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# Live-attenuated Double-deleted *Listeria monocytogenes* Bacteria JNJ-64041809

National Cancer Institute

## Source

National Cancer Institute. *Live-attenuated Double-deleted Listeria monocytogenes Bacteria JNJ-64041809*. NCI Thesaurus. Code C125631.

A proprietary, live-attenuated, double-deleted (LADD) strain of the Gram-positive bacterium *Listeria monocytogenes* (Lm) encoding multiple, as of yet undisclosed, tumor-associated antigens (TAAs), with potential immunostimulatory and antineoplastic activities. Upon intravenous administration, live-attenuated double-deleted *Listeria monocytogenes* bacteria JNJ-64041809 is taken up by antigen-presenting cells (APCs), including dendritic cells (DCs). The TAAs are subsequently expressed by the APCs and then processed and presented to the immune system by both major histocompatibility complex (MHC) class I and II molecules. This activates the immune system and leads to the recruitment and activation of cytotoxic T-lymphocytes (CTLs) against the TAA-expressing tumor cells, eventually resulting in tumor cell lysis. Two genes contributing to the virulence of Lm have been removed to minimize the risk of infection.