INTRODUCTION Most of the studies reporting symptoms during the travel are done retrospectively (1),(2), increasing the odds of recall bias. Moreover, there is no information about the percentage of travelers that suffer mild or no symptoms during their trips because they never attend to a clinic afterwards.

AIM The main aim of the study is to detect incidence of symptoms real-time amongst travelers visiting tropical and subtropical countries. Also, comparing symptoms between travelers taking or not malaria chemoprophylaxis and other demographic variables.

METHODS Participants were recruited at a Travel Clinic in Barcelona (February–May 2016). Participants downloaded a Smartphone Application (App) that checked their health status daily while travelling, asking for diarrhea, abdominal pain, cutaneous lesions, fever, headache, joint pain, oral ulcers, and insomnia. User’s health status was monitored through a web-based platform in real-time. Exclusion criteria were: travelling more than one month and taking malaria prophylaxis other than atovaquone-proguanil. An informed consent was signed prior to participate in the study.

SUMMARY OF THE RESULTS 106 participants were recruited, 62.26% (66/106) were male with mean age of 36 years (±11SD). Main travel purpose was tourism in 58.1% (61/106). A 35/106 (33%) users were on chemoprophylaxis. Thailand was the most visited country in 12.26% (13/106). The mean days of travel was 12 (±11SD). A 15% (13/106) had two or more symptoms during the trip. Main recorded symptoms were diarrhea in 13/106 cases (15%) and abdominal pain in 11/106 cases (13%). No differences between symptoms were observed by sex, purpose of travel, age, duration of the trip or prophylaxis status. Main observed incidence was diarrhea: 1.4% per person per day, and abdominal pain 1.2% per person per day. Travelers used the App a mean of 9.99 days (±SD 6.89).

CONCLUSION The study showed no severe health complications in trips less than 30 days but incidence of symptoms, specially diarrhea, could be higher than previously reported (2),(3). There were no differences in symptomatology between travelers on prophylaxis and those without. The platform showed good usability and worked in order to detect symptoms real-time. The platform is ready to be used at bigger scale.

References