



IMPLEMENTATION OF DOLUTEGRAVIR LICENCES

A Development Report 2017 – 2019



CURRENT SUBLICENSEES FOR VIIV-MPP DOLUTEGRAVIR LICENCE

17 dolutegravir sublicensee agreements

DOLUTEGRAVIR

































TIMINA

^{*}Aurobindo is a direct licensee of ViiV. A tripartite agreement Aurobindo-ViiV-MPP has been signed. For the purposes of this presentation only, Aurobindo will be referred to as an MPP licensee. **Note:** the following presentation contains updates as of December 2019, however approvals though April 2020 are included.



DTG 50mg: FILING TIMELINES





Note: Each triangle represents a manufacturer and timelines represent date of filing

10 MPP LICENSEES HAVE DEVELOPED GENERIC DTG 50MG, OF WHICH, 8 COMPANIES ARE READY TO SUPPLY THE PRODUCT

Companies Approved*: Aurobindo, Emcure, Cipla, Hetero, Laurus Labs, Micro Labs, Mylan, Strides (GF ERP valid through Aug 2020)

4 licensees awaiting WHO-PQ approvals | 2 licensees awaiting USFDA approvals | 2 licensees are in development stage



DTG 50mg: COUNTRY-WISE FILING STATUS

Generic DTG 50mg has been filed in 59 countries, of which approval has been received from 40 countries.

Total filing coverage till date is 91.3% of PLHIV in LMICs

	ADDDOV	ED (40)			
APPROVED (40) 83.8% PLHIV in LMICs					
Anguilla*	Ethiopia	Mozambique	St. Lucia*		
Antigua and Barbuda*	Ghana	Myanmar	St. Vincent & the Grenadines*		
Bahamas*	Grenada*	Namibia	Tanzania		
Barbados*	Guatemala	Nicaragua	Thailand*		
Botswana	India	Niger	Turks and Caicos*		
Cambodia	Iran*	Nigeria	Uganda		
Congo, Dem. Rep.	Kenya	Peru*	Ukraine		
Congo, Rep.	Malawi	Philippines	Uzbekistan		
Côte d'Ivoire	Mauritius	Rwanda	Zambia		
Dominica*	Montserrat*	South Africa	Zimbabwe		

FILED (19) 7.5% PLHIV in LMICs			
Benin	Indonesia		
Burkina Faso	Kyrgyzstan		
Burundi	Mali		
Cameroon	Pakistan		
Chile*	Senegal		
Costa Rica*	Sri Lanka		
El Salvador	Tajikistan		
Gabon	Тодо		
Guyana	Vietnam		
Honduras			

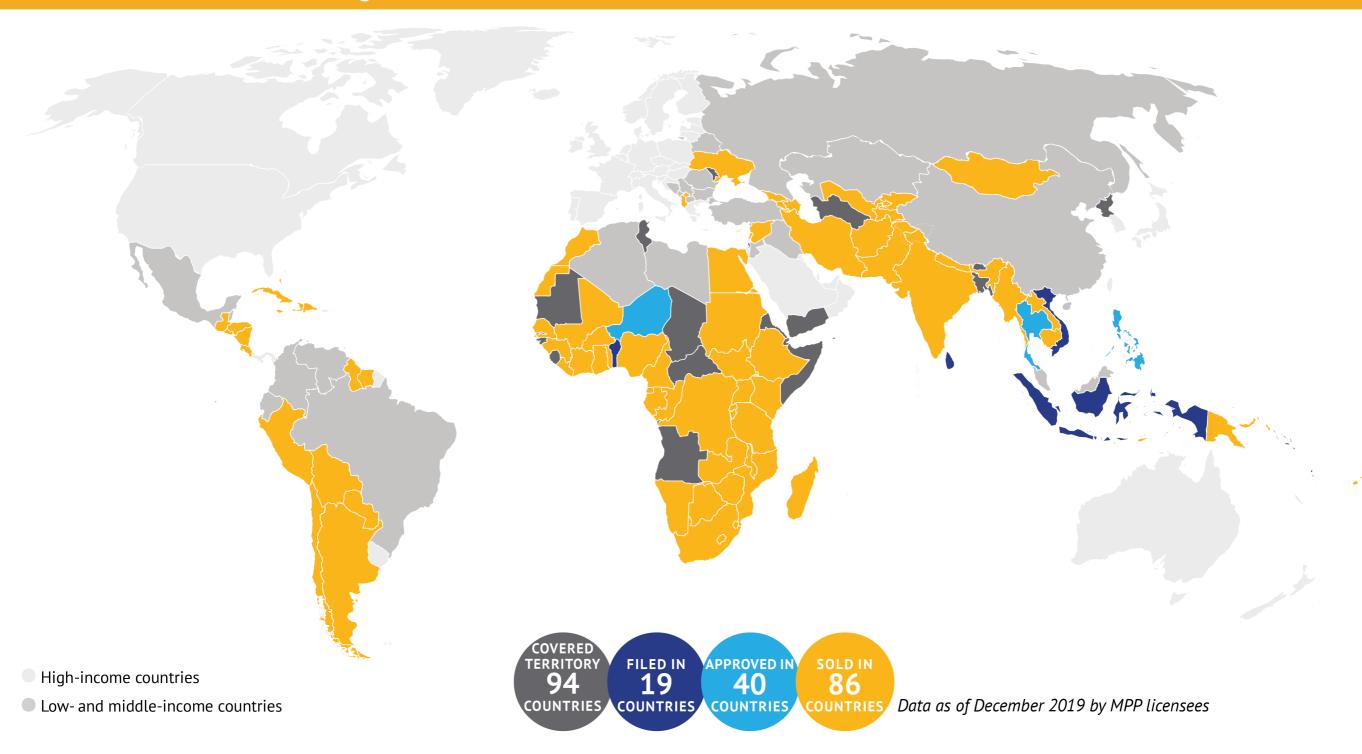
Note: Sales may occur in countries in the absence of registration via procurement channels, registration waivers and/or exemptions

^{1.} New filings and approvals in green vis-à-vis last update (Q3-19)

^{2.} Countries not included in DTG Adult licence but supply by MPP licensees permitted if no patent is being infringed in that country (*)

^{3.} Countries where DTG has been sold indicated in **bold type**

DTG 50mg sales have occurred in 86 countries in which 84% of PLHIV live





TDF/3TC/DTG (TLD): FILING TIMELINES





12 MPP LICENSEES HAVE DEVELOPED GENERIC TLD, OF WHICH, 7 COMPANIES ARE READY TO SUPPLY THE PRODUCT:

Companies Approved: Aurobindo, Cipla, Hetero, Laurus Labs, Macleods, Mylan, Sun Pharma

6 licensees awaiting WHO-PQ approvals | 2 licensees with USFDA | 3 other licensees are still developing this product



TDF/3TC/DTG: COUNTRY-WISE FILING STATUS

Generic TLD has been filed in 60 countries, of which approval is received from 39 countries.

Total filing coverage till date is 93.9% of PLHIV in LMICs

APPROVED (39) 84.9% PLHIV in LMICs					
Anguilla*	Congo, Rep.	Lesotho	St. Vincent & the Grenadines*		
Antigua & Barbuda*	Côte d'Ivoire	Malawi	Tanzania		
Bahamas*	Dominica*	Mauritania	Turks & Caicos*		
Barbados*	Eswatini	Mauritius	Uganda		
Benin	Ethiopia	Montserrat*	Ukraine		
Botswana	Gabon	Mozambique	Uzbekistan		
Cambodia	Ghana	Nigeria	Vietnam		
Cameroon	Grenada*	Rwanda	Zambia		
Chad	India	South Africa	Zimbabwe		
Congo, Dem. Rep.	Kenya	St. Lucia*			

FILED (21) 9.0% PLHIV in LMICs			
Burkina Faso	Namibia		
Burundi	Nicaragua		
Chile*	Niger		
El Salvador	Pakistan		
Guatemala	Philippines		
Haiti	Senegal		
Indonesia	Sierra Leone		
Kyrgyzstan	Sudan		
Madagascar	Thailand*		
Mali	Togo		
Myanmar			

Note: Sales may occur in countries in the absence of registration via procurement channels, registration waivers and/or exemptions

^{1.} New filings and approvals in green vis-à-vis last update (Q3-19)

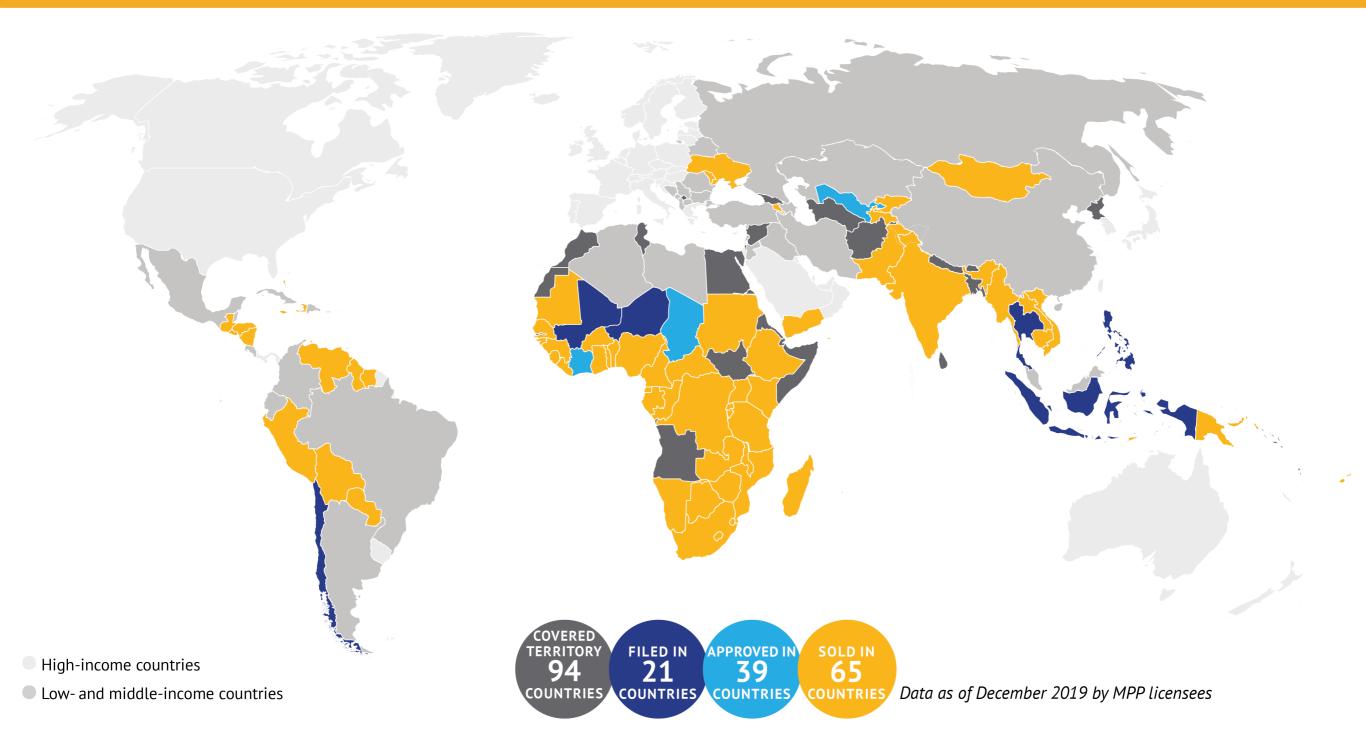
^{2.} Countries not included in DTG Adult licence but supply by MPP licensees permitted if no patent is being infringed in that country (*)

^{3.} Countries where TDF/3TC/DTG has been sold indicated in **bold type**



MPP IMPACT MAP: TDF/3TC/DTG (TLD)

MPP licensees have supplied generic TLD across 65 countries in which 81% of PLHIV live





DTG & TLD: COUNTRIES OF SALE (2017-2019)

COUNTRIES OF SALE (96)						
Afghanistan	Burkina Faso	Egypt	Haiti	Mali	Paraguay	Tanzania
Albania	Burundi	El Salvador	Honduras	Mauritania	Peru	Timor-Lest
Anguilla	Cambodia	Equatorial Guinea	India	Mauritius	Rwanda	Togo
Antigua and Barbuda	Cameroon	Eswatini	Iran	Moldova	Saint Kitts & Nevis	Turks & Caid
Argentina	Cape Verde	Ethiopia	Jamaica	Mongolia	Saint Lucia	Uganda
Armenia	Central African Republic	Fiji	Kenya	Morocco	Saint Vincent	Ukraine
Azerbaijan	Chile	Gabon	Kosovo	Mozambique	Senegal	Uzbekista
Bahamas	Congo	Georgia	Kyrgyzstan	Myanmar	Sierra Leone	Venezuela
Barbados	Congo, Dem. Rep.	Ghana	Laos	Namibia	South Africa	Vietnam
Benin	Costa Rica	Grenada	Lebanon	Nepal	South Sudan	Yemen
Bermuda	Cote d'Ivoire	Guatemala	Lesotho	Nicaragua	Sudan	Zambia
Bolivia	Cuba	Guinea	Liberia	Nigeria	Suriname	Zimbabwe
Botswana	Dominica	Guinea-Bissau	Madagascar	Pakistan	Syria	
British Virgin Islands	Dominican Republic	Guyana	Malawi	Papua New Guinea	Tajikistan	

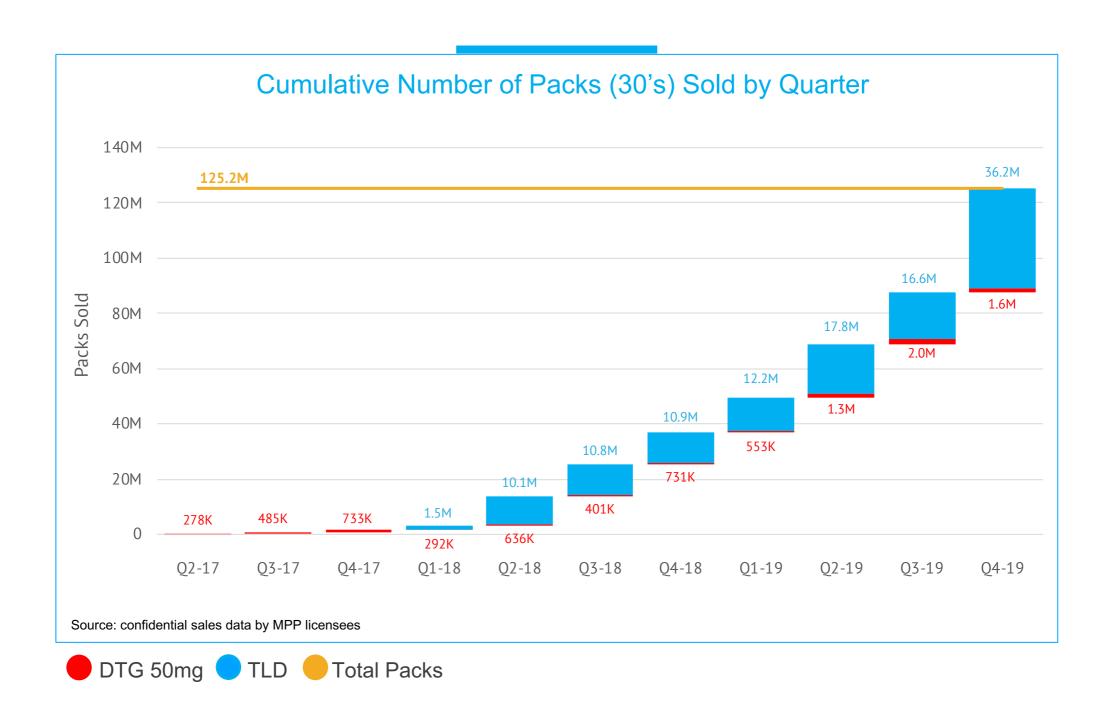
Analysis include sales of DTG 50mg and TDF/3TC/DTG:

Sales of DTG 50mg only

Sales of TLD only

CUMULATIVE PACKS SOLD: TLD & DTG 50mg (2017-2019)

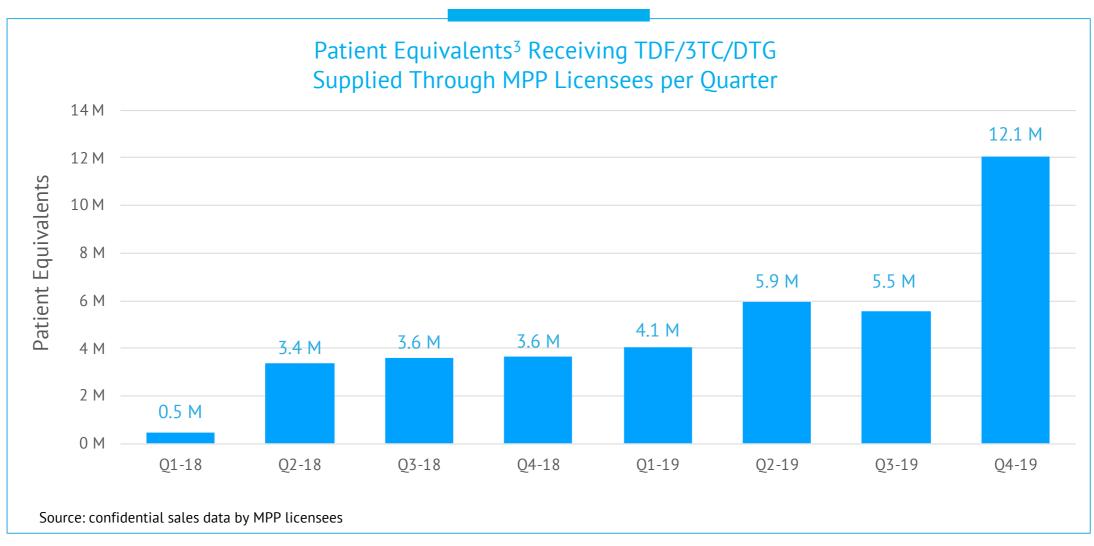
116.15 million packs of TLD and 9.03 million packs of DTG 50mg sold to-date





PATIENT EQUIVALENTS RECEIVING TDF/3TC/DTG (TLD) THROUGH MPP LICENSEES

At least 6.90 million people living with HIV (PLHIV) are on generic DTG-based treatment¹ (31.6% of PLHIV on ART in LMICs)²





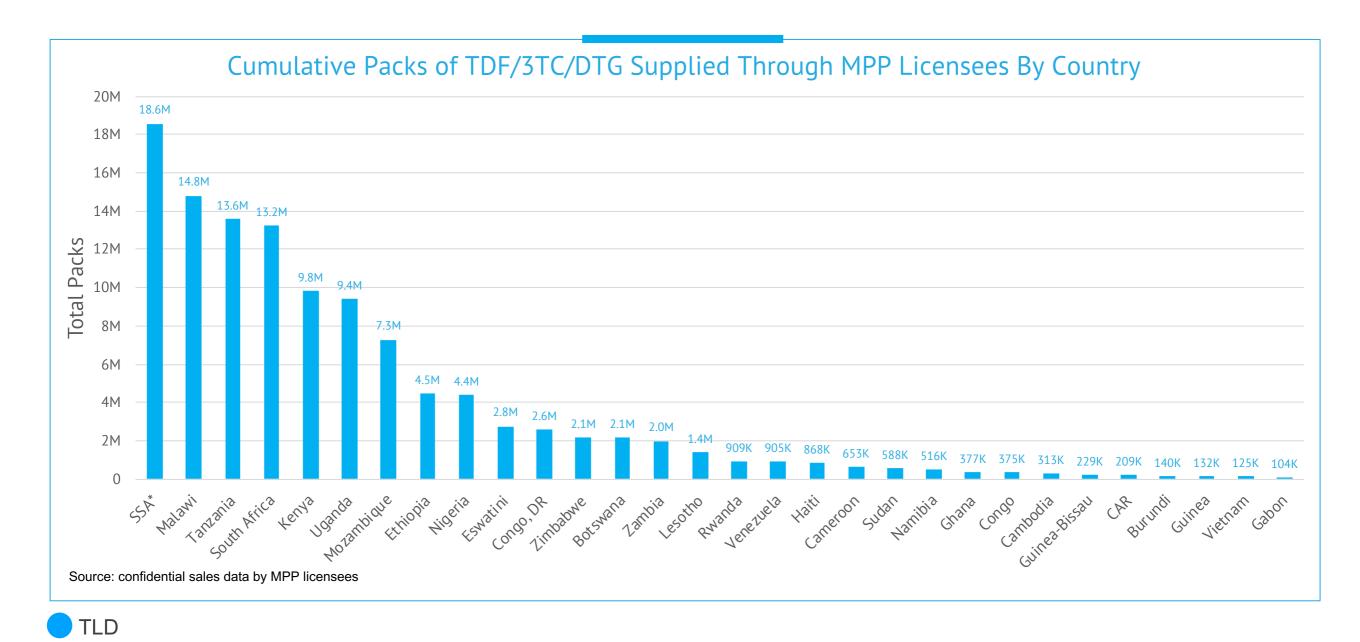
Note:. Analysis excludes sales of DTG 50mg singles. Fluctuation in sales volumes between Q2 to Q4-19 could be related to bulk orders and delays related to RSA's roll out

¹PLHIV on DTG-based treatment calculated by dividing total packs sold in 2019 by 12 (months); ²According to AIDSinfo online and World Bank income classifications: 21.84M PLHIV on ART in LMICs (2019); ³ "Patient Equivalents" by quarter calculated by dividing the total (30's) packs of TLD sold in a quarter by 3 (months)



TOP COUNTRY RECIPIENTS OF TLD (2018-2019)

5 countries comprise more than 50% of the TLD Market in LMICs (by volume): Malawi, Tanzania, South Africa, Kenya, & Uganda

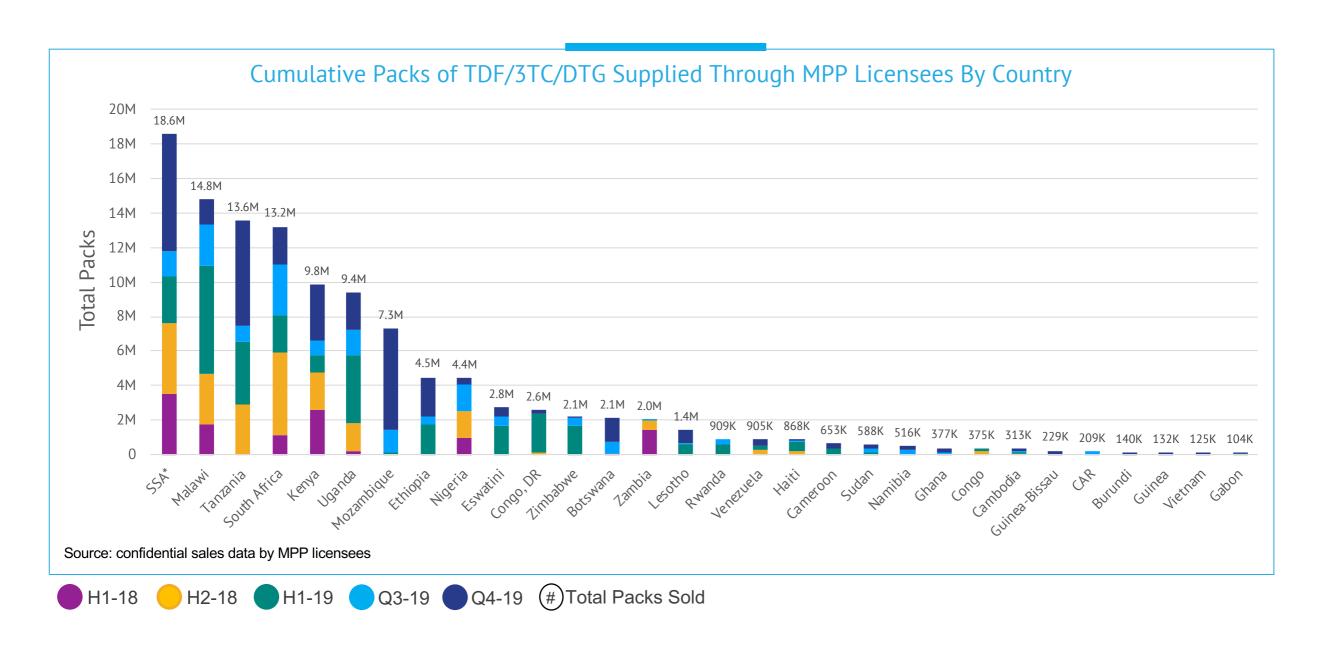


*Sub-Saharan Africa (SSA): non-identified countries by which sales were made through procurement agents

Note: Analysis excludes countries where <100,000 packs were sold (<8,300 patient-years of treatment); Packs of 90's converted to 30's for this analysis



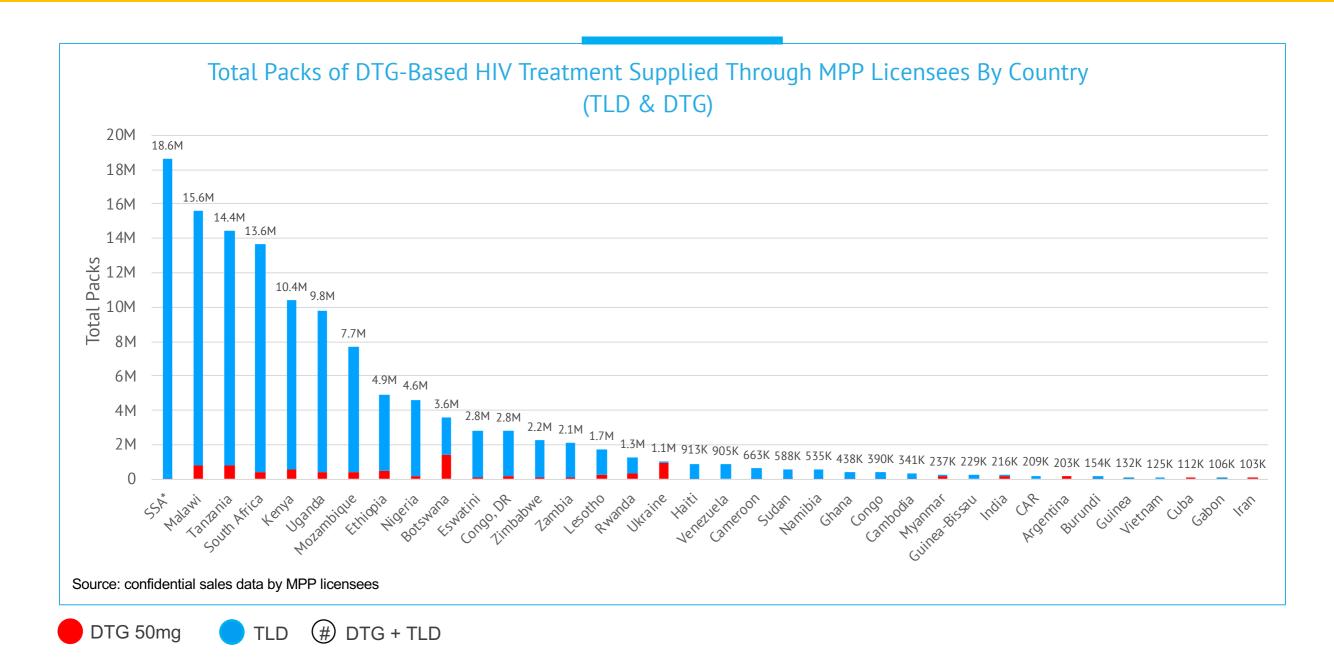
The rate of TLD scale-up continues to increase, with more than double the amount of TLD packs sold in Q4-19 vs. Q3-19





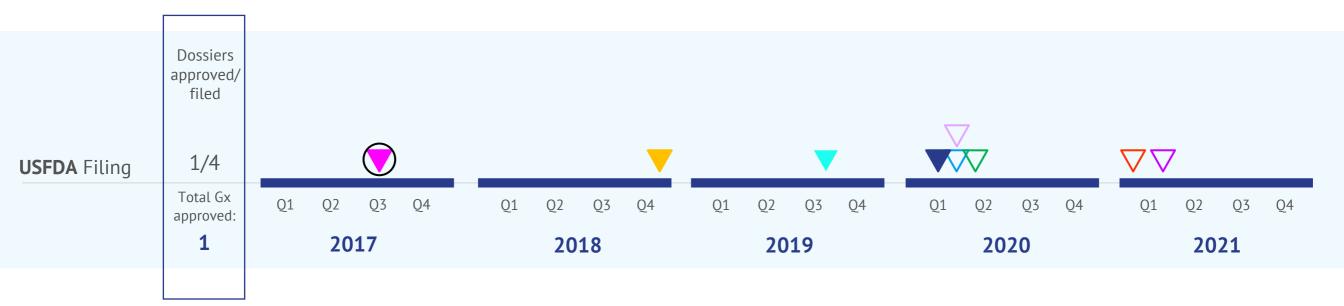
TOP COUNTRY RECIPIENTS OF DTG & TLD (2017-2019)

Ratio of DTG 50mg: TLD in-country sales suggests DTG 50mg is largely being used for TB-coinfection and/or 2L ART (Exceptions include Argentina, India, Iran, Botswana, Myanmar, Rwanda, & Ukraine where DTG accounts for >25%)





TAF/FTC/DTG (TAF-ED): FILING TIMELINES





ALTHOUGH, TAF IS NOT YET A PART OF WHO EOI, MPP LICENSEES ARE DEVELOPING GENERIC TAF/FTC/DTG, OF WHICH:

Mylan is approved and has commercialised

4 licensees in total have filed with USFDA | 7 additional licensees are in development stages



TAF/FTC/DTG: COUNTRY-WISE FILING STATUS

Generic TAF/FTC/DTG has been filed in 26 countries, of which approval has been received from 8 countries.

Total filing coverage till date is 64.1% of PLHIV in LMICs

APPROVED (8) 19.0% PLHIV in LMICs	
Botswana	
Cambodia	
Congo, Dem. Rep.	
Congo, Rep.	
India	
Malawi	
Zambia	
Zimbabwe	

FILED (18) 45.1% PLHIV in LMICs

For confidential purposes, the list
of filed countries will be disclosed
when more than one approval from
stringent regulatory authorities
(SRAs) is granted

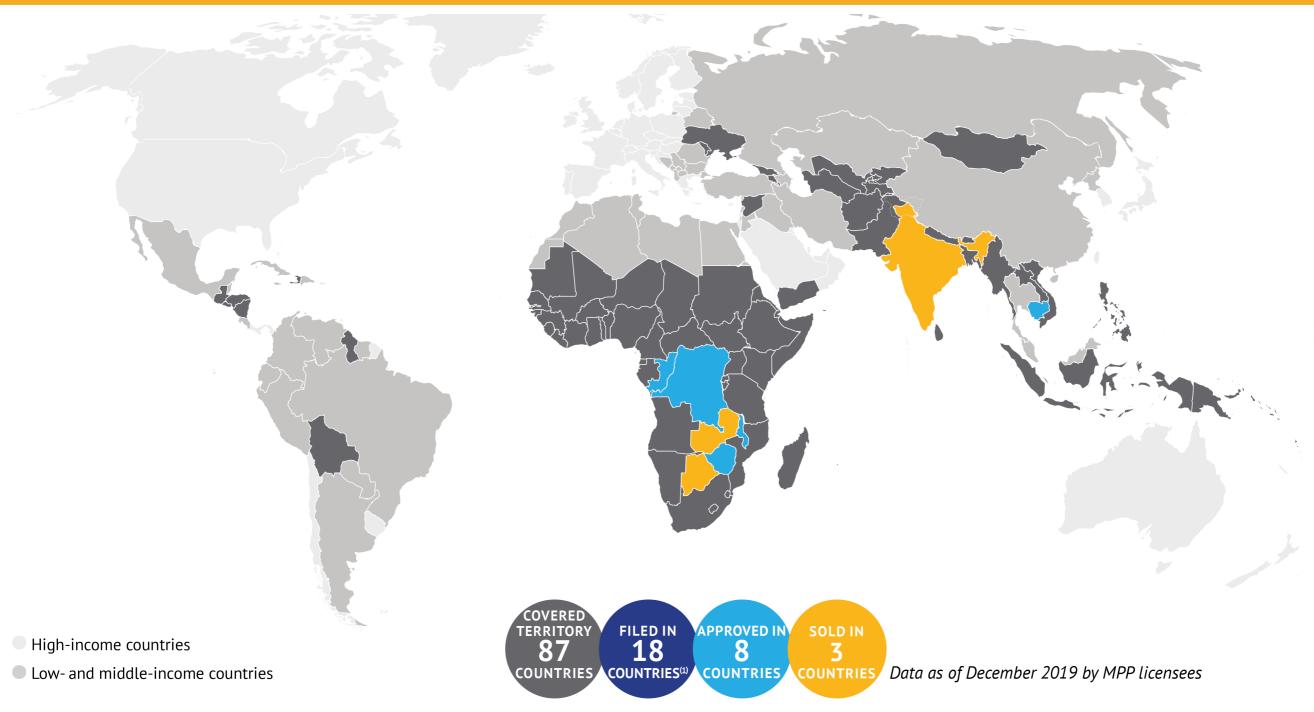
^{1.} New filings and approvals in green vis-à-vis last update (Q3-19)

^{2.} Countries where TDF/3TC/DTG has been sold indicated in **bold type**



MPP IMPACT MAP: **TAF/FTC/DTG (TAF-ED)**

MPP licensees have sold 44,759 packs of TAF/FTC/DTG across 3 countries: **Botswana, India, Zimbabwe**



⁽¹⁾ For confidentiality purposes, the list of filed countries will be disclosed when approval from a stringent regulatory authority (SRA) for this product will have been granted to more than one licensee.



THANK YOU