



## Nifedipine for tocolysis

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The release of the new WHO recommendations (October, 2015)<sup>1</sup> for preterm birth interventions is welcome. With regard to the place of tocolysis, the guidelines present a balanced view of the current uncertainties and indicate a preference for nifedipine as the drug of choice when tocolysis is considered, while emphasising the need for further research. However, an important issue in the availability and prescription of nifedipine is not covered in the WHO recommendations:<sup>2</sup> that of the appropriate formulation for use in this indication. Although the evidence on nifedipine for tocolysis relates to immediate-release formulations, in low-resource countries only sustained-release formulations, indicated for hypertension, are typically available. Thus clinicians may all too easily find themselves using the wrong formulation for tocolysis.

There is no evidence to suggest that sustained-release nifedipine might have efficacy for tocolysis and there is notable potential for harm: normotensive patients who are exposed to 30 mg of a sustained-release formulation could become hypotensive over several hours. The immediate release formulation is appropriately specified in the WHO Model List of Essential Medicines<sup>3</sup> but making this available in clinical settings globally may be problematic. It does not have other therapeutic uses and might be approaching the status of an orphan drug.

Should research confirm the usefulness of nifedipine as part of the package of interventions to improve the outcomes of preterm birth in low-resource settings, close attention will be required to drug procurement, supply-chain logistics, and methods to make the formulations clearly distinguishable at the point of care.

I declare no competing interests.

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- 1 Vogel JP, Oladapo OT, Manu A, Gülmezoglu AM, Bahl R. New WHO recommendations to improve the outcomes of preterm birth. *Lancet Glob Health* 2015; **3**: e589–90.
- 2 WHO. WHO recommendations on interventions to improve preterm birth outcomes. Geneva: World Health Organization, 2015. [http://www.who.int/reproductivehealth/publications/maternal\\_perinatal\\_health/preterm-birth-guideline](http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/preterm-birth-guideline) (accessed Aug 27, 2015).
- 3 WHO. 19th WHO model list of essential medicines (April 2015). Geneva: World Health Organization, 2015. <http://www.who.int/medicines/publications/essentialmedicines/en/> (accessed Aug 27, 2015).