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**Results:** A total of 3267 patients met inclusion criteria (722 recurred, 715 died, 1134 recurred or died). Mean (SD) age was 67 (9) years (46% male, 27% current smokers, 67% stage I, 65% had lobectomy, 6.6% PDL1+, 5.1% EGFR+, 3.6% KRAS+, 1.5% ALK+). Grade information was available for only 14% of patients. Significant predictors of RFS were type of surgery, age, gender, insurance type, smoking status, KRAS+, PDL1+, and history of COPD and HIV. Predictors of TTR and OS were similar. The C-statistic was 64.4 for RFS and TTR, and 67.2 for OS suggesting relatively poor predictability. Results were robust across models.

**Conclusions:** It was infeasible to reliably predict the recurrence of NSCLC using data from typical claims and EHR databases. Additional prognostic information beyond routinely collected data will be beneficial to improve NSCLC outcomes.

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### 1354P Delay of diagnoses, increase of advanced stages, and worse overall survival in patients with thoracic malignancies because of the COVID-19 pandemic

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**Background:** COVID19 pandemic has represented an important clinical challenge for patients (pts) with lung cancer since higher mortality rates have been observed in these pts when affected by COVID19. In the last years, however, we have also observed several indirect consequences in pts with thoracic malignancies: several experiences have highlighted its possible negative role on the clinical history of these pts.

**Methods:** We evaluated all pts with thoracic malignancies referring to our Centre from March 2019 to February 2020 (pre-COVID group) and compared them to all pts referring from March 2020 to February 2021 (post-COVID group). In these two groups, we evaluated several parameters: the total number of accesses, the mean time from symptom and first imaging, the mean time from symptoms or imaging (whichever came first) and the achievement of a histological diagnosis, the stage at diagnosis, and the pts' overall survival (OS, calculated from the time of diagnosis to death).

**Results:** We observed a reduction of 26.9% in the total number of accesses at our centre (208 pts in the pre-COVID group, 152 in the post-COVID group). The mean time from symptom to first imaging was slightly longer: 48.42 ± 52.73 days in the post-COVID group versus 36.18 ± 48.38 days in the pre-COVID group, but this was not statistically significant (p = 0.07). However, we observed a statistically significant longer mean time from first symptoms or imaging (whichever came first) and the histological diagnosis in the post-COVID group (99.52 ± 72.58 vs 83.38 ± 65.35 days, p = 0.04). In the post-COVID group we observed more stage-IV cancer (74.8% vs 63%, p = 0.03) and fewer stage I-II cancer (7.1% vs 15%, p = 0.03). The median OS has not been reached yet (only 27 events have been censored), but the estimated mean OS was 38.73 months (95%CI 35.85-41.63) in the pre-COVID group versus 17.55 months (95%CI 15.97-19.12) in the post-COVID group (log-rank p = 0.029).

**Conclusions:** COVID19 pandemic led to a reduction of pts accessing to our Oncology Centre. The time for histological diagnosis was longer. A relevant increase in the percentage of patients presenting with advanced disease at diagnosis was observed. Pts experienced a worse mean OS in the post-COVID era.

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### 1355P Clinical trial enrollment among lung cancer patients: A real-world multicenter analysis

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**Background:** One of the major need in the oncology field is to include patients into clinical trials and, more specifically, enroll cancer patients truly reflecting the real world population. However, several issues can limit enrollment.

**Methods:** From April to October 2021 we prospectively collected data of lung cancer patients receiving new treatment indication in four Italian Oncological Institutions, in order to evaluate study inclusion rates and factors limiting trials participation.

**Results:** 397 patients were included in the analysis. Median age was 70 years (range 31-91). Patients were predominately males (250, 63%), former/active smokers (302, 76%), affected by NSCLC (349, 88%), with locally advanced/metastatic disease (373, 94%). ECOG Performance Status (PS) ≥ 2 patients were 13% (52) of the entire population and 72% (286) presented with at least one major comorbidity. 374 (94%) were candidate to active anticancer therapy, in particular for adjuvant/neoadjuvant (6%), first (64%), second (19%) or third (11%) treatment line. Among them, 309 (83%) received standard treatment as per clinical practice, 15 (4%) targeted agents within expanded access programs and 58 (15%) were included in clinical trials. Median age of patients enrolled in clinical studies was 62 years (range 45-83). Trials were mainly phase II (27, 47%) and III (22, 38%), profit (38, 66%) and with a superiority (37, 64%), open-label (39, 67%) design, not requiring re-biopsy (39, 6%) nor placebo-containing (41, 71%). Targeted therapy ± other drugs (19, 33%), immunotherapy ± other drugs (17, 29%) and antibody-drug conjugate therapy (9, 16%) were the most common experimental treatments. Main obstacles to recruitment were: unavailability of studies at home/near institutions (167, 54%), disease/molecular characteristics not satisfying inclusion criteria (37, 12%), poor PS (22, 7%), presence of relevant comorbidities/non-permissible medical history (10, 3%), patient's refusal (5, 2%) for studies requiring re-biopsy or placebo-containing.

**Conclusions:** Enrolling patients in clinical trials remains an important goal in thoracic oncology. Efforts to recognize and face inclusion limitations are paramount in order to provide high-quality patients 'care.

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### 1356P Socioeconomic vulnerabilities (SEV) and cancer-related mortality in United States (US): A cross-sectional analysis

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**Background:** Cancer is the second leading cause of death. Social vulnerabilities are known to be associated with worse health outcomes. However, the association of cancer mortality with underlying SEV is unexplored.

**Methods:** Percentile ranking scores (PRS) were calculated for each US county using social vulnerability indices from agency for toxic substances and disease registry (ATSDR). PRS (ranging from 0-1) were then categorized into quartiles (Q: 1<sup>st</sup>: 0-0.25 [least vulnerable]; 4<sup>th</sup>: 0.75-1.00 [most vulnerable]). County level age adjusted mortality rates (AAMR) per 100,000 person-years (PY) were extracted for leading causes of cancer deaths (lung/bronchus, colon/rectal, hepatobiliary, pancreas, breast, ovary, and prostate) from wide ranging online data for epidemiological research (WONDER) database and were linked with quartile rankings. Rate ratios (RR) of AAMRs between 4<sup>th</sup> and 1<sup>st</sup> Q were then estimated with 95% confidence intervals using population weighted, poisson regression.