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# Immunomodulator OHR/AVR118

National Cancer Institute

## Source

National Cancer Institute. *Immunomodulator OHR/AVR118*. NCI Thesaurus. Code C49092.

A broad-spectrum peptide nucleic acid formulation comprised of breakdown products of casein, peptone, RNA and serum albumin, with potential anti-inflammatory, immunomodulatory, anti-anorectic and anti-cachexia activities. AVR118 mainly contains two peptides, peptide A and peptide B, in approximately a 1:1 ratio: peptide A (31 a. a.) is derived from bovine casein; peptide B (21 a. a.) is covalently linked via phosphodiester bond to a diadenosine unit. In addition, AVR118 contains nucleosides, nucleoside diphosphates and nucleoside monophosphates. Upon subcutaneous injection of AVR118, this agent affects the synthesis of many pro-inflammatory chemokines and cytokines, especially monocyte chemotactic protein-1 (MCP-1), interleukin (IL)-8, IL-1 beta, IL-6, and tumor necrosis factor-alpha (TNF-alpha). In particular, AVR118 stimulates macrophages to produce these mediators while in highly activated macrophages this agent inhibits their synthesis. This way, AVR118 may prevent the excessive release of cytokines seen during chemotherapy. Controlling the release of pro-inflammatory mediators may ultimately improve appetite and mood, increase strength and weight gain, and decrease fatigue.