A group $G$ is said to have property $R_\infty$ if for every automorphism $\varphi \in \text{Aut}(G)$, there are an infinite number of $\varphi$-twisted conjugacy classes. The interest in $R_\infty$ originates from topological fixed point theory. We show that if the $\Omega^n$ invariant of $G$ is finite and nonempty then it consists of one or two points. In the case of a singleton, $G$ has property $R_\infty$. If $\Omega^n$ consists of two points, then there is an index 2 subgroup $\Gamma$ in $\text{Aut}(G)$ such that there are an infinite number of $\varphi$-twisted conjugacy classes for every $\varphi \in \Gamma$. (Received September 22, 2011)