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Access to Care/Real World Evidence to Inform Decision Making

P1
DATA-LINKAGE BETWEEN ADMINISTRATIVE AND PATHOLOGICAL ANATOMY DATABASES FOR THE IDENTIFICATION OF LUNG CANCER PATIENTS ELIGIBLE TO INNOVATIVE THERAPIES

Degli Esposti L,[1] Sangiorgi D,[1] Andretta M,[2] Bacca M,[3] Barbieri A,[4] Bartolini F,[5] Cavaliere A,[6] Chinellato A,[7] Ciaccia A,[8] Cillo MR,[9] Citraro R,[10] Costantini A,[11] De Francesco A,[10] Ferrante F,[12] Gentile S,[13] Lavalle A,[13] Mancini D,[3] Mensurati M,[14] Moscogiuri R,[15] Pastorello M,[16] Procacci C,[17] Re D,[18] Santoleri F,[11] Serao Creazzola S,[19] Ubertazzo L,[20] Vercellone A,[21] **Perrone V**[1]

[1]CliCon S.r.l. Health, Economics & Outcomes Research, Bologna, Italy, [2]Azienda ULSS 8 Berica, Vicenza, Italy, [3]ASL Brindisi, Brindisi, Italy, [4]ASL Vercelli, Vercelli, Italy, [5]USL Umbria 2, Terni, Italy, [6]ASL Viterbo, Viterbo, Italy, [7]Azienda ULSS 3 Serenissima, Mestre (VE), Italy, [8]ASL Foggia, Foggia, Italy, [9]ASL Salerno, Salerno, Italy, [10]Azienda ospedaliero-universitaria Mater Domini, Catanzaro, Italy, [11]ASL Pescara, Pescara, Italy, [12]ASL Frosinone, Frosinone, Italy, [13]Direzione Generale per la Salute Regione Molise, Campobasso, Italy, [14]ASL Roma 3, Roma, Italy, [15]ASL Taranto, Taranto, Italy, [16]ASP Palermo, Palermo, Italy, [17]ASL BAT, Andria (BT), Italy, [18]ASL Teramo, Teramo, Italy, [19]ASL Napoli 1, Napoli, Italy, [20]ASL Roma 4, Roma, Italy, [21]ASL Napoli 3 SUD, Torre del Greco, Italy

Objectives: The introduction of innovative and costly oncological therapies highlights the need for healthcare system to balance the innovation with the access to therapies based on patient eligibility. This study aimed to identify, through real-world data from administrative and pathological anatomy (PA) databases, patients with metastatic lung cancer carrying specific tumor markers, potentially eligible to innovative immunotherapy treatments. ***Methods:*** The data-linkage between administrative and PA databases on a pool of Italian local Healthcare Entities (LHEs) was performed. Data were reported per million of health-assisted individuals. All patients diagnosed for lung cancer (ICD-9-CM code:162) from 2013-2019 were included. Metastatic disease has been diagnosed by using ICD-9-CM codes 196-197-198. The data integration with PA data-set was carried out to evaluate morphologic characteristics (M-80023; M-80413; M-80423) and the level of PD-L1 expression, required for the eligibility to specific immunotherapies. ***Results:*** Overall, 4,387 lung cancer patients were included, with annual incidence of 0.7/1,000 health-assisted individuals for year 2019. Among them, 37% (N=1,625) presented metastasis, in line with published evidence indicating around 30-40% of lung cancer to present metastasis. Further analyses were performed in metastatic patients with a record in the PA database (N=365). The 87% (N=317) of them had non-small cell lung cancer, accordingly to the literature estimation, and 79% of patients were potentially eligible for immunotherapy since showed positivity to PD-L1 TPS ≥1%. ***Conclusions:*** The present study results are in line with epidemiological data reported by AIRTUM (incidence 0.7/1,000) and with international literature and showed how the applied methodology could represent a valuable tool for identifying patients eligible to new therapies. The use of PA data-set could allow the detection of patients with specific genetic profiles and their access to innovative medications. The quantification of potentially eligible patients would also allow budget impact estimation needed to plan the pharmaceutical spending by LHE.

P2
ESTIMATION OF METASTATIC COLORECTAL CANCER PATIENTS CARRYING BRAF MUTATION POTENTIALLY ELIGIBLE TO TARGETED THERAPY: A REAL-WORLD EVIDENCE STUDY IN ITALY

Degli Esposti L,[1] Sangiorgi D,[1] Andretta M,[2] Bacca M,[3] Barbieri A,[4] Bartolini F,[5] Cavaliere A,[6] Chinellato A,[7] Ciaccia A,[8] Cillo MR,[9] Citraro R,[10] Costantini A,[11] De Francesco A,[10] Enieri N,[7] Ferrante F,[12] Gentile S,[13] Lavalle A,[13] Mancini D,[3] Mensurati M,[14] Moscogiuri R,[15] Pastorello M,[16] Procacci C,[17] Re D,[18] Santoleri F,[11] Serao Creazzola S,[19] Tegon M,[7] Ubertazzo L,[20] Vercellone A,[21] Perrone V[22]

[1]CliCon S.r.l. Health, Economics & Outcomes Research, Bologna, Italy, [2]Azienda ULSS 8 Berica, Vicenza, Italy, [3]ASL Brindisi, Brindisi, Italy, [4]ASL Vercelli, Vercelli, Italy, [5]USL Umbria 2, Terni, Italy, [6]ASL Viterbo, Viterbo, Italy, [7]Azienda ULSS 3 Serenissima, Mestre (VE), Italy, [8]ASL Foggia, Foggia, Italy, [9]ASL Salerno, Salerno, Italy, [10]Azienda ospedaliero-universitaria Mater Domini, Catanzaro, Italy, [11]ASL Pescara, Pescara, Italy, [12]ASL Frosinone, Frosinone, Italy, [13]Direzione Generale per la Salute Regione Molise, Campobasso, Italy, [14]ASL Roma 3, Roma, Italy, [15]ASL Taranto, Taranto, Italy, [16]ASP Palermo, Palermo, Italy, [17]ASL BAT, Trani, Italy, [18]ASL Teramo, Teramo, Italy, [19]ASL Napoli 1, Napoli, Italy, [20]ASL Roma 4, Civitavecchia (RM), Italy, [21]ASL Napoli 3 SUD, Torre del Greco, Italy, [22]CliCon S.r.l. Health, Economics & Outcomes Research, Ravenna, RA, Italy

Objectives: Cancer treatments represent one of the most expensive items for the National Health System. In a limited-resource system, the introduction of costly and innovative oncological therapies makes it necessary to balance the innovation and the access to treatments based on patient eligibility. The study aimed to evaluate the possibility of identifying metastatic colorectal cancer (mCRC) patients carrying BRAF-gene mutation, potentially eligible to targeted therapy, by linking administrative and pathological anatomy (PA) databases. ***Methods:*** A retrospective study was conducted across 2013-2019 in a sample of Italian Entities, using the data-linkage between administrative and PA databases. Data were reported per million of health-assisted individuals. CRC and mCRC patients [diagnosed by at least one hospitalization for CRC or mCRC (ICD-9-CM codes 153-154 and 196-197-198, respectively)], were screened. Mutational status of mCRC patients was identified by BRAF genetic test (procedure codes: 91.30.3/91.36.5/91.29.3/91.29.4). Data-linkage of these data with those from the administrative databases allowed the identification of mCRC patients carrying BRAF mutation ($BRAF^+$). ***Results:*** Overall, 4,666 CRC patients were identified, with an incidence (2019) estimated of 0.7/1,000 of health-assisted individuals. Among them, mCRC accounted for the 39% (N=1,818) of patients. The 50% (N=915) of mCRC patients had an outpatient test for BRAF. After the data-linkage between administrative and PA databases, 83% (N=765) of them performed the BRAF test, and 107 patients (14% of patients with BRAF test reported) were $BRAF^+$. ***Conclusions:*** These results reported an epidemiological scenario of CRC and mCRC-$BRAF^+$ Italian patients in line with published data, showing that our methodology could be a supportive tool to identify eligible patients for targeted therapy. Furthermore, the use of PA database would allow to quantify patients with a specific genetic profile required to access to innovative therapies, thus enabling to estimate health-costs and to plan the pharmaceutical expenditure in a perspective of economic sustainability.

P4
SWITCHING, PERSISTENCE AND ADHERENCE TO STATIN THERAPY: A RETROSPECTIVE COHORT STUDY USING THE AUSTRALIAN NATIONAL PHARMACY DATA

Talic S,[1] Marquina C,[1] Zomer E,[2] Lybrand S,[3] Liew D,[1] Ademi Z[2]

[1]Monash University, Melbourne, VIC, Australia, [2]Monash University, Melbourne, Australia, [3]Amgen Australia, North Ryde, Australia

Objectives: Statins are widely prescribed for the primary and secondary prevention of cardiovascular disease, but their effectiveness is dependent on the level of adherence and persistence. This study aimed to explore switching, adherence and persistence among the Australian general population with newly dispensed statins. ***Methods:*** A retrospective cohort study was conducted using a random sample of data from the Australian national prescription claims data. Switching, adherence to and persistence with statins were assessed for people starting statins from 1 January 2015 to 31 December 2019. Cox proportional hazard models were used to compare outcomes between different statins. ***Results:*** A cohort of 141,062 people dispensed statins and followed over a median duration of 2.5 years were included. Of the cohort, 29.3% switched statin intensity, 28.4% switched statin type, 3.7% switched to ezetimibe and in 2.7%, ezetimibe was added as combination therapy during the study period. Overall, 58.8% discontinued statins based on the 90-day gap criteria, of whom 55.2% restarted. The proportion of people non-adherent was 24.0% at 6 months to 49.0% at 5 years. People on low and moderate intensity statins were more likely to discontinue compared to those on high-intensity statins HR 1.20, 95% confidence interval [CI] 1.09–1.31), (HR 1.28, 95%CI 1.14–1.42), respectively. Compared to maintaining same statin type and intensity, switching statins, which includes up-titration (HR 0.77, 95%CI 0.70 to 0.86) was associated with less likelihood of discontinuation after reinitiation. ***Conclusions:*** Long-term persistence and adherence to statins remains generally poor among Australians, which limits the effectiveness of these medicines and the consequent health impact they may provide for individuals. Switching between statins is prevalent in one third of statin users, although any clinical benefit of the observed switching trend is unknown. This, combined with the high volume of statin prescriptions, highlights the need for better strategies to address poor persistence and adherence.