Virtual meeting

"Regulatory Landscape in Africa during the AMA and Vaccines Manufacturing Era"

Contents

Meeting Objectives

The main objective of AMRC VIII was to take stock of progress made on the African Medicines Agency (AMA) operationalization and Partnerships for African Vaccine Manufacturing (PAVM) Regulatory Workstream with a view to provide guidance to the AU Policy Organs.

The meeting agenda was focused specifically on the following:

- Updates on the operationalization of the Treaty for establishment of AMA.
- Updates on the African Medicines Regulatory Harmonization (AMRH) support to the operationalization of AMA and adoption of recommendations.
- Consideration of the White Paper on "the African Regulatory Ecosystems during the AMA Era" and adoption of recommendations for consideration by the Conference of the States Parties to the AMA Treaty (COSP).
- Updates on AMRH support to the PAVM and adoption of AMRH TC recommendations.

Workshop Chairs

Prof Moji Christianah Adeyeye, Director General-NAFDAC & Chair of the AMRH Steering Committee

Dr Oumy Kalsum Ndao, Director General-Senegal Medicines Authority & Chairs of the AMRC Assembly

Speakers

Dr Margareth Ndomondo- Sigonda - Head of Health Programme, AUDA-NEPAD

Mrs Chimwemwe Chamdimba - Principal Policy Specialist, AUDA- NEPAD

Prof Jean Baptiste Nikiema, WHO-AFRO

Mrs. Mimi Darko, Ghana FDA CEO (representing Ghana as AMA Chair of the Bureau) and the AVAREF TC Chairperson

Dr Boitumelo Semete, CEO, SAHPRA

Dr Madické Diagne, Pharmacist-Inspector, Senegal Medicines Authority

Dr Bonaventure Chilinde, AMQF Chairperson

Mr. Wayne Muller, Chairperson, GMP TC

Prof. Eliangiringa Kaale, Muhimbili University of Health Sciences, Tanzania, Representing RCD TC

Dr Niteen Wairagkar, PAVM Secretariat

Dr Jicui Dong, LPA Unit Head, WHO

Mrs Nancy Ngum, Programme Officer AUDA-NEPAD

Ms Vanessa Msengezi, Programme Officer AUDA-NEPAD

Discussions

Day 1: PROGRESS ON OPERATIONALIZATION OF THE AFRICAN MEDICINES AGENCY TREATY

Session 1: Opening Session

Prof Moji Christianah Adeyeye, DG-NAFDAC & Chair of the AMRH Steering Committee welcomed all participants to the meeting and thanked the AMRH Secretariat for organising the meeting and getting everyone involved. She gave an overview of the AMRH Governance structure and emphasised the need for human capacity development especially with the challenges faced during the COVID-19 pandemic. She applauded the progress made by member states in ratifying the AMA Treaty with 22 countries currently ratified. She updated participants on the AMRH initiative which is composed of ten technical committees including the Good Manufacturing Practice and Regulatory Capacity Development Technical Committees that have been reactivated. Prof Moji also mentioned the four national regulatory authorities (NRAs) that have attained WHO ML3 status (Tanzania Mainland, Ghana, Nigeria, and Egypt) as a major milestone in ensuring that Africans have access quality medicines.

Dr Oumy Kalsum Ndao, Director General, Senegal Medicines Authority, Ministry of Health, Senegal & Chairperson of the African Medicines Regulators Conference (AMRC) Assembly also gave opening remarks. She welcomed all representatives to the meeting and was happy to be representing the Republic of Senegal as the current Chair of the African Union (AU). She emphasized on the importance of regional initiatives on medicines regulation. She made a commitment to support the AMRH Initiative in her capacity as Chair of AMRC and further thanked the AMRH Secretariat for organising the meeting and then declared the meeting opened. Dr Ndao gave a brief background of the AMRC as follows:

- In April 2015, the African Union (AU) Specialized Technical Committee on Health, Population and Drug Control (STC-HPDC) decided to institutionalize the biennial African Medicines Regulator Conference (AMRC) as a platform for sharing best practices on regulatory matters and a mechanism for generating technical information to guide AU decision-making processes.
- In October 2017, the AMRH Steering Committee adopted a new governance structure recognising the AMRC as the Assembly and created 8 technical committee in various fields of regulatory functions and expertise.
- Thirst meeting of the AMRC was held in October 2019 to adopt the new AMRH Governance Structure including the new terms of reference for the Technical Committees.
- In November 2021 a decision was reached by the AMRC Assembly to convene an annual meeting to facilitate decision making process. The Assembly further agreed to

have a dedicated meeting to discuss the operationalization of the African Medicines Agency.

- She further reminded participants that the reason for this AMRC Assembly was to deliberate on AMA. In addition, the meeting will discuss mechanisms to be put in place by the AMRH Initiative to support the vaccines manufacturing agenda on the continent.

Prof Jean Baptiste Nikiema, of WHO-AFRO presented the specific objectives of the 8th AMRC Assembly. The main objective of AMRC was to take stock of progress reached on AMA operationalization and PAVM Regulatory Workstream with a view to provide guidance to the AU Policy Organs.

More specifically, the meeting was expected to:

- Update on the operationalization of the Treaty for AMA.
- Update on AMRH support to the operationalization of AMA and to the PAVM.
- Discuss the White Paper on "the African Regulatory Ecosystems during the AMA Era.
- Endorse AMRH TC recommendations.

The agenda of the meeting and programme of the day was then adopted.

Session 2: Updates on the African Medicines Agency (AMA)

Mrs Mimi Darko, CEO - Ghana FDA & Chair of AVAREF TC presented on The Role of Heads of NRAs in shaping the African Regulatory Ecosystem & pointed out that Heads of NRAs could learn from EU experience in building a strong AMA. She compared the work of EMA with Regional MRH projects and highlighted the similarities of the European Medicines regulatory network with MRH-RECs and AMA. She further invited NRAs to take part in regional harmonization platforms to make use of scarce resources. She proposed the need to establish an African Medicines Regulatory Network and have a formal management group.

Mrs Chimwemwe Chamdimba, AUDA-NEPAD made a presentation on AMRH support for the operationalization of AMA including coordination of Partners support. She gave updates on the status of AMA ratification and the first meeting of the CoSP. Heads of NRAs were called upon to advocate for their countries to sign and ratify the AMA Treaty. The roles and responsibilities of AU Organs and Partners in supporting AMA operationalization was highlighted and progress on partner coordination was elaborated. The workplan on AMRH support to operationalize AMA was presented with an estimated budget of $28 239 588 for a period of 5 years. Current financial and technical partners supporting the AMRH Initiative, and the operationalisation AMA were listed including the ongoing development of proposals for funding.

Dr Margareth Ndomondo-Sigonda, AUDA-NEPAD presented the White Paper on "The African Regulatory Ecosystem during the AMA Era". The main purpose for producing the White Paper

was to provide a clear description of the current and future regulatory ecosystem, in Africa following the establishment of the AMA so all actors understand the vision, the division of labour, and how each component of the network (i.e. AMA, TCs, AMRH, RECs, NRAs) will contribute to the regulatory ecosystem as a whole. The White Paper also serves, amongst others, to provide options for the future ecosystem including possible approaches for AMRH to provide technical support to AMA during the initial years and to stimulate debate and consideration of the optimal approach.

The Consultation process undertaken during the development of the paper commenced with discussion with the AMRH Advisory Group on AMA (AAGA) followed by five regional consultations with Heads of Agencies (SADC, EAC, IGAD, ECCAS and ECOWAS). This was followed by endorsement by the AMRH Steering Committee. It was highlighted that despite efforts to convene the Arab Maghreb Union, there was no consultation held as the union did not respond. Eleven key issues for consideration by the AMRC Assembly were also presented including modalities for AMRH and AMA as well the need for strengthened collaboration by Heads of NRA.

The presentations for the day ended with recommendations and next step presented by Ms Vanessa Msengezi.

The Chairs made the concluding remarks and thanked all Heads of NRAs and partners for the contributions to the day and closed the first day of the conference.

Day 2 – UPDATES ON PARTNERSHIP FOR AFRICA VACCINES MANUFACTURING (PAVM)

Prof Moji and Dr Ndao gave a summary of the previous day and objectives for day 2 and welcomed all to the second day of AMRC. Mrs. Nancy Ngum also presented key highlights from the discussions the previous day including the list of agreed recommendations.

Session 1: PAVM Overview

Dr Niteen Wairagkar presented updates on the PAVM role in meeting the ambitious goal set by the AU to increase vaccine manufacturing on the African continent to meet 60% of the demand by 2040. He highlighted the important milestones so far including the Framework for Action and the project management and implementation activities of the regulatory work stream which is led by AUDA-NEPAD. He also updated on key goals for the work stream in 2022 which include the establishment of harmonised guidelines and procedures for vaccines regulatory oversight, development of Reliance NRAs Network (With AMA Reliance Labs) to support the development of frontrunner NRAs through a Reliance Framework and lastly, strengthening of vaccine regulatory regional centres of regulatory excellence (RCOREs).

Dr Boitumelo Semete, CEO of SAHPRA, presented updates on the SA Health Products Regulatory Authority's COVID-19 vaccines registration process. She highlighted the key steps of vaccine assessment starting from application to traceability/surveillance**.** Key highlights included- SAHPRA is a member of WHO Pharmaceuticals Inspections Cooperation Scheme and other regulators can rely on the inspection outcome by SAHPRA, she highlighted that safety is monitored across all three phases of clinical trials and with regards to assessment of data, SAHPRA requires robust evidence of the vaccine's ability to prevent infection or reduce disease severity from well-conducted phase 3 clinical trials in humans. SAHPRA may also require data considering the local disease burden or disease epidemiology for example in case of COVID-19, SAHPRA required efficacy against variants of concern. For traceability, rigorous scientific evaluation of vaccines is conducted and in the case of public health emergencies, processes are fast-tracked, and minimum required standards are aligned globally. Continuous monitoring of the vaccines also takes place during the roll out

Dr Madické Diagne, Pharmacist-Inspector, Senegal Medicines Authority presented the experience of Senegal with regards to the COVID-19 vaccines registrations process. Dr Diagne gave an overview of the institutional reforms of the NRA which involved legislation review, revival of the local pharma industry and the production of vaccines. He emphasized that vaccines are medical products that need to comply with conditions of quality, efficacy and safety and their use is therefore regulated by the NRA. Dr Diagne also highlighted vaccines that are approved and in circulation including the yellow fever vaccine which is produced in-country. Vaccines also go through a rigorous marketing authorisation process like other medical products. Like SAHPRA, the Senegal NRA also makes provision for exceptional circumstances like public health emergencies. He also highlighted the assessment process for

safety, efficacy, and clinical data for a new vaccine registration through the classic and non-classic route which has a shorter time frame and can go through joint assessment procedures. Dr Diagne also highlighted some challenges to vaccine registration of vaccines such as the need for a stronger regulatory system, human resources with the needed skills, the maturity level of the NRA and limited funding, amongst others.

Sharing the WHO's Role in Strengthening Local Production Capacity of Quality Assured Vaccines to improve access was Dr Jicui Dong, LPA Unit Head at WHO. Dr Dong expressed thanks for the invitation to speak and extended congratulations to the African NRAs for the great strides being made in medical products regulation on the continent. Dr Jong shared an overview of the areas that the WHO is supporting the strengthen Africa's capacity for local production including but not limited to; prequalification and Emergency Use Listing related specialised assistance, technology transfer facilitation, global partnerships, and collaboration. All these various initiatives are in a bid to contribute to the improvement of quality of medical products, speed up attainment of WHO EUL and PQ and enable countries to be eligible to bid for international donor funded tenders.

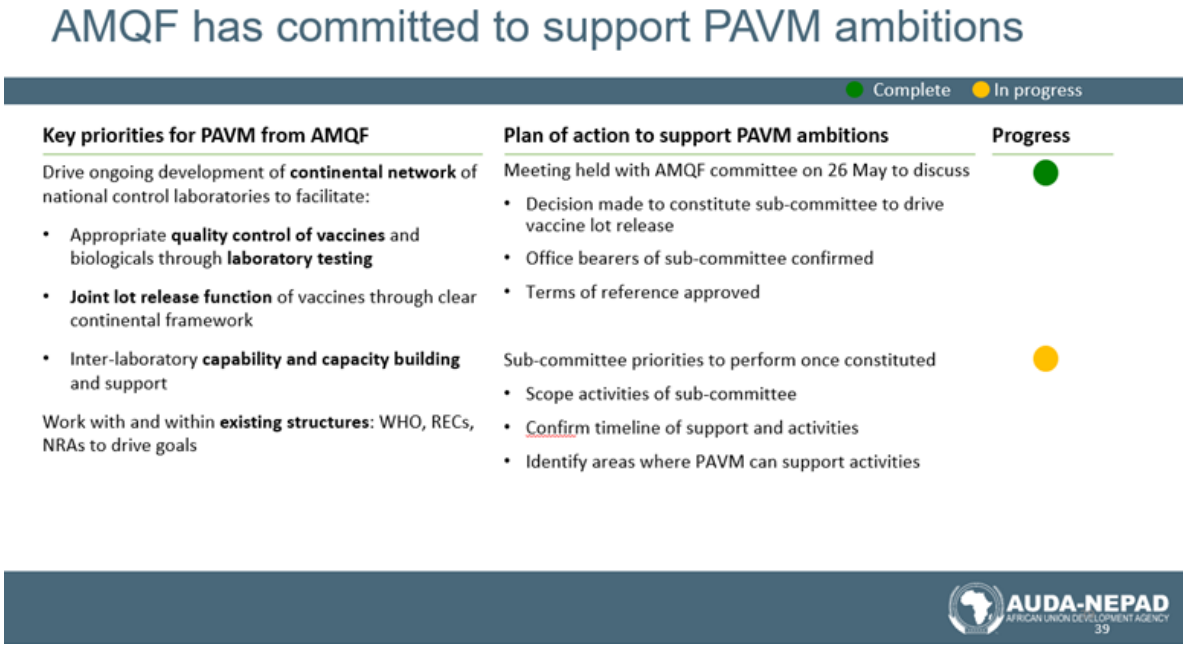
Session 2: AMRH Technical Committees Progress in Support of the PAVM Regulatory Workstream

Mrs. Mimi Darko, CEO Ghana FDA presented AVAREF plans in support of the PAVM regulatory workstream. The AVAREF TC met with the PAVM Secretariat to identify the support that AVAREF can give to PAVM. Mrs. Darko advised that AVAREF will support training for domestication and use of AVAREF guidelines and tools. The tools include standardized templates and guides for GCP Inspection, the submission and assessment of clinical trial applications, as well as the checklist and guides for monitoring of clinical trials on the continent. AVAREF will also support clinical trial reviews, offer scientific advice. AVAREF will additionally review AU Guidance on Expedited Approval of COVID-19 Vaccines to align with AMA objectives. Guidance documents to be developed include a Guideline on Clinical Trials for Pregnant Participants, Guideline for Clinical Trials in Pediatric Participants, AVAREF Guide for Emergency Use Authorization of medical products and Reliance, AVAREF Guide for handling safety data in clinical trials. Guidelines to be reviewed include the AVAREF Joint Review Guideline and the AVAREF Strategy and Guidance on Emergency Preparedness. Mrs Darko concluded with the agreed next steps based on the above.

Mr Bonaventure Chilinde Chair of the AMQF TC, opened by highlighting the scope of the AMQF TC. Composition of the main technical committee and established sub-committees on Bioanalytical Testing and Vaccine Lot release were also presented. Dr Chilinde also highlighted the proposed activities for the sub-committee in support of Vaccines manufacturing Initiatives including lot release for locally produced vaccine, information sharing on vaccines testing and lot release and capacity building/ training. He added that identified reliance QC Laboratories for lot release testing are from NRAs with ML3 status or close to achieving ML3

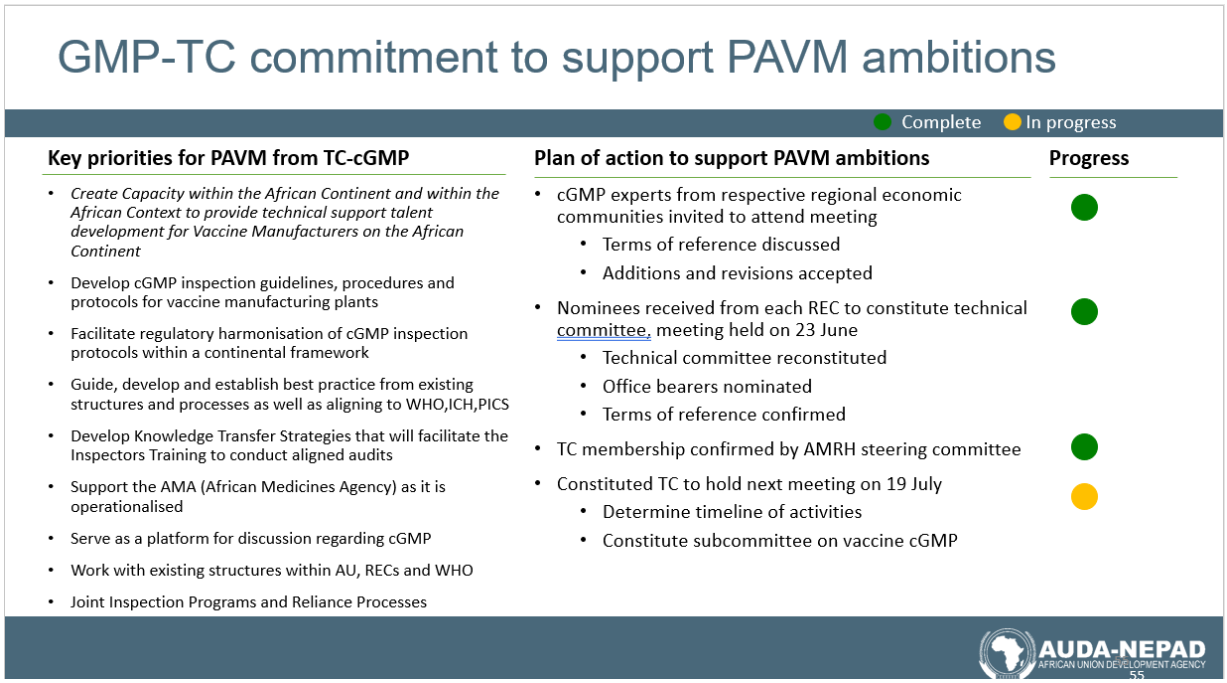
in 2022. Partners support and their areas of support were also highlighted. Partners supporting the TC include PTB/ Paul Ehrlich Institute, USP-Ghana and CEPI. Proposed strategies to achieve the objectives were also highlighted.

AMQF has committed to support PAVM as shown below:



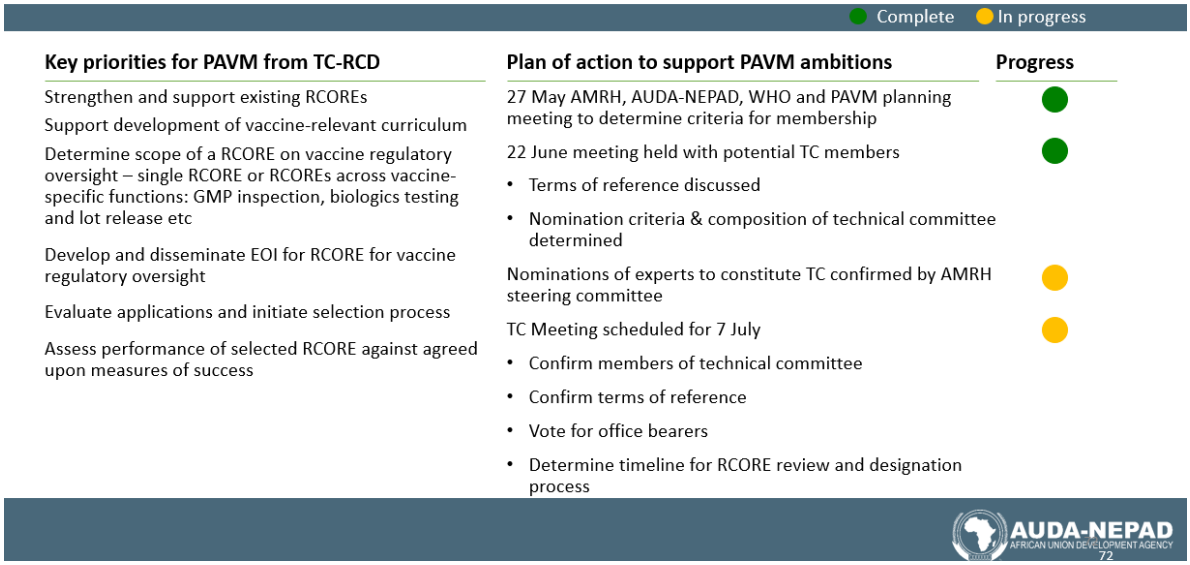
Mr Wayne Muller, cGMP TC Chair also presented on the support of the cGMP TC to the PAVM. The main function of the cGMP TC is to assist AU Member States to build their GMP capabilities, provide technical advice on the development and implementation of sustainable GMP Standards in collaboration with RECs, pharmaceutical industry, and partners in support of the AU PMPA and PAVM through the AMRH Initiative and eventually AMA once operational. Mr Muller also gave an overview of specific roles and responsibilities including but not limited to supporting NRAs in identifying regulatory gaps related to cGMP inspection and developing guidelines cGMP inspection including vaccines and biologics. He also indicated that GMP-TC membership includes 17 experts representing Africa's Regional Economic Communities

cGMP-TC commitment to support PAVM ambitions was presented as follows:



Prof. Eliangiringa Kaale of Muhimbili University of Health Sciences, Tanzania, representing RCD TC presented on the background to the TC and outlined the TC's role to provide technical advice to the AMRH Steering Committee on human resources development needs to strengthen medicines regulatory capacities and systems in Africa. Specific objectives of the TC include amongst others, to identify and prioritize the main regulatory functions that need capacity building as well the main skills required to support the regulatory functions and to recommend comprehensive training programs and other existing resources to support the capacity building of human resources. The RCD TC is also responsible for General management of RCORE platform including M&E and designation of new RCOREs.

cGMP-TC commitment to support PAVM ambitions was presented as follows:



Closing Session:

The last session of the day was a discussion of the TC presentations and the AMRC adopted the revised ToRs & plans for AVAREF, AMQF & cGMP TCs. Prof Moji and Dr Ndao gave the closing remarks and declared the meeting closed.

Summary of recommendations:

AMRC Recommendations to the AMA Board:

1. Heads of NRAs need to allocate and release their staff to participate as experts in regional and continental activities of the TCs. This is an important success factor for both RECs and AMA interventions
2. Heads of NRAs to ensure that they put in place processes and systems to facilitate timely uptake of recommendations from their RECs, AMRH TCs and from AMA to inform their own formal regulatory decisions
3. Heads of NRAs should initiate processes to update national policies and laws to allow for recognition of or reliance on AMA and REC technical standards and product recommendations as per the AU Model Law on Medical Products Regulation
4. Heads of NRAs to create a strengthened network of reliance through AMRC -learning from the EU experience to build a strong AMA

Recommendations to the Heads of NRAs:

1. Heads of NRAs need to allocate and release their staff to participate as experts in regional and continental activities of the TCs. This is an important success factor for both RECs and AMA interventions
2. Heads of NRAs to ensure that they put in place processes and systems to facilitate timely uptake of recommendations from their RECs, AMRH TCs and from AMA to inform their own formal regulatory decisions
3. Heads of NRAs should initiate processes to update national policies and laws to allow for recognition of or reliance on AMA and REC technical standards and product recommendations as per the AU Model Law on Medical Products Regulation
4. Heads of NRAs to create a strengthened network of reliance through AMRC -learning from the EU experience to build a strong AMA
5. Heads of NRAs to have a unified continental voice and communicate information widely, such as harmonised policies and strategies to inform international stakeholders on the agenda and direction of the African continent with regards to regulatory systems strengthening
6. Heads of NRAs to identify and address in-country barriers/challenges to the ratification of the AMA Treaty and intensify advocacy efforts

Recommendations to the AMRH Secretariat

1. Agenda items for AMRC meetings to be developed in a way that motivates and attracts more participation of the HoAs to ensure their optimum contribution

2. AMRH Secretariat to ensure that TC outcomes and recommendations are communicated to Heads of NRAs through quick turnaround mechanisms such as email
3. AMRH Secretariat to explore modalities for engaging AMU/UMA to ensure they are equally engaged in the AMRC
4. AMRH Secretariat to engage AUC for guidance on the costing modalities of countries which are party to the AMA Treaty

Some of the delegates who participated in AMRC VIII

Appendix 1 – List of participants

Name	Organisation	Contact Details
1. Ndembi Nicaise	Africa CDC	Nicaisen@africa-union.org
2. Sidi Ahmedou	Arab Maghreb Union	sidimostapha@yahoo.fr
3. Nqobile Ndlovu	ASLM	nndlovu@aslm.org
4. Vanessa Msengezi	AUDA-NEPAD	vanessam@nepad.org
5. Boitshepo Bibi Giyose	AUDA-NEPAD	BibiG@nepad.org
6. Justina Dugbazah	AUDA-NEPAD	Justinad@nepad.org
7. Julia Kiguru	AUDA-NEPAD	Juliak@nepad.org
8. Samuel Timpo	AUDA-NEPAD	SamuelT@nepad.org
9. Nancy Ngum	AUDA-NEPAD	nancyn@nepad.org
10. Margareth Ndomondo-Sigonda	AUDA-NEPAD	margarets@nepad.org
11. Nthabiseng Moiloa	AUDA-NEPAD	nthabisengm@nepad.org
12. Chimwemwe Chamdimba	AUDA-NEPAD	chimwemwec@nepad.org
13. Wiltshire Johnson	AUDA-NEPAD	wiltshirej@nepad.org
14. Jean Fidele Bationo	AUDA-NEPAD	jeanfidelebationo@gmail.com
15. Regine,Lehnert,	BfARM	regine.lehnert@bfarm.de
16. Kornelia Flaemig	BfARM	kornelia.flaemig@bfarm.de
17. Regine Lehnert	BfARM	tobias.siefen@bfarm.de
18. Boama Ezéchiel Prosper NOALI	Burkina Faso	pnoali@yahoo.fr
19. Dédith Mbonyingingo	Burundi NRA	dedithmbo@gmail.com
20. Eduardo Tavares	Cape Verde NRA	Eduardo.Tavares@eris.cv
21. Niteen Wairagkar	CEPI	Niteen.Wairagkar@cepi.net
22. Abebe Genetu Bayih	CEPI	abebe.genetu@cepi.net
23. Malika ALMANSOURI	CEPI	malika.almasnouri@cepi.net
24. Rachelle Harris	Consultant	harris.access.consulting@gmail.com

25. Cecile Mace	Consultant-France	cecilmace@gmail.com
26. Laetitia Gabernet	DIA Global	laetitia.gabernet@diaglobal.org
27. Fabienne Benoist	DNDI	Fbenois@dndi.org
28. Valerie FAILLAT	DNDI	vfaillat@extern.dndi.org
29. Jane Mashingia	EAC	jmashingia1@gmail.com
30. Sybil Nana Ossei-Agyeman-Yeboah	ECOWAS/WAHO	sossei@wahooas.org
31. Richard Wanko	EDQM	richard.wanko@edqm.eu
32. Catherine Milne	EDQM	catherine.milne@edqm.eu
33. Wendu Ketele Urgaha	EFDA	wketele@efda.gov.et
34. Passant,Hany (EDA)	Egypt Drug Authority	foreign.affairs@edaegypt.gov.eg
35. Dalia Abouhussein	Egyptian Drug Authority	dalia.abouhussein@edaegypt.gov.eg
36. Fortunate Bhembe	Eswatini	fortunatebhembe@gmail.com
37. Solomon Getachew	Ethiopian Food and Drug Authority	sgetachew@efda.gove.et
38. Heran Borta	Ethiopian Foods and Drugs Authority	hgerba@efda.gov.et
39. Mar Martínez	European Commission	mar.martinez@ec.europa.eu
40. Victoria Palmi	European Medicines Agency	victoria.palmi@ema.europa.eu
41. Martin Harvey Allchurch	European Medicines Agency	martin.harvey@ema.europa.eu
42. Erika Placella	Federal Department of Foreign Affairs FDFA	enrichetta.placella@eda.admin.ch

43. Cheikh Sadibou CAMARA	France	roniesadibou@yahoo.fr
44. Markieu Janneh Kaira	Gambia Medicines Agency	mjannehkaira@mca.gm
45. David Mukanga	Gates Foundation	david.mukanga@gatesfoundation.org
46. Ian Hudson	Gates Foundation	ian.hudson@gatesfoundation.org
47. Delese Darko	Ghana FDA	delese.darko@fda.gov.gh
48. Daniel Kohls	GIZ	daniel.kohls@giz.de
49. Boitumelo Mokgatla	GIZ	boitumelo.mokgatla@giz.de
50. Sukyoung Kim	GIZ	sukyoung.kim@giz.de
51. Sarah Adam	IFPMA	s.adam@ifpma.org
52. Anthony TOROITICH	IGAD	anthony.toroitich@igad.int
53. Marelebohile Mabuzela	Lesotho NRA	mcmolatelle@yahoo.com
54. Keturah Smith	Liberia NRA	keturahsmith1@gmail.com
55. Suhail Dada	Mckinsey	suhail_dada@mckinsey.com
56. Bouchra Meddah	Morocco NRA	bouchra_meddah@yahoo.fr
57. Mwesigye John Patrick	MTAPS	jmwesigye@mtapsprogram.org
58. Kate Kikule	MTAPS	kkikule@mtapsprogram.org
59. Moji Adeyeye	NAFDAC	cm.adeyeye@nafdac.gov
60. Johannes Gaeseb	Namibia NRA	johannes.gaeseb@mhss.gov.na
61. Fransina Nambahu	Namibia NRA	fransina.nambahu@mhss.gov.na
62. Barira Dan Nouhou	Niger NRA	bariradany@gmail.com
63. Jens Reinhardt	PEI	reije@pei.de
64. Tobias Diergardt	PTB	tobias.diergardt@ptb.de
65. Joseph Kabatende	Regulatory Expert	josephkabatende@gmail.com
66. Nevena Miletic	Roche	nevena.milisavljevic@roche.com
67. Patrick Rugambya	Rwanda FDA	prugambya@rwandafda.gov.rw

68. Sakhile Dube-Mwedzi	SADC MRH	sakhi.vee@gmail.com
69. Portia Nkambule	SAHPRA	portia.nkambule@sahpra.org.za
70. Boitumelo Semete-Makokotlela	SAHPRA	boitumelo.semete@sahpra.org.za
71. Wayne Muller	SAHPRA	wayne.muller@sahpra.org.za
72. Assane Dieng	Senegal	asoleso@yahoo.fr
73. Koura Coulibaly Diack	Senegal NRA	ckoura@yahoo.fr
74. Madické Diagne	Senegal NRA	dmadicke@yahoo.fr
75. Oumy Kalsoum Ndiaye Ndao	Senegal NRA	oumyndao1@yahoo.fr
76. Yérim DIOP	Senegal NRA	bayyerim@gmail.com
77. Mohamed Sesay	Sierra Leone NRA	msesay@pharmacyboard.gov.sl
78. James Komeh	Sierra Leone NRA	kompjames@yahoo.com
79. Yusuf Omar Mohamed	Somalia NRA	malablepk@gmail.com
80. Ligia Tembe	South Africa	ligiatemb@gmail.com
81. Mawien Atem Arika	South Sudan NRA	m.mawienarik@gmail.com
82. Lodovico Paganini	Swiss Medic	lodovico.paganini@swissmedic.ch
83. Yonah Hebron Mwalwisi	Tanzania Medicines and Medical Devices Authority	hebrony502004@yahoo.com
84. Adam Fimbo	Tanzania Medicines and Medical Devices Authority	adamfimbo@gmail.com
85. Kissa Mwamwitwa	Tanzania Medicines and Medical Devices Authority	kissa.mwamwitwa@tmda.go.tz

86. Felchism Apolnary	Tanzania Medicines and Medical Devices Authority	fapolnary@gmail.com
87. Alex Ismail	Tanzania Medicines and Medical Devices Authority	ajuma138@gmail.com
88. Emmanuel Alphonce	Tanzania Medicines and Medical Devices Authority	emmanuel.nkiligi@tmda.go.tz
89. Grace Shimwela	Tanzania Medicines and Medical Devices Authority	grace.shimwela@tmda.go.tz
90. Ines Fradi	Tunisia NRA	ines.fradi2@gmail.com
91. Nadia FENINA	Tunisia NRA	nadia.fenina@rns.tn
92. Sameh BEN TKHAYAT	Tunisia NRA	samehbentkhayat@gmail.com
93. Chiheb Ben Rayana	Tunisia NRA	chiheb.rayana@rns.tn
94. Serigne Omar SARR	UCAD	serigne.sarr@ucad.edu.sn
95. Carmelle Hounnou	UEMOA	kcnhounnou@uemoa.int
96. Noel Aineplan	Uganda Drug Authority	amnoel@nda.or.ug
97. Jacintha Toohey	UKZN	tooheyj@ukzn.ac.za
98. Djibril Fall	Universite Cheikh Anta Diop (UCAD)	djibril.fall@ucad.edu.sn
99. Eliangirina Kaale	University of Health Sciences, Tanzania	elia.kaale@gmail.com
100. Juliet Konje	USP	Juliet.Konje@usp.org

101. Tom Muhimbise	USP	Muhimbise.Mudenge@usp.org
102. Anitha Kalema	USP	Anitha.Kalema@usp.org
103. Evans Sagwa	USP	esagwa@gmail.com
104. Mwemezi NGEMERA	USP	Mwemezi.ngemera@usp.org
105. Omotayo Akanji	USP	Ooa@usp.org
106. Mark Whittaker	Wellcome Trust	m.whittaker@wellcome.org
107. Divya Shah	Wellcome Trust	d.shah@wellcome.org
108. Bartholomew Akanmori	WHO-AFRO	akanmorib@who.int
109. Jean-Baptiste Nikiema	WHO-AFRO	nikiemaje@who.int
110. Diadie Maiga	WHO-AFRO	maigad@who.int
111. Jicui Dong	WHO-HQ	dongj@who.int
112. Jacqueline Rodgers	WHO-HQ	rodgersj@who.int
113. Djamila Reis	WHO-HQ	cmonteiro@who.int
114. Abraham Kahsay	WHO-HQ	gebregiorgisa@who.int
115. Hiiti Sillo	WHO-HQ	silloh@who.int
116. Meyali Cruz	WHO-HQ	cruzme@who.int
117. Gaby Vercauterern	WHO-HQ	vercautereng@who.int
118. Safiatou Diaz	YOLSE	ssdiaz@yolse.ch
119. Bonaventure Chilinde	ZAMRA	bchilinde@zamra.co.zm
120. Makomani Siyanga	ZAMRA	msiyanga@zamra.co.zm
121. Baka Cisse		baka_cisse@live.fr
122. Julia Joseph Ojukwu Ikarak		juliaj.ojukwu@gmail.com
123. Fernanda Paiva		f_depaiva@hotmail.com
124. Artur Zunguze		arturzngz7@gmail.com
125. Rita Gabriel Kalamsakit		rita.tulba1969@gmail.com

126. Babacar Seck		babacarseck001@yahoo.fr
127. Mariem Kadri		mariemkad14@gmail.com
128. Baka Cisse		baka_cisse@live.fr
129. Julia Joseph Ojukwu Ikarak		juliaj.ojukwu@gmail.com
130. Fernanda Paiva		f_depaiva@hotmail.com