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# Dextromethorphan/Bupropion Tablet AXS-05

National Cancer Institute

## Source

National Cancer Institute. *Dextromethorphan/Bupropion Tablet AXS-05*. NCI Thesaurus. Code C148102.

A tablet composed of the non-opioid derivative of morphine dextromethorphan (DM) and the aminoketone bupropion, with potential analgesic, antidepressant and anti-agitation activities. Upon oral administration, the DM component may act as a weak N-methyl-D-aspartate (NMDA) receptor antagonist, a sigma-1 receptor agonist and an inhibitor of the serotonin and norepinephrine transporters, which together may alleviate pain, agitation, anxiety and depression. While the bupropion component acts as a norepinephrine and dopamine reuptake inhibitor and a central nicotinic acetylcholine receptor antagonist, which is beneficial in the treatment of depression. Additionally, bupropion may increase the bioavailability of DM, thus prolonging the therapeutic effects of DM.