

Physician Specialties Involved in Prescribing B/F/TAF and Concomitant Drugs in People with HIV in Germany: Implications for Potential Drug-Drug Interactions

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Conclusions

- In this German cohort study of patients on B/F/TAF, most people with HIV (PWH) received comedications from specialties other than their HIV care provider
- Commonly prescribed therapeutic classes of oral comedication showed a low risk* for drug-drug interactions (DDIs)
- On average, PWH on higher risk# comedications received care from more specialties than those on low-risk medications
- The low drug interaction potential of B/F/TAF with commonly used comedications may support its safe use in multidisciplinary care, even when providers should be less familiar with HIV therapy and associated DDI risks

Plain Language Summary

- B/F/TAF is a daily pill to treat human immunodeficiency virus (HIV). It combines three medicines in one tablet: bictegravir (B), emtricitabine (F), and tenofovir alafenamide (TAF)
- People with HIV often need other medicines as they age. These medicines might not work well together. Their combination could affect how well B/F/TAF or the other medicines work
- This study looked at what other medicines People with HIV in Germany take with B/F/TAF and which doctors prescribed them
 - Most other medicines do not affect how well B/F/TAF or the other medicines work
 - Seeing different types of doctors did not increase medicine interactions, except for cancer therapies
- This may be helpful when some treating specialists are less familiar with HIV treatment and potential safety risks

Purpose

- As PWH age while receiving antiretroviral treatment (ART),¹ regimens with a low potential for DDIs become increasingly relevant in routine care
- The use of concomitant medications alongside B/F/TAF and the associated potential DDI risks have been summarized previously²
- Older PWH are frequently managed by multiple healthcare providers, including specialists across various disciplines
- In Germany, PWH are typically managed in specialized outpatient centers ('Schwerpunktzentren'), often led by general practitioners or specialists in internal medicine (referred to as GPs) with additional training in infectious diseases. A formal medical specialty in internal medicine and infectious diseases was only recently established in Germany³

Objective

- This analysis aimed to assess the following over a 6-year period in Germany:
 - The range and frequency of physician specialties involved in care of PWH receiving B/F/TAF
 - The implications for potential DDI risks from concomitant medications prescribed by these specialties

Methods

- Routinely collected prescription data from July 2018 to June 2024 were obtained from the IMS® longitudinal prescription data (LRx) database (IQVIA). Aggregated and anonymized data were analysed retrospectively
 - The database covered approximately 80%^a of prescriptions reimbursed by German statutory health insurance providers^b
 - only oral concomitant medication was included in the DDI analysis
- Study population included PWH aged ≥18 years who received continuous B/F/TAF treatment for ≥3 months
- Prescribing physician specialties for both B/F/TAF and comedications were compared to assess whether potential DDIs originated from the same or different specialties
- Physicians were grouped by specialty: GP; Outpatient department; Oncology; Ear, Nose and Throat (ENT); Dentistry; Dermatology; Neurology/Psychiatry; Urology; and Others (including Anaesthesiology, Angiology, Cardiology, Gastroenterology, Gynaecology, Nephrology, Neurosurgery, Nuclear medicine, Ophthalmology, Orthopaedics, Paediatric psychiatry Psychotherapy, Paediatrics, Pulmonology, Radiology, Rheumatology, Surgery)
- The Liverpool HIV Drug Interaction database (version as of 31.10.24)⁴ was used to assess potential DDIs between prescribed comedications and B/F/TAF^c

^aSeveral HIV-focused pharmacies in cities including Berlin, Frankfurt, and Munich have prohibited sharing prescription data with corporations, including IQVIA, known as Datenweitergabeuntersagung (DWU). This limits IQVIA's LRx coverage of HIV prescriptions to about 40% of the statutory health insurance market, compared with approximately 80% in the broader market. ^bPrivate health insurance prescriptions are not included. ^cAnalysis conducted October 31, 2024.

References 1. Masters MC, et al. *J Acquir Immune Defic Syndr*. 2022;89(suppl. 1):S34-6. 2. Schäfer G, et al. 6-Year Real-World Prescribing Patterns of B/F/TAF and Concomitant Drugs in PWH in Germany: Assessment of Potential Drug-Drug Interaction Risks. *DOEAK 2025 (Abstract 87)*. 3. DGI. <https://www.dgi-net.de/fort-und-weiterbildung/facharzt-fuer-infektiologie/> (accessed July 14, 2025). 4. University of Liverpool. <https://www.hiv-druginteractions.org/checker>.

Limitations: (I) Prescriptions can only be assigned to specialty groups. not individual practitioners. The actual number of treating physicians per PWH may therefore be higher as presented in the poster. (II) For 'Outpatient department', no distinction for actual caregiving physician's specialty is available.

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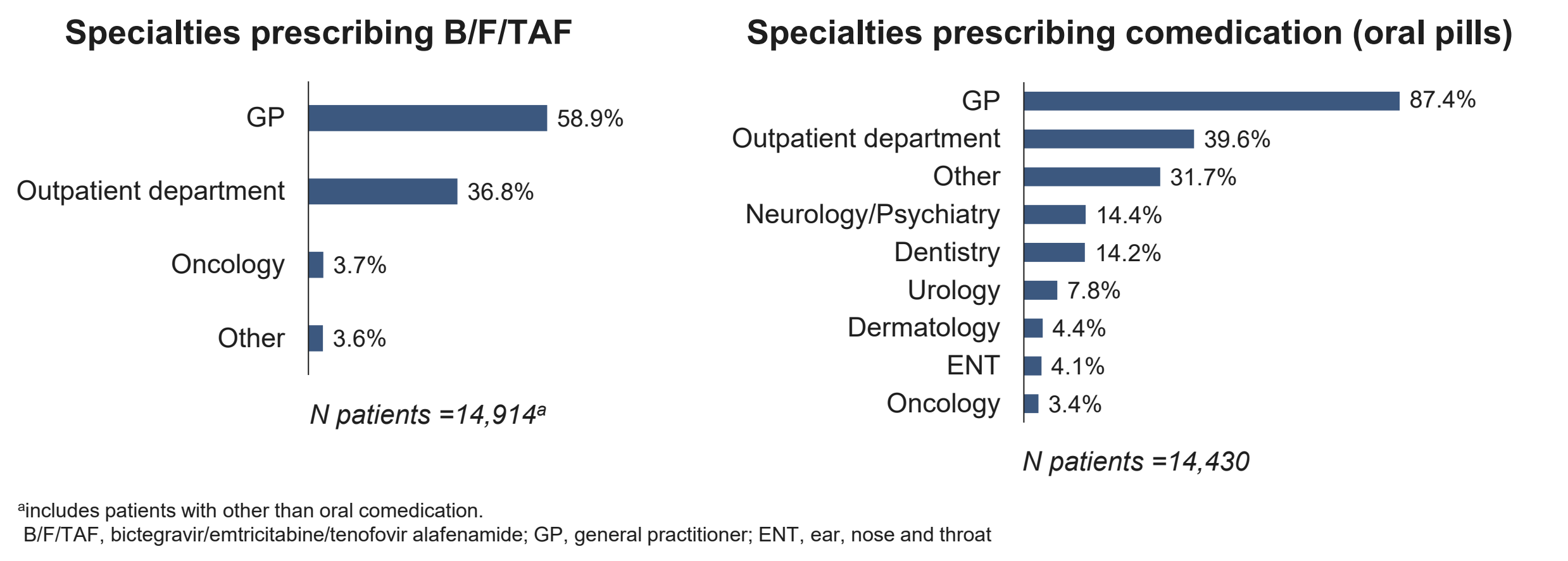
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Results

Study population

- This study analysed data from 19,804 PWH in Germany who were prescribed B/F/TAF between July 2018 and June 2024
- Data from 14,430 PWH who received continuous B/F/TAF therapy for ≥ 3 months along with at least one concomitant oral medication during the 6-year observation period were included in the analysis
- Comedications were primarily prescribed by GPs followed by outpatient departments (**Figure 1**)
- The mean and median number of different specialties involved in prescribing comedications increased over time, along with the population's increasing age.

Figure 1. Specialties Prescribing B/F/TAF and Comedications (Patient Share)



Treatment by Separate Specialties

- On average, medications were prescribed by 3.1 different specialties per PWH, ranging from 1 (i.e. same specialty as the B/F/TAF prescriber; 17.4%) to more than 10 (0.5%) (**Figure 2**)
- 59.8% of comedication prescriptions were issued by a different specialty than the one prescribing B/F/TAF, affecting 82.6% of patients receiving comedications (**Figure 3**)
- Over 70% of PWH received commonly used comedications (e.g. analgesics, antibacterials) at least once from a specialty different from the one prescribing B/F/TAF (**Figure 3**)
- For further information on prescriptions and DDI potentials by prescribing specialty, please scan the QR Code above

Figure 2. Number of Prescribing Specialties per PWH

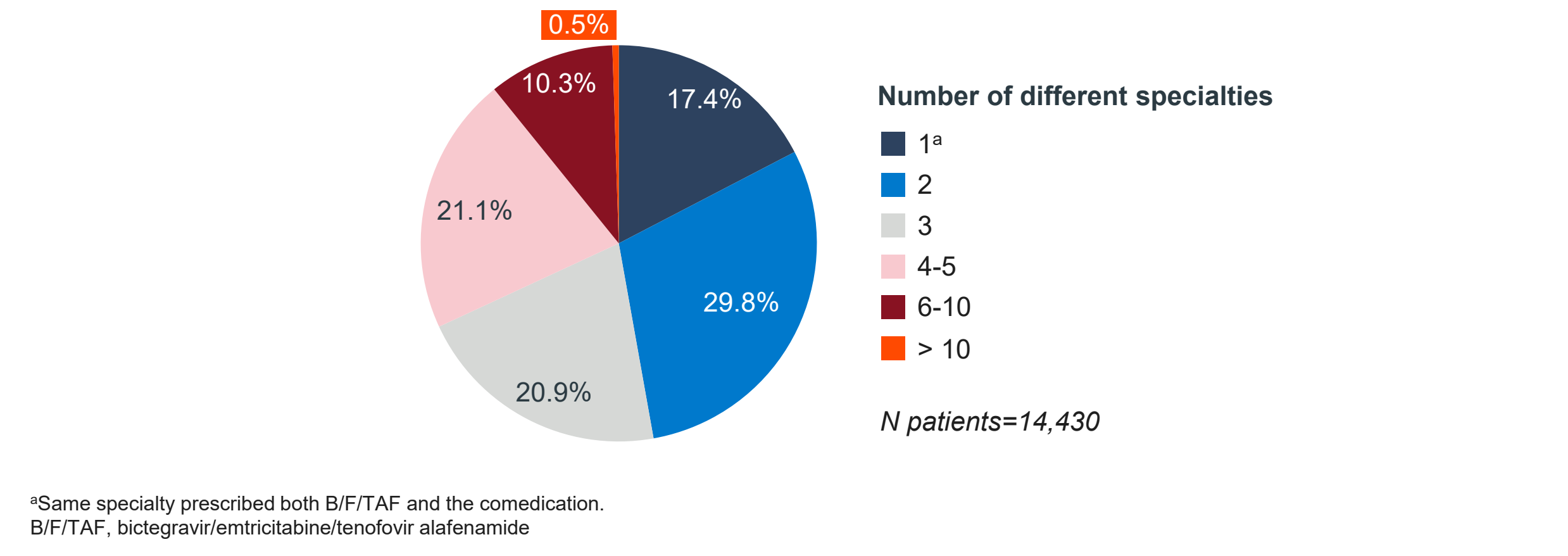
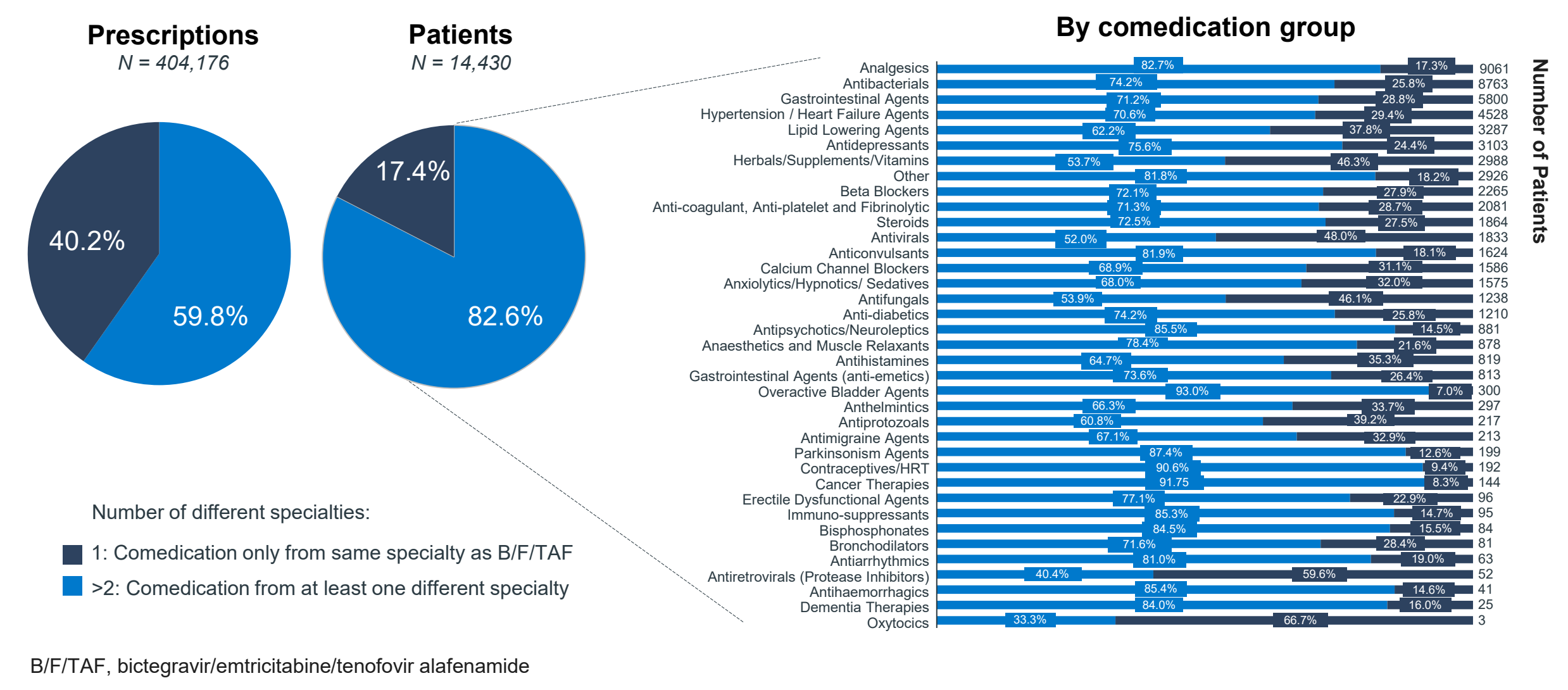


Figure 3. Therapeutic Drug Classes Prescribed by Specialty other than B/F/TAF Caregiver



Drug-Drug Interactions

- Most concomitant medications showed no risk of DDIs with B/F/TAF (**Figure 4**)
 - Analgesics and antibacterials posed the highest interaction risk; however, the risk for analgesics was attributed solely to metamizole sodium, commonly used in Germany but unavailable in most other countries
 - Non-recommended oral comedications were rarely used (1.0%; 139/14,430 PWH), with medications from the class 'anticonvulsants' being the most common
- PWH receiving potentially interacting or not recommended comedications were more likely to be treated by multiple specialties than those receiving only weakly interacting comedications (**Figure 5**)
- Neurology and psychiatry accounted for a higher proportion of not recommended comedications compared to other specialties, although few PWH (1.0%) were affected (**Figure 6**)
- Cancer therapies (n=163 patients) showed the greatest disparity in potential DDIs between same-specialty (12.9% potential DDI) and different specialty prescriber (22% potential DDI; see supplement)

Figure 4. Profile of Potential DDIs in Participants Receiving B/F/TAF and Oral Comedications^{2,a}

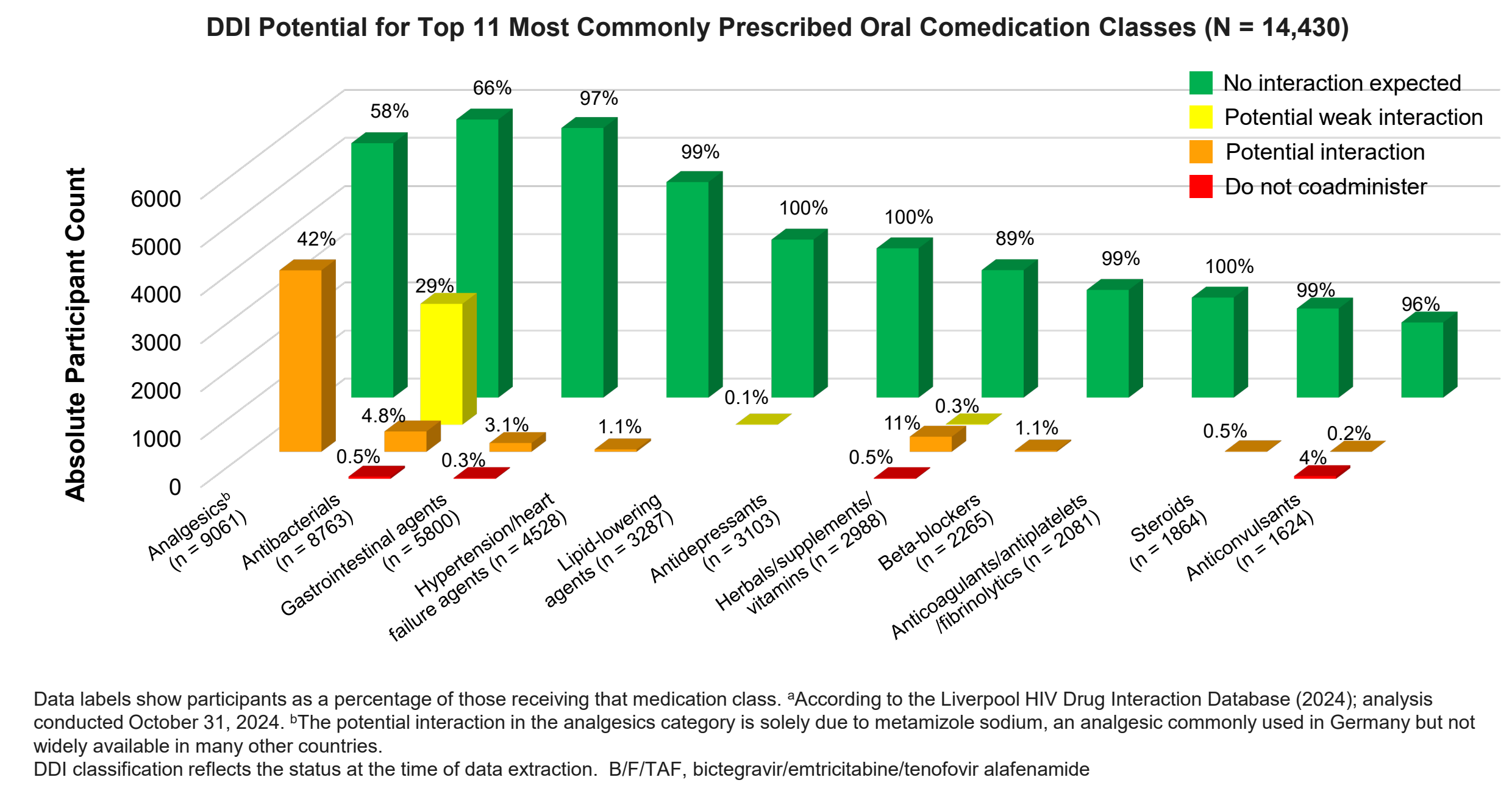
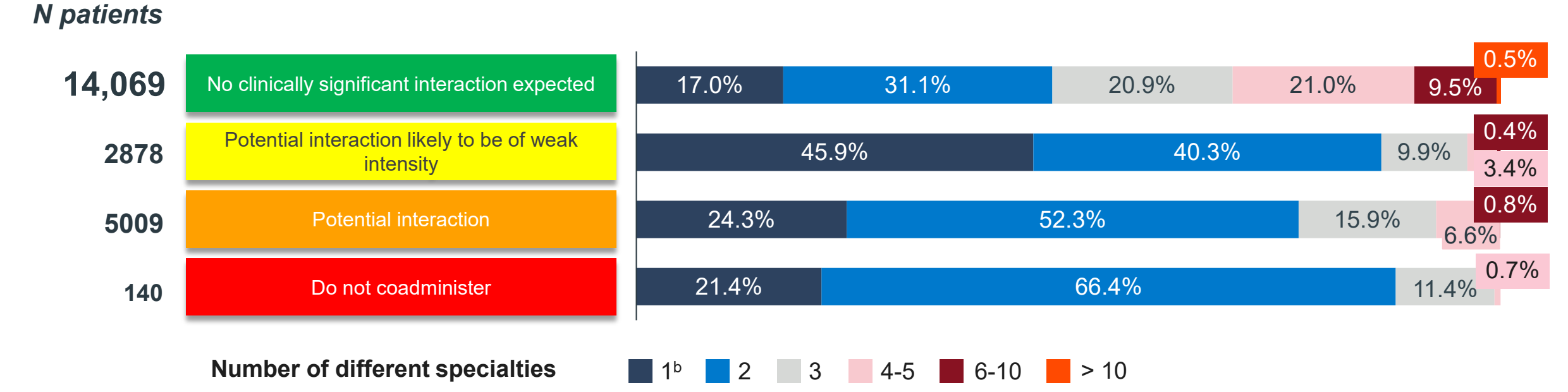
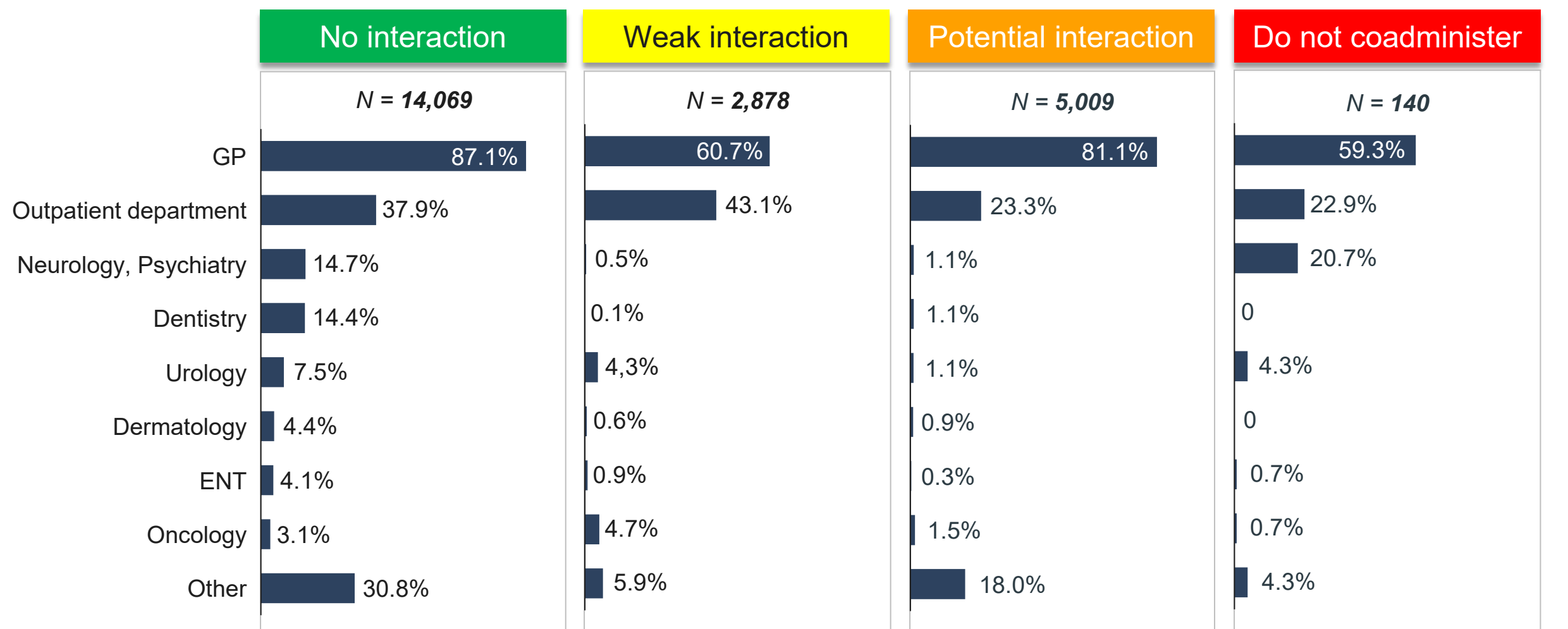


Figure 5. Distribution of Prescribing Specialties for B/F/TAF and Comedications by DDI Potential Group^a



^aAccording to the Liverpool HIV Drug Interaction Database (2024), analysis conducted October 31, 2024. ^bSame specialty prescribed both B/F/TAF and the comedication. B/F/TAF, bictegravir/emtricitabine/tenofovir alafenamide

Figure 6. DDI Potential of Comedication by Prescribing Specialty^a



^aAccording to the Liverpool HIV Drug Interaction Database (2024), analysis conducted October 31, 2024. B/F/TAF, bictegravir/emtricitabine/tenofovir alafenamide; GP, general practitioner; ENT, ear, nose and throat physician