

**P2036 Examination of paediatric off-label drug use applications by paediatric infectious diseases specialists**

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**Background:** Off-label drug use is comparably often in pediatrics and should be managed attentively in critical indications. Infectious diseases pose a globally important disease burden in pediatric population. This study aimed to examine off-label drug use applications by pediatric infectious diseases specialists in Turkey.

**Materials/methods:** This retrospective study analyzed medical records of off-label drug use applications that were made to the electronic registry system of Turkish Medicines and Medical Devices Agency by pediatric infectious diseases specialists for children (<18 years old) in Turkey between 1<sup>st</sup> of January and 31<sup>st</sup> of December in 2015. Some demographic characteristics of patients and applying physicians were examined with most commonly drugs and diagnoses.

**Results:** Pediatric infectious diseases specialists were found to apply for 127 off-label drug requests, 85.0% of which were approved. Among all applications, 60.6% belonged to boys, and the mean age of patients was 6.3±5.5 years. Around one-third (33.9%) of applications were made by professors, and 89.0% from university hospitals. The most frequent drugs to be used off-label at ATC-1 category showed "J- antiinfectives for systemic use" (64.6%), "P-antiparasitic drugs, insecticides, and repellents" (21.3%), and "B- blood and blood forming organs" (5.5%). At ATC-5 level, valganciclovir (29.9%), pyrimethamine (14.2%), and posaconazole (8.7%) were determined to be the most commonly applied drugs. The most common three diagnoses regarding pediatric off-label drug applications were detected as "B25- cytomegaloviral disease" (26.0%), "P37.1- congenital toxoplasmosis (11.8%), and "Z20.6- contact with and exposure to HIV" (8.7%).

**Conclusions:** Pediatric off-label drug use applications by pediatric infectious diseases specialists seem to be made most commonly for systemic antiviral agents in cytomegaloviral diseases. Considering probable association of this indication to immunocompromised conditions, further investigation of the key outputs in terms of pediatric off-label drug use could give critical insights to the relevant stakeholders.

