

600 mg (2 x 300 mg tablets) at Hour 0. On Day 1, Period 2, subjects received a single oral 20 mL dose of aluminum hydroxide 800 mg/magnesium hydroxide 800 mg/simethicone 80 mg suspension per 10 mL (Maalox[®] Advanced Maximum Strength oral suspension) with a single oral dose of TBP-PI-HBr 600 mg at Hour 0. In Period 3, on Days 1 through 5, subjects received a single oral dose of omeprazole 40 mg (Prilosec[®]) once daily (QD), at Hour -2. On Day 5, a single oral dose of 600 mg TBP-PI-HBr was administered at Hour 0. Whole blood sampling for TBP PK occurred pre-dose and up to 24 hours post dose. Whole blood samples were assayed for TBP by liquid chromatography-tandem mass spectrometry.

Results. Twenty subject were enrolled and completed the study. Geometric mean ratios for AUC indicated mean TBP exposure (AUC) was approximately 11% lower and mean C_{max} was 22% lower for TBP-PI-HBr combined with aluminum hydroxide/magnesium hydroxide/simethicone vs. TBP-PI-HBr alone (Figure). Similarly, geometric mean ratios for AUC indicated mean TBP exposure (AUC) was approximately 11% lower and mean C_{max} was 43% lower for TBP-PI-HBr in combination with omeprazole vs. TBP-PI-HBr alone. Because the PK/PD driver for TBP efficacy is AUC dependent, concomitant administration is not expected to impact the efficacy of oral TBP-PI-HBr.

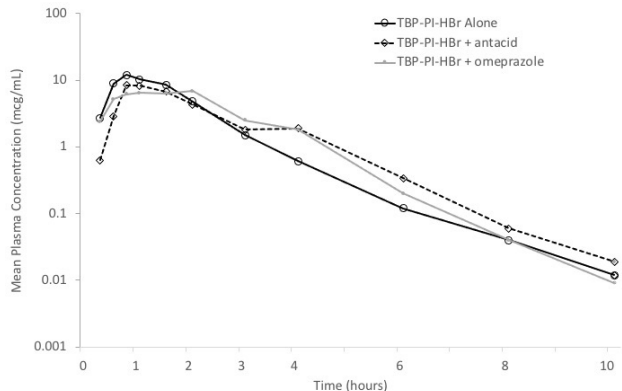


Figure 1. Arithmetic mean plasma TBP concentrations following a 600 mg dose of clinical study drug product (A1 and A2) and registrational drug product (B) – PK population.

Conclusion. Administration of TBP-PI-HBr combined with aluminum hydroxide/magnesium hydroxide/simethicone or omeprazole QD had no meaningful effect on plasma TBP exposure; C_{max} decreased with both agents. Co-administration was generally safe and well tolerated.

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1123. Appropriateness of Antibiotic Prescribing Through the COVID-19 Pandemic and Associated Telehealth Visits

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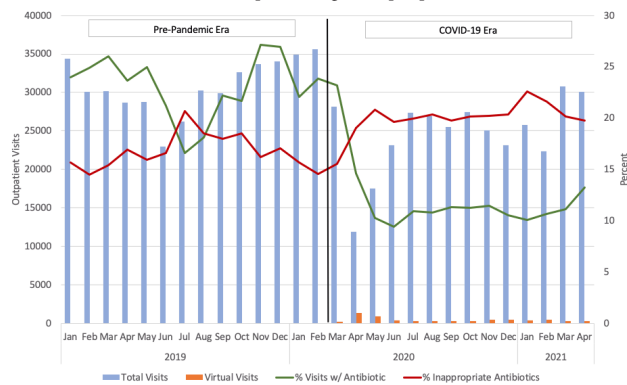
Background. The COVID-19 pandemic and resulting mitigation strategies have impacted rates of outpatient infections and delivery of care to pediatric patients. Virtual healthcare was rapidly implemented but much is unknown about the quality of care provided in telehealth visits. We sought to describe changes in visits throughout the pandemic and evaluate the appropriateness of antibiotic prescribing.

Methods. We utilized EHR data from a large health care system that provides primary care via pediatric, family medicine, and urgent care clinics. We included outpatient visits from 1/1/19 - 4/30/21 for children < 20 years. The COVID-19 era was defined as after March 2020. Visits were labeled as virtual according to coded encounter or visit type variables. The appropriateness of antibiotic prescriptions was assigned using a previously published ICD-10 classification scheme that defines each prescription as appropriate, potentially appropriate, or inappropriate (Chua, et al. BMJ, 2019).

Results. There were 805,130 outpatient visits during the study period. The mean rate of antibiotic prescriptions in the pre-pandemic period was 23% (range 17-26% per month) and 11% (range 9-15%) in the COVID-19 era. Mean rates of inappropriate prescribing were 17% (range 14-20% per month) and 20% (range 19-22%), respectively (Figure 1). Coded virtual visits during the COVID-19 era were uncommon (1-2%) with the exception of April and May 2020 (11% and 5%, respectively). During the COVID-19 era, approximately 9% of telehealth visits resulted in antibiotics, compared to 11% of

in-person visits (Table 1). Virtual visits had lower rates of inappropriate and appropriate prescribing, but higher rates of potentially appropriate prescribing (Table 1).

Visits and associated antibiotic prescribing in the pre-pandemic and COVID-19 era



Appropriateness of antibiotic prescribing in the COVID-19 era, by visit type

	Telehealth N (%)	In-person N (%)
Visits	6,395 (2.0%)	310,458 (98.0%)
Visits resulting in antibiotics	594 (9.3%)	34,703 (11.2%)
Appropriate	67 (11.3%)	5,842 (16.8%)
Potentially appropriate	410 (69.0%)	21,492 (61.9%)
Inappropriate	97 (16.3%)	7,079 (20.4%)

Conclusion. Rates and volume of antibiotic prescribing in outpatient pediatric visits have declined in the COVID-19 era, while rates of inappropriate prescribing have increased slightly. Our study suggests use of telehealth for pediatric visits was minimal and led to higher prescribing rates for "potentially appropriate" indications. This could be explained by a lack of clinical certainty in conditions such as otitis media and pharyngitis in virtual visits.

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1124. Evaluation of the Use and Impact of the BioFire FilmArray[®] Respiratory Panel on Diagnosis and Treatment of Pediatric Respiratory Infections: A Quality Improvement Project

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Background. The BioFire FilmArray[®] Respiratory Panel is a respiratory pathogen PCR that is used to detect the presence of 20 different infectious organisms that cause respiratory illness. Young children are prone to viral upper respiratory illness and represent an age group most likely to receive an antibiotic. As rapid diagnostics evolve, utilizing these tools within antimicrobial stewardship programs to improve utilization of antimicrobials is ideal. The purpose of this study was to assess how the BioFire FilmArray[®] Respiratory Panel is being used in practice and optimize its use in a large, free-standing, academic children's hospital.

Methods. Retrospective chart review evaluating all patients (inpatient and outpatient) that received the BioFire FilmArray[®] Respiratory Panel from December 1, to December 10, 2019. Patients were evaluated based on where the panel was administered, results of the panel, results of other cultures, utilization of antibiotics, and overall hospital course. Data was collected from the electronic medical record and entered into a REDCap database and then analyzed descriptively.

Results. 151 patients were included with an average age of 2.6 years with 78 (51.7%) being < 1 year of age. 105 (70%) were administered in either the clinic or ED. In the < 1 year group, 29 (37%) received antibiotic therapy, with 20 having positive viral panels and 11 had positive bacterial cultures. In the ≥ 1 year of age group, 38 (52%) received antibiotic therapy, with 28 having positive viral panels and 9 had positive bacterial cultures. In the outpatient group, 33/105 (31%) were given empiric antibiotics of which 66% had positive viral panels. In the inpatient group, 28/46 (61%) were given empiric antibiotics of which 68% had positive viral panels.

Conclusion. The BioFire FilmArray[®] Respiratory Panel was found to be primarily utilized in the young child and outpatient/ED setting. With approximately 67% of children who received empiric antibiotics having a positive viral panel, and the majority of these not having positive bacterial cultures, work can be done to decrease the initiation of empiric antibiotics or earlier discontinuation. Further studies are needed in order to determine the optimal strategy for using the viral panel to de-escalate and escalate antimicrobial therapy in practice.

Disclosures. All Authors: No reported disclosures