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Erratum: Optimal Test Strategies for Hepatitis B Vaccination with no Vertical Transmission

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Erratum:

In this short note, we provide the following minor correction in equation (4) of "Problem Formulations" section appeared in "K.T. Yannick and H.D.D. Elvis, Optimal test strategies for Hepatitis B vaccination with no vertical transmission, Gen. Math. Notes, 20(1) (2014), 19-26".

Please read a " $\Psi(a)$ " in the first line of the equation (4). The correct form is:

one obtains that (s, v, I, E) satisfies the following system of equations:

$$\begin{aligned}(\partial_t + \partial_a + \Psi(a) + \mu) s(t, a) &= -\lambda(t)s(t, a), \quad t > 0, a > 0, \\s(t, 0) &= \Lambda, \\(\partial_t + \partial_a + \mu) v(t, a) &= \Psi(a)s(t, a) - \delta\lambda(t)v(t, a), \\I'(t) &= \lambda(t) \int_0^\infty p(a) (s(t, a) + \delta v(t, a)) da - \nu_I I(t), \\E'(t) &= \lambda(t) \int_0^\infty q(a) (s(t, a) + \delta v(t, a)) da - \nu_E E(t), \quad t > 0,\end{aligned}\tag{1}$$

instead of

one obtains that (s, v, I, E) satisfies the following system of equations:

$$\begin{aligned}
 (\partial_t + \partial_a + \mu) s(t, a) &= -\lambda(t)s(t, a), \quad t > 0, \quad a > 0, \\
 s(t, 0) &= \Lambda, \\
 (\partial_t + \partial_a + \mu) v(t, a) &= \Psi(a)s(t, a) - \delta\lambda(t)v(t, a), \\
 I'(t) &= \lambda(t) \int_0^\infty p(a) (s(t, a) + \delta v(t, a)) da - \nu_I I(t), \\
 E'(t) &= \lambda(t) \int_0^\infty q(a) (s(t, a) + \delta v(t, a)) da - \nu_E E(t), \quad t > 0,
 \end{aligned} \tag{2}$$

This omission does not play any role on the rest of the paper.