



A review of proposed models, their implementation and how they deliver on each of the pillars

David Findlay DRIVE-AB Work Package 2 & GSK

‘Transforming the way policymakers stimulate innovation, responsible use and global access to novel antibiotics to meet public health needs’

## DRIVE-AB’s principles

*Innovation*

*Access*

*Sustainable use*



Hoffman S, Outterson K, et al. JLME 2015

# DRIVE-AB's shortlist of incentives

Incentive	Type	Innovation stimulated	Required funding per annum
Grants	Push	Early phase research	Additional \$250 ++
Pipeline coordinator	Push	Key health threat pathogens through discovery and development	
Market Entry Rewards	Pull	Most pressing public health threats	\$1-1.25bn per AB
Continuity model	Pull	Ensures product availability post MER period	TBD on a case basis

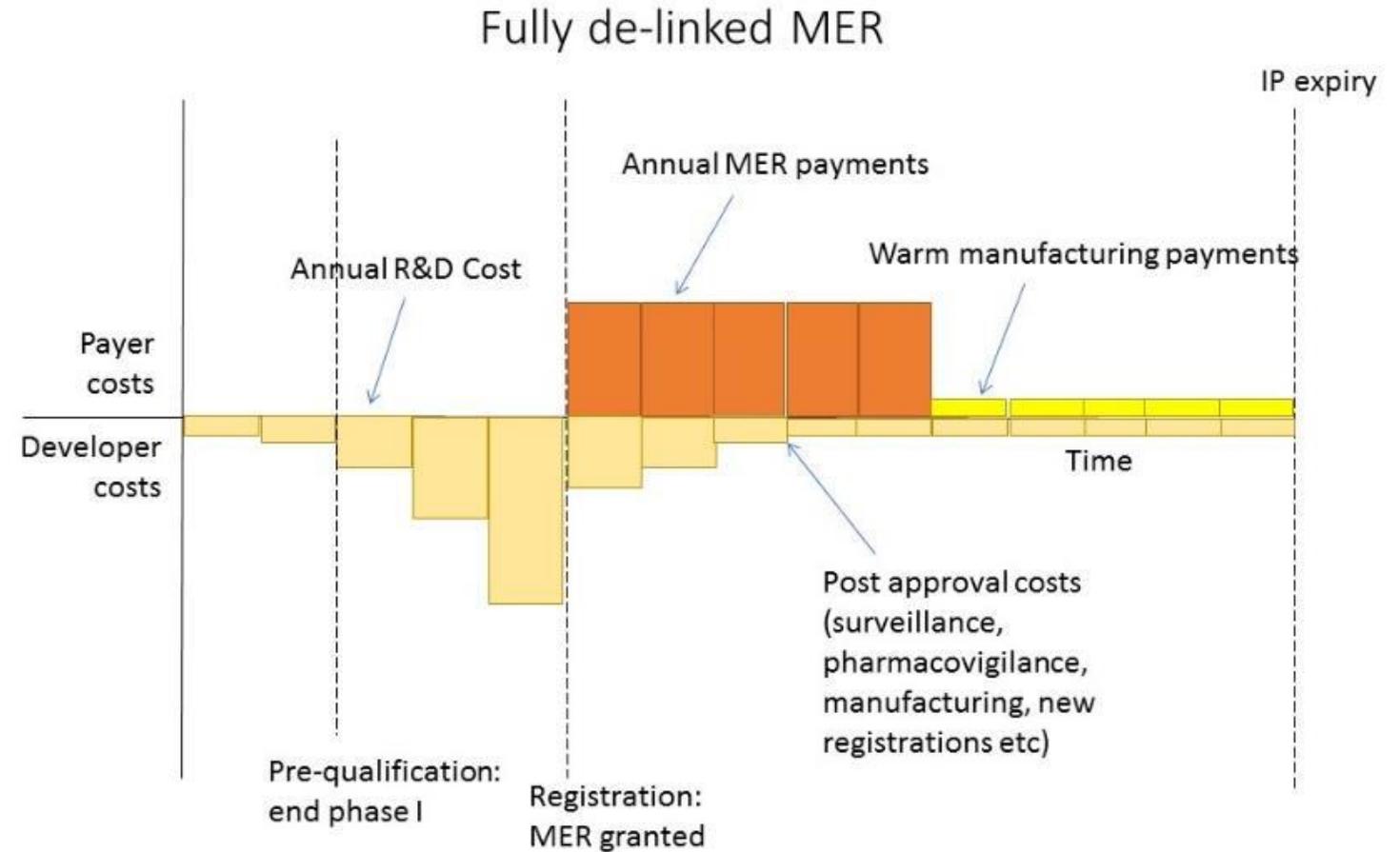
# Criteria for Market Entry Rewards

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- **Targeted**....to key public health priorities.
- **Sustainable**...predictable, reliable and not subject to budget changes. A MER will not incentivise if it is likely to disappear 5 years into a 10 year development programme!
- **Transparent**....the criteria for delivering a MER should be clear and publicly available – Target Product Profiles, contract conditions, funding timelines...
- **Sufficient**...the MER must maintain existing investment and generate new public and private capital investment into AB R&D through increasing ROI to attractive levels

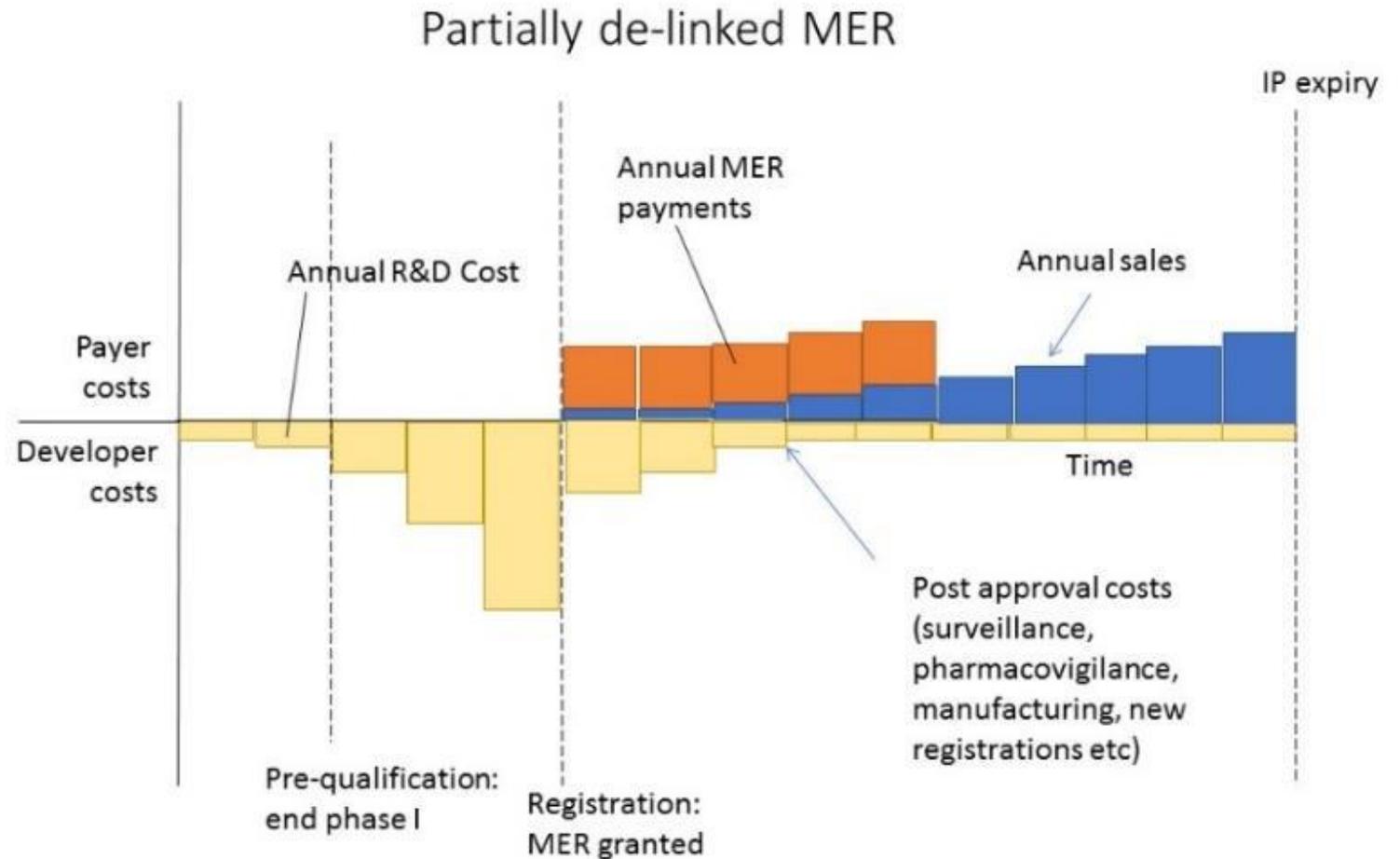
# Fully de-linked MER

In a fully delinked MER, *all* developer revenues associated with the eligible antibiotic would be from the MER payments for the lifetime of the IP; the antibiotic would be supplied at cost price.



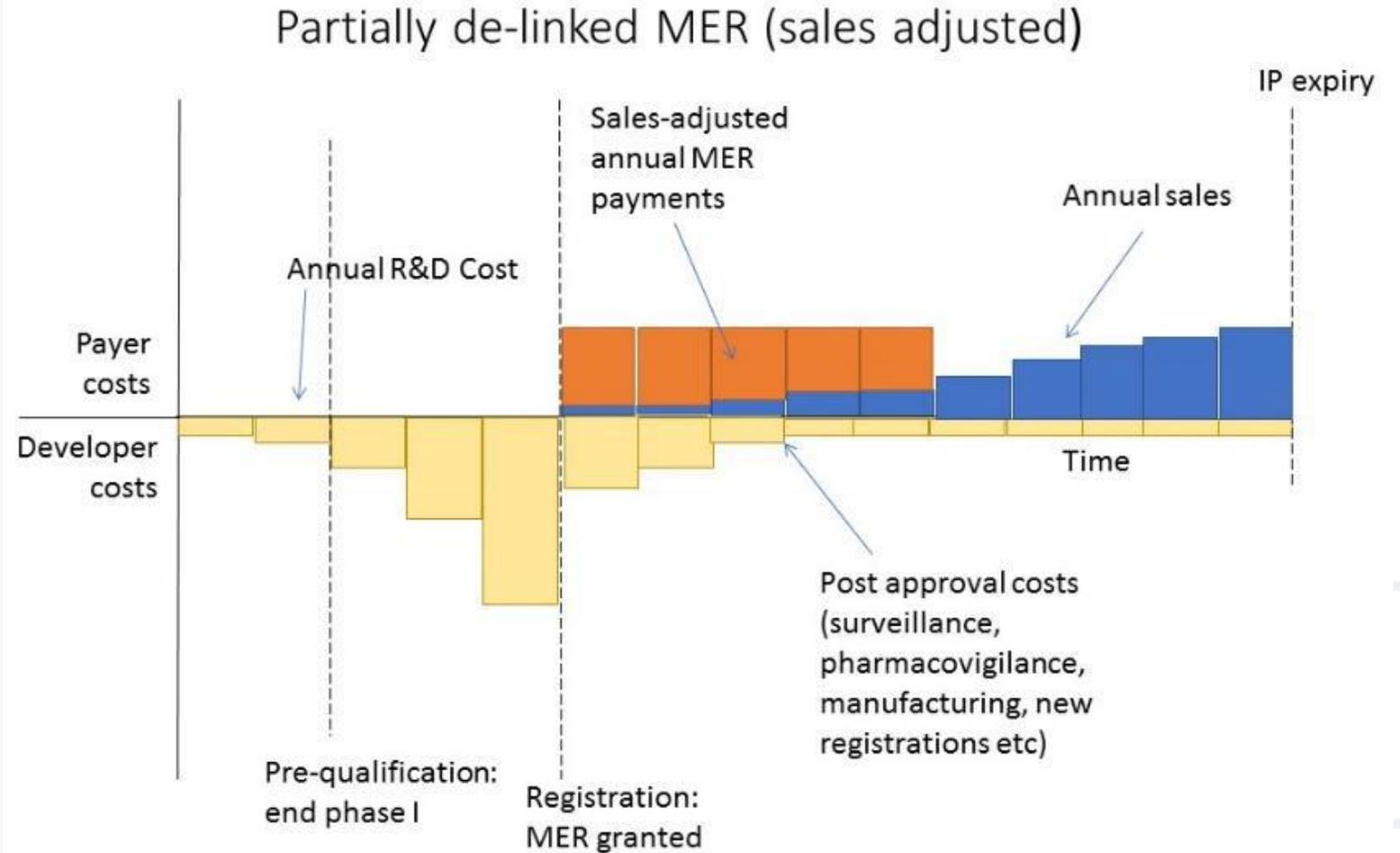
# Partially de-linked MER

A partially delinked MER preserves some flexible market-based elements, which lowers the upfront financial commitment and allows developers to operate within their existing business model



# Partially de-linked MER (Sales adjusted)

The MER would be offered as a set of “top-up” payments over five years that ensure the developer earns an agreed target revenue each year. If revenue from sales is greater than the MER in a given year, then there would be no MER payment and any excess revenue would be discounted from the following year’s MER payment.



# Sustainable use: DRIVE-AB recommendation

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- Sustainable use measures for developers should be contractually linked to both market entry rewards and long-term supply continuity awards.
- Countries should also commit to high-level sustainable use commitments and adherence to antibiotic-specific guidance documents developed by the World Health Organization or other relevant bodies.
- We recommend that a special working group (perhaps under the guidance of the EU commission, G20 or TATFAR) convene to develop standard sustainable use measures both for developers and governments.

# MERs must be bound by sustainable use and equitable availability obligations on the developer.

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- We define sustainable use as the implementation of policies targeting a range of actors to ensure the preservation of a specific, novel antibiotic.
- It is vital that any innovation incentive promotes sustainable use to ensure the longevity of the AB and continued benefit to patients
- For sustainable use activities that are within the control of developers, DRIVE-AB recommends that these obligations are contractually agreed between the funder and developer, with annual reporting.
- MER conditions should not be so numerous or complex that they make the MER unattractive to developers or too difficult to effectively administer, both from an industry and a public payer perspective.

# Options for developer sustainable use measures

## Pragmatic recommendation

- Sales of active ingredient outside of human medicine prohibited\*
- Product promotion limited to appropriate use only. All materials reviewed at least 90 days prior to use
- Review and apply antibiotic discharge framework across supply chain (including API).
- Sales and surveillance data disclosure
- Reduce/eliminate volume-based remuneration of sales staff
- Support on-going self regulatory initiatives via the Davos Declaration and AMR Industry Alliance

## Stringent recommendation

- Sales of active ingredient outside of human medicine prohibited\*
- No product promotion, similar to existing FDA off-label restrictions, with defined exceptions for the dissemination of use-related information – safe harbours.
- Review and apply antibiotic discharge framework across supply chain (including API)
- Sales and surveillance data disclosure
- Eliminate inducements related to volume sales
- Externally enforce developer controls

\*unless product classified by the World Organization for Animal Health's veterinary antimicrobial list as critically or highly important.

# Options for country sustainable use measures

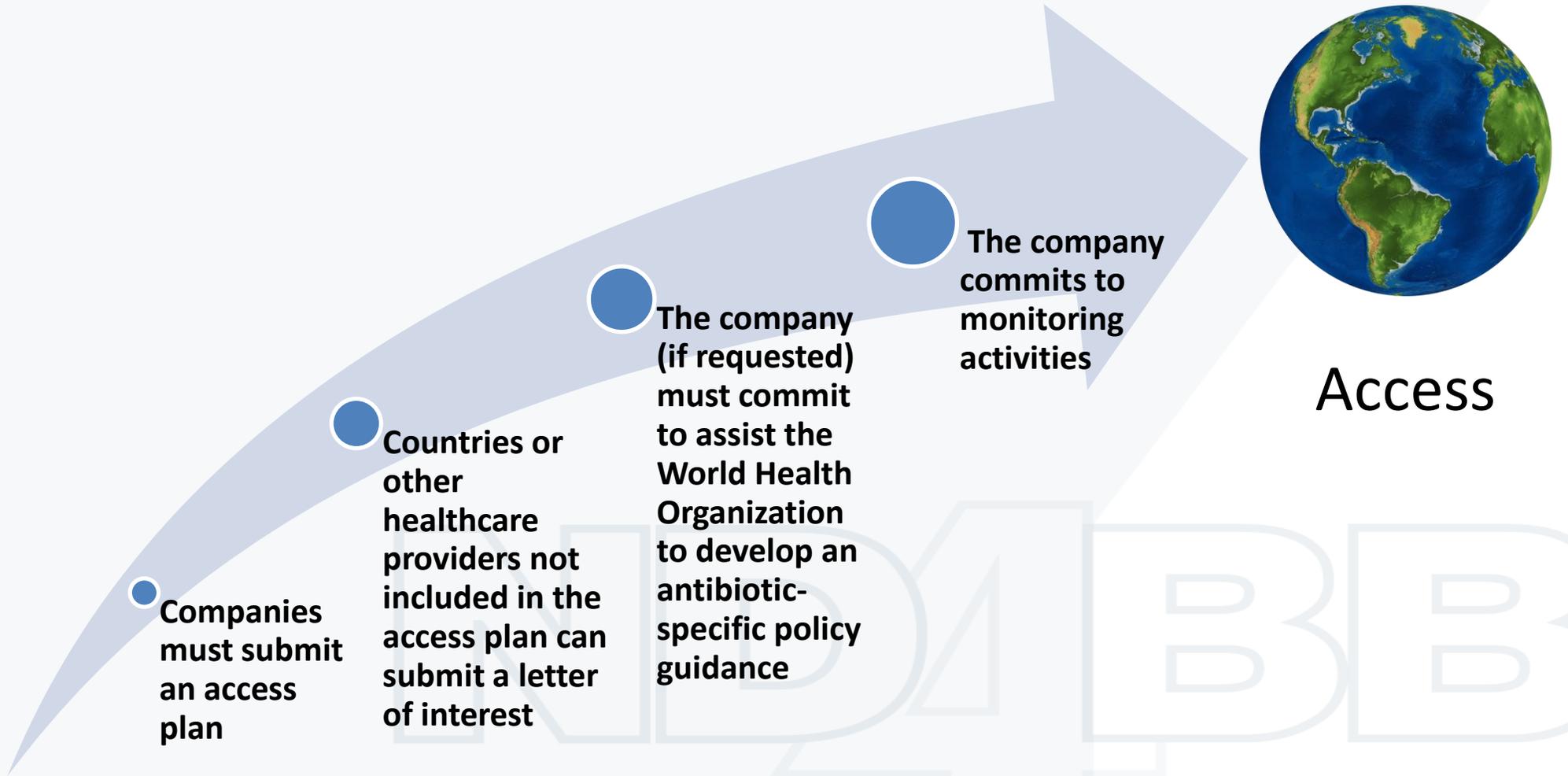


# Building in equitable availability: DRIVE-AB Recommendation

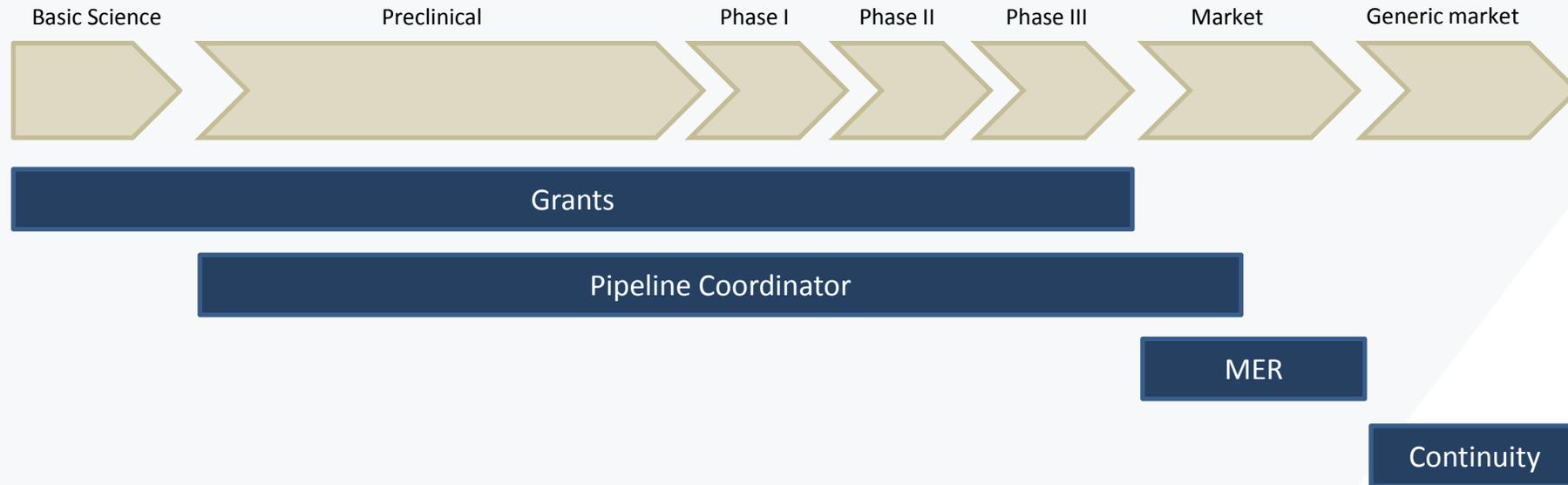
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- Equitable availability measures for developers should be contractually linked with both market entry rewards and long-term supply continuity awards.
- A special working group (perhaps under the guidance of the Global Antibiotic Resistance Partnership) should be convened to develop standard equitable availability measures.

# Building in equitable availability



# DRIVE-AB's recommended models



ND4BBB

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*Sustainable*



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