



BRITISH  
COLUMBIA



BRITISH COLUMBIA  
CENTRE *for EXCELLENCE*  
*in HIV/AIDS*

# Harmonizing Global Treatment Initiation

## The Tale of Varied Color Starting Flags

**Julio Montaner, MD**

Professor of Medicine, and Head, Div. of AIDS, University of British Columbia  
Director, BC-Centre for Excellence in HIV/AIDS at Providence Health Care  
UNAIDS Special Advisor on HIV Therapeutics

**IAPAC – Controlling the HIV Epidemic with Antiretrovirals Summit**  
**Sept 18<sup>th</sup> 2014**

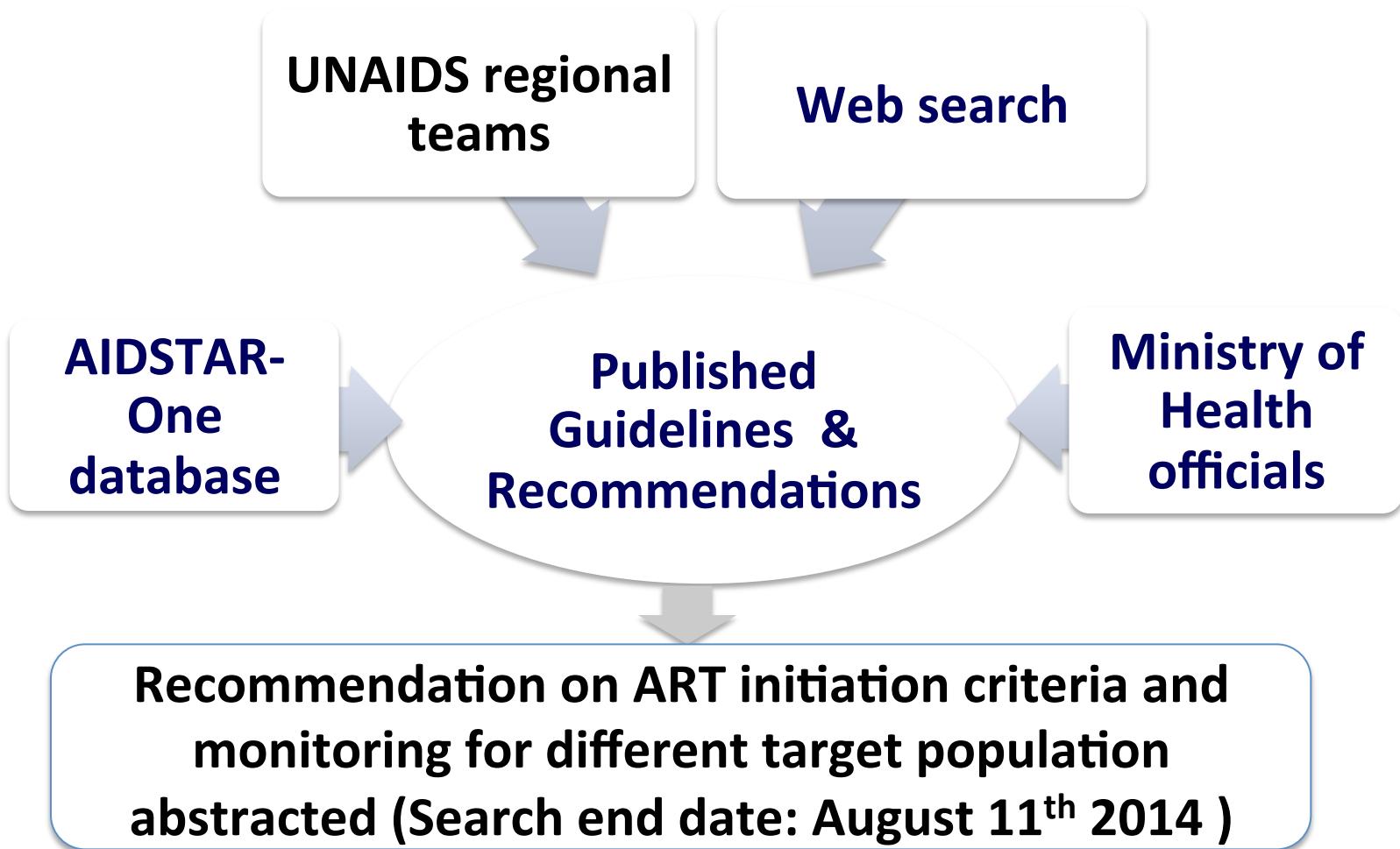


BC Centre for Disease Control  
AN AGENCY OF THE PROVINCIAL HEALTH SERVICES AUTHORITY



How you want to be treated.

# Methods



# ART initiation for asymptomatic PLHIV

published + reported

| ART criteria                  | Countries | PLHIV<br>(2012)     | Countries   |
|-------------------------------|-----------|---------------------|---|
| Irrespective of CD4 count     | 9         | 924,000<br>(3%)     | Australia, Belgium, Brazil, British Columbia (Canada), France, Korea, the Netherlands, Panama, Spain, United States   |
| Consider for CD4 >500         | 6         | 127,700<br>(0.3%)   | Argentina, Austria, Germany, Guyana, Hong Kong, Italy   |
| ≤500                          | 29        | 11,000,000<br>(31%) | Afghanistan, Angola, Algeria, Bangladesh, Belize, Bolivia, Cambodia, Chad, Ecuador, Ethiopia, Fiji, Gabon, Honduras, India, Kenya, Madagascar, Malawi, Morocco, Namibia, Nepal, Rwanda, Sri Lanka, Timor-Leste, Tunisia, Uganda, Venezuela, Yemen, Zambia, Zimbabwe |
| ≤350 & consider for CD4 ≤ 500 | 3         | 775,000<br>(2%)     | Costa Rica, Guinea, Mexico, Thailand, Uruguay, Europe   |

# ART initiation for asymptomatic PLHIV

published + reported

| ART criteria                  | Countries | PLHIV (2012)        | Countries  |
|-------------------------------|-----------|---------------------|--|
| ≤350                          | 59        | 16,977,000<br>(49%) | Armenia, Benin, Bhutan, Botswana, Britain, British Virgin Islands, Burkina Faso, Burundi, Canada, Cape Verde, Chile, China, Comoros, Congo, Democratic Republic of Congo, Djibouti, Egypt, El Salvador, Equatorial Guinea, Eritrea, Gambia, Ghana, Guatemala, Guinea- Bissau, Haiti, Indonesia, Jamaica, Kazakhstan, Kyrgyzstan, Lesotho, Malaysia, Mali, Mauritania, Mauritius, Moldova, Mozambique, Myanmar, Nicaragua, Niger, Nigeria, Papua New Guinea, Paraguay, Peru, Sao Tome, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Swaziland, Sweden, Switzerland, Tajikistan, Tanzania, Togo, Ukraine, Vietnam |
| ≤300                          | 1         | 34,700 (0.1%)       | Uzbekistan   |
| ≤250 (consider for CD4 ≤ 350) | 1         | 140,000<br>(0.4%)   | Colombia   |
| ≤200 (consider for CD4 ≤ 350) | 2         | 16,000 (0%)         | Cuba, Russia   |
| ≤200                          | 7         | 1,119,800<br>(3%)   | Cameroon, Dominican Republic, Ivory Coast, Lao PDR, Liberia, Pakistan, Philippines   |

# ART initiation for asymptomatic PLHIV

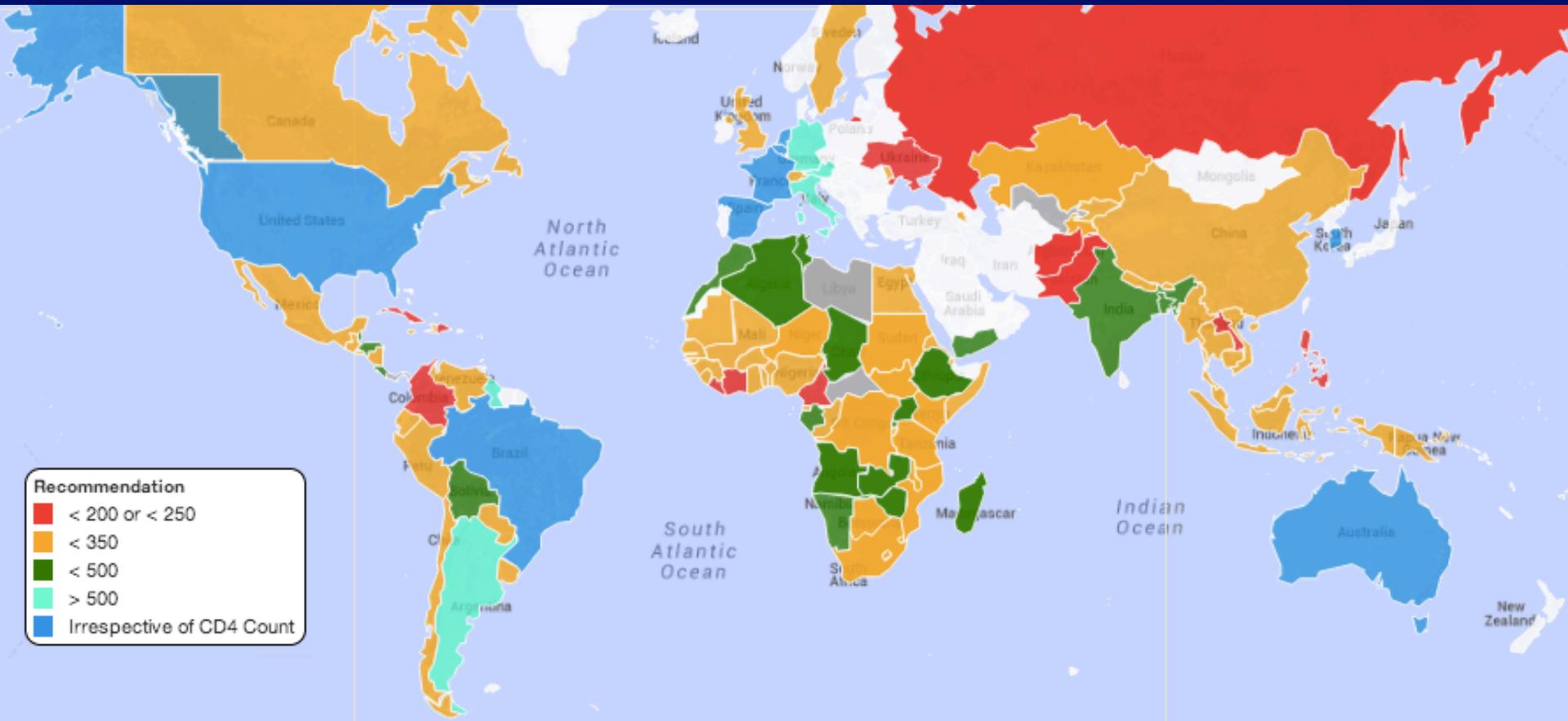
| ART criteria                  | Countries | PLHIV (2012)     |
|-------------------------------|-----------|------------------|
| Irrespective of CD4 count     | 9         | 924,000 (3%)     |
| Consider for CD4 >500         | 6         | 127,700 (0.3%)   |
| ≤500                          | 29        | 11,000,000 (31%) |
| ≤350 & consider for CD4 ≤ 500 | 3         | 775,000 (2%)     |
| ≤350                          | 59        | 16,977,000 (49%) |
| ≤300                          | 1         | 34,700 (0.1%)    |
| ≤250 (consider for CD4 ≤ 350) | 1         | 140,000 (0.4%)   |
| ≤200 (consider for CD4 ≤ 350) | 2         | 16,000 (0%)      |
| ≤200                          | 7         | 1,119,800 (3%)   |

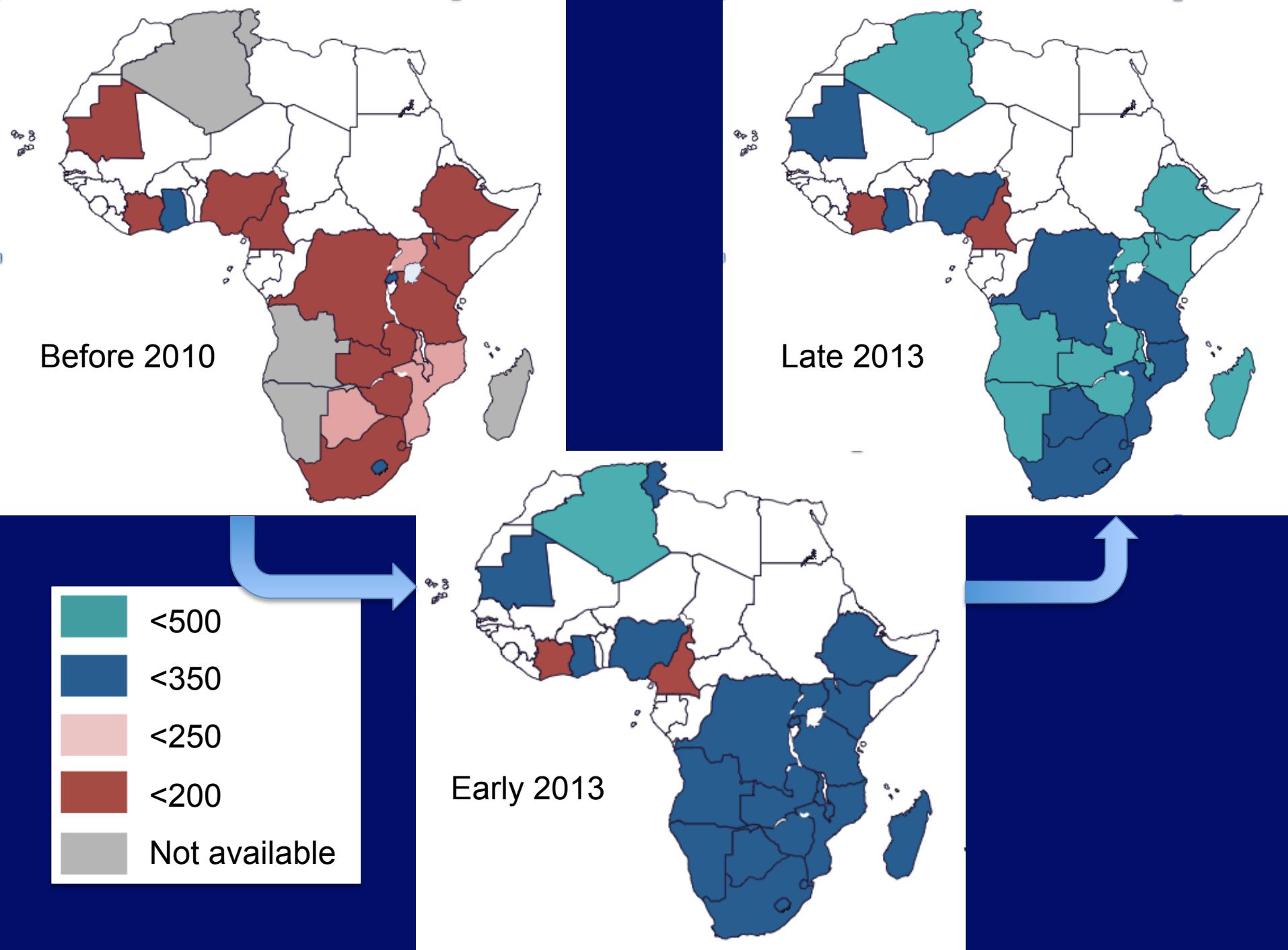
47 Countries  
36.3 % PLHIV

70 Countries  
52.5% PLHIV

# ART initiation for asymptomatic PLHIV

(published policy and reported)





# ART eligibility for children <5 years

WHO 2013 Guidelines: ART irrespective of CD4 count

| ART INITIATION CRITERIA                                       | NUMBER | CHILDREN WITH HIV | COUNTRIES   |
|---|--------|-------------------|---|
| Irrespective of CD4 count for children <5                     | 9      | 1,342,000 (42%)   | Honduras, Kenya, Malawi, Namibia, Rwanda, South Africa, Uganda, Zambia, Zimbabwe  |
| Irrespective of CD4 count for children <2                     | 24     | 1,203,400 (37.6%) | Algeria, Argentina, Bangladesh, Benin, Botswana, Burundi, Cambodia, Democratic Republic of Congo, Ghana, Guyana, India, Kazakhstan, Lesotho, Morocco, Mozambique, Myanmar, Nepal, Nigeria, Panama, Papua New Guinea, Swaziland, Tanzania, Venezuela, Viet Nam |
| Irrespective of CD4 count for children <1                     | 14     | 287,100 (9%)      | Angola, Brazil, Burkina Faso, Costa Rica, Ethiopia, Guatemala, Hong Kong, Madagascar, Mexico, Sri Lanka, Sweden, Thailand, Tunisia, United States   |
| Conditional<br>(Children must satisfy clinical prerequisites) | 19     | 208,100 (6.5%)    | Afghanistan, Bhutan, Cameroon, Cape Verde, Chile, Comoros, Djibouti, Dominican Republic, El Salvador, Guinea, Haiti, Ivory Coast, Lao PDR, Liberia, Malaysia, Mauritania, Peru, Sierra Leone, Ukraine   |

Source: published policy

# ART eligibility for PLHIV with TB (published policy)

2013 WHO Recommendation : Irrespective of CD4 count

| ART INITIATION CRITERIA   | COUNTRIES | COUNTRIES  |
|---------------------------|-----------|--|
| Irrespective of CD4 count | 58        | Argentina, Algeria, Australia, Bangladesh, Belize, Benin, Bolivia, Botswana, Brazil, Britain, Burundi, Cambodia, Chile, China, Costa Rica, Democratic Republic of Congo, Ecuador, Ethiopia, France, Ghana, Haiti, Honduras, Hong Kong, India, Indonesia, Italy, Jamaica, Kenya, Korea, Lesotho, Madagascar, Malawi, Mexico, Morocco, Mozambique, Namibia, Nepal, Netherlands, Nigeria, Panama, Papua New Guinea, Peru, Rwanda, South Africa, Spain, Sri Lanka, Swaziland, Switzerland, Tanzania, Tunisia, Uganda, United States, Ukraine, Uruguay, Venezuela, Viet Nam, Zambia, Zimbabwe |
| ≤500                      | 1         | Myanmar*   |
| ≤350                      | 16        | Afghanistan, Angola, Bhutan, Burkina Faso, Cameroon, Cuba, Djibouti, Guyana, Lao PDR, Liberia, Malaysia**, Pakistan, Paraguay, Philippines, Sierra Leone, Thailand   |
| ≤200                      | 1         | Comoros  |
| No mention                | 18        | Austria, Canada, Cape Verde, Colombia, Cote d'Ivoire, Germany, Guinea, Dominican Republic, El Salvador, Guatemala, Kazakhstan, Mauritania, Moldova, Nicaragua, Niger, Russia, Senegal, Sweden  |

\*ART is recommended irrespective of CD4 count for extrapulmonary and disseminated TB patients or MDR TB

\*\* ART is recommended at CD4 > 350 cells/mm<sup>3</sup> if other WHO stage III or IV illnesses are present

# ART eligibility for pregnant women (published policy)

2013 WHO Recommendation : Irrespective of CD4 count

| ART INITIATION CRITERIA  | NO. OF COUNTRIES | COUNTRIES   |
|--------------------------|------------------|---|
| Option B+                | 42               | Algeria, Argentina, Australia, Austria, Benin, Bolivia, Brazil, Cambodia, Costa Rica, Ecuador, Ethiopia, France, Germany, Guatemala, Honduras, India, Indonesia, Italy, Kenya, Korea, Madagascar, Malawi, Mexico, Morocco, Namibia, Netherlands, Nicaragua, Papua New Guinea, Paraguay, Peru, Rwanda, Spain, Sri Lanka, Switzerland, Uganda, United States, Uruguay, Venezuela, Tanzania, Tunisia, Zambia, Zimbabwe |
| ≤500 & consider for ≥500 | 1                | Hong Kong (China)   |
| ≤350                     | 31               | Angola, Afghanistan, Bangladesh, Belize, Botswana, Britain, Burkina Faso, Burundi, Chile, China, DRC, Djibouti, El Salvador, Ghana, Guinea, Guyana, Haiti, Jamaica, Lesotho, Liberia, Mozambique, Myanmar, Nepal, Niger, Nigeria, Panama, South Africa, Swaziland, Sweden, Thailand, Viet Nam   |
| ≤200 (consider for ≤350) | 1                | Cape Verde  |
| ≤250                     | 1                | Colombia  |
| ≤200                     | 11               | Bhutan, Cameroon, Comoros, Cuba, Ivory Coast, Lao PDR, Mauritania, Pakistan, Philippines, Senegal, Sierra Leone   |
| No mention               | 7                | Canada, Dominican Republic, Kazakhstan, Malaysia, Moldova, Russia, Ukraine  |

# ART initiation for serodiscordant couples (published policy)

2013 WHO Recommendation : Irrespective of CD4 count

| ART INITIATION CRITERIA   | NO. OF COUNTRIES | COUNTRIES  |
|---------------------------|------------------|--|
| Irrespective of CD4 count | 32               | Algeria, Argentina, Australia, Austria, Benin, Bolivia, Brazil, Canada, China, Costa Rica, Ecuador, France, Germany, Honduras, Hong Kong, Indonesia, Italy, Kenya, Korea, Madagascar, Namibia, Netherlands, Rwanda, Spain, Sri Lanka, United States, Uganda, Uruguay, Tunisia, Venezuela, Zambia, Zimbabwe |

# ART eligibility for PLHIV with HBV Liver Disease (published policy)

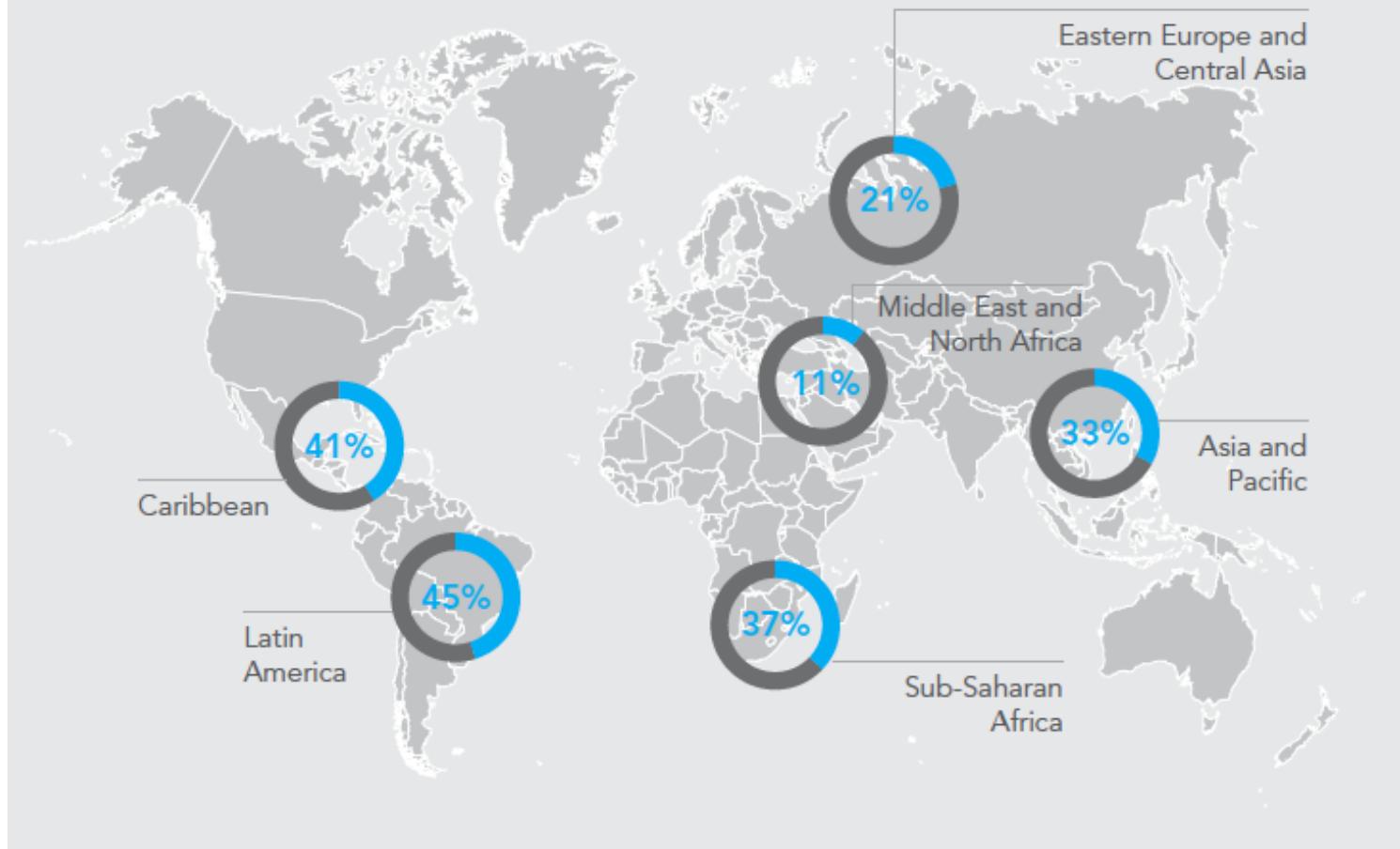
2013 WHO Recommendation : Irrespective of CD4 count

| ART INITIATION CRITERIA   | NO. OF COUNTRIES | COUNTRIES  |
|---------------------------|------------------|--|
| Irrespective of CD4 count | 52               | Algeria, Angola, Argentina, Australia, Austria, Bangladesh, Belize, Bolivia, Brazil, Burundi, Costa Rica, Cuba, Ecuador, France, Germany, Guatemala, Haiti, Honduras, Hong Kong, India, Indonesia, Italy, Jamaica, Kenya, Lesotho, Madagascar, Malawi, Malaysia, Mexico, Morocco, Myanmar, Namibia, Nepal, Netherlands, Nicaragua, Nigeria, Papua New Guinea, Paraguay, Peru, Rwanda, South Korea, Spain, Sri Lanka, Swaziland, Thailand, Tunisia, Uganda, United States, Uruguay, Venezuela, Zambia, Zimbabwe |
| <500                      | 2                | Britain, Switzerland   |
| Same as eligibility       | 40               | Afghanistan, Benin, Bhutan, Botswana, Burkina Faso, Cambodia, Cameroon, Canada, Cape Verde, Chile, China, Colombia, Comoros, Cote d'Ivoire, Democratic Republic of Congo, Djibouti, Dominican Republic, El Salvador, Ethiopia, Ghana, Guinea, Guyana, Kazakhstan, Lao PDR, Liberia, Mauritania, Moldova, Mozambique, Niger, Pakistan, Panama, Philippines, Russia, Senegal, Sierra Leone, South Africa, Sweden, Tanzania, Ukraine, Viet Nam  |

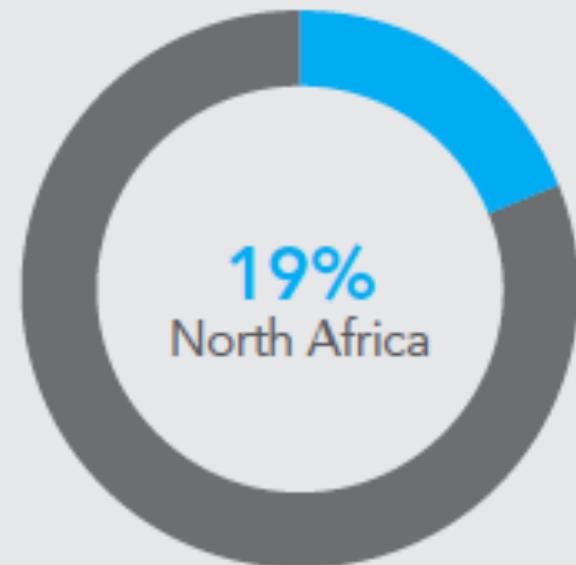
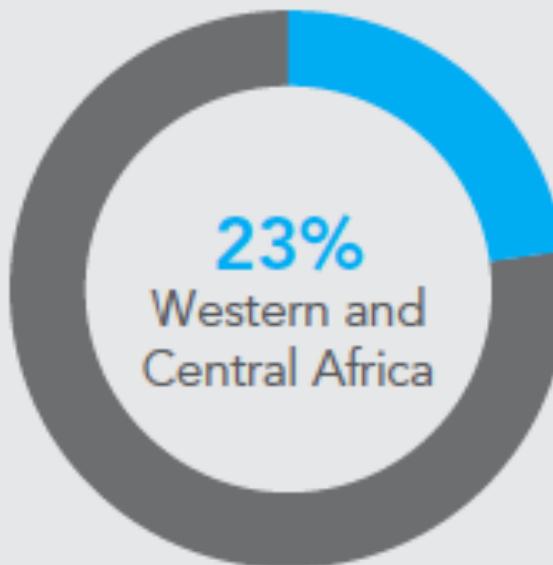
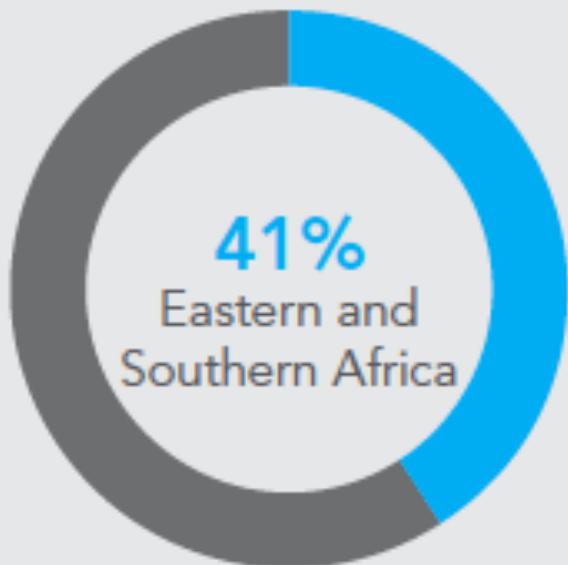
## TOTAL ANTIRETROVIRAL TREATMENT COVERAGE BY REGION IN 2013

■ Total ART coverage

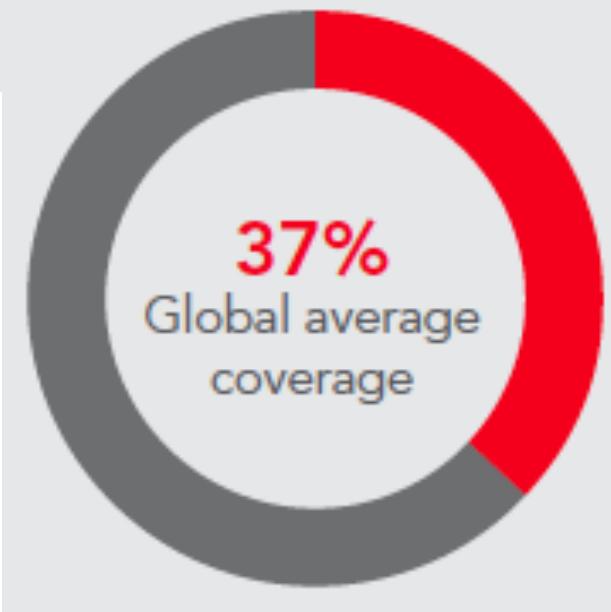
■ Gap



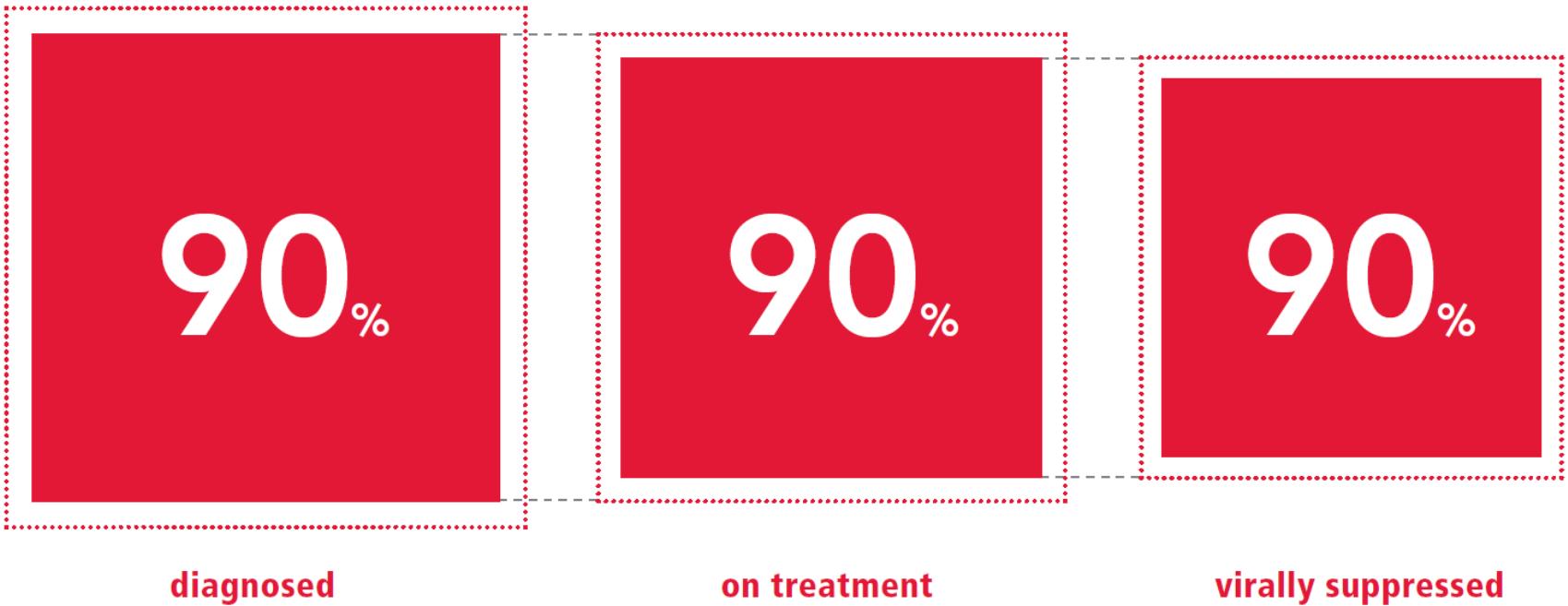
## ANTIRETROVIRAL TREATMENT COVERAGE VARIES WITHIN AFRICA



Source: UNAIDS estimates 2013.



# Ambitious, but achievable, new target



by 2020

# The objective

“Maximize the effectiveness of existing tools by 2020, to virtually eliminate progression to AIDS, premature death and HIV transmission, and thereby transform the HIV/AIDS pandemic into a low level sporadic endemic by 2030.”

**"If we can bring a bottle  
of Coke to every corner  
of Africa, we should  
be able to also deliver  
antiretroviral d\*\*gs..."**



**Joep Lange:** Pioneering HIV/AIDS researcher. Born Sept 25, 1954, in Nieuwenhagen, the Netherlands; assassinated in the MH17 bombing, Ukraine on July 17, 2014, at the age of 59.