



Antifungal consumption in Belgium between 2015-2024



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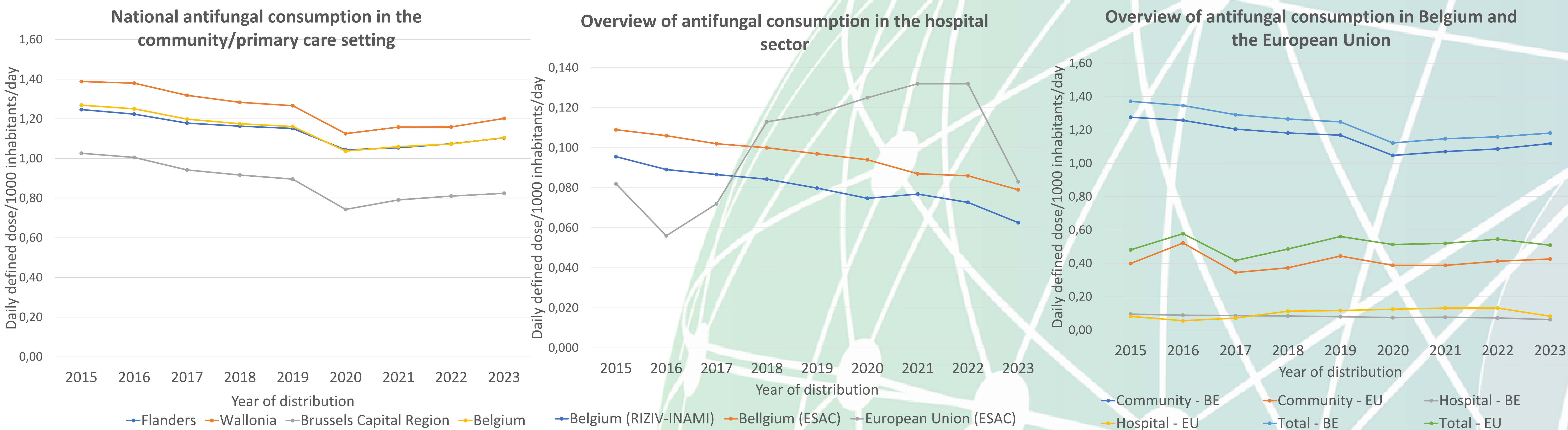
BACKGROUND & OBJECTIVES

- First Fungal Priority Pathogens list to guide research, development and public health action (1).
- Belgium has a historically high antifungal consumption per capita (2).
- Determine Belgian antifungal consumption from 2015 onwards.
- Describe prescribing patterns of antifungal therapy in Belgian hospitals.

METHODS

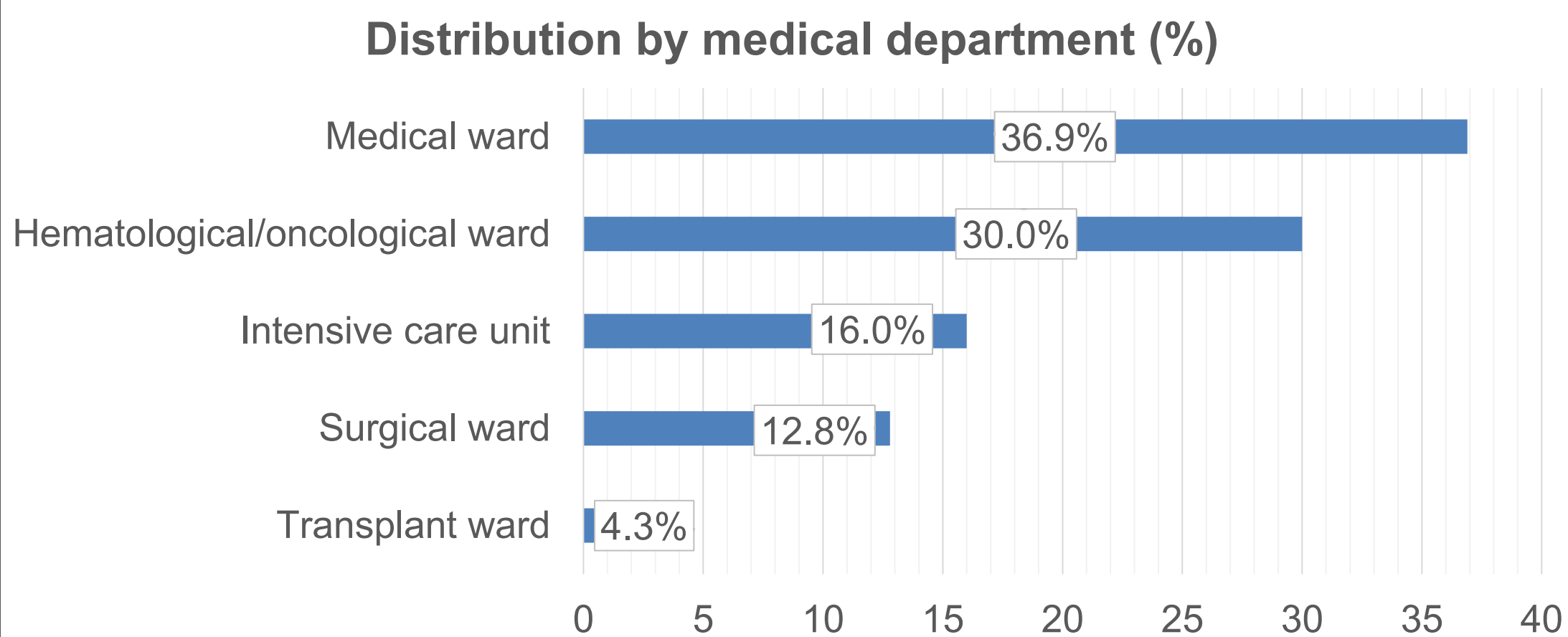
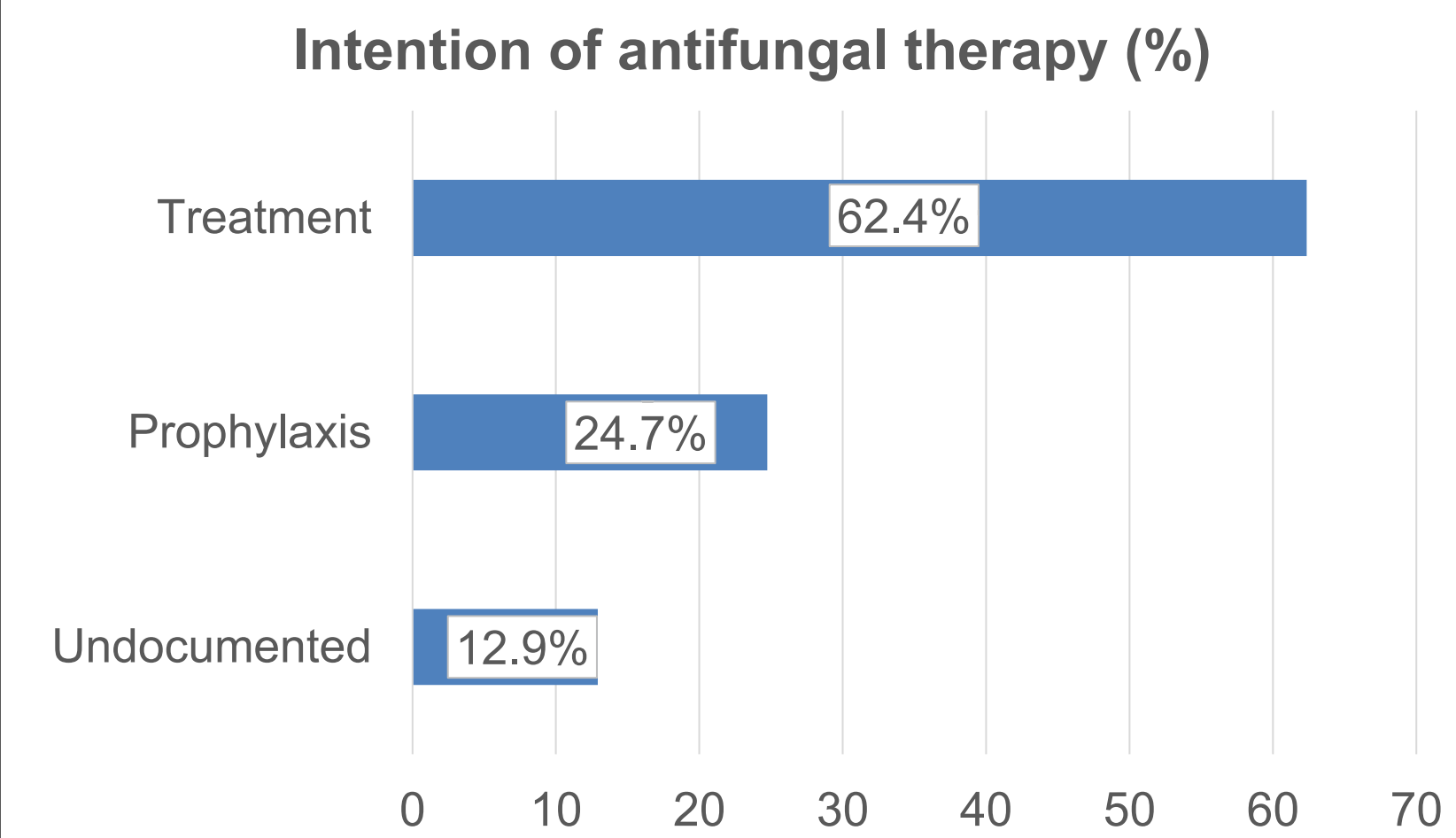
- Analysis of national reimbursement statistics through Pharmanet concerning antifungal therapy from 2015-2023.
- 1. Comparison of antifungal consumption in community and hospital sector and between Belgian districts.
- 2. Comparison of antifungal consumption with other European countries through the European Surveillance of Antimicrobial Consumption Network (ESAC-Net).
- Descriptive analysis of antifungal consumption patterns in hospitalised patients through successive point-prevalence surveys (Global-PPS) in Belgian hospitals from 2015-2024 (402 surveys of 140 acute care hospitals).

RESULTS

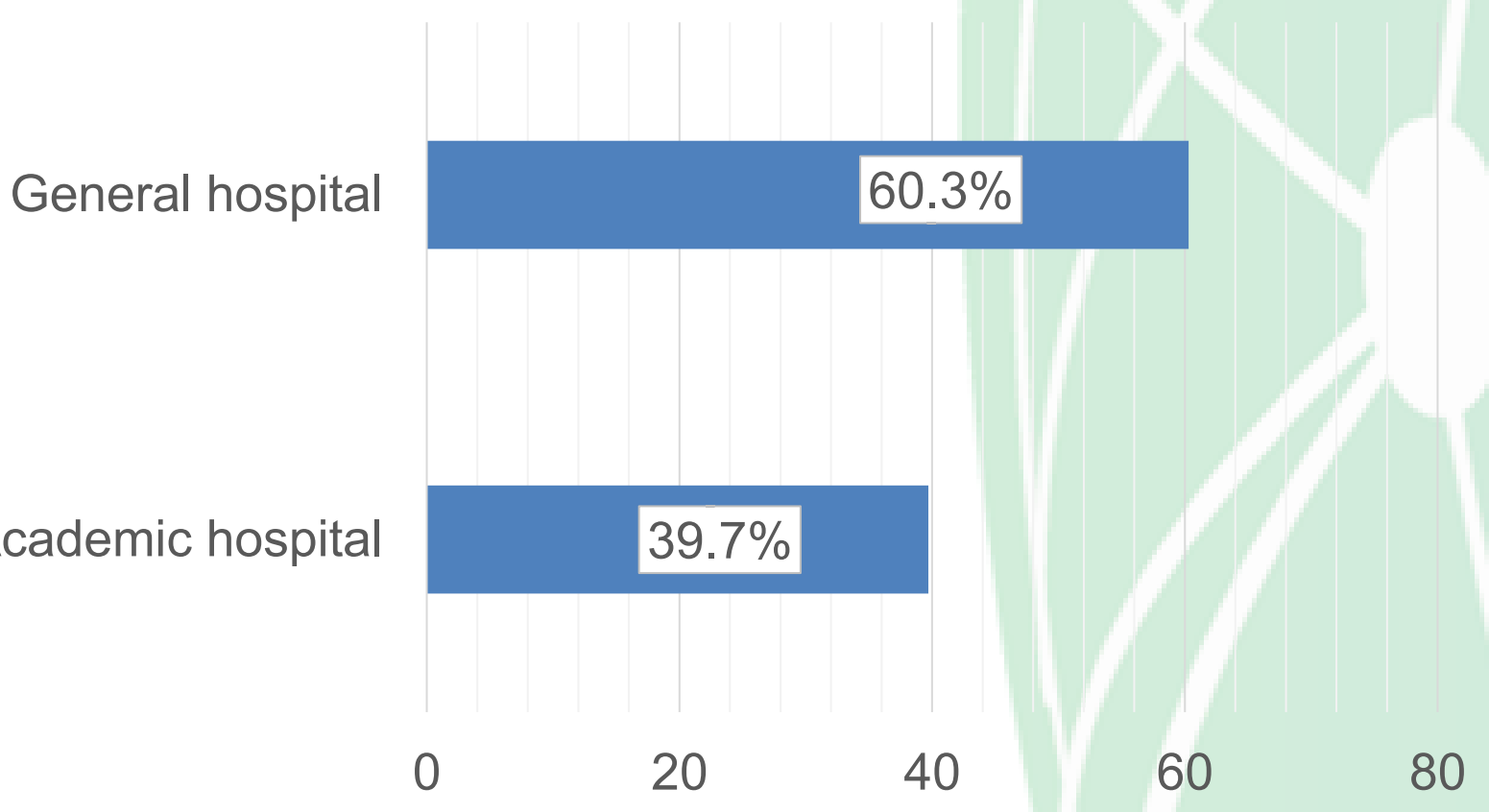


Global-PPS consumption patterns in antifungal therapy (n=1549)

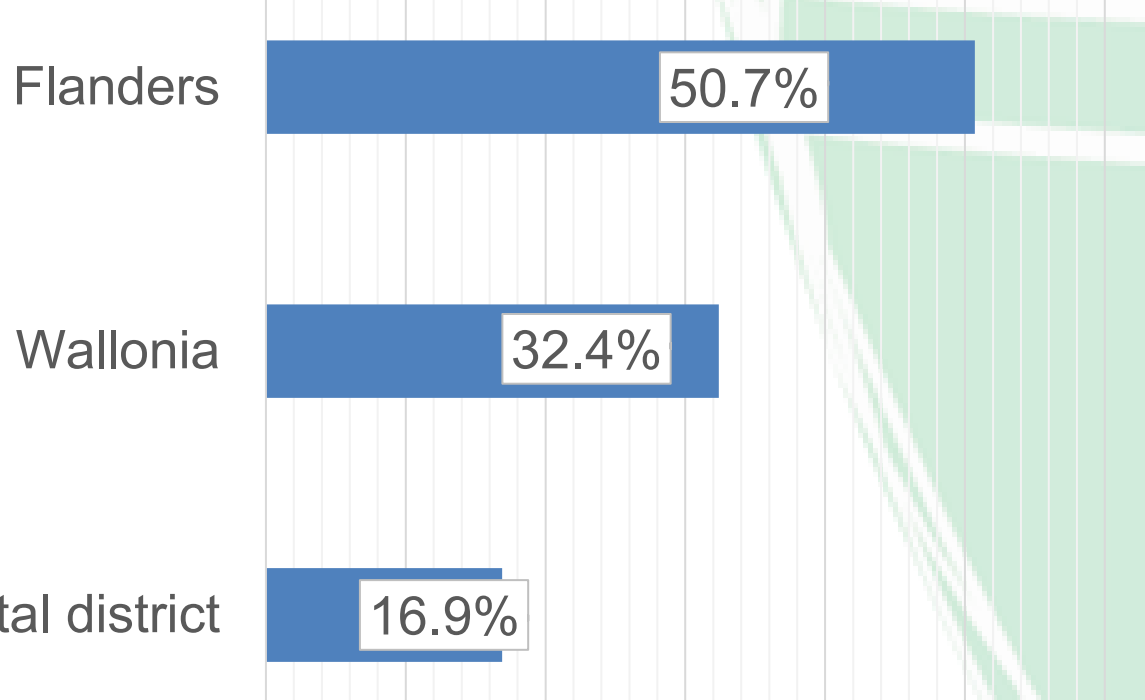
Year	Patients treated with antimicrobial therapy (n)	Patients treated with antifungal therapy (n)	Prevalence of antifungal therapy (%)
2015	7213	425	5.9
2017	7565	361	4.8
2018	87	0	0
2019	5671	233	4.1
2020	192	4	2.1
2021	2702	91	3.4
2022	4598	154	3.3
2023	1594	43	2.7
2024	4696	224	4.8
Total	34318	1549	4.5



Distribution by health-care institution (%)

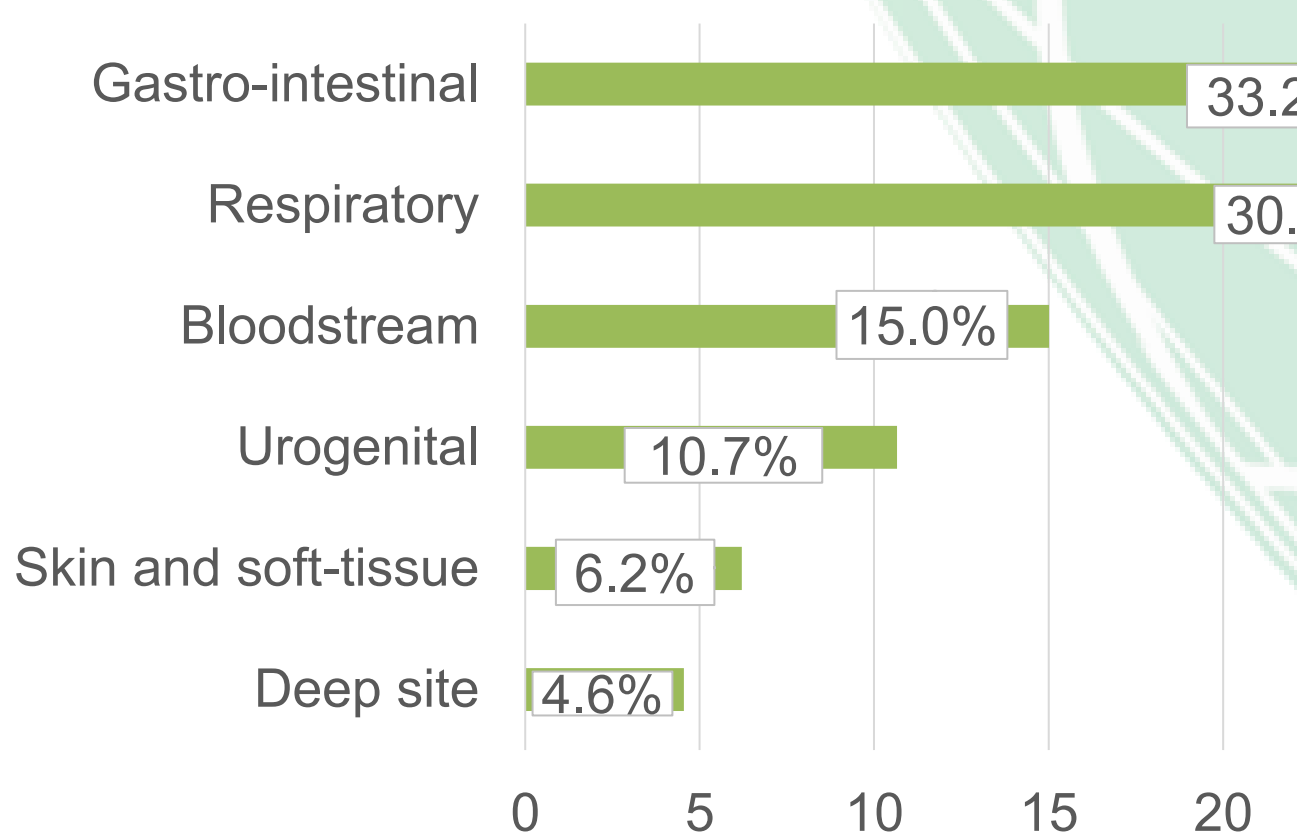


Distribution by region (%)

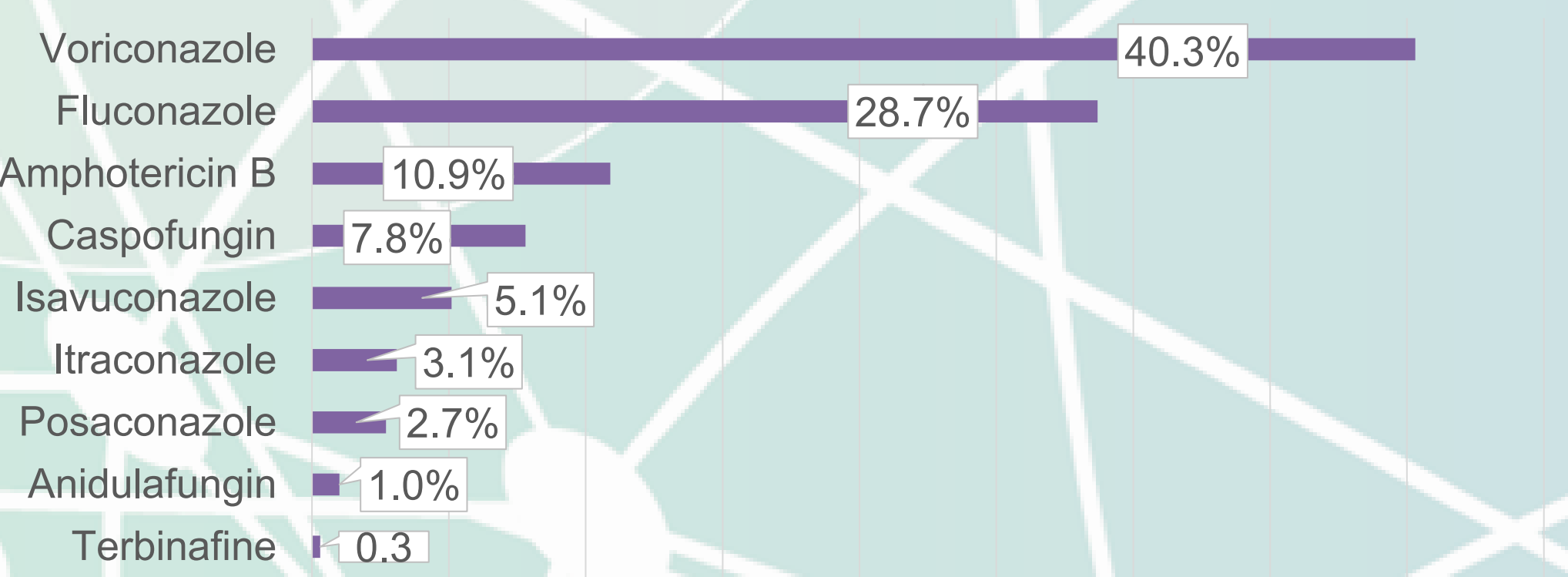


Antifungal	Medical prophylaxis (%)	Gastro-intestinal (%)	Respiratory (%)	Undocumented (%)	Bloodstream (%)	Urogenital (%)	Skin- and soft tissue (%)	Deep site (%)	Surgical prophylaxis (%)
Fluconazole (n=1031)	23.5	27.2	8.1	15.0	8.2	9.3	3.7	2.4	2.5
Voriconazole (n=141)	2.8	2.1	83.7	2.1	4.3		1.4	3.5	
Posaconazole (n=102)	74.5		7.8	11.8	1.0				4.9
Caspofungin (n=91)	10.0	18.7	25.3	7.7	34.1			4.4	
Amphotericin B (n=59)	8.5	5.1	54.2	3.4	10.2		1.7	10.2	6.8
Itraconazole (n=42)	19.0	11.9	21.4	23.8	2.4	7.1	9.5		4.8
Anidulafungin (n=37)	5.4	29.8	8.1		40.5	8.1	5.4	2.7	
Terbinafine (n=24)			4.2	45.8			50.0		
Isavuconazole (n=17)		5.9	88.2				5.9		
Flucytosine (n=4)						25.0		75.0	
Miconazole (n=1)		100.0							
Total (n=1549)	22.3	20.7	18.9	12.9	9.4	6.6	3.9	2.8	2.4

Focus of infection (n=966)



Antifungal therapy in respiratory infection (n=293)



CONCLUSION

- Antifungal consumption per capita is 2.4x higher in Belgium compared to the average of the EU, driven mainly by usage in the community.
- Gastro-intestinal, respiratory and bloodstream infections were the most frequently reported fungal infections among hospitalised patients. Fluconazole was the most prescribed antifungal agent across almost all reported indications.
- Antifungal stewardship initiatives focusing on the distinction of fungal colonization and infection might be effective to reduce antifungal consumption in the hospitalized patients.
- Successive point prevalence surveys such as Global-PPS are time- and cost-effective to monitor antifungal consumption and reported indications.

REFERENCES

1. Sati H, Beardsley AA-U, Morrissey O, Alffenaar J-W, Howard K, Kim HY, et al. WHO fungal priority pathogens list to guide research, development and public health action. Geneva: World Health Organization, Division WHOAR; 2022.
2. Goemaere B, Lagrou K, Spriet I, Hendrickx M, Vandael E, Becker P, et al. Systemic antifungal drug use in Belgium—One of the biggest antifungal consumers in Europe. Mycoses. 2019;62(6):542-50.

Scan for more info on Global-PPS

