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WEIGHTED ANALOGUE OF INVERSE LÉVY DISTRIBUTION: STATISTICAL PROPERTIES AND ESTIMATION

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SUMMARY

In this article, Weighted version of Inverse Lévy distribution has been introduced. Numerous properties including both mathematical and statistical (like moments, moment-generating function(mgf), hazard rate function, mean residual lifetime function, residual lifetime function, reversed residual life function, conditional moments and conditional mgf) has been obtained. For estimation of model parameters, techniques like Maximum Likelihood Estimation and method of moments have been used. Finally, a real life data set has been taken for comparative analysis with its parent model.

Keywords and phrases: Inverse Lévy distribution; reversed residual lifetime function;conditional moments.

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