

Medications that may aggravate the SHMP / PMCHS terrain

Documented list for informational purposes — discuss with your doctor

Caution — This list is not medical advice and does not replace a medical consultation in any way. It compiles medication classes documented in the scientific literature for their potential effect on mast cell mechanisms and related pathways (mast cell activation syndrome, mastocytosis, SHMP/PMCHS terrain). Sensitivity varies greatly between individuals — many profiles tolerate several medications listed here very well. **Never stop an ongoing treatment without medical advice.** This list is provided to support an informed discussion with your doctor, particularly before surgery, anaesthesia, or the prescription of a new treatment.

Opioids	Morphine, codeine, pethidine, hydromorphone	Direct non-IgE mast cell degranulation (a direct pharmacological effect, independent of allergy). Fentanyl and buprenorphine are generally better tolerated.	High
Non-steroidal anti-inflammatory drugs (NSAIDs)	Ibuprofen, aspirin, ketorolac, naproxen	Inhibition of cyclo-oxygenase 1 (COX-1), shifting arachidonic acid metabolism toward the leukotriene pathway — may aggravate the leukotriene-dominant phenotype. Paradoxically, low-dose aspirin is used as a stabiliser in some prostaglandin-dominant profiles, under strict medical supervision.	Variable
Vancomycin (IV)	Intravenous form only — the oral form is generally well tolerated	“Red Man Syndrome” — direct, non-IgE-mediated histamine release related to infusion rate.	High
Fluoroquinolones	Ciprofloxacin, levofloxacin, moxifloxacin	Documented interference with histamine-degrading enzymes (diamine oxidase, DAO) and reported direct mast cell activation.	Moderate
Beta-lactams	Amoxicillin and penicillin derivatives	Documented non-allergic hypersensitivity in patients with a mast cell terrain; increased risk reported in systemic mastocytosis.	Moderate
ACE inhibitors	Lisinopril, enalapril, ramipril	Increased bradykinin levels, a mediator that activates mast cells and can worsen angioedema.	Moderate
Beta-blockers	Propranolol, metoprolol, atenolol	Lower the mast cell activation threshold and may reduce the effectiveness of epinephrine during an acute anaphylactic reaction — an important point if an emergency kit has been prescribed.	Moderate
Neuromuscular blocking agents	Atracurium, succinylcholine	Documented histamine release during general anaesthesia. Vecuronium and pancuronium are generally better tolerated — should be flagged systematically to the anaesthetist.	High
Ester-type local anaesthetics	Benzocaine, procaine, tetracaine, chloroprocaine	Documented degranulation triggers. Lidocaine and other amide-type anaesthetics are generally well tolerated and represent a preferable alternative.	Moderate
Iodinated contrast media	Agents injected during imaging procedures (CT scan, angiography)	Reported non-IgE mast cell activation upon injection; premedication may be considered with the medical team in case of a prior reaction.	Moderate

Proton pump inhibitors (PPIs)	Omeprazole, lansoprazole, esomeprazole	Possible interference with the enzymatic breakdown of histamine (DAO), potentially increasing the functional histamine load in some profiles.	Variable
Central muscle relaxants	Some centrally-acting muscle relaxants	Reported as triggers in some profiles, often via the formulation's excipients rather than the active molecule itself.	Variable
Alcohol (present as an excipient)	Oral solutions, syrups, certain liquid formulations	Known cofactor of mast cell degranulation, independent of the drug's active molecule.	Moderate

Sources

This list is based on the following documentary resources: The Mast Cell Disease Society (TMS), “Symptoms and Triggers of Mast Cell Activation” and “Treatments”; Mast Cell Action (UK), “Management” and “Managing MCAS”; AAAAI Mast Cell Disorders Committee Work Group Report (Weiler et al., J Allergy Clin Immunol, 2019); Castells & Butterfield, “Mast Cell Activation Syndrome and Mastocytosis: Initial Treatment Options and Long-Term Management” (J Allergy Clin Immunol Pract, 2019); review “Challenges in Drug and Hymenoptera Venom Hypersensitivity Diagnosis and Management in Mastocytosis” (PMC10814166); Dr Bruce Hoffman, “Mast Cell Activation Syndrome and Excipients”; MCAS UK, “Treatment of Mast Cell Activation Syndrome explained”.