

UPDATE ON PROGRESS OF MPP SUBLICENSEES

TILL DECEMBER 2022

MEDICINESPATENTPOOL.ORG







This presentation showcases the progress made by MPP licensees (generic pharmaceutical companies).



• To date, MPP has signed agreements with 18 patent holders for 14 HIV antiretrovirals, 1 HIV technology platform, 3 hepatitis C direct-acting antivirals, 1 tuberculosis treatment, 4 longacting technologies, 1 non-communicable disease treatment, 3 experimental oral antiviral treatments for COVID-19 and 12 Covid-19 technologies.



• Licensed products are developed by multiple MPP licensees, with an aim of encouraging competition, reducing market prices and providing faster access to medicines for people living in low- and middle-income countries (LMICs).



• Generic medicines are developed and filed with stringent regulatory authorities such as the U.S. Food and Drug Administration (USFDA) and the World Health Organization prequalification (WHO-PQ), ensuring availability of quality assured products in LMICs.



• This presentation gives a snapshot of the development of each licensed product and when the product may be filed with regulators. It also shows which countries the local filing is taking place in and when – thereby providing a clearer picture of availability of new formulations in each country.





MPP PARTNERSHIPS WITH **INNOVATORS**

abbvie

lopinavir, ritonavir (adults) lopinavir, ritonavir (paediatric)

Boehringer Ingelheim

nevirapine (non-assert)

Bristol-Myers Squibb

atazanavir

Gilead

bictegravir cobicistat elvitegravir emtricitabine tenofovir alafenamide tenofovir disoproxil fumarate

Janssen

darunavir (paediatric; non-assert)

MSD

raltegravir (paediatric)

NIH

darunavir related

ViiV Healthcare

abacavir (paediatric) dolutegravir (paediatric) dolutegravir (adults) dolutegravir (adults, for AZ, BY, KZ, MY)

Roche

Tuberculosis

valganciclovir (pricing agreement)

Technologies

(e.g., long-acting, diagnostics)

MSD

molnupiravir

Pfizer

nirmatrelvir

Shionogi

ensitrelvir







Abbvie

glecaprevir/pibrentasvir

Bristol-Myers Squibb

daclatasvir

Pharco Corporation

ravidasvir



Johns Hopkins University

sutezolid

HIV

Pfizer

sutezolid

ViiV Healthcare

Cabotegravir LA for HIV Prep

University of Liverpool

solid drug nanoparticles technology (disease agnostic) ETFD LAI (TB, malaria, HCV)

CSIC

serological antibody diagnostic test (COVID-19)





Medincell

LA technology for Malaria vector control

Tandem Nano Ltd

LA technologies for HCV, TB and Malaria treatment

University of Washington

TLD LAI (HIV)

NIH

serological antibody diagnostic test (COVID-19)



Novartis nilotinib



abacavir (paed)

Aurobindo

atazanavir

Aurobindo Emcure Cipla Mylan Desano

bictegravir

Adcock Ingram Arene Lifesciences Aurobindo Biochem

Desano Emcure Laurus Labs Lupin

MacLeods

cobicistat

Adcock Ingram Biochem Emcure **Arene Lifesciences** Lupin

dolutegravir

Laurus Labs ** Adcock Ingram** Lupin ** Arene Lifesciences Celltrion** MacLeods ** Cipla ** Mangalam Desano ** Micro Labs ** Emcure ** Mylan ** Hetero ** Strides** Langhua Sun Pharma ** elvitegravir Arene Lifesciences Limited Adcock Ingram Biochem

emtricitabine

Adcock Ingram Arene Lifesciences Aurobindo Biochem Desano Emcure Laurus Labs Lupin

MacLeods

Natco

Emcure Hetero# Lupin Sun Pharma Micro Labs Limited

lopinavir, ritonavir

Adcock Ingram Arene Lifesciences Aurobindo Cipla* Desano

Raltegravir / Paed

Lupin

Emcure

tenofovir alafenamide

Langhua Adcock Ingram Laurus Labs Arene Lupin Lifesciences Aurobindo MacLeods Biochem Micro Labs Desano Natco

Tenofovir, disoproxil, fumarate

Adcock Ingram Arene Lifescience Biochem

sutezolid / **John Hopkins** University

TB Alliance

sutezolid / Pfizer

Bill & Melinda **Gates Foundation**

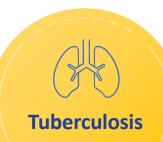
MPP PARTNERSHIPS WITH **GENERICS**











daclatasavir

Beximco Pharma Mylan Cipla Natco Hetero Zydus Cadila Laurus Labs

glecaprevir/pibrentasvir

Arene Lifesciences

Mylan Remington USV

molnupiravir

Incepta Arene Lifesciences BDR Langhua Beximco Pharma Laurus Labs Biophore Lonzeal MSN Bright Gene **CPT Pharma** Natco Desano Remington **SMS Pharma** Dongbang FTL Fosun Pharma Stella Kimia Pharma Strides Hikma Universal Corporation ltd

nirmatrelvir

Amneal Apeloa Arene Lifesciences Aurobindo Biocon Cadila Pharmaceuticals Celltrion Cipla Darnitsa Desano Divis

Dr. Reddy's Dongbang FTL Emcure Fosun Pharma Glenmark Granules Hetero Hikma

Huahai

Jiuzhou

Laurus Labs

MacLeods Magnachem MSN Mylan Neolpharma Remington **SMS Pharma** Stella Strides Sun Pharma **Torrent Pharma** Zdravlje Leskovac



MPP'S NETWORK OF GENERIC MANUFACTURERS AND PRODUCT **DEVELOPERS ARE IN 14 COUNTRIES**



Bangladesh Incepta

China Apeloa Beximco Aurisco Biochem BrightGene

Desano

Fosun Jiuzhou Huahai Langhua Lonzeal

Dominican Republic Magnachem

India Amneal Arene Aurobindo BDR Biocon

Biophore Cadila Cipla Divi's Dr Reddy's Emcure

Glenmark Granules Hetero Laurus Lupin

Mangalam Micro Labs MSN Natco **SMS Pharma** Macleods Strides

Sun Torrent USV Viatris Zydus Cadila Indonesia Kimia Farma **Jordan**

Mexico Hikma Neolpharma

Kenya

UCL

Pakistan Remington

Serbia FHI Zdravlje

South Korea Adcock Ingram Celltrion

South Africa

CPT

Dongbang

Ukraine Darnitsa

Vietnam Stella

> **Product** developers TB Alliance* Gates MRI*



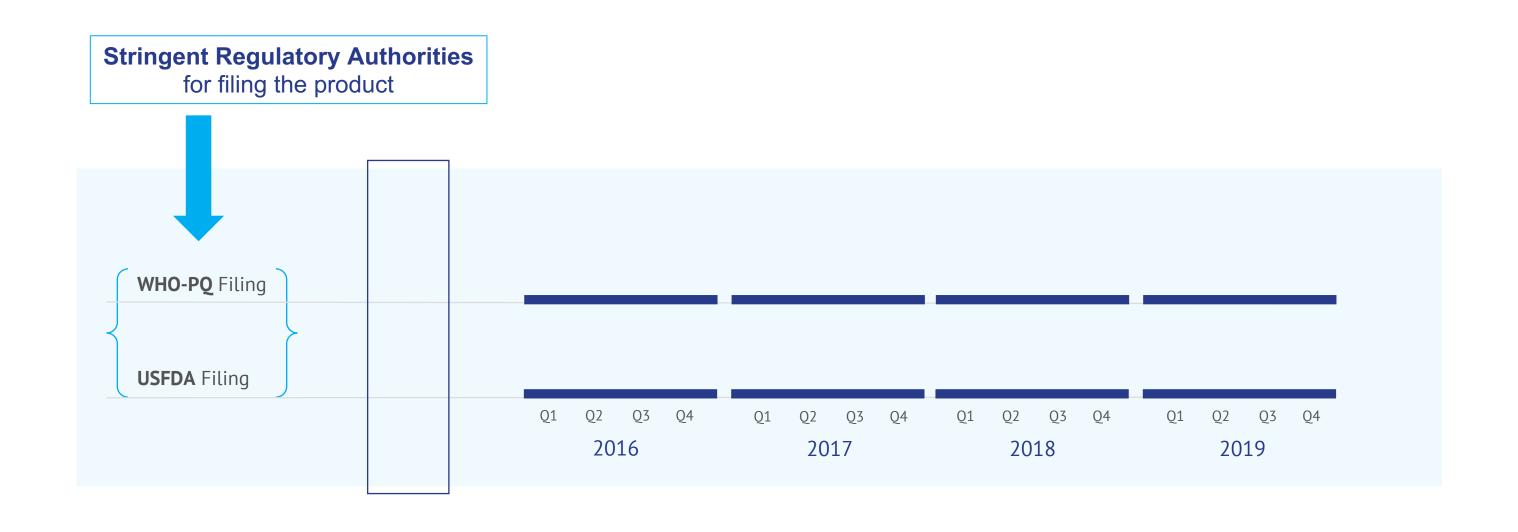
Triangle charts represent a comparative analysis of each MPP licensee's filings with WHO-PQ and/or USFDA for each product country





See following slides for explanation

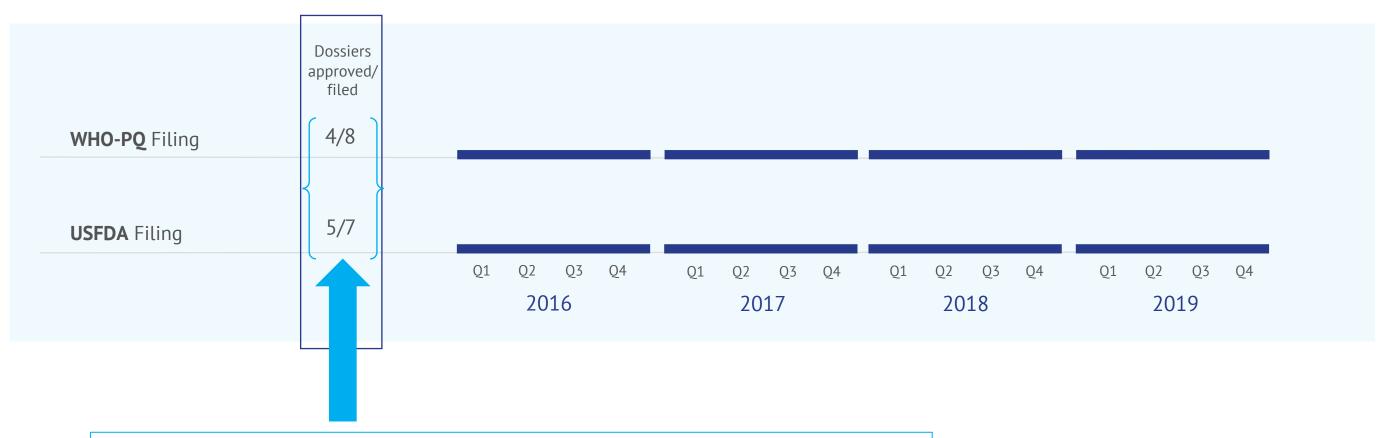












No. of companies that have **received approval out of total companies filed** with WHO-PQ/USFDA





that here of companies that have been approved by which a green by

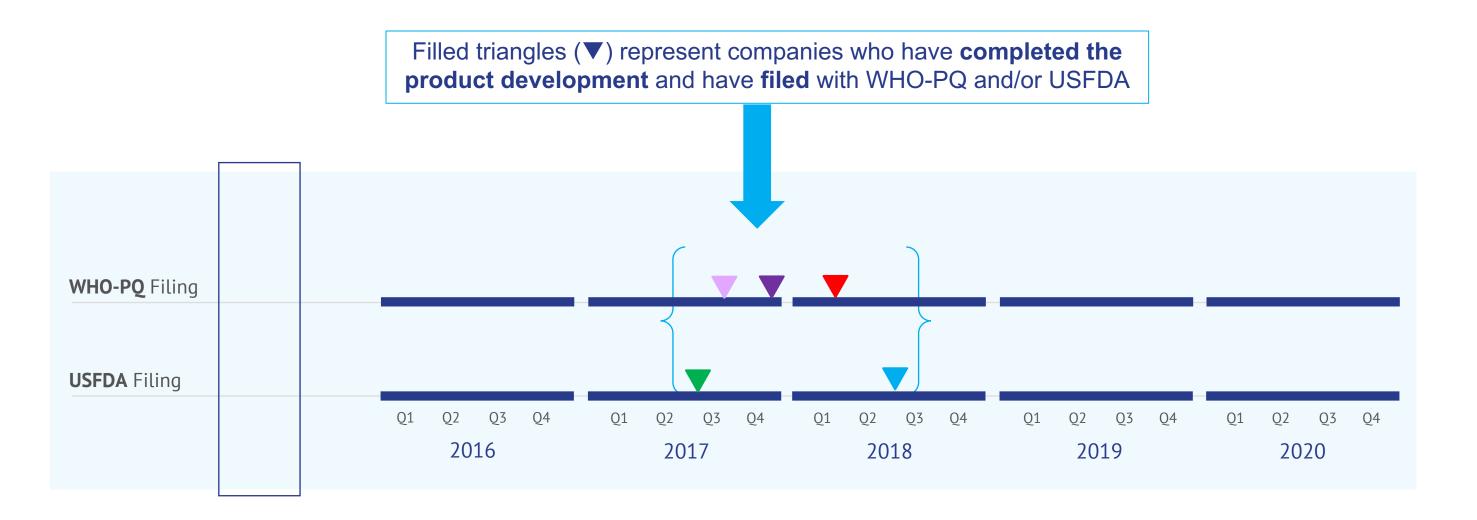




VCompanies planning to file

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





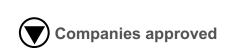
Companies filed

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



Circled triangles represent companies who have **completed the product development** and have **received approvals** from WHO-PQ and/or USFDA





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





CURRENT SUBLICENSEES

FOR VIIV-MPP DOLUTEGRAVIR LICENCE

16 dolutegravir sublicensee agreements

































^{*}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.









11 MPP LICENSEES HAVE DEVELOPED DTG 50MG, OF WHICH ALL 11 ARE READY TO COMMERCIALIZE THE PRODUCT

Licensees Approved*: Aurobindo, Cipla, Desano, Emcure, Hetero, Laurus, Macleods, Micro Labs, Mylan, Strides, Sun Pharma

3 licensees awaiting USFDA approval | 1 additional licensee developing



Generic DTG 50mg has been filed in 74 countries, of which approval has been received in 59 countries Filings have occurred where 92.6% of PLHIV^ reside in the licensed territory#

DTG 50MG: COUNTRY WISE FILING STATUS

| | | | APPROVED (59) 88.5% PLHIV | | | |
|-------------------------|---------------|-----------|------------------------------|-------------|--------------------------------------|------------|
| Anguilla* | Botswana | Dominica* | Kazakhstan | Namibia | Saint Lucia* | Ukraine |
| Antigua and Barbuda* | Burundi | Ethiopia | Kenya | Nicaragua | Saint Vincent and the Grenadines* | Uruguay* |
| Armenia | Cambodia | Ghana | Kyrgyzstan | Niger | South Africa | Uzbekistan |
| Azerbaijan | Chad | Grenada | Malawi | Nigeria | Tajikistan | Zambia |
| Bahamas* | Chile* | Guatemala | Malaysia | Pakistan | Tanzania | Zimbabwe |
| Barbados* | Congo | Honduras | Mauritius | Panama* | Thailand* | |
| Belarus | Congo, DR | India | Montserrat* | Peru* | Turkmenistan | |
| Benin | Costa Rica* | Indonesia | Mozambique | Philippines | Turks and Caicos Islands* | |
| Bhutan | Côte d'Ivoire | lran* | Myanmar | Rwanda | Uganda | |

| | FILED (15) 4.1% PLHIV | |
|------------------------|--------------------------|-----------|
| Bolivia | Gabon | Moldova |
| Burkina Faso | Guyana | Morocco |
| Cameroon | Jamaica | Senegal |
| Dominican Republic* | Madagascar | Sri Lanka |
| El Salvador | Mali | Viet Nam |

MPP-ViiV DTG licence agreem

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

New filings in green vis-à-vis last update (Q3-22)

Countries where DTG has been sold indicated in **bold type**

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

[^] People living with HIV





DTG adult (50 mg)

DTG 50mg sales have occurred in **125** countries in which **99.9%** of PLHIV[^] reside in the licensed territory[#]

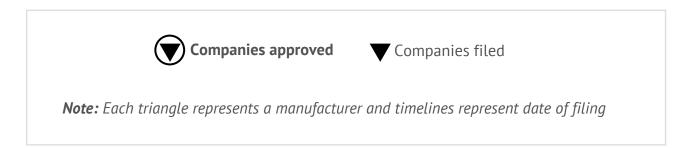


Note: Sales may occur in countries in the absence of registration via procurement channels, registration waivers and/or exemptions ^ People living with HIV



TDF/3TC/DTG (TLD): FORMULATION DEVELOPMENT TIMELINES





13 MPP LICENSEES HAVE DEVELOPED TDF/3TC/DTG, OF WHICH ALL 13 ARE READY TO COMMERCIALIZE THE PRODUCT

Licensees Approved*: Aurobindo, Celltrion, Cipla, Desano, Emcure, Hetero, Laurus, Lupin, Macleods, Micro Labs, Mylan, Strides, Sun Pharma

1 licensee awaiting WHO-PQ approval | 4 licensees awaiting USFDA approval



Generic TDF/3TC/DTG has been filed in 80 countries, of which approval has been received in 60 countries Filings have occurred where 93.7% of PLHIV reside in the licensed territory#

APPROVED (60) 90.8% PLHIV Anguilla* Côte d'Ivoire Kazakhstan Montserrat* Uganda **Botswana** Rwanda Antiqua and **Burkina Faso** Ukraine Mozambique Dominica* Saint Lucia* Kenya Barbuda* Saint Vincent and the Myanmar Uzbekistan Armenia Burundi **Ethiopia** Kyrgyzstan Grenadines* **Viet Nam** Azerbaijan Cambodia Gabon Madagascar Namibia **South Africa Tajikistan** Bahamas* Cameroon Gambia Malawi Niger Zambia Barbados* Chad Ghana Malaysia Nigeria **Tanzania Zimbabwe** Grenada* **Thailand** Belarus Chile* Mali Panama* Congo India Mauritania Peru* Turkmenistan Benin **Turks and Caicos** Congo, DR **Philippines** Mauritius Bhutan Indonesia Islands*

TDF/3TC/DTG (TLD): COUNTRY WISE FILING STATUS

| Now filings and | approvals in green | vic à vic la | st undata (O2 22) |
|-----------------|--------------------|---------------|-------------------|
| New Hillnas and | approvais in dreen | vis-a-vis ias | si ubdate (U3-ZZ) |

Countries where TLD has been sold indicated in **bold type**

MPP-ViiV DTG licence agreemen

channels, registration waivers and/or exemptions

| 2.9% PLHIV | | | | | |
|-----------------------|-----------|----------|--------------|--|--|
| Bangladesh | Guatemala | Moldova | Sierra Leone | | |
| Bolivia | Guinea | Morocco | Sri Lanka | | |
| Costa Rica* | Guyana | Nepal | Sudan | | |
| Dominican Republic | Jamaica* | Pakistan | Togo | | |
| El Salvador | Lebanon* | Senegal | Uruguay* | | |
| | | | | | |

FILED (20)

Note: Sales may occur in countries in the absence of registration via procurement

Data as of December 2022

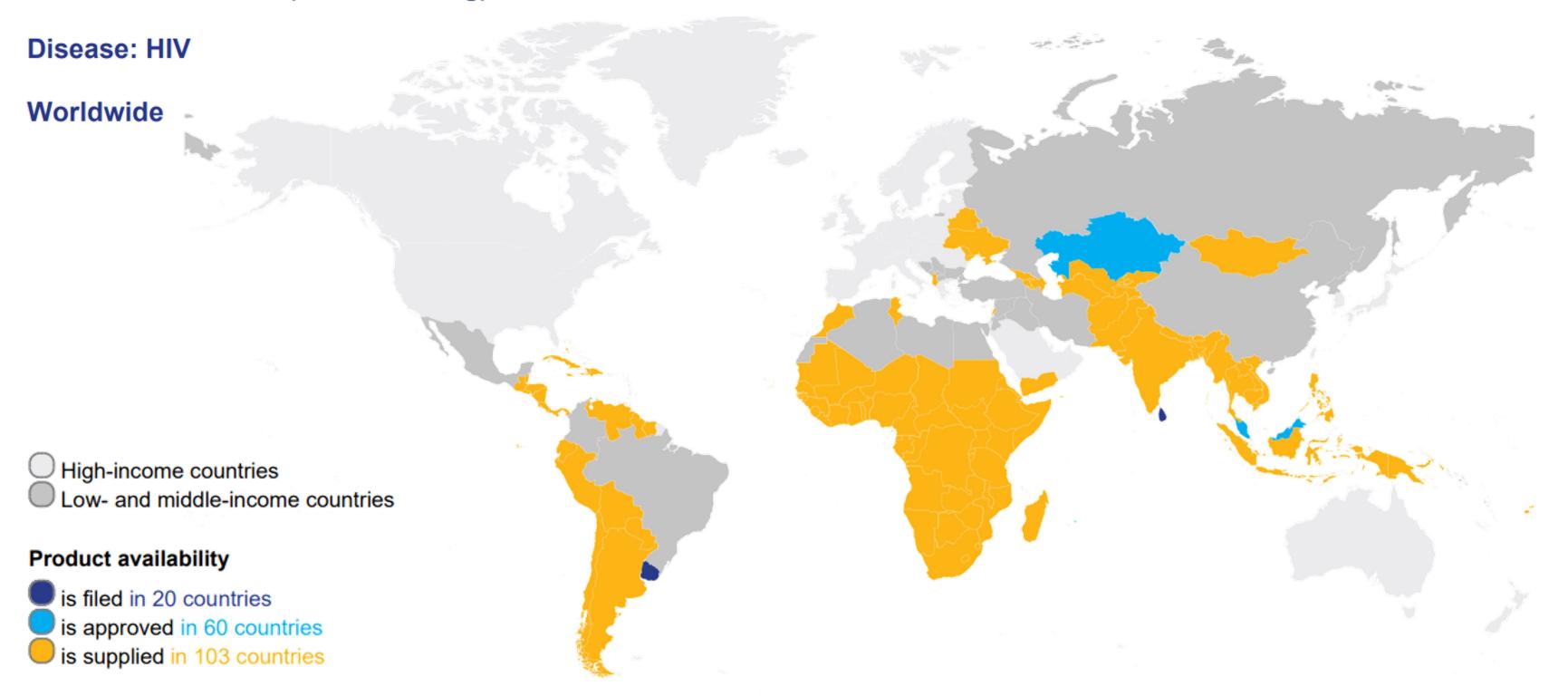
^{*} Countries not included in DTG Adult licence but supply by MPP licensees permitted if no patent is being infringed in that country

^ People living with HIV



TLD - TDF/3TC/DTG (300/300/50 mg)

TDF/3TC/DTG sales have occurred in **103** countries in which **99.15%** of PLHIV[^] reside in the licensed territory[#]



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

^ People living with HIV



DTG 50MG & TDF/3TC/DTG (TLD): COUNTRIES OF SALE- (2017 TO DECEMBER 2022)

| Countries of Sale (126), where 99.9% of PLHIV^ covered by the license reside# | | | | | | | | |
|---|--------------------------|--------------------|---------------|--|----------------------|----------------------------------|--------------------------|-----------------------------|
| Afghanistan | Bermuda | Costa Rica | Gambia (the) | Kenya | Moldova, Republic of | Paraguay | Sudan | Uzbekistan |
| Albania | Bhutan | Côte d'Ivoire | Georgia | Kosovo | Mongolia | Peru | Suriname | Venezuela |
| Algeria | Bolivia | Cuba | Ghana | Kyrgyzstan | Montserrat | Philippines | Syrian Arab Republic | Viet Nam |
| Angola | Botswana | Djibouti | Grenada | Lao People's Democratic Republic (the) | Morocco | Rwanda | Tajikistan | Virgin Islands (British) |
| Anguilla | Burkina Faso | Dominica | Guatemala | Lebanon | Mozambique | Saint Kitts and Nevis | Tanzania | Yemen |
| Antigua and Barbuda | Burundi | Dominican Republic | Guinea | Lesotho | Myanmar | Saint Lucia | Thailand | Zambia |
| Argentina | Cabo Verde | Ecuador | Guinea-Bissau | Liberia | Namibia | Saint Vincent and the Grenadines | Timor-Leste | Zimbabwe |
| Armenia | Cambodia | Egypt | Guyana | Libya | Nepal | Sao Tome and Principe | Togo | |
| Azerbaijan | Cameroon | El Salvador | Haiti | Madagascar | Nicaragua | Senegal | Tunisia | |
| Bahamas | Central African Republic | Equatorial Guinea | Honduras | Malawi | Niger | Seychelles | Turkmenistan | |
| Bangladesh | Chad | Eritrea | India | Malaysia | Nigeria | Sierra Leone | Turks and Caicos Islands | |
| Barbados | Chile | Eswatini | Indonesia | Mali | Oman | Somalia | Uganda | |
| Belarus | Comoros | Ethiopia | Iran | Mauritania | Pakistan | South Africa | Ukraine | |
| Belize | Congo | Fiji | Jamaica | Mauritius | Panama | South Sudan | United Arab Emirates | |
| Benin | Congo, DR | Gabon | Kazakhstan | Micronesia | Papua New Guinea | Sri Lanka | Uruguay | |

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

Sales of DTG 50mg only (n=23) Sales of TLD only (n=1)

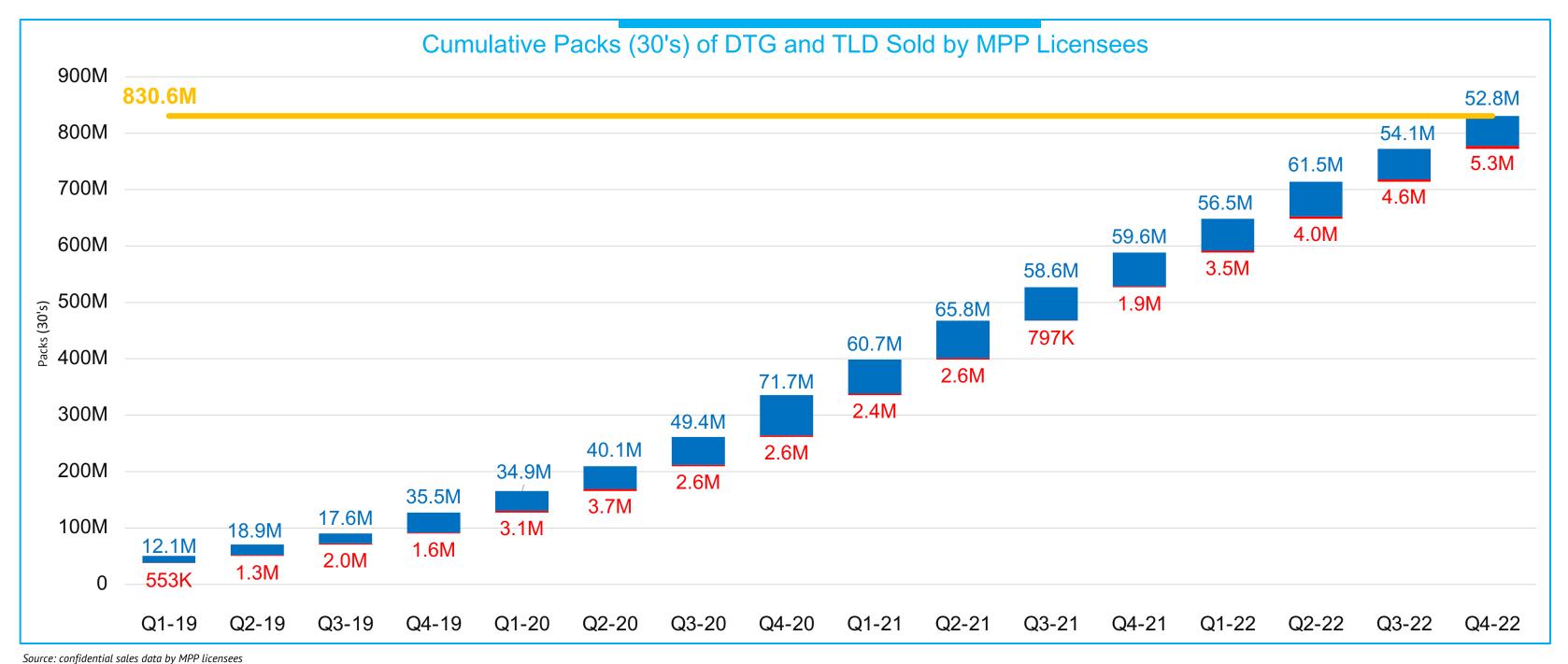


MPP-ViiV DTG licence agreement

[^] People living with HIV

CUMULATIVE PACKS SOLD: TLD & DTG 50MG (2019-DECEMBER 2022)

784.4 million packs of TLD and **46.2** million packs of DTG 50mg sold till December 2022



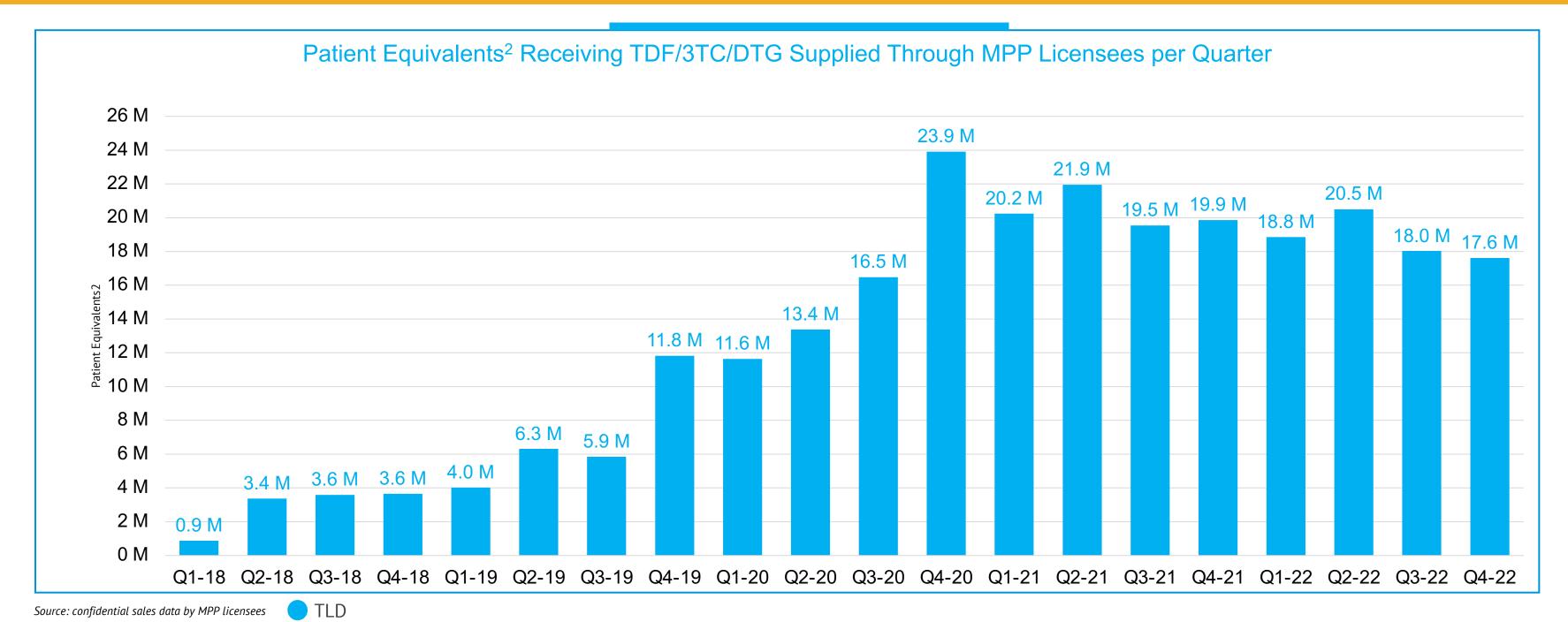
Source. confidential sales data by Mir ticensees





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

Today, at least **18.7** million people living with HIV (PLHIV) are on MPP-enabled generic TLD¹ (>80% of PLHIV on ART in LMICs)²



Note: Packs of 90 's and 180's converted to 30's for this analysis. Analysis excludes sales of DTG 50mg singles

¹Total PLHIV on TLD-based treatment calculated by dividing total packs sold in the last 4 quarters by 12 (months);

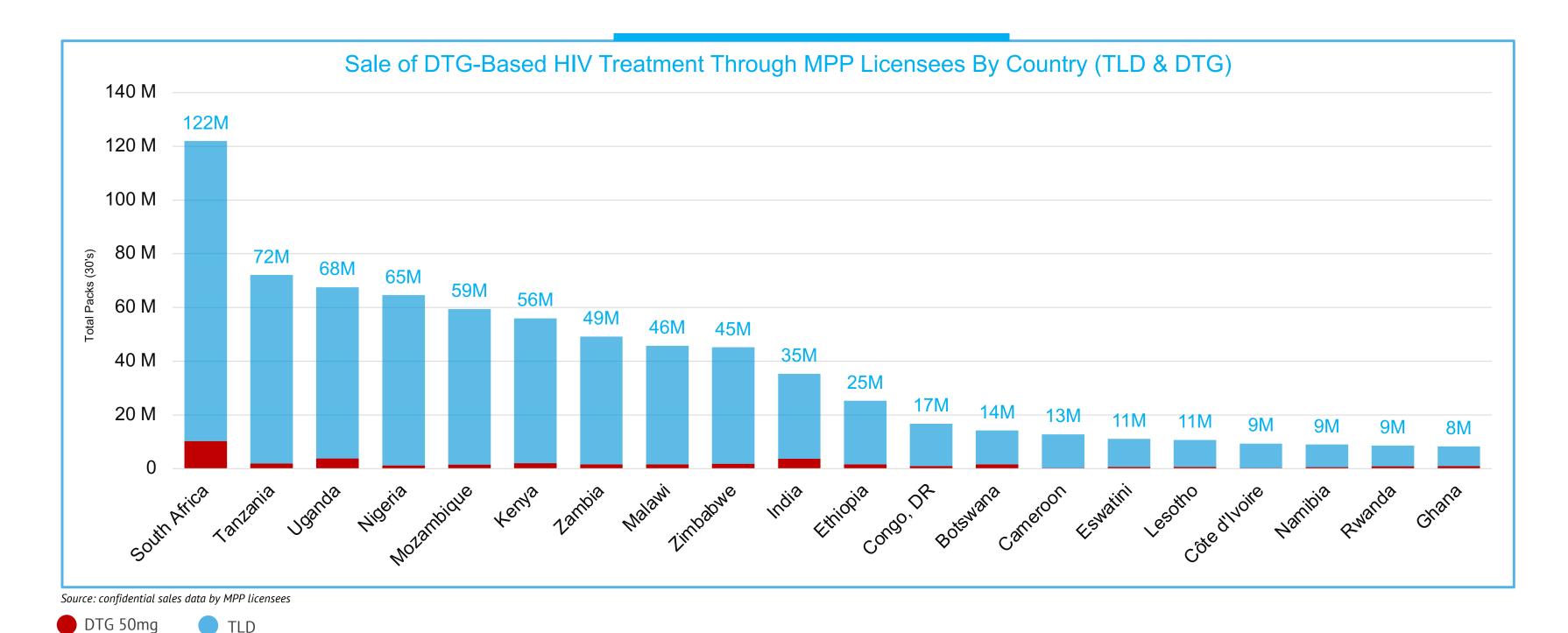
² "Patient Equivalents" per quarter calculated by dividing the total packs of TLD sold in a quarter by 3 (months)

³ Epi data sourced from Consolidated Forecast of Global ARV Demand (WHO): 22,500,000 PLHIV on DTG based (2022)

TOP COUNTRY RECIPIENTS OF DTG & TLD (2018-DECEMBER 2022)

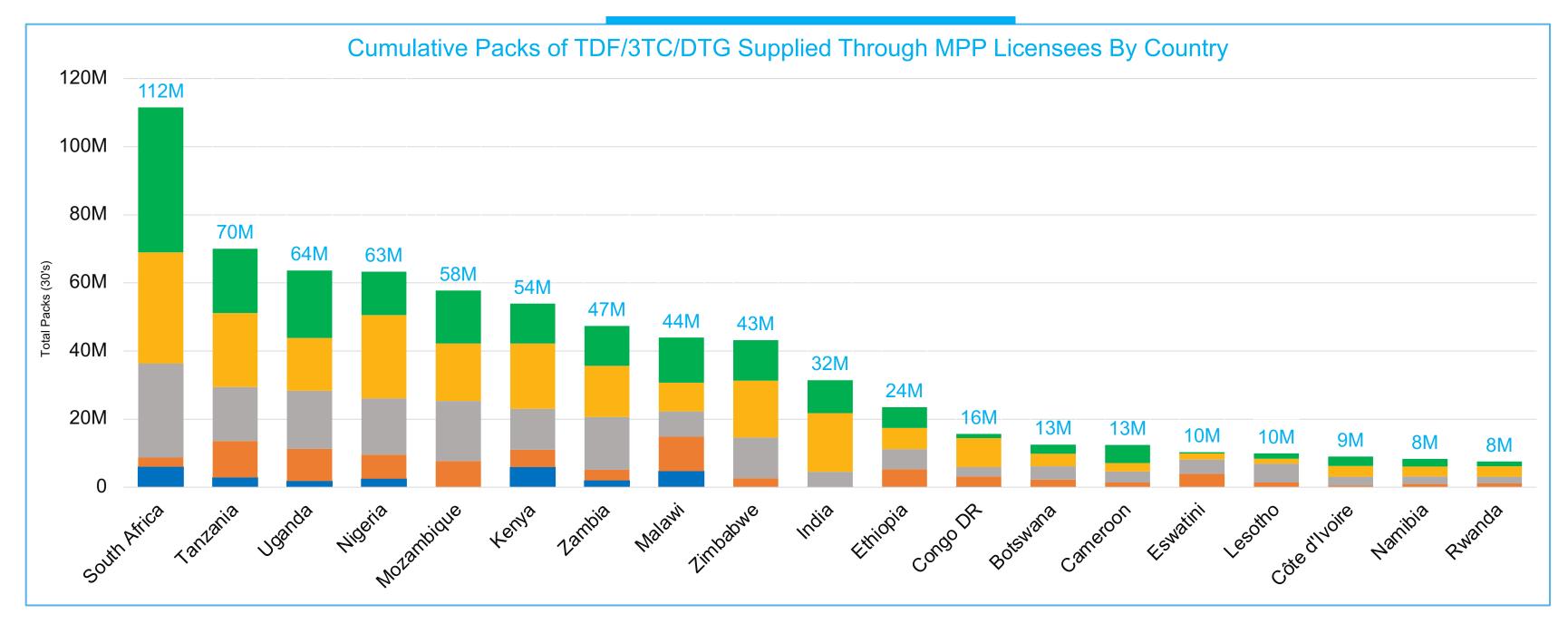
Top 20 countries comprise more than 80% of the TLD market in LMICs (by volume)*

Ratio of DTG 50mg:TLD in country-level sales data suggests DTG 50mg is largely being used for TB-coinfection and/or 2L ART





As of December 2022, TLD was supplied in 103 countries by 12 of MPP Partners



Source: confidential sales data by MPP licensees

2018

2019

2

2020

_ 2021

_ (

2022



ABC/3TC/DTG ADULT (ALD): FORMULATION DEVELOPMENT TIMELINES





6 MPP LICENSEES HAVE DEVELOPED ABC/3TC/DTG ADULT FORMULATION

Licensee Approved: Laurus

5 licensees awaiting USFDA approval





7 MPP LICENSEES HAVE DEVELOPED TAF/FTC/DTG FORMULATION

Licensees Approved: Laurus, Lupin, Mylan

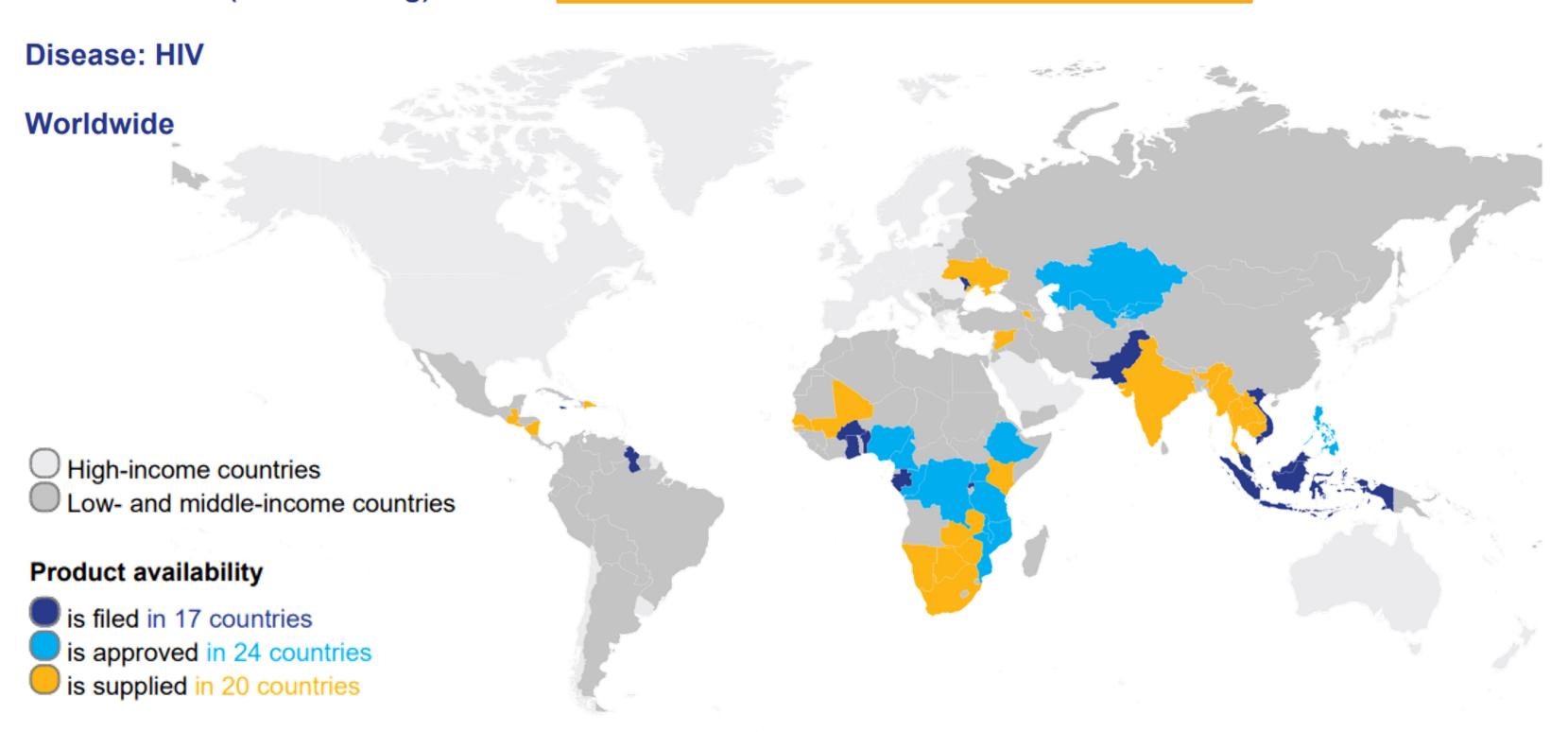
4 licensees awaiting USFDA approval | 1 additional licensee developing





TAF/FTC/DTG (25/200/50 mg)

TAF/FTC/DTG sales have occurred in **20** countries in which **52.4%** of PLHIV[^] reside in the licensed territory[#]







4 MPP LICENSEES HAVE DEVELOPED TAF/3TC/DTG ADULT FORMULATION

Licensee Approved: Cipla, Laurus, Mylan

1 licensee awaiting USFDA approval | 2 additional licensees developing







5 MPP LICENSEES HAVE DEVELOPED ATV/R, OF WHICH: 4 ARE READY TO COMMERCIALIZE

Licensees Approved*: Cipla, Desano, Emcure, Mylan

1 licensee awaiting WHO-PQ approval



Generic ATV/r has been filed in 51 countries, of which approval has been received in 36 countries Filings have occurred where 91.4% of PLHIV[^] reside in the licensed territory[#]

| | | APPROVED (36) 85.5% PLHIV | | |
|--------------|--------------------|------------------------------|---------------------|------------|
| Armenia | Congo | Kenya | Namibia | Ukraine |
| Belarus | Congo DR | Kyrgyzstan | Nigeria | Uzbekistan |
| Botswana | Dominican Republic | Madagascar | Philippines | Zambia |
| Burkina Faso | Ethiopia | Malawi | Rwanda | Zimbabwe |
| Cambodia | Ghana | Mali | South Africa | |
| Cameroon | Guyana | Mauritius | Tanzania | |
| Chile | India | Mozambique | Trinidad and Tobago | |
| Colombia | Jamaica | Myanmar | Uganda | |
| | | | | |

FILED (15)

5.9% PLHIV

ATV/R: **COUNTRY WISE FILING STATUS**

| Côte d'Ivoire | Moldova |
|---------------|---------|
| | |

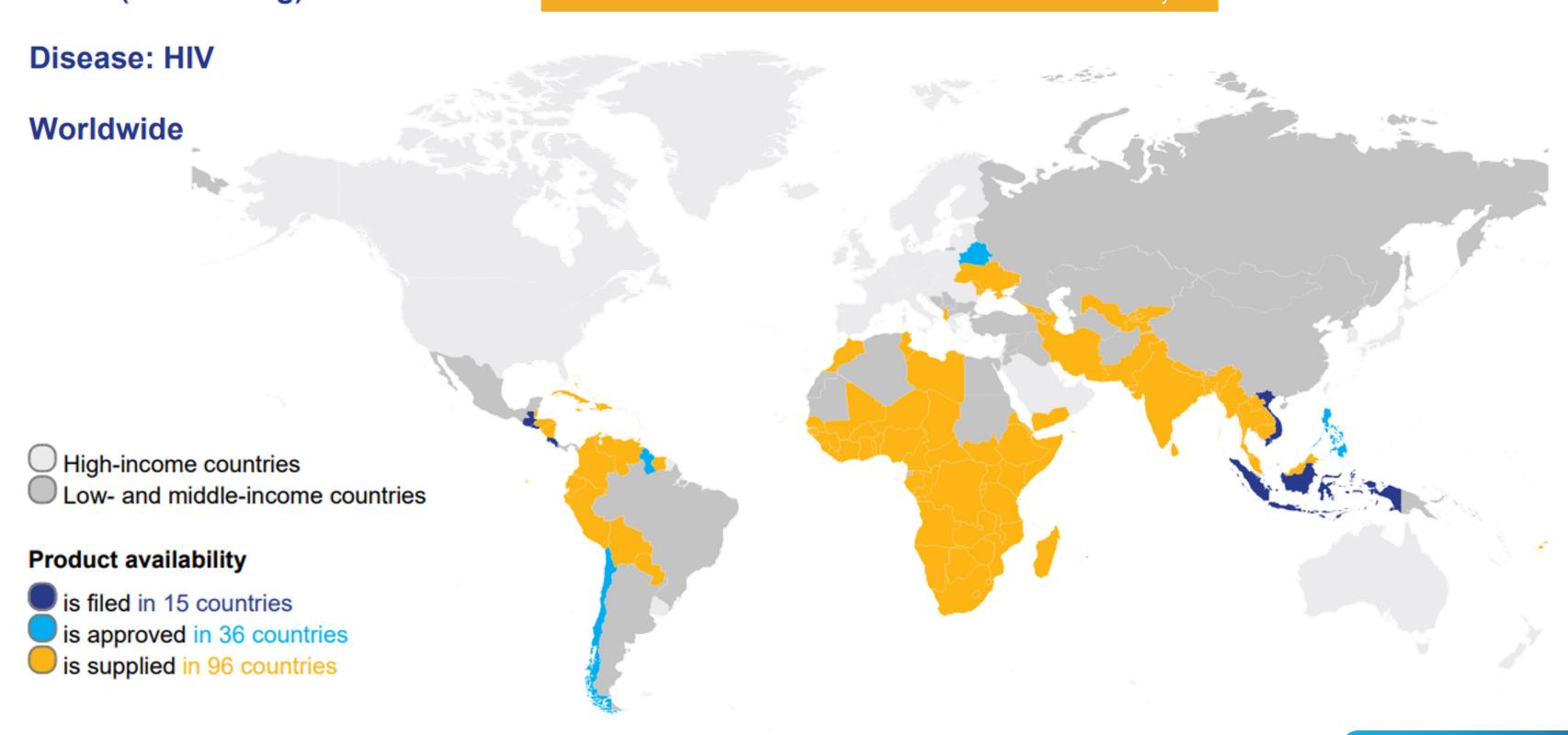
Countries where ATV/r has been sold indicated in **bold type** patent is being infringed in that country People living with HIV

New filings and approvals in green vis-à-vis last update (Q3-22)

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



ATV/r sales have occurred in **96** countries in which **95.1%** of PLHIV[^] reside in the licensed territory[#]



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

^ People living with HIV





2 MPP LICENSEES HAVE DEVELOPED DTG/3TC DUAL FORMULATION

Licensee Approved: Cipla

1 licensee awaiting USFDA approval | 3 additional licensees developing

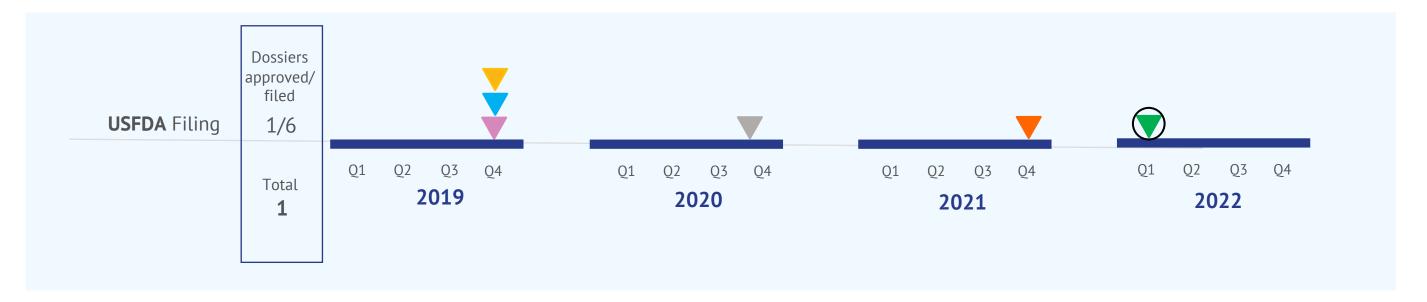




2 MPP LICENSEES HAVE DEVELOPED DTG/RPV DUAL FORMULATION

Licensee Approved: Lupin

1 licensee awaiting USFDA approval





6 MPP LICENSEES HAVE DEVELOPED TAF/FTC DUAL FORMULATION

Licensee Approved: Aurobindo

5 licensees awaiting USFDA approval





DTG DT PAED (10MG SCORED):FORMULATION DEVELOPMENT TIMELINES





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

2 MPP LICENSEES HAVE DEVELOPED DTG DT PAED

Licensee Approved*: Macleods, Mylan



Generic DTG DT 10mg has been filed in 33 countries, of which approval has been received in 14 countries Filings have occurred where 89.3% of CLHIV reside in the licensed territory#

DTG DT PAED (10MG SCORED): COUNTRY WISE FILING STATUS

| APPROVED (14) 64% CLHIV | | |
|----------------------------|--------------|--|
| Cameroon Malawi | | |
| Chad | Mozambique | |
| Congo | Namibia | |
| Congo, DR | South Africa | |
| Ghana | Tanzania | |
| India | Uganda | |
| Kenya | Zimbabwe | |
| | | |

| FILED (19) 25.3% CLHIV | | |
|---------------------------|-----------|------------|
| Benin | Indonesia | Thailand |
| Botswana | Mali | Тодо |
| Burkina Faso | Myanmar | Uzbekistan |
| Burundi | Niger | Viet Nam |
| Côte d'Ivoire | Nigeria | Zambia |
| Ethiopia | Rwanda | |
| Guinea-Bissau | Senegal | |
| | | |

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

New approvals in green vis-à-vis last update (Q3-22)

Countries where DTG DT 10MG has been sold indicated in **bold type**

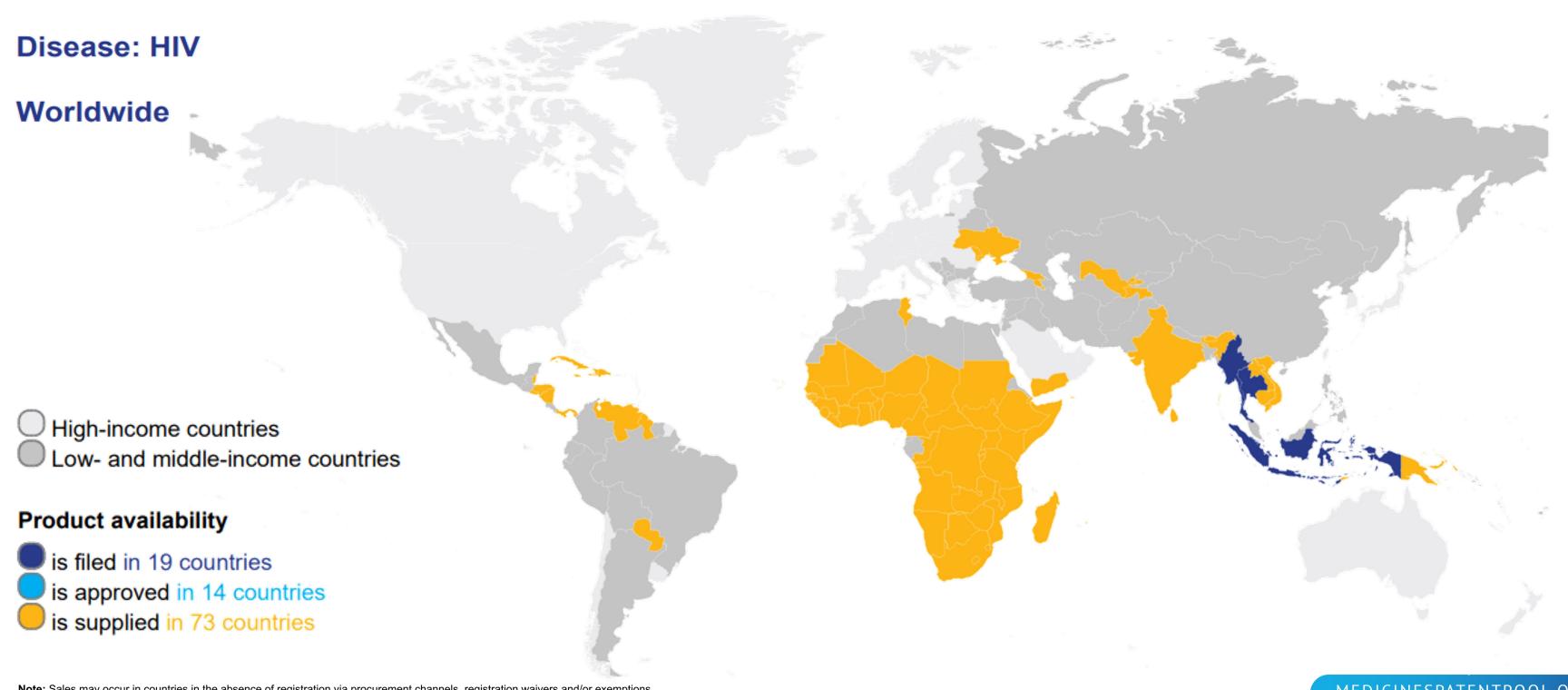
[^] Children living with HIV

P-ViiV DTG Paed licence agreement



DTG DT 10mg sales have occurred in **73** countries in which **95.9%** of CLHIV[^] reside in the licensed territory[#]

DTG paediatric (10 mg scored, dispersible)



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



ABC/3TC/DTG PAED (ALD): FORMULATION DEVELOPMENT TIMELINES





3 MPP LICENSEES HAVE DEVELOPED ABC/3TC/DTG PAED FORMULATION AND ARE AWAITING APPROVAL





CURRENT SUBLICENSEES

FOR BMS-MPP DACLATASVIR LICENCE

7 daclatasvir sublicensee agreements





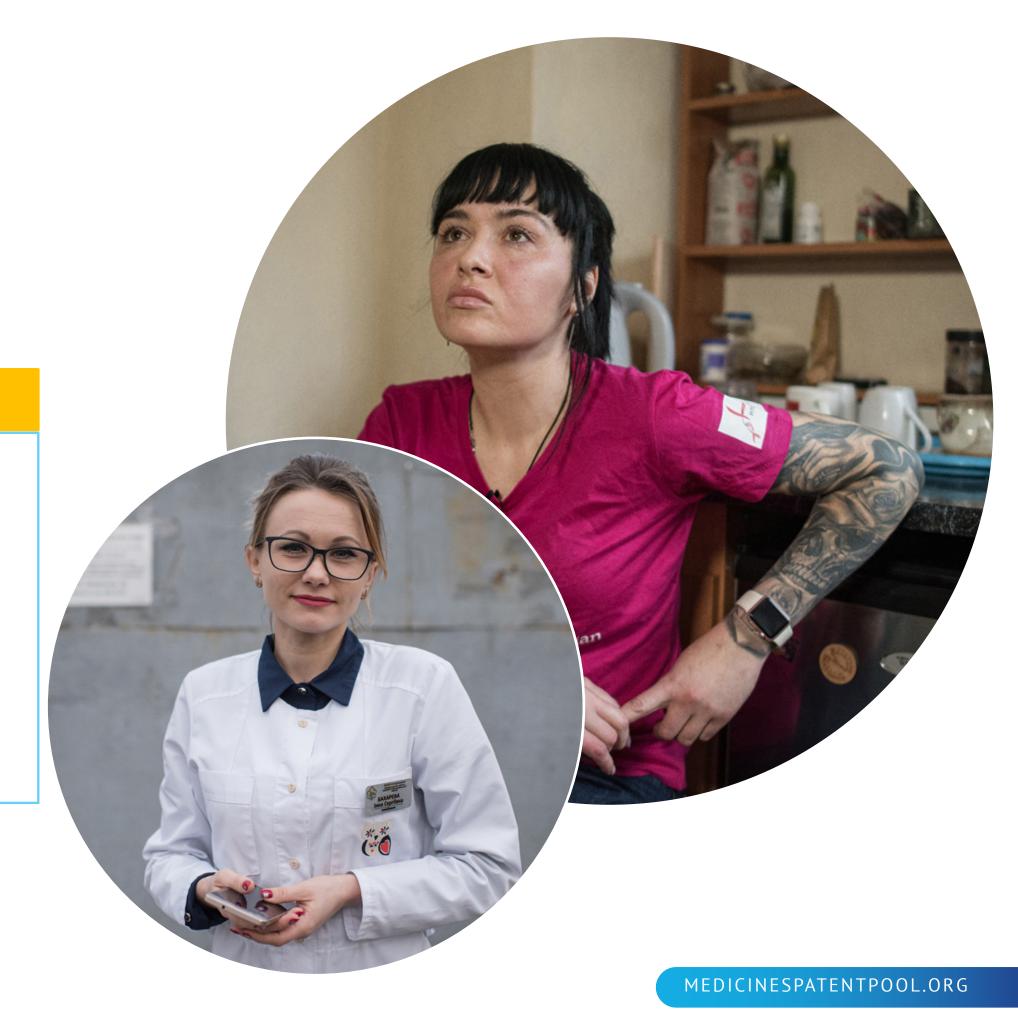








Zydus Cadila





DAC 30MG & 60MG: FORMULATION DEVELOPMENT TIMELINES



Companies approved

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

4 MPP LICENSEES HAVE DEVELOPED DAC 30/60 MG

Licensee Approved: Cipla, Hetero, Laurus, Mylan



Generic DAC 30/60 mg has been filed in 58 countries, of which approval has been received in 41 countries Filings have occurred where 64.5% of PLHCV[^] reside in the licensed territory[#]

APPROVED (41)

| 58.2% PLHCV | | | | |
|--------------|--------------------|------------|--------------|------------|
| Belarus | Côte d'Ivoire | Kenya | Pakistan | Ukraine |
| Benin | Dominican Republic | Kyrgyzstan | Paraguay | Uzbekistan |
| Burkina Faso | Ethiopia | Liberia | Philippines | Viet Nam |
| Burundi | Gabon | Malawi | Senegal | Zambia |
| Cambodia | Ghana | Malaysia | Suriname | Zimbabwe |
| Cameroon | Guyana | Mozambique | Tanzania | |
| Chad | India | Myanmar | Thailand | |
| Congo | Indonesia | Nicaragua | Turkmenistan | |
| Congo, DR | Kazakhstan | Nigeria | Uganda | |
| | | | | |

| DAC 30 | & 60MG |
|---------------|---------------|
| COUNT | RY WISE |
| FILING | STATUS |

| Nilano and an annual tra | | 14 | (00 00) |
|--------------------------|--------------------------|-------------|---------|
| New approval in | dreen <i>vis-a-vis</i> i | iast upgate | (Q3-22) |

Countries where either DAC 30mg or DAC 60mg have been sold indicated in bold

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

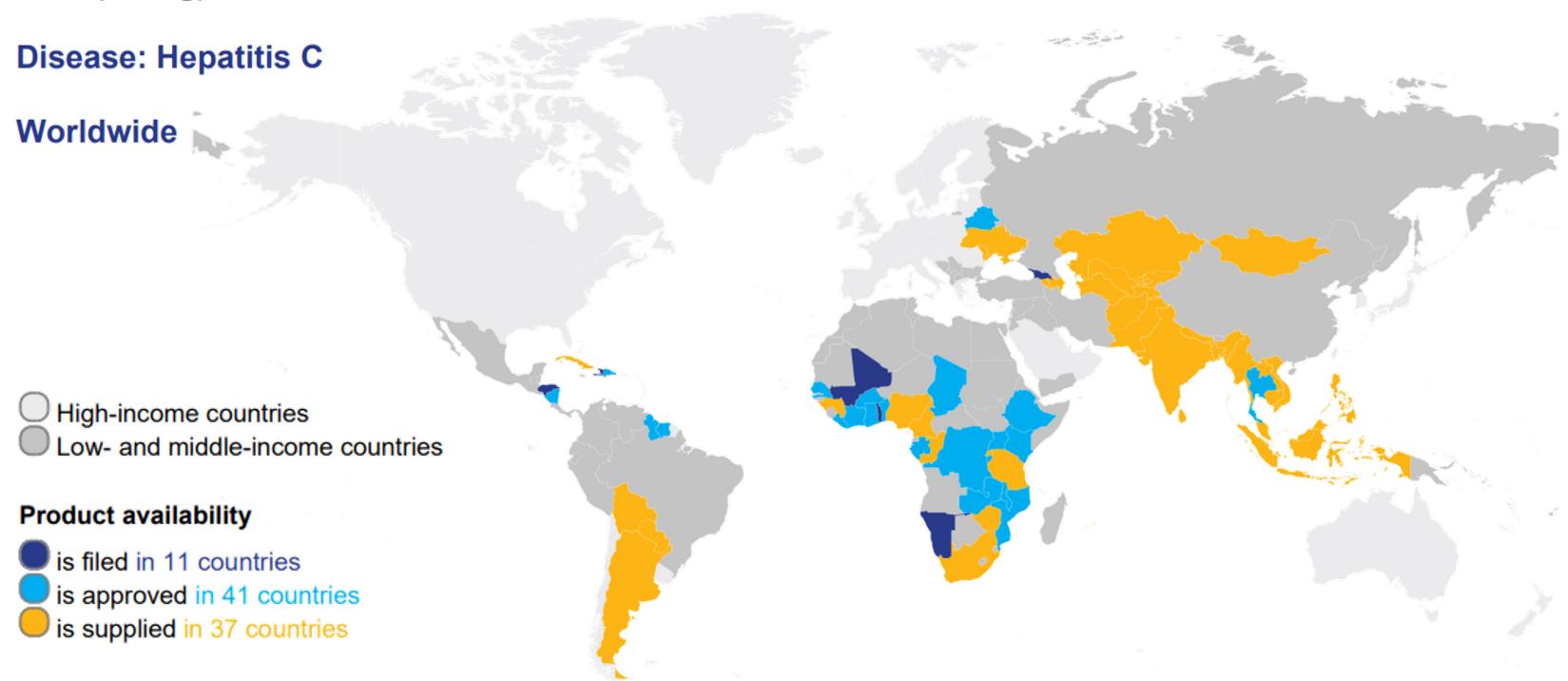
| | FILED (17) 6.3% PLHCV | |
|--------------|--------------------------|---------|
| Azerbaijan | Georgia | Namibia |
| Benin | Haiti | Nepal |
| Bolivia | Honduras | Rwanda |
| Burkina Faso | Kenya | Senegal |
| Ethiopia | Mali | Togo |
| Gabon | Mongolia | J |

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DAC 60mg sales have occurred in **37** countries where MPP licensees have supplied more than **~1.3 million treatments*** in which **55.5%** of PLHCV[^] reside in the licensed territory[#]

DAC (60 mg)



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

*Note: 1 HCV treatment = 12 weeks therapy (3 packs)

[^] People living with Hepatitis C



DAC/SOF: FORMULATION DEVELOPMENT TIMELINES



Companies approved

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

1 MPP LICENSEE HAS DEVELOPED DAC/SOF

Licensee Approved: Mylan



Generic DAC/SOF has been filed in 18 countries, of which approval has been received in 15 countries Filings have occurred where 37.9% of PLHCV[^] reside in the licensed territory[#]

DAC/SOF: **COUNTRY WISE FILING STATUS**

| APPROVED (15) 36.1% PLHCV | | |
|------------------------------|-----------|----------|
| Belarus | Kenya | Paraguay |
| Côte d'Ivoire | Malawi | Suriname |
| Ethiopia | Myanmar | Uganda |
| Ghana | Nicaragua | Ukraine |
| India | Nigeria | Zimbabwe |
| | | |

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

Countries where DAC/SOF has been sold indicated in bold type

[^] People living with Hepatitis C



MPP licensees have supplied ~253,460 packs* of generic DAC/SOF across 14 countries

DAC/SOF (60/400 mg)

Disease: Hepatitis C Worldwide . High-income countries Low- and middle-income countries **Product availability** is filed in 3 countries is approved in 15 countries is supplied in 14 countries









2 MPP LICENSEES HAVE DEVELOPED MOL 200MG AND ARE AWAITING WHO-PQ APPROVAL



NIRMATRELVIR+RITONAVIR (CO-PACK): FORMULATION DEVELOPMENT TIMELINES





5 MPP LICENSEES HAVE DEVELOPED NIR+RTV CO-PACK

Licensee approved: Hetero

