

## Review Form 1.6

Journal Name:	<a href="#">Journal of Pharmaceutical Research International</a>
Manuscript Number:	Ms_JPRI_79949
Title of the Manuscript:	ROLE OF TOCOLYTICS IN PRETERM
Type of the Article	Review Article

### **General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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**PART 1: Review Comments**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Compulsory</b> REVISION comments	<p>General comments</p> <ol style="list-style-type: none"> <li>1. Your manuscript doesn't follow the protocol of review. please follow review protocol during your write up please</li> <li>2. You manuscript doesn't have full and well written abstract</li> <li>3. Your manuscript doesn't have well written body for the main text such as full and appropriately written introduction, methods, results, discussion and conclusion. Please you should have to follow the above mentioned protocol for your manuscript. Generally the manuscript has huge grammatical and content problems</li> </ol> <p>Specific comments</p> <ol style="list-style-type: none"> <li>1. Abstract =should follow objective, methods, results and conclusion format</li> <li>2: introduction</li> </ol> <p>There are many grammatical error through the whole document and should be corrected</p> <p>"Preterm birth is still a major problem faced by Gynaecologists and obstetricians all over the world." Please add reference</p> <p>"The reason for preterm labour is still not clear. It could be because of premature activation of the contraction of uterine muscles due to physiological or pathological factors. Uterine distension is due to multiple pregnancies, placental ischemia, cervicitis, immune and allergic phenomena, placental abruption or residual bleeding, intrauterine infections, and other complications. Inflammatory process may be the cause of preterm labour." Plead add reference</p> <p>"According to the WHO report, it is estimated that every year around the world there are about 15 million premature births." Please rephrase and support with reference.</p> <p>"Premature birth is supposed to be one of the major causes of infant mortality and morbidity." Please add reference</p> <p>"Recommended treatments for preterm labour can help stop or delay the contractions at the time of labour and prevent the future health problems for both mother and baby. By reducing the uterine contractions, placental blood flow can be improved thereby the oxygen supply to the foetus can be improved." Please add reference</p> <p>"Antenatal corticosteroids like betamethasone and dexamethasone can be administered to speed up the development of baby's lung." Please add reference</p> <p>"The chances of having major health problems after birth like, problems of respiratory system - respiratory distress syndrome, intraventricular haemorrhage, necrotizing enterocolitis and various bacterial infections can are reduced only if preterm is delayed." Please add references</p> <p>"The purpose of this review is to take a look on currently used tocolytic drugs and putting forward the evidence showing their effectiveness in prolonging pregnancy by short period of time of at least 2 days" please rephrase it</p> <p><b>Mechanisms of Tocolysis</b></p> <p>"Tocolysis focuses on delaying uterine contractions and making them weak. The myometrium, the smooth muscles in the uterus are responsible for the contractions of uterus. Contraction of myometrium can be explained as a process, which is complex and based on the functions of myocytes, the special muscle cells. It is associated with the hormonal receptors, intercellular gap junctions, ions channels." Please add reference</p> <p>"The initiation of the contractions is not a result of any hormonal stimulus or any kind of nerve input." The same comments</p> <p>"The smooth muscle cells or uterine myocytes, which contain many dense bodies, dense bands and myofilaments. The actin filaments of dense bodies attach to each other, thereby forcibly making the uterine contractions along the lengthwise direction of the cell. The contractile apparatus containing actin filaments connect to the cytoskeleton to form the dense bands. The result is the transmission of force from the contractile muscles to the plasma membrane resulting in condensing of the muscles of cytoskeleton. Beta-adrenergic receptor agonists, nitric oxide</p>	

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	<p>donors, magnesium sulfate, and ca channel blockers interfere with the intracellular messenger responsible for the effects of uterine muscle contraction and relaxation proteins. In addition, the oxytocin receptor antagonist, Atosiban and prostaglandin synthetase inhibitors interfere with endogenous stimulants in the uterus to inhibit the synthesis of contractile factors. They are the most commonly used antipyretics today.” I haven’t seen any reference in each sentences, please add reference and rephrase it again.</p> <p><b>Types of Tocolytic Treatment</b></p> <p>“All of these are selective beta 2 agonists. Ritodrine and salbutamol were used regularly for preterm labour in 1980.” Please add reference</p> <p>“During acute phase, they are administered by IV infusion. For prophylactic therapy, they are given orally.</p> <p>A scientist divided the adrenergic receptors into alpha- and beta-adrenergic receptors which are placed on the cell membrane. All adrenergic receptors are coupled with G-protein receptors which help in regulating the production of intracellular second messengers.</p> <p>Betamimetics exert a stimulant effect on beta-2 receptors. When cyclic AMP is increased cyclically, the intracellular ca levels are depleted, reducing the contractility of the uterine muscles. As per many studies, beta-2 adrenergic receptor agonists are known for causing adverse effects in mother. They are dyspnoea, tachycardia, chest pain, hyperglycaemia and hypokalaemia<sup>12</sup>.</p> <p>Tremor is due to stimulation of beta 2 receptors of skeletal muscle. Tolerance develops to this effect on continued administration. Tachycardia and palpitation are due to stimulation of beta 1 receptors of heart. Hyperglycaemia may occur in diabetic following parenteral administration of beta 2 agonists. Hypokalaemia is due to shift of k+ not cells. So, though they are efficient, the wellbeing of mother and child is one of the real troubles which is responsible for discontinuation of therapy.” Please add references in each section.</p> <p>[2] Ca channel blockers The same comments with the above.</p> <p>[3] Magnesium sulfate The same comments with above</p> <p>[4] Oxytocin receptor blockers The same comment with above</p> <p>[5] Prostaglandin inhibitors The same comments as the above</p> <p>[6] Nitrates and other drugs The same comments with the above</p> <p>[7] Progesterone The same comments with above</p> <p>[8] Antibiotics The same comments with above</p> <p>[9] Other drugs Similar comments</p> <p><b>Discussion:</b> <b>Discussion is not well written .please rephrase it again and make compare and compression.</b></p>	
<p><b>Minor</b> REVISION comments</p>		
<p><b>Optional/General</b> comments</p>		

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**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

Name:	<b>Getu Engida Wake</b>
Department, University & Country	<b>Debre Berhan University, Ethiopia</b>