

SUPPLEMENTARY MATERIAL

VigiBase: resource profile update with a summary of global patterns and trends in adverse event reports for medicines and vaccines

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Figure S1. Flow chart summarizing the flow of VigiBase reports and key processing steps.

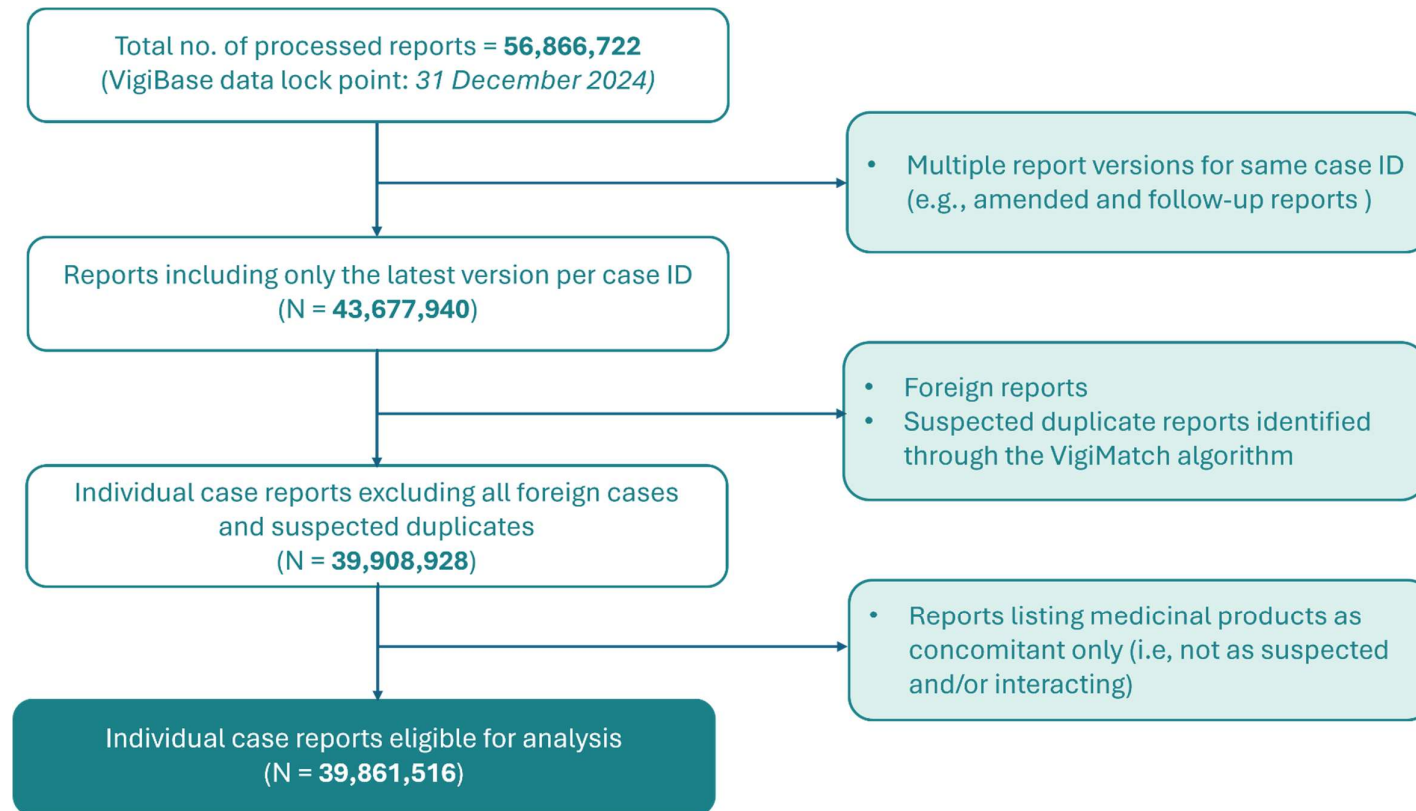
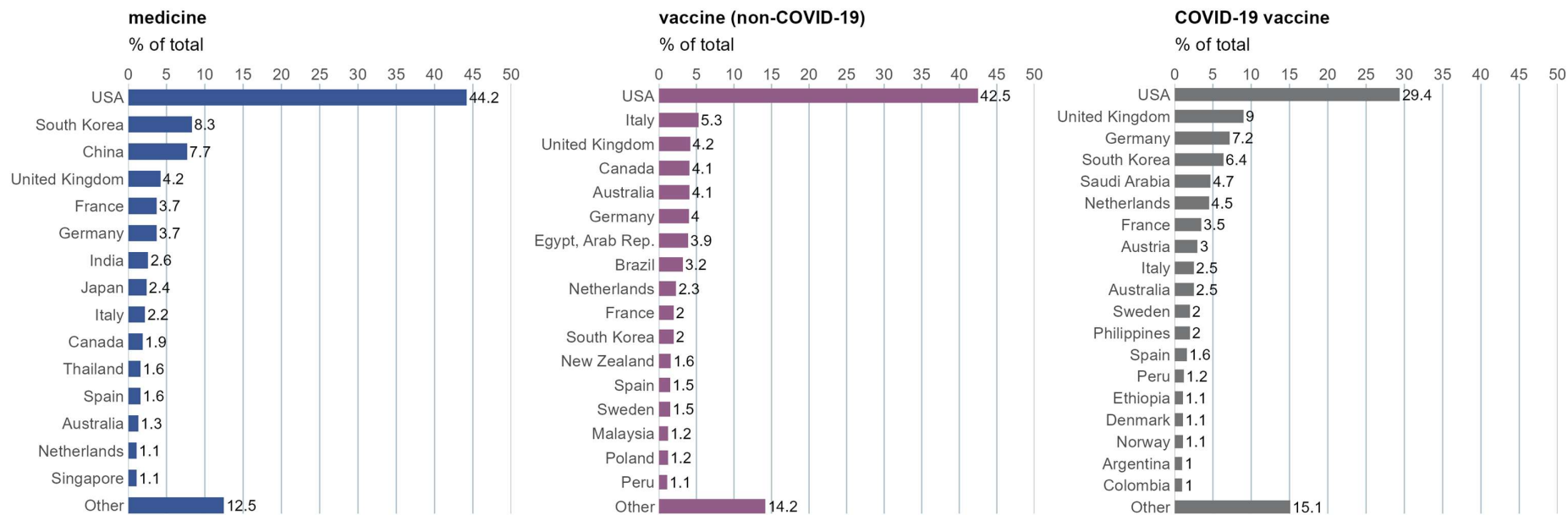
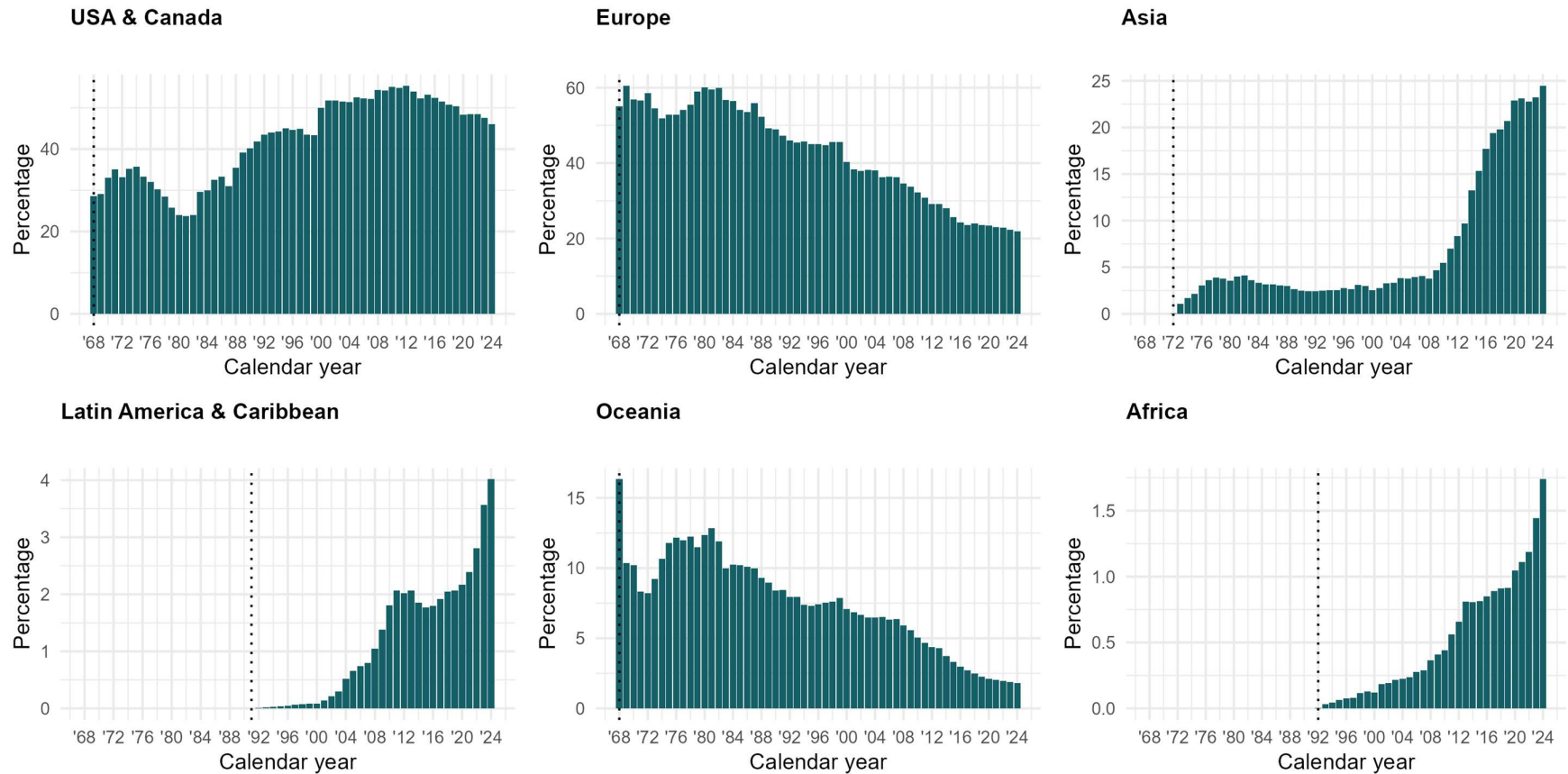


Figure S2. Top reporting countries per product type.



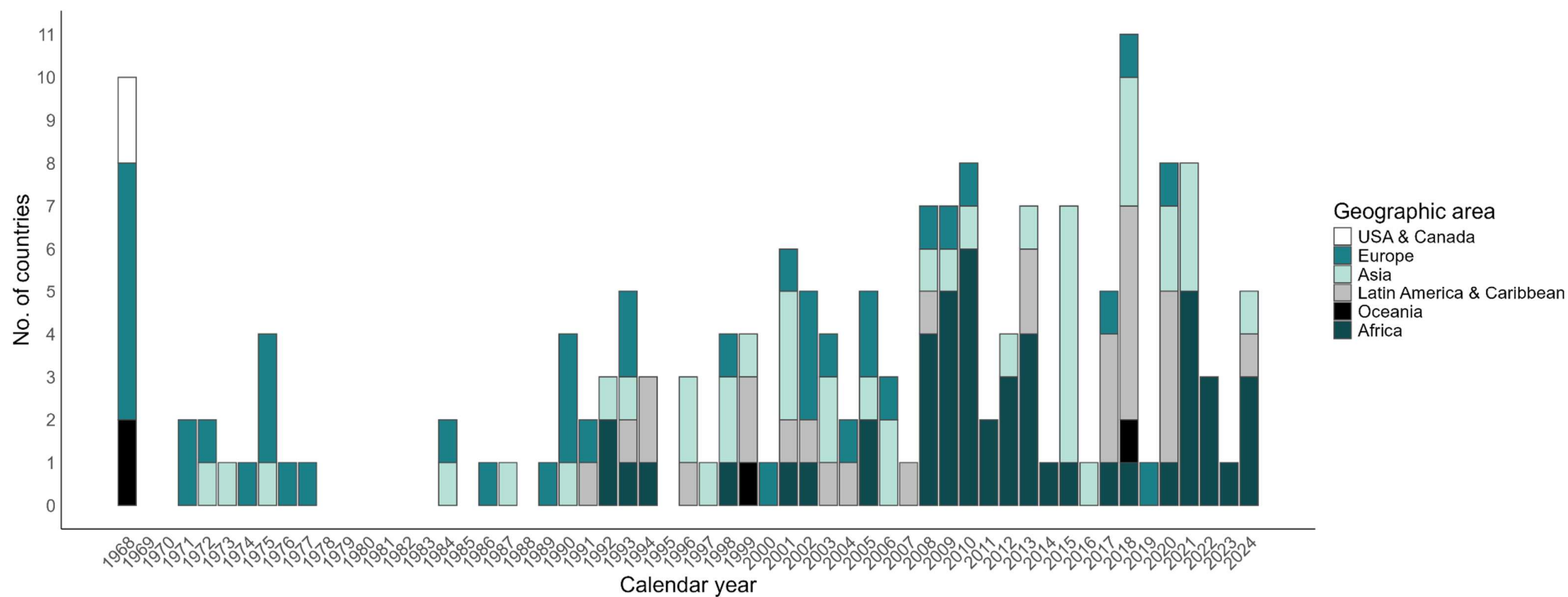
For each product type, the percentages shown represent the relative contribution of each country to the total reports with a suspected and/or interacting product. Only countries that contribute at least 1% of all product-specific reports are listed individually; countries with smaller contributions are grouped as 'Other'.

Figure S3. Cumulative trends in the distribution of reports by geographic area.



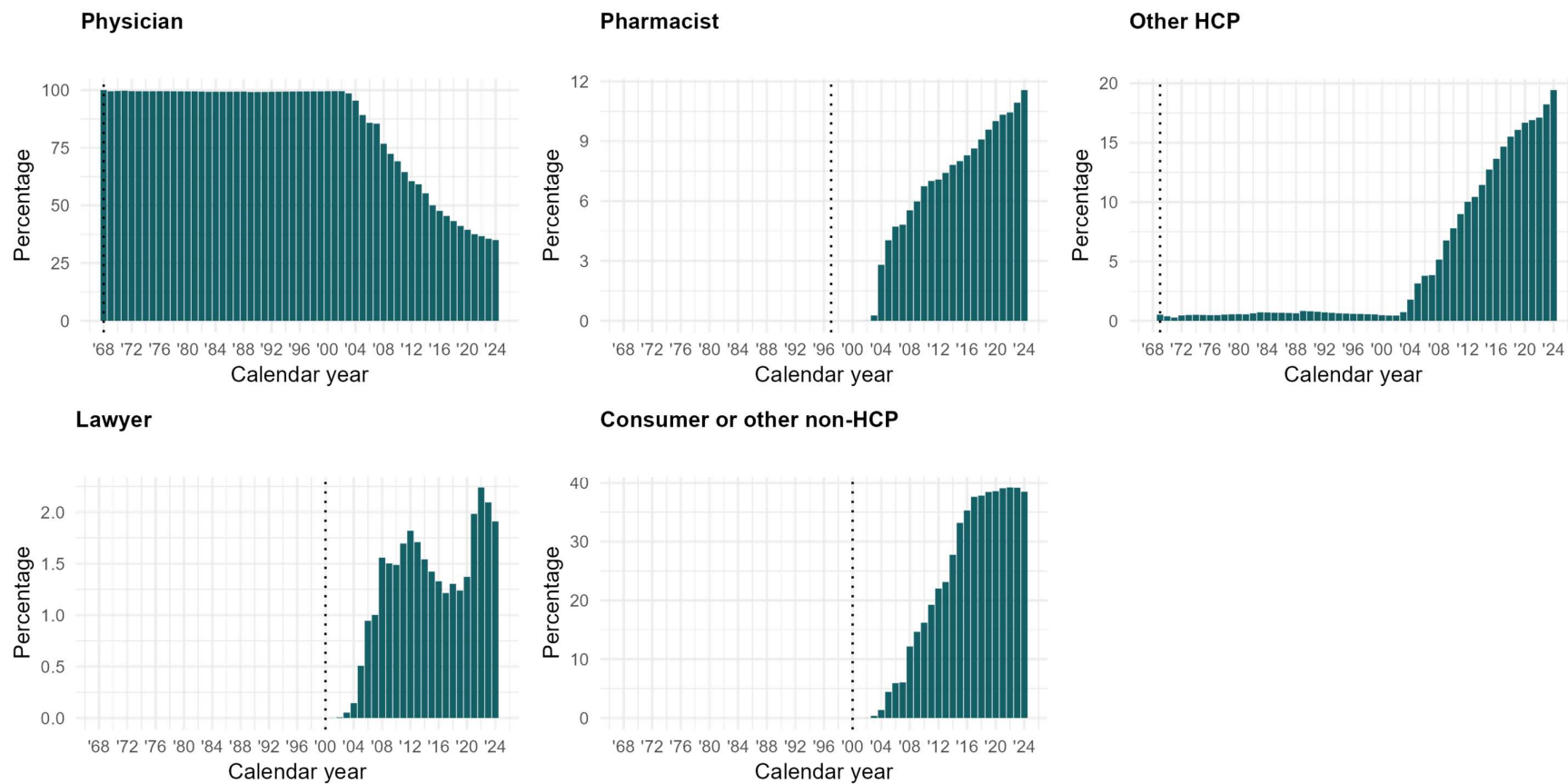
Trends in the distribution of reports with a suspected and/or interacting medicinal product for each geographic area after excluding COVID-19 vaccine reports. The percentages represent the relative contribution of each geographic area to the total reports over time (through the end of each calendar year). The dashed line marks the year when the first report was received in the database.

Figure S4. Distribution of WHO PIDM member countries by start of report entry in Vigibase, grouped by geographic area.



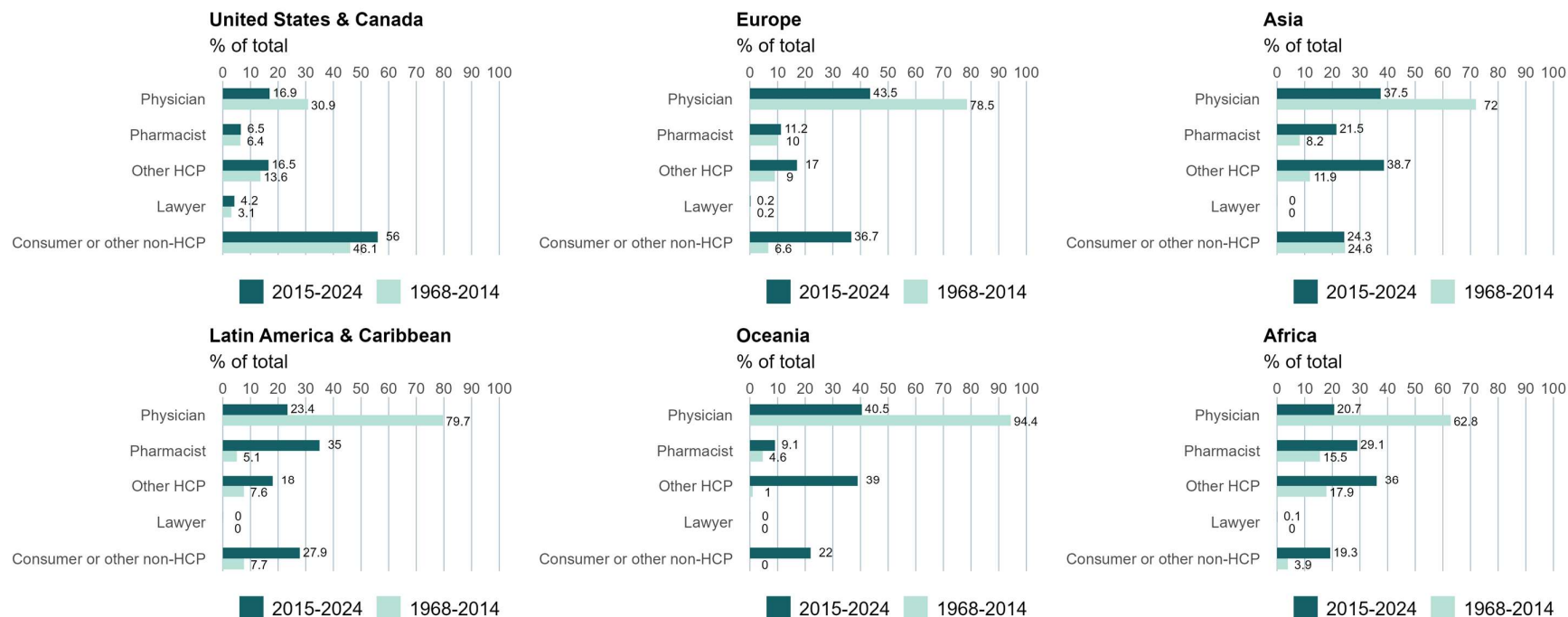
The X-axis represents the calendar year when WHO PIDM member countries started sharing reports, and the Y-axis indicates the number of countries that initiated report sharing in each respective year. The no. of countries represents counts as observed since the inception of the database and includes non-sovereign countries as of 2024 (British Virgin Islands and former Yugoslavia). Abbreviations: WHO PIDM = World Health Organization Programme for International Drug Monitoring.

Figure S5. Cumulative trends in the distribution of reports by reporter qualification.



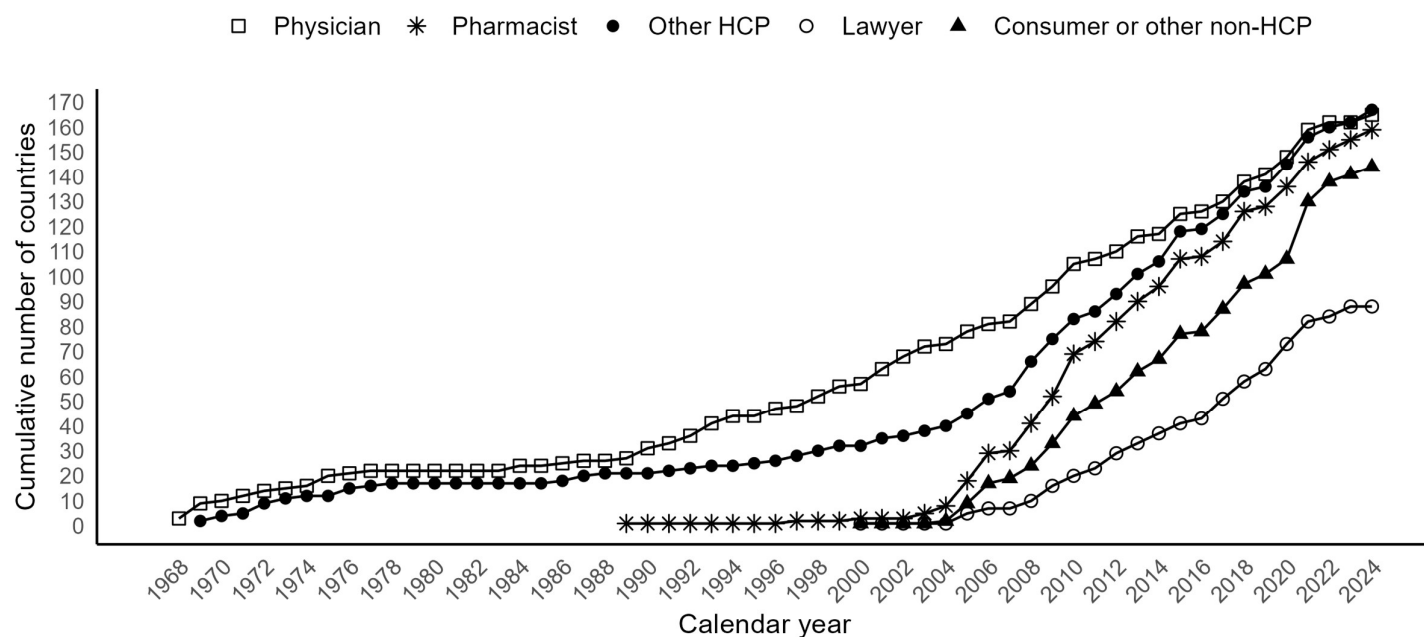
Trends in the distribution of reports with a suspected and/or interacting medicinal product for each reporter qualification after excluding COVID-19 vaccine reports. The percentages represent the relative contribution of each reporter qualification to the total reports over time (through the end of each calendar year). The dashed line marks the year when the first report was received in the database. Abbreviations: HCP = Health Care Professional.

Figure S6. Distribution of reports by reporter qualification: comparing reports received in 1968-2014 vs. 2015-2024 – analyses stratified by geographic area.



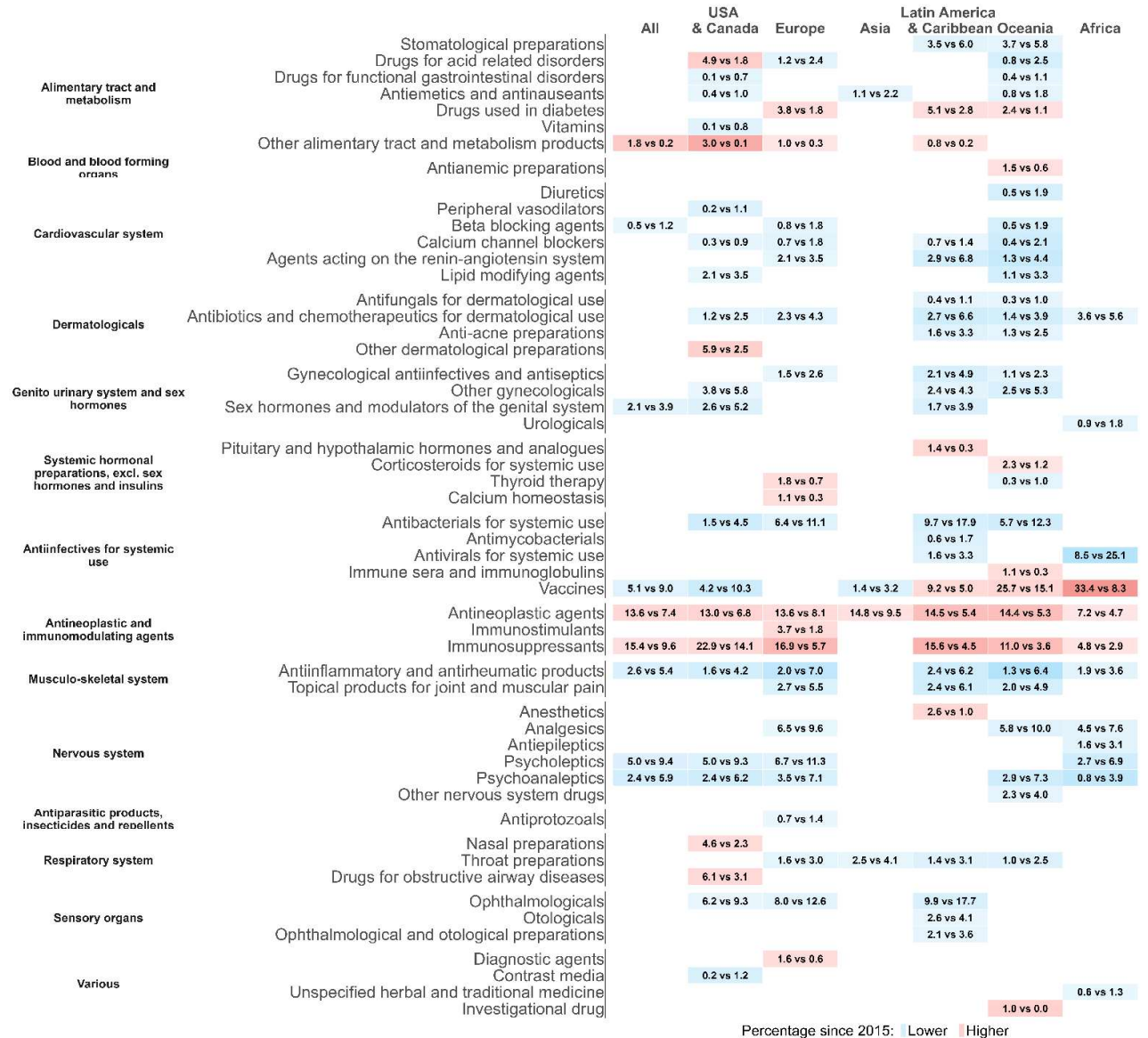
For each calendar period, the percentages shown represent the relative contribution of each reporter qualification tot the total reports with a suspected and/or interacting medicinal product. Since reports with multiple reporter qualifications were assigned to each of the relevant qualifications, the total sum of the percentages can exceed 100%. COVID-19 vaccine reports were not included in these analyses. Abbreviations: HCP = Health Care Professional.

Figure S7. Cumulative distribution of countries contributing reports by reporter qualification.



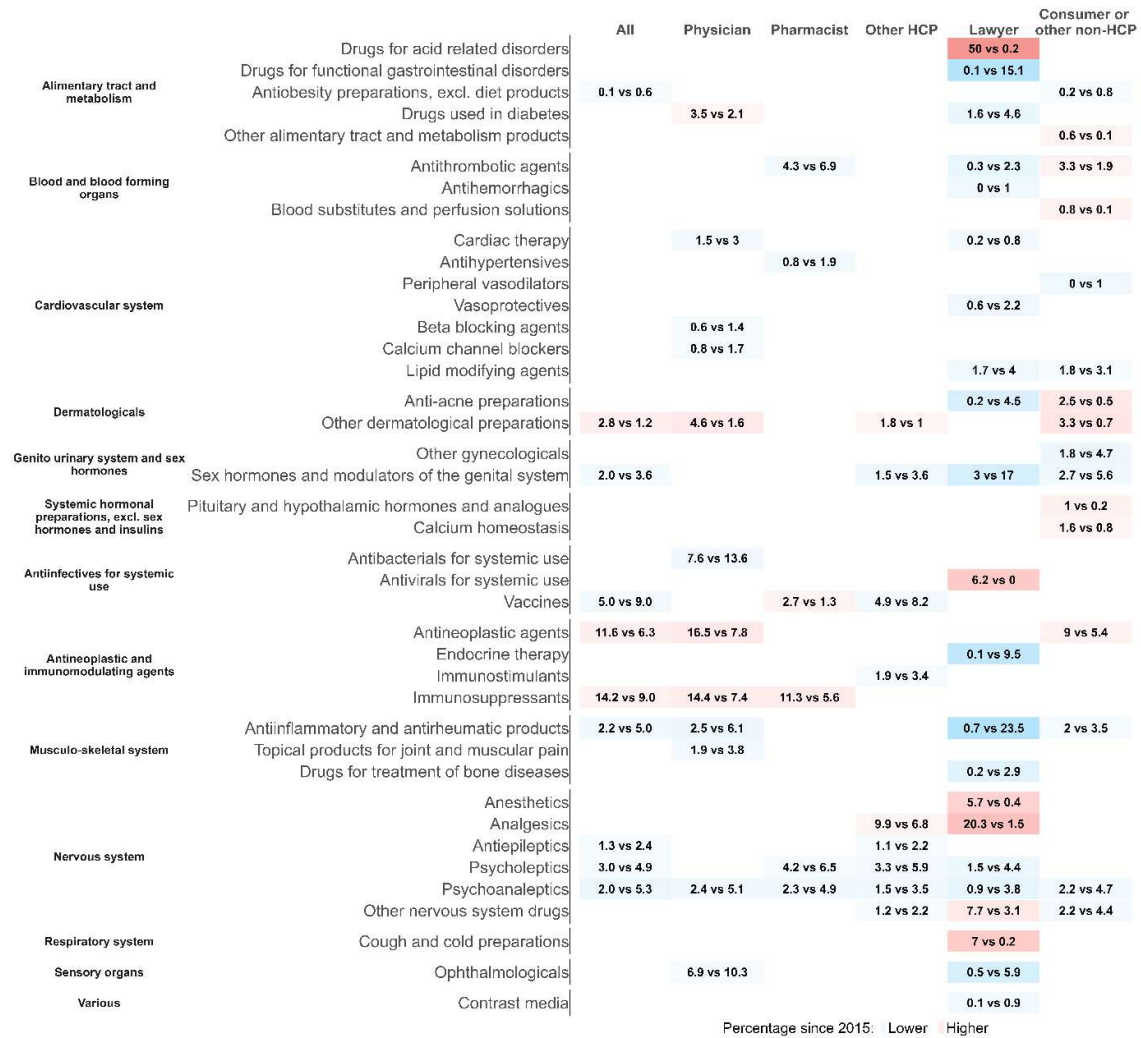
Cumulative number of WHO PIDM member countries sharing reports with a suspected and/or interacting medicinal product, grouped by reporter qualification. The X-axis denotes the calendar year of first data submission, and the Y-axis indicates the cumulative count of countries contributing reporter-specific reports over time. The no. of countries represents counts as observed since the inception of the database and includes non-sovereign countries as of 2024 (British Virgin Islands (territory) and former Yugoslavia). Abbreviations: HCP = Health Care Professional.

Figure S8. ATC therapeutic subgroups with a higher or lower relative representation in VigiBase since 2015, based on percentage distributions (2015-2024 vs. 1968-2014), overall and by geographic area – *official and UMC-assigned ATC codes*.



Distribution of official and UMC-assigned ATC (level 2) therapeutic subgroup terms for medicine and vaccine (non-COVID-19) reports with a higher (in red) or lower (in blue) relative representation in VigiBase since 2015 (a total of 53 terms), overall and by geographic area. ATC therapeutic subgroup terms are grouped by ATC (level 1) anatomical group. Each cell summarizes the percentage of all reports with the ATC therapeutic subgroup listed for the period 2015-2024 compared to the corresponding percentage in the period prior (1968–2014). Of note, some medicinal product active ingredients map to more than 1 ATC level 2 term since several therapeutic subgroups may include the same active ingredient when used in different therapeutic indications, formulations or routes of administration (e.g., corticosteroids). This replication can result in the repetition of patterns across ATC level 2 terms. Also, since UMC assigned ATC codes capture additional indications described in the product label beyond the main intended use, this explains some of the ATC level 2 patterns that are not replicated when restricting analyses to official ATC codes only (Figure 6).

Figure S9. ATC therapeutic subgroups with a higher or lower relative representation in Vigibase since 2015, based on percentage distributions (2015-2024 vs. 1968-2014), overall and by reporter qualification.



Distribution of official ATC (level 2) therapeutic subgroup terms for medicine and vaccine (non-COVID-19) reports with a higher (in red) or lower (in blue) relative representation in Vigibase since 2015, overall and by reporter qualification. ATC therapeutic subgroup terms are grouped by ATC (level 1) anatomical group. Each cell summarizes the percentage of all reports with the ATC therapeutic subgroup listed for the period 2015-2024 compared to the corresponding percentage in the period prior (1968-2014). Of note, some medicinal product active ingredients map to more than 1 ATC level 2 term since several therapeutic subgroups may include the same active ingredient when used in different therapeutic indications, formulations or routes of administration (e.g., corticosteroids). This replication can result in the repetition of patterns across ATC level 2 terms.

Figure S10. MedDRA® High Level Group Terms (HLGTs) with a lower or higher relative representation in VigiBase since 2015, based on percentage distributions (2015-2024 vs. 1968-2014), overall and by reporter qualification.

		All	Physician	Pharmacist	Other HCP	Lawyer	Consumer or other non-HCP
Blood and lymphatic system disorders	Anaemias nonhaemolytic and marrow depression					0.4 vs 1.3	
	Cardiac arrhythmias		2 vs 3.3	1.9 vs 3.5	1.6 vs 3.1	0.4 vs 3.9	
Cardiac disorders	Cardiac disorders, signs and symptoms NEC					1.3 vs 11.7	
	Cardiac valve disorders					0.1 vs 1.1	
	Congenital cardiac disorders					0.1 vs 0.7	
	Coronary artery disorders			1.3 vs 2.6	1.9 vs 3.4	1.4 vs 17.8	1.7 vs 3.1
	Heart failures				1.6 vs 2.8	0.4 vs 4.3	
Congenital, familial and genetic disorders	Myocardial disorders					0.3 vs 2.1	
	Cardiac and vascular disorders congenital					0.3 vs 1.3	
Endocrine disorders	Diabetic complications					0.1 vs 1	
	Endocrine disorders of gonadal function					0.8 vs 0.2	
Eye disorders	Glucose metabolism disorders (incl diabetes mellitus)					1.8 vs 7.6	
	Anterior eye structural change, deposit and degeneration					1.6 vs 0.2	
Gastrointestinal disorders	Vision disorders					0.6 vs 2.1	
	Benign neoplasms gastrointestinal					0.1 vs 0.6	
	Dental and gingival conditions					2.4 vs 0.4	
	Exocrine pancreas conditions					0.1 vs 1.8	
	Gastrointestinal conditions NEC					0.6 vs 2	
	Gastrointestinal haemorrhages NEC			0.9 vs 2.1		0.2 vs 1.7	
	Gastrointestinal infections					0.1 vs 0.7	
	Gastrointestinal inflammatory conditions					0.3 vs 4.7	
	Gastrointestinal motility and defaecation conditions					0.9 vs 4	
	Gastrointestinal signs and symptoms					1.2 vs 5.2	
	Gastrointestinal stenosis and obstruction					0.1 vs 1.4	
	Gastrointestinal vascular conditions					0.1 vs 0.7	
	Malignant and unspecified neoplasms gastrointestinal NEC	0.7 vs 0.2	0.9 vs 0.2			15.8 vs 0.3	
	Oral soft tissue conditions					0.2 vs 1.1	
	Salivary gland conditions					0.1 vs 0.8	
General disorders and administration site conditions	Therapeutic and nontherapeutic effects (excl toxicity)	7.9 vs 5.4	6.6 vs 3.1			9.8 vs 5.1	
	Tissue disorders NEC					0.1 vs 0.7	
Hepatobiliary disorders	Gallbladder disorders				0.1 vs 0.6	0.1 vs 2.9	
	Hepatic and hepatobiliary disorders					0.3 vs 1.7	
	Hepatobiliary neoplasms					2.7 vs 0.1	
Immune system disorders	Allergic conditions					0.8 vs 2.7	
	Autoimmune disorders					0.4 vs 1.7	
	Immune disorders NEC					0.5 vs 4.3	
Infections and infestations	Ancillary infectious topics					0.1 vs 3.2	
	Bacterial infectious disorders					0.2 vs 0.9	
	Infections - pathogen unspecified					0.8 vs 3.7	
	Viral infectious disorders	2.0 vs 1.1	2.1 vs 0.8				2.7 vs 1.4
	Injuries NEC				2.1 vs 3.7	8.4 vs 15.6	
Injury, poisoning and procedural complications	Medication errors and other product use errors and issues	8.7 vs 2.5	5.5 vs 1	6.7 vs 4.2	6.5 vs 2.7		14 vs 6.1
	Off label uses and intentional product misuses/use issues	3.0 vs 0.6	3.2 vs 0.3	1.5 vs 0.5	3.2 vs 0.7		4.4 vs 1.7
	Overdoses and underdoses NEC					9 vs 2	
	Procedural related injuries and complications NEC				1.8 vs 3.1	0.4 vs 1.7	
	Cardiac and vascular investigations (excl enzyme tests)				1.3 vs 2.3	0.2 vs 1.9	
Investigations	Haematology investigations (incl blood groups)			1.8 vs 3.1		0.1 vs 0.7	
	Hepatobiliary investigations					0.1 vs 0.6	
	Investigations, imaging and histopathology procedures NEC					0.1 vs 2	
	Lipid analyses					0.1 vs 1.8	
	Musculoskeletal and soft tissue investigations (excl enzyme tests)					4.2 vs 0.1	
Metabolism and nutrition disorders	Physical examination and organ system status topics					0.7 vs 1.7	
	Acid-base disorders					0.2 vs 0.9	
	Appetite and general nutritional disorders					0.6 vs 1.5	
	Electrolyte and fluid balance conditions	1.9 vs 3.3				0.3 vs 2.2	
	Lipid metabolism disorders					0.1 vs 1.2	
	Metabolism disorders NEC					0.1 vs 0.8	

Percentage since 2015: Lower Higher

Figure S10. Continued

		All	Physician	Pharmacist	Other HCP	Lawyer	Consumer or other non-HCP
Musculoskeletal and connective tissue disorders	Bone disorders (excl congenital and fractures)					4.7 vs 2.8	
	Connective tissue disorders (excl congenital)					0 vs 1	
	Joint disorders					0.7 vs 3.3	
	Muscle disorders			2.7 vs 4.3		0.7 vs 3.1	
	Musculoskeletal and connective tissue disorders NEC					1 vs 3.9	
	Tendon, ligament and cartilage disorders					0.1 vs 0.8	
Neoplasms benign, malignant and unspecified (incl cysts and polyps)	Endocrine neoplasms malignant and unspecified					0.7 vs 0.1	
	Gastrointestinal neoplasms benign					0.1 vs 0.6	
	Gastrointestinal neoplasms malignant and unspecified	0.7 vs 0.2	0.9 vs 0.2			15.8 vs 0.3	
	Hepatobiliary neoplasms malignant and unspecified					2.7 vs 0.1	
	Miscellaneous and site unspecified neoplasms malignant and unspecified					1.3 vs 0.2	
	Renal and urinary tract neoplasms malignant and unspecified					12.9 vs 0.1	
	Reproductive neoplasms female malignant and unspecified					1 vs 0.4	
	Reproductive neoplasms male malignant and unspecified					8.3 vs 0.1	
	Respiratory and mediastinal neoplasms malignant and unspecified					2.6 vs 0.1	
	Skin neoplasms malignant and unspecified					0.9 vs 0.1	
	Central nervous system vascular disorders				0.7 vs 1.5	0.9 vs 13.4	
	Headaches					0.6 vs 2.2	
Nervous system disorders	Mental impairment disorders					1 vs 2.6	
	Movement disorders (incl parkinsonism)	1.6 vs 2.7				0.7 vs 16.7	
	Neurological disorders NEC					2.3 vs 14.2	
	Neurological disorders of the eye					0.4 vs 1.6	
	Neuromuscular disorders				0.8 vs 1.5		
	Seizures (incl subtypes)	0.7 vs 1.7		0.6 vs 1.4	0.6 vs 1.7	0.3 vs 1	
Product issues	Sleep disturbances (incl subtypes)					0.9 vs 2.7	
	Device issues	1.7 vs 0.6	1.6 vs 0.5	1.4 vs 0.4			2.4 vs 1.3
Psychiatric disorders	Anxiety disorders and symptoms				1.1 vs 2.4	5.3 vs 13.4	
	Deliria (incl confusion)			0.6 vs 1.4		0.2 vs 0.8	
	Dementia and amnesic conditions					0.4 vs 2	
	Depressed mood disorders and disturbances				0.6 vs 1.4	3.9 vs 11.5	
	Disturbances in thinking and perception			0.4 vs 1		0.2 vs 0.8	
	Manic and bipolar mood disorders and disturbances					0.1 vs 0.6	
	Mood disorders and disturbances NEC				2.2 vs 3.8	17.3 vs 10.1	
	Personality disorders and disturbances in behaviour					0.5 vs 1.8	
	Psychiatric disorders NEC				0.8 vs 1.7	20.9 vs 4.8	
	Sleep disorders and disturbances					1 vs 2.9	
	Somatic symptom and related disorders					0.1 vs 1.8	
	Suicidal and self-injurious behaviours NEC			0.4 vs 1.1	0.4 vs 1.5	0.5 vs 4.5	
Renal and urinary disorders	Bladder and bladder neck disorders (excl calculi)					7.1 vs 0.3	
	Genitourinary tract disorders NEC					0.1 vs 0.6	
	Renal disorders (excl nephropathies)			1.4 vs 2.5		15 vs 6.3	
Reproductive system and breast disorders	Menstrual cycle and uterine bleeding disorders						0.7 vs 1.7
	Prostatic disorders (excl infections and inflammations)					8.3 vs 0.2	
Respiratory, thoracic and mediastinal disorders	Bronchial disorders (excl neoplasms)					0.2 vs 0.8	
	Lower respiratory tract disorders (excl obstruction and infection)					0.2 vs 0.9	
	Pulmonary vascular disorders				0.4 vs 1.1	0.7 vs 3.8	
	Respiratory disorders NEC					0.8 vs 3.9	
	Respiratory tract infections		3.5 vs 2.1			0.4 vs 1.9	
	Respiratory tract neoplasms					2.6 vs 0.2	
	Respiratory tract signs and symptoms					0.5 vs 3.5	
	Upper respiratory tract disorders (excl infections)					0.2 vs 1.1	
Skin and subcutaneous tissue disorders	Angioedema and urticaria		5.1 vs 7.7				
	Epidermal and dermal conditions					1.6 vs 6.3	
	Skin appendage conditions					3.9 vs 1.2	
	Skin vascular abnormalities	1.2 vs 2.1	0.9 vs 1.9				0.8 vs 1.6
Social circumstances	Economic and housing issues					1.2 vs 3.9	
	Family issues					0.1 vs 1.8	
	Lifestyle issues					2.1 vs 4.1	
Surgical and medical procedures	Hepatobiliary therapeutic procedures					0 vs 0.5	
	Therapeutic procedures and supportive care NEC	1.2 vs 0.4		1.1 vs 0.4	1.7 vs 0.8		1.5 vs 0.7
Vascular disorders	Arteriosclerosis, stenosis, vascular insufficiency and necrosis	1.2 vs 2.4		0.7 vs 1.9	1 vs 3.2	3.8 vs 20.2	1.3 vs 2.4
	Decreased and nonspecific blood pressure disorders and shock					0.7 vs 2.9	
	Embolism and thrombosis				0.7 vs 2.2	1.2 vs 7.3	
	Vascular disorders NEC					1.3 vs 16.7	
	Vascular haemorrhagic disorders			3.4 vs 6.3		0.7 vs 3.8	
	Vascular hypertensive disorders					0.3 vs 3.9	
	Venous varices					0.1 vs 0.7	

Percentage since 2015: Lower Higher

Distribution of HLGs for medicine and vaccine (non-COVID-19) reports with a higher (in red) or lower (in blue) relative representation in Vigibase since 2015, overall and by reporter qualification. HLGs are grouped by system organ class (SOC). Each cell summarizes the percentage of all reports with the HLG listed for the period 2015-2024 compared to the corresponding percentage in the period prior (1968–2014). Abbreviations: NEC = not elsewhere classified.

Table S1. Categorisation of WHO PIDM member countries by geographic area.

Geographic area	WHO PIDM country/economy
USA & Canada	Canada
USA & Canada	USA
Europe	Albania
Europe	Andorra
Europe	Austria
Europe	Belarus
Europe	Belgium
Europe	Bosnia and Herzegovina
Europe	Bulgaria
Europe	Croatia
Europe	Czechia
Europe	Denmark
Europe	Estonia
Europe	Finland
Europe	France
Europe	Germany
Europe	Greece
Europe	Hungary
Europe	Iceland
Europe	Ireland
Europe	Italy
Europe	Latvia
Europe	Liechtenstein
Europe	Lithuania
Europe	Luxembourg
Europe	Malta
Europe	Moldova
Europe	Montenegro
Europe	Netherlands
Europe	North Macedonia
Europe	Norway
Europe	Poland
Europe	Portugal
Europe	Romania
Europe	Russian Federation
Europe	Serbia
Europe	Slovak Republic
Europe	Slovenia
Europe	Spain
Europe	Sweden
Europe	Switzerland
Europe	Ukraine
Europe	United Kingdom
Europe	Yugoslavia -2003*

Asia	Afghanistan
Asia	Antigua and Barbuda
Asia	Armenia
Asia	Azerbaijan
Asia	Bangladesh
Asia	Bhutan
Asia	Brunei Darussalam
Asia	Cambodia
Asia	China
Asia	Cyprus
Asia	Georgia
Asia	India
Asia	Indonesia
Asia	Iran, Islamic Rep.
Asia	Iraq
Asia	Israel
Asia	Japan
Asia	Jordan
Asia	Kazakhstan
Asia	Korea, Rep. (South Korea)
Asia	Kuwait
Asia	Kyrgyz Republic
Asia	Lao PDR
Asia	Lebanon
Asia	Malaysia
Asia	Maldives
Asia	Mongolia
Asia	Myanmar
Asia	Nepal
Asia	Oman
Asia	Pakistan
Asia	Philippines
Asia	Saudi Arabia
Asia	Singapore
Asia	Sri Lanka
Asia	Syrian Arab Republic
Asia	Tajikistan
Asia	Thailand
Asia	Turkiye
Asia	United Arab Emirates
Asia	Uzbekistan
Asia	Viet Nam
Asia	Yemen, Rep.
Latin America & Caribbean	Argentina
Latin America & Caribbean	Barbados
Latin America & Caribbean	Belize

Latin America & Caribbean	Bolivia
Latin America & Caribbean	Brazil
Latin America & Caribbean	British Virgin Islands*
Latin America & Caribbean	Chile
Latin America & Caribbean	Colombia
Latin America & Caribbean	Costa Rica
Latin America & Caribbean	Cuba
Latin America & Caribbean	Dominica
Latin America & Caribbean	Dominican Republic
Latin America & Caribbean	Ecuador
Latin America & Caribbean	El Salvador
Latin America & Caribbean	Guatemala
Latin America & Caribbean	Guyana
Latin America & Caribbean	Haiti
Latin America & Caribbean	Honduras
Latin America & Caribbean	Jamaica
Latin America & Caribbean	Mexico
Latin America & Caribbean	Nicaragua
Latin America & Caribbean	Panama
Latin America & Caribbean	Paraguay
Latin America & Caribbean	Peru
Latin America & Caribbean	St. Vincent and the Grenadines
Latin America & Caribbean	Suriname
Latin America & Caribbean	Uruguay
Latin America & Caribbean	Venezuela, RB
Oceania	Australia
Oceania	Fiji
Oceania	New Zealand
Oceania	Papua New Guinea
Africa	Algeria
Africa	Angola
Africa	Benin
Africa	Botswana
Africa	Burkina Faso
Africa	Burundi
Africa	Cabo Verde
Africa	Cameroon
Africa	Central African Republic
Africa	Chad
Africa	Comoros
Africa	Congo, Dem. Rep.
Africa	Congo, Rep.
Africa	Cote d'Ivoire
Africa	Egypt, Arab Rep.
Africa	Eritrea
Africa	Eswatini

Africa	Ethiopia
Africa	Gabon
Africa	Gambia, The
Africa	Ghana
Africa	Guinea
Africa	Guinea-Bissau
Africa	Kenya
Africa	Lesotho
Africa	Liberia
Africa	Libya
Africa	Madagascar
Africa	Malawi
Africa	Mali
Africa	Mauritania
Africa	Mauritius
Africa	Morocco
Africa	Mozambique
Africa	Namibia
Africa	Niger
Africa	Nigeria
Africa	Rwanda
Africa	Sao Tome and Principe
Africa	Senegal
Africa	Sierra Leone
Africa	South Africa
Africa	South Sudan
Africa	Sudan
Africa	Tanzania
Africa	Togo
Africa	Tunisia
Africa	Uganda
Africa	Zambia
Africa	Zimbabwe

*Not recognised as a sovereign state by the United Nations as of 2024.

Supplementary Table 2. Categorisation of WHO PIDM member countries by World Bank income grouping.

World Bank income grouping	WHO PIDM country/economy
High income countries	Andorra
High income countries	Antigua and Barbuda
High income countries	Australia
High income countries	Austria
High income countries	Barbados
High income countries	Belgium
High income countries	British Virgin Islands*
High income countries	Brunei Darussalam
High income countries	Bulgaria
High income countries	Canada
High income countries	Chile
High income countries	Croatia
High income countries	Cyprus
High income countries	Czechia
High income countries	Denmark
High income countries	Estonia
High income countries	Finland
High income countries	France
High income countries	Germany
High income countries	Greece
High income countries	Guyana
High income countries	Hungary
High income countries	Iceland
High income countries	Ireland
High income countries	Israel
High income countries	Italy
High income countries	Japan
High income countries	Korea, Rep.
High income countries	Kuwait
High income countries	Latvia
High income countries	Liechtenstein
High income countries	Lithuania
High income countries	Luxembourg
High income countries	Malta
High income countries	Netherlands
High income countries	New Zealand
High income countries	Norway
High income countries	Oman
High income countries	Panama
High income countries	Poland
High income countries	Portugal
High income countries	Romania
High income countries	Russian Federation

High income countries	Saudi Arabia
High income countries	Singapore
High income countries	Slovak Republic
High income countries	Slovenia
High income countries	Spain
High income countries	Sweden
High income countries	Switzerland
High income countries	United Arab Emirates
High income countries	United Kingdom
High income countries	Uruguay
High income countries	USA
Upper-middle income countries	Albania
Upper-middle income countries	Algeria
Upper-middle income countries	Argentina
Upper-middle income countries	Armenia
Upper-middle income countries	Azerbaijan
Upper-middle income countries	Belarus
Upper-middle income countries	Belize
Upper-middle income countries	Bosnia and Herzegovina
Upper-middle income countries	Botswana
Upper-middle income countries	Brazil
Upper-middle income countries	China
Upper-middle income countries	Colombia
Upper-middle income countries	Costa Rica
Upper-middle income countries	Cuba
Upper-middle income countries	Dominica
Upper-middle income countries	Dominican Republic
Upper-middle income countries	Ecuador
Upper-middle income countries	El Salvador
Upper-middle income countries	Fiji
Upper-middle income countries	Gabon
Upper-middle income countries	Georgia
Upper-middle income countries	Guatemala
Upper-middle income countries	Indonesia
Upper-middle income countries	Iran, Islamic Rep.
Upper-middle income countries	Iraq
Upper-middle income countries	Jamaica
Upper-middle income countries	Kazakhstan
Upper-middle income countries	Libya
Upper-middle income countries	Malaysia
Upper-middle income countries	Maldives
Upper-middle income countries	Mauritius
Upper-middle income countries	Mexico
Upper-middle income countries	Moldova
Upper-middle income countries	Mongolia
Upper-middle income countries	Montenegro

Upper-middle income countries	Namibia
Upper-middle income countries	North Macedonia
Upper-middle income countries	Paraguay
Upper-middle income countries	Peru
Upper-middle income countries	Serbia
Upper-middle income countries	South Africa
Upper-middle income countries	St. Vincent and the Grenadines
Upper-middle income countries	Suriname
Upper-middle income countries	Thailand
Upper-middle income countries	Türkiye
Upper-middle income countries	Ukraine
Upper-middle income countries	Venezuela, RB
Upper-middle income countries	Yugoslavia -2003*
Lower-middle income countries	Angola
Lower-middle income countries	Bangladesh
Lower-middle income countries	Benin
Lower-middle income countries	Bhutan
Lower-middle income countries	Bolivia
Lower-middle income countries	Cabo Verde
Lower-middle income countries	Cambodia
Lower-middle income countries	Cameroon
Lower-middle income countries	Comoros
Lower-middle income countries	Congo, Rep.
Lower-middle income countries	Cote d'Ivoire
Lower-middle income countries	Egypt, Arab Rep.
Lower-middle income countries	Eswatini
Lower-middle income countries	Ghana
Lower-middle income countries	Guinea
Lower-middle income countries	Haiti
Lower-middle income countries	Honduras
Lower-middle income countries	India
Lower-middle income countries	Jordan
Lower-middle income countries	Kenya
Lower-middle income countries	Kyrgyz Republic
Lower-middle income countries	Lao PDR
Lower-middle income countries	Lebanon
Lower-middle income countries	Lesotho
Lower-middle income countries	Mauritania
Lower-middle income countries	Morocco
Lower-middle income countries	Myanmar
Lower-middle income countries	Nepal
Lower-middle income countries	Nicaragua
Lower-middle income countries	Nigeria
Lower-middle income countries	Pakistan
Lower-middle income countries	Papua New Guinea
Lower-middle income countries	Philippines

Lower-middle income countries	Sao Tome and Principe
Lower-middle income countries	Senegal
Lower-middle income countries	Sri Lanka
Lower-middle income countries	Tajikistan
Lower-middle income countries	Tanzania
Lower-middle income countries	Tunisia
Lower-middle income countries	Uzbekistan
Lower-middle income countries	Viet Nam
Lower-middle income countries	Zambia
Lower-middle income countries	Zimbabwe
Low income countries	Afghanistan
Low income countries	Burkina Faso
Low income countries	Burundi
Low income countries	Central African Republic
Low income countries	Chad
Low income countries	Congo, Dem. Rep.
Low income countries	Eritrea
Low income countries	Ethiopia
Low income countries	Gambia, The
Low income countries	Guinea-Bissau
Low income countries	Liberia
Low income countries	Madagascar
Low income countries	Malawi
Low income countries	Mali
Low income countries	Mozambique
Low income countries	Niger
Low income countries	Rwanda
Low income countries	Sierra Leone
Low income countries	South Sudan
Low income countries	Sudan
Low income countries	Syrian Arab Republic
Low income countries	Togo
Low income countries	Uganda
Low income countries	Yemen, Rep.

*Not recognised as a sovereign state by the United Nations as of 2024. Abbreviations: WHO PIDM = World Health Organization Programme for International Drug Monitoring.