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# Ranitidine Hydrochloride/Bismuth Potassium Citrate/Sucralfate Hydrate Formulation

National Cancer Institute

## Source

National Cancer Institute. *Ranitidine Hydrochloride/Bismuth Potassium Citrate/Sucralfate Hydrate Formulation*. NCI Thesaurus. Code C124645.

A formulation containing the hydrochloride salt form of the non-imidazole histamine H<sub>2</sub> receptor antagonist ranitidine, bismuth potassium citrate, and the hydrate form of sucralfate, a basic aluminum complex of sulfated sucrose, with potential antacid, radio- and cytoprotective activities. Upon oral administration of the ranitidine hydrochloride/bismuth potassium citrate/sucralfate hydrate formulation, ranitidine binds to and blocks the activity of the histamine H<sub>2</sub> receptors in the parietal cells in the stomach and in the gastrointestinal (GI) tract, thereby decreasing acid secretion. Sucralfate physically binds to the surface of damaged mucosa, thereby forming a protective barrier that shields the GI tract from stomach acid. It also neutralizes stomach acid. Bismuth inhibits peptic activity, increases mucosal secretions and acts as a barrier to prevent damage by acid. Altogether, this protects against ulcer formation and may help to heal existing ulcers.