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Pharmacology, Toxicology, and Pharmaceutics Research Output in One Hundred and Fifty Countries for the Year 2019-2020

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Note

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In this note, the data about “Pharmacology, Toxicology, and Pharmaceutics” is compiled. Scopus has included pharmacology, toxicology & pharmaceutics (all), pharmacology, toxicology, pharmaceutics (miscellaneous), drug discovery, pharmaceutical science, pharmacology, and toxicology in the stated category. We analyzed the publications data of one hundred and fifty (150) countries for 2019-2020. The data were independently screened, sorted, and extracted on 29th Dec 2020 (from Scopus). Based on the number of publications (NoP) and growth rate (GR), we designed and ranked the top country in each “publication club,” as shown in Table 1. Furthermore, if we ignore the minimum number of publications, the top ten ranked countries with growth rate are Uzbekistan (n = 1388.37), Ethiopia (n = 238.64), Brunei Darussalam (n = 200.00), Gambia (n = 200.00), Mongolia (n = 171.43), Honduras (n = 150.00), Philippines (n = 144.00), Rwanda (n = 142.86), French Polynesia (n = 125.00) and Benin (n = 120.00). Based on the total publication record from more than 150 countries (n = 118706 for 2020 and n = 100366 for 2019), a significant and positive growth rate (n = 18.27) has been noticed in “Pharmacology, Toxicology, and Pharmaceutics”. The NoP and GR details of each country are provided in Table 2.

Table 1

The Number of Publications and Growth Rate Details of Various Publication Clubs

The Publication Club	Number of Countries	Top Ranked Country (Based on NoP)	NoP	Top Ranked Country (Based on GR)	2019-2020 GR
Above 25000	1	China	28198	China	14.77
Above 20000	1	United States	21425	United States	9.07
Above 10000	1	India	11914	India	37.59
Above 4000	4	United Kingdom	5376	Italy	23.71
Above 3000	5	Iran	3855	Brazil	23.35
Above 2000	9	Australia	2669	Indonesia	105.74
Above 1000	8	Malaysia	1784	Malaysia	68.14
Above 500	15	Thailand	998	Uzbekistan	1388.37
Above 400	6	Israel	482	United Arab Emirates	76.15
Above 200	11	Chile	399	Ethiopia	238.64
Above 100	14	Tunisia	195	Philippines	144.00
Above 50	11	Lithuania	96	Sudan	68.75
Above 20	25	Costa Rica	48	Benin	120.00
Above 10	22	Libyan Arab Jamahiriya	19	Brunei Darussalam	200.00
Less Than 10	17	Dominican Republic	9	French Polynesia	125.00

Table 2

The NoP and GR Details of each Country for the Year 2019-2020

Countries	2019 NoP	2020 NoP	2019-2020 GR	The Publication Club
China	24569	28198	14.77065	Above 25000
United States	19643	21425	9.071934	Above 20000
India	8659	11914	37.59095	Above 10000
Italy	4057	5019	23.7121	Above 4000
United Kingdom	4750	5376	13.17895	
Germany	4649	5115	10.02366	
Japan	4745	4988	5.12118	
Brazil	2809	3465	23.35351	Above 3000
Iran	3129	3855	23.2023	
France	2960	3506	18.44595	
Spain	2613	3058	17.03023	
South Korea	2940	3076	4.62585	
Indonesia	1289	2652	105.7409	Above 2000
Saudi Arabia	1445	2309	59.79239	
Iraq	1440	2118	47.08333	
Russian Federation	1473	2034	38.08554	
Egypt	1862	2450	31.57895	

Poland	1675	2024	20.83582	
Netherlands	1678	2013	19.96424	
Australia	2282	2669	16.95881	
Canada	2481	2621	5.642886	
Malaysia	1061	1784	68.14326	Above 1000
Portugal	901	1185	31.52053	
Belgium	1120	1432	27.85714	
Turkey	1416	1719	21.39831	
Sweden	1112	1333	19.8741	
Switzerland	1485	1729	16.43098	
Taiwan	1052	1197	13.78327	
Pakistan	1183	1278	8.030431	
Uzbekistan	43	640	1388.372	Above 500
Viet Nam	422	613	45.26066	
Nigeria	612	870	42.15686	
Greece	676	909	34.46746	
Thailand	770	998	29.61039	
Austria	626	783	25.07987	
Finland	449	541	20.48998	
South Africa	737	888	20.48847	
Romania	462	553	19.69697	
Denmark	823	973	18.226	
Ireland	441	515	16.78005	
Czech Republic	638	733	14.89028	
Hong Kong	478	549	14.85356	
Mexico	801	905	12.98377	
Hungary	473	500	5.708245	
United Arab Emirates	239	421	76.15063	Above 400
Jordan	315	429	36.19048	
Israel	391	482	23.27366	
Norway	382	460	20.41885	
Singapore	432	475	9.953704	
Argentina	445	433	-2.69663	
Ethiopia	88	298	238.6364	Above 200
Ukraine	232	370	59.48276	
Lebanon	133	202	51.8797	
Slovenia	160	233	45.625	
Bangladesh	199	283	42.21106	
Chile	335	399	19.10448	
Croatia	250	274	9.6	
Serbia	338	370	9.467456	
Slovakia	200	215	7.5	
Colombia	351	377	7.407407	
New Zealand	389	389	0	
Philippines	75	183	144	Above 100
Kazakhstan	82	156	90.2439	

Kuwait	56	103	83.92857	
Cameroon	66	113	71.21212	
Cyprus	71	114	60.56338	
Ghana	71	106	49.29577	
Oman	80	119	48.75	
Morocco	124	177	42.74194	
Qatar	137	180	31.38686	
Tunisia	161	195	21.11801	
Algeria	148	161	8.783784	
Macao	152	161	5.921053	
Bulgaria	176	174	-1.13636	
Ecuador	147	119	-19.0476	
Sudan	48	81	68.75	Above 50
Nepal	44	74	68.18182	
Kenya	59	95	61.01695	
Lithuania	62	96	54.83871	
Latvia	45	61	35.55556	
Estonia	58	78	34.48276	
Uruguay	57	65	14.03509	
Uganda	49	55	12.2449	
Sri Lanka	62	63	1.612903	
Cuba	101	93	-7.92079	
Peru	79	70	-11.3924	
Benin	10	22	120	Above 20
Namibia	15	25	66.66667	
Zimbabwe	12	20	66.66667	
Iceland	26	39	50	
Azerbaijan	19	28	47.36842	
Belarus	33	46	39.39394	
Yemen	26	36	38.46154	
Senegal	15	20	33.33333	
Costa Rica	37	48	29.72973	
Bahrain	31	40	29.03226	
Tanzania	38	48	26.31579	
North Macedonia	17	21	23.52941	
Puerto Rico	24	29	20.83333	
Armenia	26	30	15.38462	
Myanmar	33	38	15.15152	
Cote d'Ivoire	19	21	10.52632	
Luxembourg	46	46	0	
Syrian Arab Republic	46	46	0	
Panama	22	21	-4.54545	
Georgia	40	36	-10	
Malta	27	23	-14.8148	
Palestine	52	41	-21.1538	

Venezuela	61	44	-27.8689	
Mauritius	40	28	-30	
Bosnia and Herzegovina	32	20	-37.5	
Brunei Darussalam	6	18	200	Above 10
Gambia	5	15	200	
Mongolia	7	19	171.4286	
Honduras	4	10	150	
Rwanda	7	17	142.8571	
Burkina Faso	10	18	80	
Jamaica	8	14	75	
Montenegro	8	13	62.5	
Democratic Republic Congo	10	16	60	
Tajikistan	12	19	58.33333	
Afghanistan	7	10	42.85714	
Albania	12	15	25	
Moldova	15	17	13.33333	
Zambia	15	17	13.33333	
Mozambique	10	11	10	
Botswana	12	13	8.333333	
Trinidad and Tobago	18	19	5.555556	
Bolivia	11	11	0	
Monaco	10	10	0	
Malawi	16	15	-6.25	
Cambodia	15	14	-6.66667	
Libyan Arab Jamahiriya	21	19	-9.52381	
French Polynesia	4	9	125	Less Than 10
Grenada	3	5	66.66667	
Madagascar	7	9	28.57143	
Dominican Republic	8	9	12.5	
Gabon	8	8	0	
Congo	7	7	0	
Togo	7	7	0	
Guinea	5	5	0	
Nicaragua	4	4	0	
North Korea	4	4	0	
Guatemala	8	7	-12.5	
Guadeloupe	6	5	-16.6667	
Mali	10	8	-20	
Laos	9	6	-33.3333	
Sierra Leone	7	4	-42.8571	
Paraguay	15	5	-66.6667	
Fiji	12	4	-66.6667	