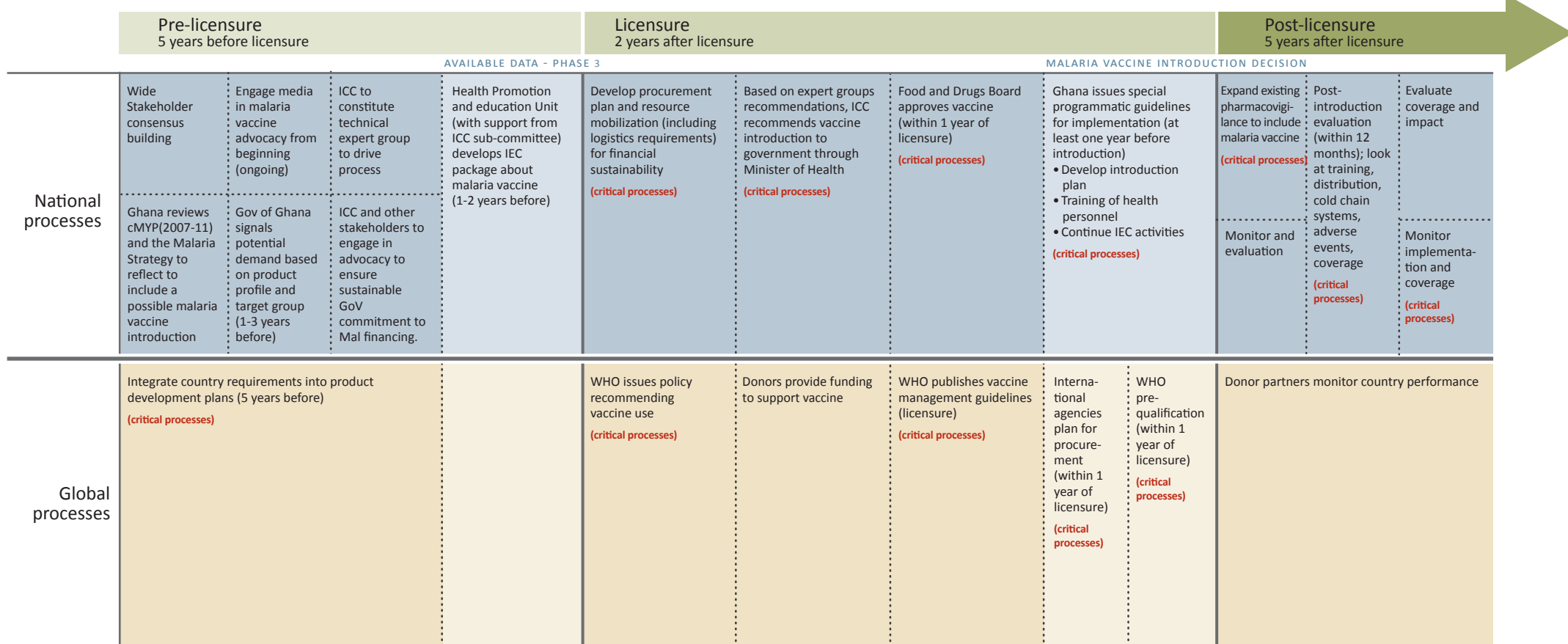


# GHANA MALARIA VACCINE DECISION-MAKING FRAMEWORK—DATA

	Pre-licensure 5 years before licensure					Available data - Phase 3			Licensure 2 years after licensure			Post-licensure 5 years after licensure				
	MALARIA VACCINE INTRODUCTION DECISION															
Malaria disease burden	5Yrs trend Reported malaria cases confirmed <i>(critical data)</i>	5Yrs Trends of malaria admission (confirmed) <i>(critical data)</i>	Reported malaria deaths 5 yr trends <i>(critical data)</i>	Cases by age group (removed) <i>(critical data)</i>	Economic burden for household/ GoV	Sentinel site data on lab-confirmed cases of clinical disease, severe disease, and deaths from malaria <i>(critical data)</i>			Sentinel site data on lab-confirmed cases of clinical disease, severe disease, and deaths from malaria <i>(critical data)</i>			Surveys on parasites <i>(critical data)</i>		Sentinel site data on lab-confirmed cases of clinical disease, severe disease, and deaths from malaria <i>(critical data)</i>		Surveys on parasites <i>(critical data)</i>
Other malaria interventions	Impact of malaria preventive interventions <i>(critical data)</i>		Cost-effectiveness estimates of malaria preventive interventions		Surveys to assess coverage, use, and impact of current interventions <i>(critical data)</i>	Surveys to assess coverage, use, and impact of current preventive interventions <i>(critical data)</i>		Country-level cost-effectiveness of malaria preventive interventions <i>(critical data)</i>	Changes in impact of malaria interventions		Surveys to assess coverage, use, and impact of current interventions		Surveys to assess coverage, use, and impact of current interventions <i>(critical data)</i>			
Malaria vaccine impact	Impact in different age groups <i>(critical data)</i>		Impact on < 59 mths in Ghana (through modeling) <i>(critical data)</i>			Absolute impact through modeling <i>(critical data)</i>	Marginal impact with other malaria interventions (through modeling) <i>(critical data)</i>	Impact on epidemiology and morbidity in different age groups					Immunization coverage <i>(critical data)</i>	Monitor trends on lab confirmed mal (country wide) <i>(critical data)</i>	Effectiveness, including impact on: • clinical malaria • severe malaria • anemia • parasitemia	
Economical and financial issues	Credible public-sector price estimate <i>(critical data)</i>	Preliminary cost-effectiveness estimates of malaria vaccine (regional or sub-regional results) <i>(critical data)</i>		Return on investment (i.e., cost/benefits information for politicians, MoF)		Public-sector vaccine price	Donor subsidy of malaria vaccine <i>(critical data)</i>		Sustainability of donor subsidy	Sustainable national commitment <i>(critical data)</i>	National affordability <i>(critical data)</i>		Updated malaria vaccine cost-effectiveness data	Return on investment	Public-sector vaccine price <i>(critical data)</i>	
Malaria vaccine efficacy, quality and safety	Quality assurance <i>(critical data)</i>	Safety <i>(critical data)</i>	Adverse events <i>(critical data)</i>	Local data, where available, is useful; where we don't, need system to evaluate data for Ghana <i>(critical data)</i>		Safety <i>(critical data)</i>	Efficacy, including impact on: • Clinical disease • Severe disease • Anemia • Parasitemia <i>(critical data)</i>	Duration of protection <i>(critical data)</i>		Safety <i>(critical data)</i>	Quality <i>(critical data)</i>		Safety <i>(critical data)</i>	Quality <i>(critical data)</i>	Post-licensure safety data <i>(critical data)</i>	
Programmatic considerations	Vaccine presentation <i>(critical data)</i>	Evidence of established policy, regulatory, and institutional roadmap to support intervention		Assessing capacity in quantification <i>(critical data)</i>		Supply availability <i>(critical data)</i>		Impact of vaccine presentation on health system (e.g., logistics inc. cold chain, training) <i>(critical data)</i>			Forecasting and quantification of demand for the vaccine <i>(critical data)</i>	Procurement, supply and management <i>(critical data)</i>				
Socio-cultural environment	Knowledge attitudes, and practices of communities towards vaccines and malaria interventions			Community expectations of malaria vaccines in clinical trial areas									KAP, especially on acceptability and compliance (e.g., drop out rates)			

Key:  National data  Global data

# GHANA MALARIA VACCINE DECISION-MAKING FRAMEWORK—PROCESSES



Key: ■ National process ■ Global process