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Lars Winther Christensen* (lars.w.christensen@ttu.edu), Department of Mathematics and Statistics, Broadway and Boston, M.S. 1042, Lubbock, TX 79409, and Sean Sather-Wagstaff. A Cohen-Macaulay algebra has only finitely many semidualizing modules.

Let R be a commutative noetherian local ring. A finitely generated R-module C is semidualizing if the natural homomorphism $R \to \text{Hom}(C, C)$ is an isomorphism and $\text{Ext}^{\geq 1}(C, C) = 0$.

Vasconcelos asked whether the set of isomorphism classes of semidualizing R-modules is finite when R is Cohen-Macaulay and whether it has even cardinality when it contains more than one element.

I will present a positive answer to the first question for equicharacteristic rings and also discuss the second question. (Received August 31, 2009)