Inhibition of RAGE axis signaling: A pharmacological challenge

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The Receptor for Advanced Glycation End Products (RAGE) is an important cell surface receptor, which belongs to the IgG super family and is now considered as a pattern recognition receptor. Because of its relevance in many human clinical settings, it is now pursued as a very attractive therapeutic target. However, particular features of this receptor such as a wide repertoire of ligands with different binding domains, the existence of many RAGE variants as well as the presence of cytoplasmatic adaptors leading a diverse signaling, are important limitations in the search for successful pharmacological approaches to inhibit RAGE signaling. Therefore, the present review aimed to display the most promising approaches to inhibit RAGE signaling, and provide an up to date review of progress in this area.