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# Extended Release Bupivacaine Hydrochloride Resorbable Matrix Formulation

National Cancer Institute

## Source

National Cancer Institute. *Extended Release Bupivacaine Hydrochloride Resorbable Matrix Formulation*. NCI Thesaurus. Code C102745.

An extended release (ER) injectable formulation composed of the hydrochloride salt form of bupivacaine, an amide-type, long-acting local anesthetic, in a resorbable sucrose acetate isobutyrate-based matrix, with analgesic activity. Following administration in or around a specific site, ER bupivacaine is released from the matrix over an extended period of time. Upon release, bupivacaine reversibly binds to specific voltage-gated sodium ion channels in the neuronal membrane, resulting in a decrease in the voltage-dependent membrane permeability to sodium ions, membrane destabilization, and depolarization inhibition thus disrupting nerve impulse conduction. This eventually leads to a reversible loss of sensation. This formulation may provide pain relief up to 72 hours.