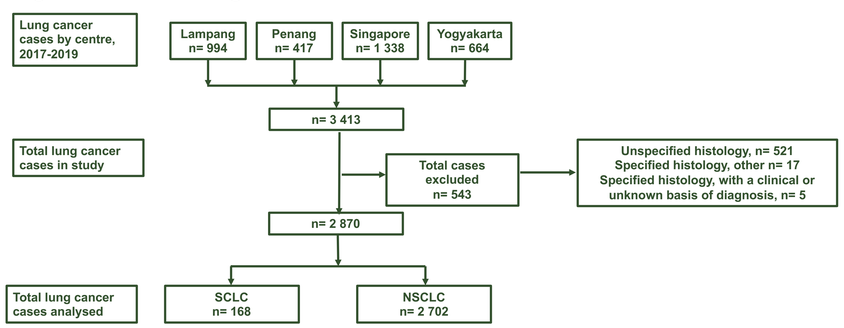
- To determine the lung cancer incidence, diagnosis and treatment patterns for patients with small cell lung cancer (SCLC) and non small cell lung cancer (NSCLC) diagnosed in the years 2017-2019.

Methods

- A retrospective study was conducted based on incident lung cancer cases diagnosed between 2017 – 2019 in Lampang (Thailand), Penang (Malaysia), and Yogyakarta (Indonesia) and a clinical case series obtained from the National Cancer Centre in Singapore.
- Tumour and clinical information were abstracted by chart review according to a predefined study protocol.
- Biomarker results were recorded for molecular testing of EGFR, ALK, ROS1, and BRAF V600 mutation as well as PD-L1 testing.

Results

Figure 1. Consort diagram



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Results

- A total of 2, 870 patients were analysed with 168 cases of SCLC, 2,239 cases of non-squamous NSCLC and 463 cases of squamous NSCLC (Table 1, Figure 2).
- 25% of cases received no anti-cancer therapy (Figure 3) and the percentage of patients who did not receive 1st line therapy was 37%, 39%, 7% and 44% in Lampang, Penang, Singapore and Yogyakarta, respectively (Figure 4).
- The overall survival (OS) for patients with NSCLC stage I, II, III and IV was 96.4% (95%CI 93.6-98.0), 85% (77.0-90.4), 63.9% (58.5-68.8), and 46.6% (44.1-49.0), respectively. OS by region is shown in Figure 5.
- The median OS for SCLC for limited and extensive stage disease was 17.4 months and 7.8 months respectively and the 1 year survival was 62.5% (45.7-75.4) and 32.1% (23.6-41.0), respectively.

Table 1. Patient characteristics

Patient characteristics	SCLC, n=168 (5.9%)	NSCLC, n=2,702 (94.1%)
Median age at diagnosis (range)	66 years (19-97)	65 years (19-97)
Smoking history, n (%)		
Current	84 (50.0%)	565 (20.9%)
Ever	54 (32.1%)	664 (24.6%)
Never	16 (9.5%)	1,172 (43.4%)
Unknown	14 (8.3%)	301 (11.1%)
Gender, n (%)		
Females	28 (16.7%)	1,092 (40.4%)
Males	140 (83.3%)	1,610 (59.6%)
ECOG performance status, n (%)		
0	28 (16.7%)	580 (21.5%)
1	71 (42.3%)	1,017 (37.5%)
2	35 (20.8%)	517 (19.1%)
3	24 (16.1%)	450 (16.7%)
5	0 (0%)	3(0.1%)
Unknown	10 (6.0%)	135 (5.0%)
Basis of diagnosis, n (%)		
Histology	126 (75.0%)	1,980 (73.1%)
Cytology	42 (25.0%)	722 (26.7%)

Figure 2. Histological subtypes (n=2,870)

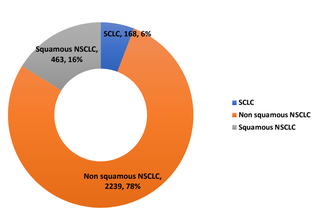


Figure 3. First line therapy (n= 2,870)

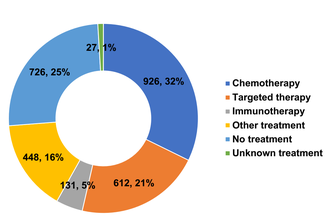


Figure. 4. First line therapy by region

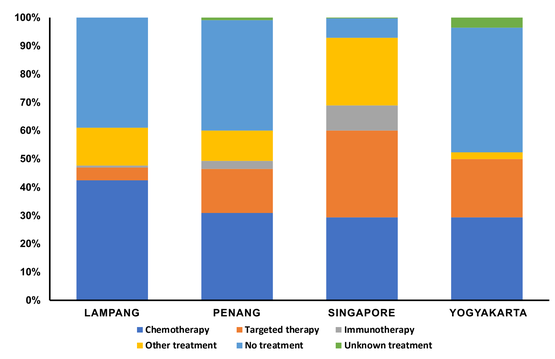
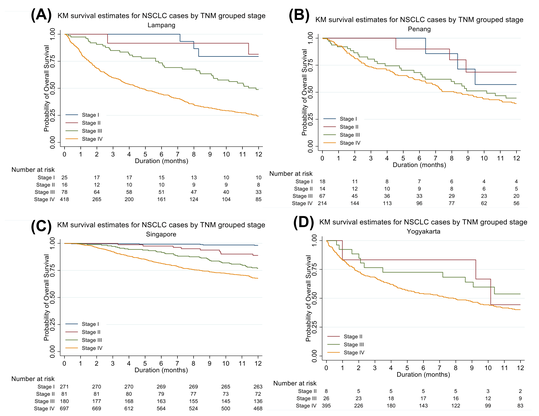


Figure 5. OS for NSCLC cases in (A) Lampang (B) Penang (C) Singapore (D) Yogyakarta



Conclusions

- Analysis of data from a clinically annotated registry for lung cancer from four settings in South-East Asia demonstrated integrating clinical data within population-based cancer registries was feasible and can address clinically relevant data gaps.
- Regional variation in survival exist and identifying factors for such differences may improve outcomes.

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