Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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FTC+LPV(r), abacavir/lamivudine combined with lopinavir/ritonavir (ABC/ 3TC+LPV(r) and zidovudine/lamivudine combined with lopinavir/ritonavir (AZT/ 3TC+LPV(r) were the highest shares (20.3%, 19.3%, 15.1%, 12.2% and 9.5% respectively). Conclusions: ABC/VEN analysis of the real-world data showed that medicines for the antiretroviral treatment for adult HIV-infected patients in Ukraine correspond to the international treatment guidelines and regulatory lists which provides reliable additional evidence for the health technology assessment.

**PIN80 UNDERSTANDING REAL-WORLD UTILIZATION OF PRE-EXPOSURE PROPHYLAXIS (PREP): DATA FROM TRIO HEALTH HIV RESEARCH NETWORK**

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**Objectives:** In February 2019, the US Department of Health and Human Services proposed a strategic initiative to end human immunodeficiency virus (HIV) epidemic in the US by reducing new HIV infections by 90% in 2020–2030. One of the 4 pillars of the initiative is protecting persons at risk for HIV infection using HIV PreP (antiretrovirals proven effective at preventing infection among persons at risk). We investigated PreP uptake, adherence, and discontinuation among patients in care at 11 large geographically distributed US HIV treatment centers. **Methods:** Trio Health HIV Research Network containing electronic medical records for over 130,000 HIV and non-HIV patients was used for the study. PreP patient registry contains nearly 9,000 patients with PreP prescriptions and over 5,000 with PreP dispenses. **Results:** Of 5,223 adults with PreP dispensing data, 66% were male, 4% female, 1% transgender, and 30% unspecified gender; 59% were white, 12% black, 10% other race, 1% unknown; 86% were age <50 at PreP initiation. Emtricitabine/tenofovir disoproxil fumarate (FTC/TDF) was dispensed to 81% of patients, FTC/tenofovir alafenamide (TAF) to 47%. Average PreP duration was 10.2 mo (SD 9.9); 12 mo (11.6) FTC/TDF, 7.2 mo (4.4) FTC/TAF. Average medication possession ratio was 88%: 87% for FTC/TDF, 93% for FTC/TAF. **Conclusions:** Trio Health HIV Research Network is dynamic data collection that provides insight into patterns of PreP prescribing and dispensing, patient experience and adherence, longitudinal changes in comorbidities and laboratory values, frequency and time to seroconversion. Continued collection and analysis of patient data will broaden PreP awareness and optimize patient outcomes.

**PIN81 TOWARDS A BETTER UNDERSTANDING OF COVID-19 AMONG YOUNG ADULTS AGES 18-24**

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**Objectives:** The impact of COVID-19 on young adults is not well understood. The aim of this study was to identify factors associated with hospital utilization of young adult patients with COVID-19. **Methods:** Young adult patients (ages 18-24 years) diagnosed with COVID-19 between December 2019 and August 2020 were identified in the IBM® Explorys® database. Positive infection was determined via the Systematized Nomenclature of Medicine-Clinical Terms (SNOMED-CT) codes. Chi-square test, univariate, and multivariate logistic regression were employed to evaluate the association between key risk factors, including sociodemographics, Charlson comorbidity index, hospital admissions to the emergency department (ED), inpatient units, and intensive care unit (ICU). **Results:** 6648 young adult patients (mean 21.9 years, 59.6% female) with confirmed COVID-19 were identified. Forty-nine percent were Caucasian, 34% African American, 0.8% Asian, 8.9% Hispanic and 3.6% Other Race. Common symptoms included cough (25.6%), fever (15%), headache (10.6%), loss of smell (6.4%), loss of taste (6.2%), nausea (5.5%), and fatigue (4.6%). Among these, 910 (13.7%) were seen in the ED; 184 (2.8%) inpatient admission, and 23 (0.3%) ICU admission. Multivariate logistic regression suggested that both African American (OR=2.38, 95% CI: [1.63-3.3]) and Other Race (OR=4.99, 95% CI: [2.62-9.08]) patients were significantly associated with increased odds of hospitalization (OR=4.99, 95% CI: [2.79-5.70]). Cardiovascular disease (OR=4.01, 95% CI: [2.79 - 5.70]) and obesity (OR=3.03, 95% CI: [2.14 - 4.34]) were associated with the increased odds of hospitalization. Obesity was also associated with increased odds of ED visits (OR=1.45 95% CI: [1.24-1.69]), African American, Hispanic and Other Race had increased odds of ED visits (OR=2.24, 95% CI: [1.91-2.64]; OR=1.34, 95% CI: [1.01-1.76]; OR=3.48, 95% CI: [2.51-4.77], respectively). **Conclusions:** Young adult patients typically have milder COVID-19 symptoms, yet 10% required emergency department or hospital care. Cardiovascular disease, obesity and race/ethnicity were important risk factors. Additional research is needed to better understand disease severity among young adults.

**PIN82 REAL-WORLD UTILIZATION OF REMDESIVIR IN 2020: A RETROSPECTIVE COHORT STUDY**

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**Objectives:** Remdesivir is an FDA approved treatment for hospitalized patients with COVID-19 infection and, in randomized controlled trials, RDV shortened time to recovery and improved clinical outcomes. Data are scarce on RDV utilization in real-world settings or how use has changed over the course of the pandemic. Using chargemaster inpatient data from the Premier Healthcare Database, we describe the patient population and use of RDV following Emergency Use Authorization. **Methods:** In this retrospective cohort study, adult patients admitted May 1st – Nov 30th 2020 with a primary or secondary discharge diagnosis of COVID-19 (ICD-10-CM: U07.1) were identified and their first COVID-related hospital admission was considered. Descriptive statistics were reported for demographic characteristics of RDV and non-RDV treated patients. RDV utilization over time and by region was examined. **Results:** Of the 190,529 patients hospitalized for COVID-19 in 823 hospitals, 55,030 (29%) were treated with RDV in 589 hospitals. RDV utilization over time increased from 5% of patients in May to 47% in Nov 2020. In Nov, RDV utilization was 57% in the West, followed by 49% in the South, 48% in the Midwest and 27% in the Northeast. Over time, RDV was initiated earlier in the course of hospitalization. Initiation within the first 2 days of hospitalization increased from 40% to 85% from May to Nov 2020. The average age was 63.6 years (SD=15.3) and 63.5 years (SD=17.3) for RDV-treated and non-RDV treated patients, respectively. More than half of the patients were white male (RDV: 56%; Non-RDV: 52%) and about a quarter had commercial insurance (RDV: 28%; Non-RDV: 22%). Racial distribution (white, black, and other) was similar between RDV and non-RDV/ patients. **Conclusions:** Overall use of RDV and initiation within the first two days of hospitalization have substantially increased over the course of the pandemic in the United States.

**PIN83 THE COVID-19 RESEARCH DATABASE: BUILDING ONE OF THE LARGEST PRO BONO REAL-WORLD DATA REPOSITORIES**

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**Objectives:** The creation of an integrated data repository to capture the comprehensive patient journey across multiple data sources has always held promise in principle but has been stymied in practice due to the challenges of managing data provider partnerships, patient privacy, and technological integration. However, the urgent need to better understand the effects of COVID-19 propelled the creation and operationalization of an integrated data repository. The aim of this research is to chronicle the technical and collaborative efforts underpinning this success. **Methods:** The COVID-19 Consortium is a pro-bono, community-wide collaboration composed commonly of technology companies, donating technology, healthcare expertise, and de-identified data. Different types of patient level data from several industry-leading sources were ingested through an automated pipeline comprising source-native ETL (auto-refreshed weekly), privacy-preserving tokenization linking patients across datasets, and granular project-based access. The data and analytical environments were hosted in a dedicated and isolated virtual network to protect data privacy and intellectual property. A third-party certifier safeguarded protection of patient privacy while scientific and pan-stakeholder governance ensured research quality, data security, and operational collaboration. **Results:** In 2020, approximately 9 terabytes of data, consisting of 5 billion records from 250 million unique persons and 2.1 million patients with COVID-19, from ten different data providers were loaded onto the platform. Data types ingested include medical, pharmacy, and life insurance claims, electronic health records, mortality, consumer, and health propensities. Over 350 academic, scientific, and medical researchers accessed the database and produced 23 publications in medical journals and the media, with over 100 ongoing projects. Topics of research ranged from the public health effects to the socioeconomic effects of COVID-19. **Conclusions:** The successful deployment of the COVID-19 database is a concrete example of the possibility and potential of integrating disparate datasets for rapid research and can serve as a roadmap for future efforts.