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## Oscillation criteria for a certain second-order nonlinear perturbed differential equations

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### Abstract

In this paper, a class of second order nonlinear perturbed differential equation and its special cases are studied. By using the generalised Riccati transformation and well-known techniques, some new oscillation criteria are established. The results obtained essentially generalize and improve some known results and can be applied to the well-known half-linear and damped half-linear type differential equations.

**Key Words:** Half-linear differential equation, Oscillation, Riccati transformation.

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