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**Erratum to: A network epidemic model with preventive rewiring:  
comparative analysis of the initial phase (Bull Math Biol (2016) 78:2427–2454  
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**Tom Britton · David Juher · Joan Saldaña\***

the date of receipt and acceptance should be inserted later

After a presentation of the paper cited above at a workshop on Dynamic Networks at the Isaac Newton Institute for Mathematical Sciences, Cambridge, prof Frank Ball in discussions explained two potential errors in our analysis. After further discussions this was indeed confirmed. One mistake was an oversight, whereas the second one was more subtle. It turns out that the first mistake has impacts on the results of the paper, whereas the second one can be repaired and hence has no effect on the results.

The oversight appears in Section 4.1 where the basic reproduction number  $R_0^{BA}$  for the SEIR- $\omega$  model is derived, and it only affects the case  $\alpha\omega_{EI} > 0$ . There the probability for an exposed but not yet infectious individual to rewire away from its infector, and reconnect to a new (susceptible) individual, is computed. The competing events are that the exposed individual rewires (at rate  $\omega_{EI}$  and only with probability  $\alpha$  does the individual reconnect to a new individual), that the individual becomes infectious (when he/she stops rewiring), but also if the infector stops being infectious and recovers, because then the exposed individual stops rewiring according to the model. This last possibility was forgotten and the rate  $\gamma$  at which the infector recovers is missing in the denominator of the probability. So, the last term in Equation (5) should be  $\alpha\omega_{EI}/(\phi + \gamma + \omega_{EI})$ , and the correct expression for the basic reproduction number is

$$R_0^{BA} = \frac{\phi\beta}{(\phi + \omega_{SE})(\beta + \gamma + \omega_{SI})} \left( E(\tilde{D}) - 1 + \frac{\alpha\omega_{EI}}{\phi + \gamma + \omega_{EI}} \right). \quad (1)$$

This corrected term  $\alpha\omega_{EI}/(\phi + \gamma + \omega_{EI})$  should also replace the old expression (without  $\gamma$ ) in the last term on the right of Equation (7) when deriving the exponential growth rate  $r$  (the event that the infector recovers is also left out in the integrals preceding this equation). The corrected version of Equation (7) is

$$\frac{\beta\phi}{(r + \omega_{SI} + \beta + \gamma)(r + \phi + \omega_{SE})} \left( E(\tilde{D}) - 1 + \frac{\alpha\omega_{EI}}{r + \phi + \gamma + \omega_{EI}} \right) = 1.$$

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\* Corresponding author

Tom Britton  
Department of Mathematics, Stockholm University, Stockholm, Sweden  
E-mail: tom.britton@math.su.se

David Juher · Joan Saldaña  
Departament d'Informàtica, Matemàtica Aplicada i Estadística, Universitat de Girona, Catalonia, Spain  
E-mail: david.juher@udg.edu, joan.saldana@udg.edu