

# 10<sup>th</sup> WHO Vector Control Advisory Group (VCAG) Meeting

**VCAG** update





#### Outline

- Organizational matters
- The role of VCAG
- Products under review
- Updates
- Next Steps



# Organizational matters

- Working procedures for the Open Session
  - VCAG members invited to speak first, followed by observers and then those on WebEx
  - Questions after the meeting can be answered by contacting the VCAG Secretariat
- Because we are using WebEx please speak into microphone





## The role of VCAG

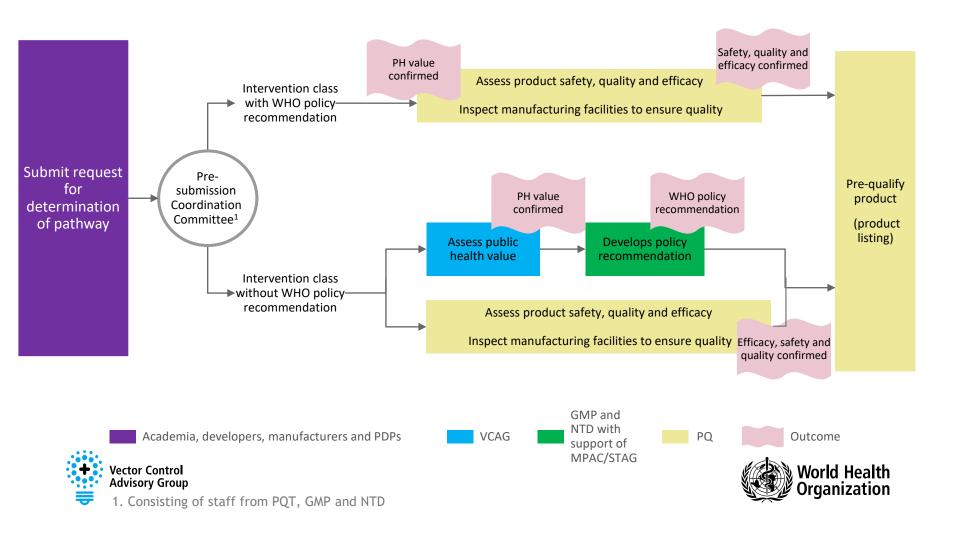
- VCAG is an advisory body to WHO on new tools, technologies and approaches for the control of vector-borne diseases.
- VCAG assist WHO in developing public health policy on new tools,
   VCAG assesses the public health value of new interventions and provides guidance on developing the evidence base required to inform such assessments by the group.
- Public health value is defined as: proven protective efficacy to reduce or prevent infection and/or disease in humans.
- Cross-departmental collaboration of the WHO Global Malaria Programme (GMP), the Department of Control of Neglected Tropical Diseases (NTD), and the WHO Prequalification Team (PQT) for Vector Control Products.





### Evaluation Pathway for vector control products

Within WHO, VCAG assesses the public health (PH) value of new intervention classes



Intervention	Intervention class	Prototype / product	Status in WHO
intervention	intervention class	r rototype / product	evaluation process
Insecticide-treated nets	Non-pyrethroid insecticide net	Yorkool LN (OP)	Safety assessment by PQ
	Pyrethroid plus non-pyrethroid insecticide net	Interceptor® G2 (pyrethroid-chlorfenapyr)	RTC protocols reviewed by VCAG
	regulator net	Royal Guard LN (pyrethroid-pyriproxifen)	RTC protocols reviewed by VCAG
	(PBO) net*	Olyset® Plus	Converted to PQ listings during 2017/18
		SmartPatch	Reviewed by VCAG in 2014
Spatial Repellents	Spatial Repellents	Transfluthrin passive emanator	Field trials in progress
Attractive Targeted Sugar Baits		ATSB®, mosquitoes' bait station	Field trials in planning
Peridomestic residual spray		Spaying of exterior walls and boundary fences of dwellings with residual insecticide formulations	VCAG reviewed protocol in May 2018
Peridomestic combined repel and lure devices	control	The approach consists of two devices: 1) repels mosquitoes from houses and immediate surroundings (the "push") and 2) lures mosquitoes towards odorbaited traps (the "pull")	Concept and preliminary elements of an RCT reviewed by VCAG
Vector traps for disease management	Adulticidal oviposition and lavicidal	Vector traps including AGO trap, Trap-N-kill $^{\mbox{\scriptsize \$}}$ trap and ALO	ALO concept review May 2019
	Auto-dissemination devices	In2Care® Mosquito Trap	Field trials in planning
Genetic manipulation of vectors for disease control	Population reduction – gene-drive approach	CRISP/Cas9 - suppression construct in An gambiae	Initial lab data reviewed by VCAG
		Cas9- based gene drive - anti-P. falciparum and/or anti-P. vivax constructs	Initial lab data reviewed by VCAG
Sterile insect technique (SIT) combined with microbial infection	The state of the s	Sterilized male Ae. aegypti and Ae. albopictus infected with Wolbachia spp.	VCAG reviewed RCT protocol
Microbial control of human pathogens in adult vectors	Wolbachia-based population alteration	wMel strain Wolbachia in Aedes aegypti	Field trial in progress
Systemic insecticides and endectocides	Systemic cattle treatment for vector control	Fipronil bolus	VCAG reviewed protocol in 2017
	Endectocides	Ivermectin repurposed for malaria	Field trials in planning
Housing modification		In2Care®EaveTube with electrostatically charged coating for delivery of powder formulations	Field trial in progress

# Updates

- Clarified processes:
  - Updated VCAG Terms of Reference
  - SOPs for VCAG applicants
  - Overview of products under VCAG review developed
  - Roles / responsibilities clearly defined between NTD, PQT-VC and GMP
- Streamlined running of meetings: option for off-cycle reviews
- Improved communications:
  - New website and regular updates





# Updates - VCAG Membership

#### Two new co-chairs

- Heather Ferguson
- Salim Abdulla

#### Four new members:

- Kalpana Baruah
- Steven Bradbury
- Neal Alexander
- David O'Brochta

# Five *ad hoc* experts invited to this meeting

- Mamadou Brahima Coulibaly (by phone)
- Philip Coyne (PQ Assessor)
- Alfred B. Tiono
- Alia Zayed
- Tongyan Zhao





# **Updates - VCAG Terms of Reference**

- Terminology: "Intervention class" not "product class"
- Clarification entomological data:

#### **PQT-VC:**

 Responsible for assessment of entomological data, in the context of meeting data requirements for prequalification, and development of associated guidance on test procedures.

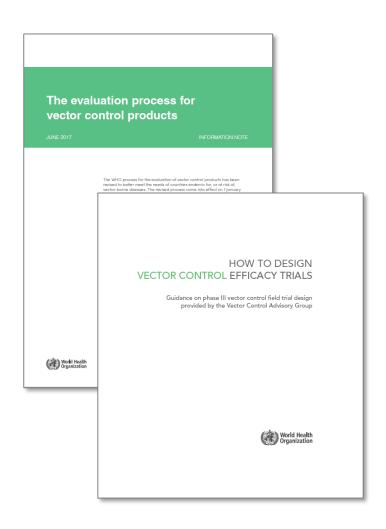
#### **VCAG:**

- The provision of advice to WHO may require a review of entomological data generated to allow the prequalification assessment, as these data may inform the epidemiological study design and supporting studies
- In cases where entomological evaluations are conducted alongside epi trials to generate supporting /explanatory evidence, VCAG is expected to review and guide the study design





#### VCAG: next steps



- Update / revise two key documents to align with revised GMP policy-making process:
  - The evaluation process for vector control products
  - How to design vector control efficacy trials
- Further diversify VCAG membership

